The Impact of Houghton Mifflin Harcourt Read 180 Next Generation Program on Middle School Students with Disabilities

Katherine Arnold

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THE IMPACT OF HOUGHTON MIFFLIN HARCOURT READ 180 NEXT GENERATION PROGRAM ON MIDDLE SCHOOL STUDENTS WITH DISABILITIES

by

Katherine Arnold

A Dissertation
Submitted to the Graduate School,
the College of Education and Human Sciences
and the School of Education
at The University of Southern Mississippi
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for the Degree of Doctor of Philosophy

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ABSTRACT

The purpose of this study was to determine if reading performance of students with disabilities in grades six through eight improved as a result of one year implementation of READ 180 Next Generation program. Teacher experience, student gender and teachers’ overall satisfaction and how the READ 180 Next Generation program may influence the academic reading performance of students with disabilities. Reading performance was measured by the Georgia Milestones assessment and Houghton Mifflin Harcourt Reading Inventory.

Research findings show no significant differences in sixth, seventh, and eighth grade participants after one year of implementation of READ 180 Next Generation program. A review of literature reveals there are no overall evidence of effectives in all five areas of reading as defined by the National Reading Panel in the READ 180 Next Generation program.
ACKNOWLEDGMENTS

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In August 2006, the special education department in a large metropolitan district piloted Sopris West’s Language! The Comprehension Literacy Curriculum program in selected direct service model and small-group special education classrooms in Grades 4–12. Due to the federal accountability demands of the No Child Left Behind Act (NCLB) of 2001, concerns of closing the achievement gap with all students increased drastically and became a focus of districts and schools. (Antonis, Zhang, Ryan, & Jones, 2001). According to NCLB (2002), school districts were required to implement scientific, research-based programs and strategies. As another measure of accountability, NCLB (2002) also required that all schools report adequate yearly progress (AYP). In order to fulfill the required student achievement progress to meet AYP established by the NCLB (2002) legislation, each state was required to develop educational goals and growth goals for each district. Measurement of AYP included assessment results of all students; including the scores of students with disabilities. As a result of these accountability measures and mandated reporting, districts and schools became increasingly concerned about the performance of students with disabilities. In the state of Georgia, performance of all students, including students with disabilities were measured by the state of Georgia’s Criterion Referenced Competency Test (CRCT) (Retired Georgia Assessments, n.d.) New content standards in language arts and mathematics were adopted by the Georgia State Board of Education in 2010 (Common Core Georgia Performance Standards, 2010). Due to the change in content standards, the state assessment measure for Georgia students, the CRCT, changed to the Georgia Milestones assessment during the 2014-2015 school year (Cardoza, M. 2014). Up until the Georgia Milestones
assessment change during the 2014-2015 school; the Language! The Comprehension Literacy Curriculum program was used as the primary reading intervention program for students with disabilities in grades 6-8 in the school district. After the Georgia Milestones assessment replaced the Georgia Criterion Referenced Competency Test (CRCT) and the district received results from an outside program evaluation of the special education department the READ 180 Next Generation program became the reading intervention program primarily used for general education students and students with disabilities in the district. There were a few remaining schools in the district that continued to use the Language! The Comprehension Literacy Curriculum program with students with disabilities; however, the district did not provide materials or training. The cost of the program was incumbent on the local school.

Publishers of core reading programs offer assurances to districts that their programs, if used with fidelity, yields higher academic achievement (Allington, 2011). Closing the achievement gap with staffing reductions, decreased funding for materials, and the continued pressure for special needs students to perform to State standards in school districts influenced school district decisions regarding curriculum and instructional implementation. This study investigated the impact of a specific commercial reading program that is in use in a large metropolitan school district.

Background Information

During the 2017-2018 school year, the READ 180 Next Generation program was the reading intervention program primarily used for all students in the district. Publishers of core reading programs offer assurances to districts that their programs, if used with fidelity, yields higher academic achievement (Allington, 2011). Closing the achievement
gap with staffing reductions, decreased funding for materials, and the continued pressure for special needs students to perform to State standards in school districts influence school district decisions regarding curriculum and instructional implementation. This study investigated the impact of this specific commercial reading program that was used in a large metropolitan school district.

The federal requirement of students with disabilities accessing general education curriculum in a general education classroom creates a challenge to educators in how to deliver intensive intervention in reading in a general education classroom (Vaughn, Shumm & Forgan, 1998). Both NCLB from 2002-2015 and ESSA enacted in 2015 hold schools accountable for expected gains of students with disabilities (Andrew, M. & Lee, J. 2019). Accountability requirements have been established; however, determining how much progress a student with disabilities should make has been in questions for years. A provision of Free and Appropriate Education (FAPE) is for a student to be fully integrated in a general education classroom, to the maximum extent appropriate; however, if a student requires another setting to accommodate the student’s unique needs, the focus of what is the amount of progress made shift to the unique characteristics of the student (Wright, P. 2017).

In 2006-2007 school year, before this study was conducted the school district spent significant financial resources to purchase the Language! The Comprehensive Literacy Curriculum program. Considering the amount of funding used for the purchase, training of teachers and implementation of the program, the district school administrators needed additional information to document the effectiveness of the Language! The Comprehensive Literacy Curriculum program. To ensure that the district complied with
the federal requirements of NCLB and ESEA Flexibility waiver approved for Georgia and students with disabilities were receiving Free and Appropriate Education (FAPE), additional research was needed regarding the performance of special needs students receiving instruction using the Language! The Comprehensive Literacy Curriculum program.

In 2014-2015 school year, the District’s Board of Education requested an outside review of the special education department’s compliance and instructional practices. The outcome of this review suggested that too much money was being spent on commercial reading products that were being used exclusively for special education students. The review stated that students with disabilities should access the general education reading materials before other materials are purchased and used. Therefore, based on these suggestions from the review, funding to continue using the Language! The Comprehensive Literacy Curriculum program significantly decreased. The district made the decision to use the reading commercial reading program currently used for intervention for general education students for the students with disabilities; the Scholastic READ 180 Next Generation program. A transition away using from Language! The Comprehensive Literacy Curriculum program occurred.

Statement of Problem

Schools are required to design learning experiences that enable students with disabilities to access the general education curriculum to the extent appropriate to meet the student’s individual needs (Katsiyannis, Zhang, Ryan, & Jones, 2007). The Individuals with Disabilities Education Act of 2004 (IDEA) requires that students with disabilities participate with their non-disabled peers in regular classrooms to the greatest
extent possible (Katsyannis, et.al 2007). The Georgia Department of Education’s publication *Redesigned College and Career Ready Performance Index* (2018) notes that the extent to which students with disabilities are appropriately included in regular classroom instruction is one of the indicators used to measure accountability for districts in the state of Georgia. Determination whether the school is making adequate progress as measured by an index is referred to as College and Career Readiness Performance Index (CCRPI). The federal requirement of students with disabilities accessing general education curriculum in a general education classroom creates a challenge to educators in determining ways to deliver intensive intervention in reading type (Vaughn, Shumm & Forgan, 1998). Schools are facing accountability measures of expected gains in achievement and general education inclusion of students with disabilities.

There are many commercial reading programs that are available for purchase (Slavin, Cheung, Groff, & Lake, 2008). School districts have a fiscal and professional responsibility to purchase reading materials and resources with the most potential for student gains in reading. Making decisions as to what type of commercial reading program should be purchased takes time and building administrators must consider the needs of the school. There are resources for assisting district and school administrators when evaluating and choosing commercial reading programs. What Works Clearinghouse (WWC) and the Institute of Educations Sciences (IES) are examples of resources that are available that offer guidance to districts reviewing commercial products and their effectiveness (Allington, 2011). For example, fidelity and ease of implementation of a commercial program are important considerations. Allington (2011) describes that how a reading program is implemented in a classroom may result in ineffective gains for
students, therefore, the practical day to day instruction and an expert reading teacher to implement the program is important to consider when making decisions regarding the purchase of commercial reading programs.

The *Language! The Comprehensive Literacy Curriculum* program was developed to address students with disabilities having difficulties in reading and piloted in 1994 (Greene, 2006). It is a commercial product designed to improve reading performance among students in schools. The school district in which this study was conducted invested significant financial resources to purchase the *Language! The Comprehensive Literacy Curriculum* program. Considering the amount of funding allocated and approved for purchase, district school administrators needed additional information to document the effectiveness of the *Language! The Comprehensive Literacy Curriculum* program. To ensure that the system complied with the federal requirements of NCLB and ESEA flexibility waiver approved for Georgia, additional research was needed regarding the performance of special needs students receiving instruction using the *Language! The Comprehensive Literacy Curriculum* program in a small group classroom with only other students with disabilities.

In 2014-2015 school year, the District’s Board of Education requested an outside review of the special education department’s compliance and instructional practices. The outcome of this review suggested that too much money was being spent on commercial reading products that were being used exclusively for special education students. The review stated that students with disabilities should access the general education reading materials before other materials are purchased. Therefore, based on these suggestions, funding to continue using the *Language! The Comprehensive Literacy Curriculum*
program significantly decreased. Currently, the commercial reading program used for reading intervention for general education students and students with disabilities in general education classroom in the district is Houghton Mifflin Harcourt’s *READ 180 Next Generation* program.

**Purpose of Study**

The purpose of this study determined if there was an increase in reading achievement of students with disabilities in grades 6-8 who participated in direct reading instruction using the *READ 180 Next Generation* program as measured by the Georgia Milestones Assessment and Houghton Mifflin Harcourt Reading Inventory. This study sought to examine whether relationships existed among reading achievement of students with disabilities, student gender, teacher experience, and teacher perceptions of the program’s implementation. How experienced a teacher was and how they felt about using the *READ 180 Next Generation* program may directly influence student achievement gains. This study provided supporting evidence regarding whether the program should continue being used with student with disabilities or if another program should be purchased and implemented.

**Research Questions**

1. Is there an increase in Georgia Milestones or HMH Reading Inventory reading scores of students with disabilities who participated in direct instruction using the *Read 180 Next Generation* program?

2. Does teacher perception relate to student gains when implementing the *Read 180 Next Generation* program?
3. Does teacher experience relate to student gains when implementing the *Read 180 Next Generation* program?

4. Is there a difference based on gender in the reading scores of students with disabilities using the *Read 180 Next Generation* program?

**Delimitations**

The following is acknowledged in advance. There are factors that would limit the degree to which the study results could be generalized to populations and locations other than those that were included in the study:

1. Participants for this study were limited to middle school students.

2. The research study included only educators and students located in one school district in a metropolitan area.

**Assumptions**

It was assumed that the sample used is indicative of the total population of students with disabilities within the school district who received the reading intervention of *READ 180 Next Generation* program. Secondly, it was assumed that the teachers would answer questions honestly without fear of negative consequence for their responses.

**Definition of Key Terms**

*Adequate Yearly Progress (AYP)*: is a measure by which schools, districts, and states are held accountable for student performance (Editorial Projects in Education Research, 2011).
**Co-teaching model:** the special education teacher provides service in the general education classroom by sharing teaching responsibility with the general education teacher for a full segment every day (Implementation Manual, 2018).

**Criterion-referenced competency test (CRCT):** is an assessment measure designed to measure how well students acquire the skills and knowledge described in the state mandated content standards in reading, English/language arts, mathematics, science and social studies (Criterion-Referenced Competency Test, 2018).

**Formative assessment:** is an evaluation tool used to guide and monitor the progress of student learning during instruction. Its purpose is to provide continuous feedback to both the student and teacher concerning learning successes and progress toward mastery (Types of Learning Disabilities, 2018).

**Georgia Milestones Assessment:** is a comprehensive summative assessment that measures state adopted content standards and serves as a key component of Georgia’s accountability system (GDOE Milestones Assessment System, 2018).

**Inclusion Class:** is one which gives special needs students the opportunity to learn alongside their peers in age appropriate, general education classrooms. (Capti Solutions for Education, 2017).

**LANGUAGE! The Comprehensive Literacy Curriculum:** is a commercial reading program that provides an intervention that integrates reading, writing, spelling, vocabulary, grammar, foundational skills, and spoken English, targeting students who score below the 40th percentile on standardized tests (Voyager Sopris Learning, 2018).

**Least Restrictive Environment:** students with disabilities are educated with non-disabled students to the maximum extent possible (Types of Learning Disabilities, 2018).
Lexile: is a standard score developed by MetaMetrics and matches a student’s reading ability with difficulty of text material. (MetaMetrics About Lexile Measures for Reading. (2019).

Read 180 Next Generation Program: is a commercial reading program that provides a blended learning model; online and direct instruction for students struggling in reading comprehension, academic vocabulary and writing skills in elementary through high school (WWC READ 180 Intervention Report, 2016).

Scientifically-based research: is research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs (What is Scientifically Based Research, 2006).

Students with disabilities: is a student evaluated as having mental retardation, hearing impairment, speech or language impairment, visual impairment, serious emotional disturbance, an orthopedic impairment, autism, traumatic brain injury, and other health impairment, a specific learning disability, or deaf-blindness and who needs special education and related services are referred to as a student with disabilities. (Special Education Services and Supports, n.d.).

Summative assessment: A summative assessment is an evaluation tool generally used at the end of an assignment, unit, project, or course (Types of Learning Disabilities, 2018).

Justification

The information provided in this study may be used in making future decisions regarding curriculum purchases (i.e., program adoption, purchase, and professional development) for the school district. Publishers of commercial reading programs often
evaluate their own product effectiveness (Duncan, 2008). Duncan (2008) shares that these programs these studies often do not meet the review protocol or standards set by outside researchers. Studies conducted outside of publishers provide unbiased feedback that is valuable to districts in many ways. Since *READ 180 Next Generation* program is in use, the findings of this study will potentially provide the additional information regarding its effectiveness and ways to better support teachers with implementation. The respondents’ answers to the questionnaire may provide insight for administrators and determine specific types of support needed for teachers. The questionnaire feedback will enable administrators to decide whether to provide additional materials and training or address conflicts in scheduling that may impact the fidelity of the program. Additionally, because of recent budget cuts amid a struggling economy, the results of this study may provide district administrators with information regarding staff reduction and training opportunity decisions.

Summary

The special education department in a large metropolitan district piloted Sopris West’s *Language! The Comprehensive Literacy Curriculum* program in selected inclusive and small-group special education classrooms in grades 6-8. However, research on the program was limited, especially with special education middle school students. The district of interest earmarked significant financial resources to purchase *Language! The Comprehensive Literacy Curriculum* program and local school administrators needed additional information to document the effectiveness of this program within the district. Initially, the purpose of this study was to determine if students with disabilities that participated in the commercial reading program, *Language! The Comprehensive
Curriculum, improved in their reading scores as measured by the Georgia Criterion-Referenced Competency Test (CRCT).

While collecting data during 2012-2013 school year study of commercial reading program outcomes, an outside program evaluation for the entire special education department for the district was conducted. After the program evaluation was completed, the direction from the district’s Board of Education required phasing out the Language! The Comprehensive Literacy Curriculum and for the special education department to provide students with disabilities access to the general education reading materials; including the general education reading interventions materials. The information provided in this study may be used for making future decisions regarding curriculum (i.e., such as program adoption and purchase, and professional development). In addition to the district phasing out Language! The Comprehensive Literacy Curriculum, the state measure of assessment changed from Georgia Criterion-Reference Competency Test (CRCT) to the Georgia Milestones Assessment. Considering that the district spent significant funds to purchase READ 180 Next Generation program to use as a reading intervention for general education students, and an external to the district evaluation group recommended that the students with disabilities access the general education resources the information provided in this study is timely for the district and may be used for making future decisions regarding curriculum (i.e., such as program adoption and purchase, and professional development). The outcome of the study may assist in further purchasing, providing special education teacher allotments, and data to assist teachers with being able to speak with confidence as to the intervention being used with their student.
CHAPTER II – REVIEW OF LITERATURE

The purpose of this study was to research the effects of a language arts intervention program that was being offered in a school district in a large metropolitan county in Georgia. This researcher assessed whether or not students with disabilities who received additional support from teachers using the READ 180 Next Generation program improved on standardized reading scores. This chapter contains a review of the history of learning to read and types of ongoing research in the area of reading intervention programs. Studies are discussed on two commercial reading programs and instructional strategies used with students experiencing reading difficulties. Components of The Language! The Comprehensive Literacy Curriculum program and READ 180 Next Generation program are described, and how the program components align with the five critical areas required for effective reading instruction as summarized by the Report of the National Reading Panel (National Institute of Child Health and Human Development, 2000). The five critical areas defined by the National Reading Panel (2000) are: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Literature related to the history of reading and educational theories of learning to read are included in this chapter.

According to the 2015 Every School Success Act (ESSA) that replaced NCLB (2002), all schools must continue to assess, report, and confront the achievement gap of all students (National Conference of State Legislatures, 2016). Regardless of the number of students with disabilities in a district or the categorical disability of the student, NCLB required academic achievement scores to be included in the individual school and district accountability measures for student growth. The academic performance of students with
disabilities may influence the overall scores that could result in a school, and subsequently a school district, not achieving state required accountability mandates (Yell, Shriner, & Katsiyannis, 2006). ESSA continues the NCLB requirement that academic performance of students with disabilities is to be reported (Samuels, 2017). Supporting this ESSA mandate, the condition of Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) required the inclusion of students with disabilities in the general education curriculum and participation of students with disabilities in state and district assessments (Georgia Alternate Assessment, 2018).

The reality of the 2014 NCLB mandate for all students to read on grade level became an increasing concern for schools, districts, and states (Sack, 2005). In September 2011, President Obama and then Secretary of Education, Arne Duncan, announced that the administration would allow states to request flexibility waivers. These ESSA flexibility waivers can alter some of the requirements of NCLB (McNeil, & Klein, 2011). In March 2012, a flexibility waiver was granted to the state of Georgia (Georgia Receives Waiver from NCLB, 2015). The waiver plan allowed the Georgia Department of Education (2015) to identify and support schools that struggle with student achievement growth and student subgroups that have historically not made adequate gains. The waiver took effect in the 2012-2013 school year.

Adequate Yearly Progress (AYP) must be reported; therefore, Georgia’s Single Statewide Accountability System (n.d.) was created and used in every school district in the state of Georgia. The College and Career Ready Performance Index (CCRPI) provides every public school in the state of Georgia a numerical index that measures how well students are ready to advance to the next educational level. This index score is
considered to be a more complete and comprehensive way to view a school’s performance (Accountability, 2018.) A single index score was reported for the state, local school districts, and all individual schools. Indicator weights for calculation included: but were not limited to; credit for achievement, credit for graduation, achievement for gap size and gap change, and a rigorous and consistent measurement of content mastery (Accountability, 2018).

The Georgia Department of Education’s Accountability website (2019) explained that there is continued expectation for subgroups to improve achievement rates. Schools have an opportunity to earn what is referred to as challenge points for subgroups that show gains. The challenge points are used when calculating total scores for individual schools’ CCRPI. Challenge points are earned when students in a subgroup meet the state proficiency expectation. Based on a student’s current academic functioning and goals and objectives, an Individual Education Plan (IEP) team may decide that the programming for the student is to be delivered in a small group (Accountability, 2018).

As written in Education Secondary and Elementary Act of 1965 and No Child Left Behind Act of 2001, the Equal Student Success Act of 2015 maintained the importance of ensuring opportunities for all students in America. ESSA continues to require states to establish student subgroups for accountability (Darrow, A.2016). Darrow (2016) describes that subgroups continue to include students who are economically disadvantaged, have limited English language proficiency, students with disabilities, and students that belong to major racial and ethnic groups as determined by the state. Data collection and reporting student achievement by subgroup at each grade level continues with ESSA (McGuinn, 2016). ESSA requires states to conduct academic
testing that measures for student achievement. Testing is required in the grades three through eight, which is same as the grade level testing requirements for NCLB, however, a difference that exists is that states have the flexibility of how the tests are administered. Tests may be administered in small increments of time and states can explore the option of different testing formats.

Districts and schools with the subgroup of students with disabilities, which are not making progress in achievement, must develop an evidence-based plan for those students (McQuinn, 2016.). States have to report student growth for each subgroup separately, decide how to intervene in low-performing schools, and allow districts to submit plans for intervention (Korte, 2015). School climate, teacher engagement, and students having access to advanced coursework must also be included in state accountability plans.

Every Student Succeeds Act (ESSA) allows states to make their own decisions regarding standards, assessments, school and district accountability (Rainwater, 2016). Georgia’s ESEA Waiver plan continued through the 2016-2017 school year. The new ESSA Plan began in the 2017-2018 school year (National Conference of State Legislatures, 2018). The Accountability Division organized by the Georgia Department of Education reports communication of performance and progress of districts and schools to stakeholders (Accountability, 2018). The annual tool to measure performance and growth used by the Department of Education Accountability Division is the College and Career Ready Performance Index (CCRPI). The components for the index are measured by using several indicators that include: Achievement, Progress, Closing Gaps and Graduation Rate. Additional information reported includes performance of student subgroups that includes students with disabilities. Brenchley (2015) reports that since the
signing of ESEA in 1965, states across the nation have continued to struggle with students making gains in achievement and not meeting the goal of full educational opportunity. The struggles of limited academic progress for all students across the United States toward the goals of ESEA resulted in the signing of The No Child Left Behind Act of 2001 and then the Elementary School Success Act of 2015.

There are many challenges when synthesizing research in the area of special education, therefore, potentially creating many different reading programs and methodologies being used within the same district (Odom, Gersten, Horner, Thompson, & Harris, 2005). Multiple categorical disabilities of students and multiple research designs result in varying results, making types of intervention decisions difficult (Odem, et al., 2005). Individual school IEP teams make decisions about the delivery of services for special education students. For example, a small group environment may be required for intensive support in the area of reading. The small group classroom may coexist with an inclusion classroom with students with disabilities being instructed alongside non-disabled peers. District level policies regarding inclusion classrooms have limited research; therefore, many varied practices regarding implementation of services are in practice (DeMatthews, & Mawhinney, 2013). Zigmond (2003) decisions regarding student placement in a special education setting; such as small group, should be based on data and best instructional practices. However, it is often difficult to decide due to IEP teams varying in their opinions about which delivery models of instruction are most effective (p.198).

IDEA (2004) recognizes 13 different categorical disabilities that students can qualify for eligibility in special education (Goldberg, 2011). Students may qualify for
multiple categorical disabilities. These categorical differences may contribute to creating a study that does not meet requirements for validity, due to the different characteristics, learning processes, and general behaviors of the students (Odem, et al., 2005). For example, under the category of Learning Disabilities, a student could have several different processing deficits impacting the ability to access content. “This variability of participants in research makes special education research complex and difficult” (p. 140).

Controversy continues around the efficacy of reading instruction for students. (Rayner, Foorman, Perfetti, Pesetsky, & Seidenberg, 2002). Supporters of teaching reading through strategy instruction, or supporters that advocate that primarily using direct instruction to teach reading continue to be divided. Swanson (1999) identified interventions that yield high effect size using strategy instruction and direct instruction. Hattie’s (2009) meta-analysis of best practices identified both direct instruction and strategy instruction as high impact strategies for teachers. In addition to decisions to be made regarding the type of instruction, the level of intensive intervention that is required when teaching reading to students with disabilities also present challenges to special education teachers (Torgesen, 2005). According to the National Center on Intensive Intervention website (2014), intensive intervention addresses severe learning difficulties. Intensive intervention in the area of reading would possibly require reading instruction to occur within a small group classroom with increased amount of instructional time (Denton, C. Vaughn, S. & Fletcher, J., 2010). Denton et.al, 2010 reviews challenges schools may face when scheduling small groups for reading and providing increased instructional time may present a challenge when providing intensive interventions.
Theoretical Framework

The theoretical framework of this study is focused on effective reading instruction.

Early Theories

A review of the literature supports early theories of effective reading instruction as: providing practice; making connections before, during, and after learning; providing reading material of interest, and examining materials to determine if they are developmentally appropriate (Tracy & Morrow, 2006). Early learning theories and how selected theories are related to models of learning to read. The research and ideas of early theorist provide a foundational framework that supports the development of curriculum and instruction (p.7).

Tracy & Morrow’s book *Lenses on Reading: An Introduction to Theories and Models* (2006) provides an overview of theories that may provide educators and curriculum developers an understanding of learning that will lead to making more informed decision regarding classroom practices and instructional planning. The theories that present the brain as a muscle in need of being strengthened is called the Mental Discipline Theory and the Early Learning Theory. Another early educational and psychological theory is Associationism (Tracey & Morrow, 2002, p.16). Aristotle supported that there are three types of connections in the theory of Associationism that give support to memory and learning: contiguity, similarity, and contrast (p.17). Associating events to time and space is contiguity, similarity is associating things in categories of familiarity or things that are similar, and contrast is a form of association by thinking of opposites.
From the mid-1700s to the early 1800s, the *Unfoldment Theory* emphasized the central role of individuals’ interest in learning (Tracey & Morrow, 2006). The *Unfoldment Theory* emphasized that children will learn by interest and curiosity. From the late 1800s to the early 1900s (Tracey & Morrow, 2006 p.19). *Structuralism Theory* suggested learning occurs through the study of perceptual processes that focuses on print, letters and words (p.22). The practice of perceptual processing still occurs in present literacy instruction when teachers use pointers in the classroom when identifying letters, or when students use colored sentence strips to assist in focusing attention on specific words. These early theories are considered to be grounded in educational practices that apply to current classrooms.

The theory of Behaviorism researcher by Edward Thorndike, Ivan Pavlov, John Watson, and B. F. Skinner became popular during the 20th century (Tracey & Morrow, 2006). Behaviorism focuses on the belief that behavior is the result of stimuli, and external stimuli that can manipulate behavior (p.34). Tracey and Morrow (2006) stated the Behaviorism Theory dominated education in America from 1900s to 1950s. Pavlov’s theory of *Classical Conditioning* is considered to have the most indirect influence on educational practice, however, it does lead to *Operant Conditioning* that provides rewards for desired behaviors and punishments for undesired behaviors, also known as antecedents and consequences, is considered a strong influence in educational practices (p.37). Edward Thorndike studied how behavior changed after stimuli has been introduced. The theory of *Behaviorism* has a place in educational practices that influence different facets of reading instruction (p.39).
Constructivism theory is described as when new knowledge integrates with existing knowledge and then results in learning (Tracey & Morrow, 2006). Tracey and Morrow (2006) describe the theory of Constructivism as having three major components: learning is internal and not always an observable behavior, learners may use hypothesis testing based on the learner’s experiences, and a learner uses the skill of inferencing. “Constructivism is a theory of learning that emphasizes the active construction of knowledge by individuals” (Tracey & Morrow, 2006, p.47). Problem based learning, inquiry learning, metacognition, organizing knowledge into schemas, and building learning from language are all examples of constructivism. The theory of developmental stages of learning offered by Jean Piaget are well known to educators and researchers (Tracy & Morrow, 2006). Piaget identified four states of cognitive development as: (a) the sensorimotor stage, (b) the pre-operational stage, (c) the concrete operations stage, and (d) the formal operations stage. According to Piaget’s theory, the way knowledge is organized and the delivery of instruction should coincide with the different stages of a child’s development (p.78). Tracey & Morrow (2006) argue that “…no single theory can capture all the complexities of the reading experience, theories and models are best used in conjunction of each other.” (p.205).

History of Reading Instruction

Initially, colonialists used a book called the New England Primer to teach reading (Smith, 2010). This book was a version of a prayer book used during this early period and the New England Primer was imported into the colonies in the mid 1600s. Smith (2010) books included comprehension questions about the bible, and rhymes for letters of
the alphabet were used for all ages. The themes in the New England Primer included were sin, salvation, and politics (para 3).

According to Witty’s (1949) book, “Reading in Modern Education” (as cited by Ladnier-Hicks, 2010), the first documented instructional method used to teach reading in the United States was the Alphabet Method in which students identified and memorized letters, then syllables, phrases, sentences, and stories. Witty (1949) continues to describe that this method relied heavily upon the skill of memorization, and no decoding or sounding out of letters occurred. The teacher primarily provided reading instruction verbally, and textbooks were not used. Christian beliefs were prominent throughout the communities and children read orally from the Bible, as well as from books with stories, poems, and speeches. The Alphabet Method continued until the mid-1800s (Barry, 2008).

*Spelling books* were introduced at the turn of the 18th century (Barry, 2008). Noah Webster was the first American to publish a speller. The instructional focus of the spelling books included spelling, reading, religion, and morality. Barry (2008) describes the three sections of the spelling books. The first section, was an Alphabet Method that included drill and practice. The second section advanced to multisyllabic words and lessons that dispersed these words in sentences that conveyed a message of morality. The third section included passages that were designed for children who could read. This section included material that was primarily comprised of political speeches.

During the 18th century; textbooks or basal readers were introduced as a way to teach reading (Reyhner, 2008). The first basal readers were known as The McGuffey Readers (para 2). McGuffey Readers included phonics based and comprehension
questions. The lack of good children’s literature and teachers’ low education level, served as a justification for using of basal readers for reading instruction (Gursky, 2018).

In the late 1800’s new readers began using the Word Method; the principle of learning whole words was included in readers (Barry, 2008). The Word Method excluded initially learning letter names and sounds from the instructional approach. Children memorized and then demonstrated mastery of sight words (p.38). The Sentence Method used illustrations and the story was presented one sentence at a time. The Story Method used the Sentence Method, but instead of presenting the story one sentence at a time, the teacher was instructed to read the entire story to the students first (p.41).

At the beginning of the 20th century, comprehension became more of a focus in reading instruction (K12 Academics, 2012). A movement designed to emphasize comprehension and make stories more interesting was introduced. At the beginning of the 20th century, Scott Foresman published the preprimer Dick and Jane series (Reyhner, 2008). Barry (2008) states the Dick and Jane series included a word list in the book, a teacher’s guide with scripted lessons, and used repetitive vocabulary. Many educators refer to this instructional technique as a sight word approach or whole word approach. In 1955, Rudolf Flesch wrote a book entitled, Why Johnny Can’t Read and What You Can Do About It, that criticized the instructional techniques surrounding sight word reading and proposed the most effective form of reading instruction was by drill and practice of sound and letter relationships that assist children in decoding new and unfamiliar words (Barry, 2008).

Debates surrounding the best instructional approach as how to teach reading continued throughout the 1950s and 1960s (Barry, 2008). During the mid-1960s, Chall
reviewed existing reading research and interviewed proponents of various methods of instruction (Kim, 2008). Chall (1967) states “Nor can I emphasize too strongly that I recommend a code emphasis only as a beginning reading method—a method to start the child on—I do not recommend ignoring reading for meaning practice” (p. 307). Chall expressed that there is no one way to teach a child to read and if an instructional practice is working for a teacher, they should continue and not be forced to use a program.

In the 1960s and 1970s, two major approaches to reading instruction emerged, referred to as the Language Experience approach. Stauffer (1980) indicated that the Language Experience approach was based upon the research and work of Dewey, Piaget, and Watson. The philosophy of this approach claimed that in order to teach reading effectively, educators should provide environments in which children feel free to explore their surroundings using the five basic senses. Children are encouraged to talk about those experiences, using oral and written language. The children create products that display their understanding of those experiences (Stauffer, 1980). Stauffer (1980) describes that this approach of learning how to read assumes that if communication skills such as listening, speaking, reading, and writing were all addressed during instruction, children would automatically develop the ability to decode printed material.

The Language Experience approach evolved into what is referred to as Whole Language (Tracey & Morrow, 2006). According to Reyhner (2008), Whole Language is described as a top down approach because readers use their prior knowledge in order to understand the meaning of what they read. In the 1990s, the Whole Language approach became popular and many educators supported this holistic instructional technique. The Whole Language approach integrated a variety of skills, such as listening, speaking,
reading, and writing (Tracey & Morrow, 2006 p. 60). The text vocabulary rather than the sounds of letters was a focus of teachers. As a result, journal writing and literacy center activities became popular within the American classrooms during the 1990s (Stauffer, 1980).

Best practices of reading acquisition and instruction continue to be researched in the 21st century. Two major research studies completed by the Federal government attempted to summarize the most effective instructional techniques in the area of reading. These studies were completed by Snow, Burns, and Griffin in 1998 and the National Reading Panel (NRP) in 2000. The Snow et al. (1998) study revealed that early literacy programs should include specific instruction in the area of sound-symbol relationships as well as writing. In the executive summary of Preventing Reading Difficulties in Young Children, (Snow, 1998) reports:

If we have not learned anything from this effort, it is that effective teachers are able to craft a special mix of instructional ingredients for every child they work with. But it does mean that there is a common menu of materials, strategies, and environments from which effective teachers make choices. In other words, there is little evidence that children experiencing difficulties in learning to read, even those with identifiable learning disabilities, need radically different supports than children at low risk, although they may need much more intensive support. (p.18).

The report, Preventing Reading Difficulties in Young Children (Snow et al., 1998) encouraged teachers to monitor student performance, and emphasizes the importance of teachers’ participation in professional development. The National Reading Panel (NRP) in the year 2000 concluded a review of existing research in the area of reading and
identified instructional techniques in the teaching of reading (Shanahan, 2005). Shanahan (2005) reports that the National Reading Panel recognized the importance of phonemic awareness, phonics, oral reading fluency, comprehension strategies, and vocabulary instruction. The NRP reported 52 studies that showed phonemic awareness instruction could improve phonemic awareness (p.8). Thirty-eight studies show systematic phonics instruction was more effective than responsive or no instruction in phonics (p.12). Oral reading fluency instruction was found to improve fluency, decoding, word recognition and silent reading comprehension in 51 studies (p.18). Forty-five studies on vocabulary instruction reported improved reading comprehension (p. 23). Reading comprehension strategies from 205 studies resulted in nine strategies showing evidence of improvement: questioning, monitoring summarization, story mapping, graphic organizers, cooperative grouping, prior knowledge, and mental imagery (p.29).

Throughout history, educators have struggled to identify the most effective strategies and programs designed to teach reading; however, there are multiple ways to determine if instructional practices are effective (Stanovich, & Stanovich, 2003). Testing of students is not always a clear measure of instructional effectiveness. Stanovich & Stanovich (2003) described the following as other measuring sources to determine effectiveness:

- Demonstrated student achievement in formal testing situations implemented by the teacher, school district, or state;
- Published findings of research-based evidence that the instructional methods being used by teachers lead to student achievement;
- Proof of reason-based practice that converges with a research-based consensus in the scientific literature. This type of justification of educational practice
becomes important when direct evidence may be lacking (a direct test of the instructional efficacy of a particular method is absent), but there is a theoretical link to research-based evidence that can be traced. (p. 1)

Factors That Affect Student Achievement

A review of literature indicated several factors may influence student performance (Allington, 2013). Determining what is successful in identifying teacher quality and effectiveness is not always clearly defined (Goe & Stickler, 2008). The factors that may impact student achievement include teacher education, type of teacher preparation, and teachers’ years of experience (Darling-Hammond, 2000; Glatthorn, 1990; Ornstein et al., 2000). Teacher education programs that require integrated coursework designed to connect subject and pedagogical knowledge, intensive, supervised field experiences, personal reflection, and professional collaboration are indicators they may impact student achievement (Darling-Hammond et al., 2000). Conversely, synthesis of research studies on teacher quality reported there is no direct impact on student achievement (Goe & Stickler, 2008). Goe and Stickler (2008) state that teacher preparation programs do not always show an impact on student achievement; and there are limited studies directly showing how the teacher preparation programs directly impact student achievement. However, there are studies that show teachers with more experience show improved student achievement (Stronge, 2007). Stronge reported that “teacher expertise as defined by experience (as well as education and scores on licensing exams) accounts for as much as 40 percent of the variation in student achievement” (p.12).

The No Child Left Behind Act of 2001 not only required the use of research-based materials, it also required all states to have a highly qualified teacher in every
classroom by the end of the 2005–2006 academic school year. The contention was that highly qualified teachers produced greater student achievement than less qualified teachers (Alexander & Fuller, 2004). The National Center for Educational Statistics (Spotlight, 2005) stated:

Although teachers’ academic degrees and their average years of experience have been traditional indicators of the qualifications of the teacher workforce, research has not found the highest degree attained by teachers to be a good predictor of gains in student achievement (Rivkin, Hanushek, and Kain 2005; also see Hanushek 1996; Hedges, Laine, and Greenwald 1994). Number of years of teaching experience has also proven to be problematic in predicting such gains. Generally, beginning teachers (those with 3 or fewer years of teaching experience) are not as effective as teachers with more years of teaching experience, with brand-new teachers typically being the least effective teachers (Rivkin, Hanushek, and Kain 2005; Rockoff 2004; Murnane 1975). Research has consistently found that brand-new teachers make “important gains in teaching quality in the first year and smaller gains over the next few career years”; however, there is not a consistent linear relationship between years of teaching experience and student achievement after the initial three years of teaching, making it difficult to say whether there are any discernible differences among more veteran teachers—for example, between teachers with 7–10 years of experience and teachers with 20 or more years of experience (Rivkin, Hanushek, and Kain 2005, p. 449; Murnane and Phillips 1981). A better predictor of student achievement—and hence a better indicator of the qualifications of the teacher
workforce—is whether teachers have training and certification in the field they teach (Monk 1994; Goldhaber and Brewer 1997, 2000). Those who have neither an undergraduate or graduate major nor certification in the field they teach are known as “out-of-field” teachers. Research has suggested that high school students in mathematics and science learn less from out-of-field teachers than they do from teachers with a major or certification in the field they teach (Goldhaber and Brewer 1997, 2000; for a summary of this research, see Seastrom et al. (2002), pp. 1–2). (p. 5).

Nevertheless, Allington (2013) stated there is limited knowledge about the development of reading and how to teach reading among teachers in the United States. A study conducted by Darling-Hammond (2000) revealed that teacher quality variables are more strongly correlated to student achievement than class sizes, overall spending levels, and teacher salaries. Darling-Hammond’s (2000) findings indicate that a teacher with full certification and a major in the field of instruction is a better predictor of student achievement than the teacher’s education level. Changes in coursework, curriculum, testing techniques, or textbooks exhibit little impact on student achievement if teachers do not know how to identify the needs of individual learners (National Reading Panel, 2000).

A study of teacher quality completed by Fuller (2010) supported the finding that students scored significantly higher when the majority of teachers were prepared and licensed. Overall, students with teachers who graduate from preparation programs outperform teachers who have not graduated from a teacher preparation program. Goe and Stickler (2008) shared literature reporting the relationship between teacher
experience and student achievement received mixed results from researchers; results showing a positive association with student achievement in the area of reading, and conversely several other studies show no differences. Another study in Texas reports that after 5 years of experience, teaching experience is not related to effectiveness (Rivkin, Hanushek, & Kain, 2005). Rivkin & Hanushek (2005) reports there are few studies with statistically significant results that indicate teacher experience shows a positive effect on student achievement. As reported by Goe and Stickler (2008) a study conducted by Gallagher in 2004 analyzed the relationship between student achievement, teacher evaluation, teacher experience and the effectiveness of the teacher. The study found that teacher qualities such as licensure and experience appeared insignificant predictors in student achievement.

While gender is not a subgroup of Georgia’s current accountability measures, there may be an interest in how gender relates to student achievement among educators when choosing reading curriculum. The Education Research Report (n.d.) published that research compiled by the Center of Education Policy (2010) found that in 2009, girls outperformed boys in reading in every state and the District of Columbia. Additionally, the research gave warning that gender gaps were closing more slowly than other gaps. Allington (2013) points out that girls outperform boys in reading by 7 points in grade 4 and 10 points in grade 8, and this observation of performance is noted in international comparisons.

According to various studies, boys and girls process information in different ways (Gurian, 2011). Researchers have learned through the use of Positron Emission Tomography (PET) scans that females use both sides of their brain; while males
primarily use the left side of their brain (Boyles & Contadino, 1998). Female brains are more inclined to notice details; male brains are more active in spatial activities. Boyles & Contadino (1998) contend that this information is described as somewhat conclusive; there are clearly differences in the male and female brain. There are developmental and maturation differences also occur between girls and boys. Boyles and Contadino state that females mature faster than males and this rate of change occurs physically, mentally, and emotionally. Research also supports that males and females have some neurological differences (Boyles & Contadino, 1998).

King and Gurian (2006) report that over 100 structural genetic and socialized differences between the male and female brain have been identified by researchers. Below are a few:

*Verbal/spatial differences.* Boys' brains generally have more cortical areas dedicated to spatial-mechanical functioning than girls' brains do, whereas girls' brains generally have greater cortical emphasis on verbal-emotive processing (Blum, 1997). Girls use more words on average than boys do, and they tend to think more verbally.

*P cells and M cells.* The male visual system (optical and neural) relies more heavily on type M ganglion cells, which detect movement. Girls generally have more type P ganglion cells, which are sensitive to color variety and other fine sensory activity (Sax, 2005). As a result, boys tend to rely more on pictures and moving objects when they write, whereas girls tend to excel in using words that reference color and other fine sensory information.
Frontal lobe development. A girl's prefrontal cortex is generally more active than a boy's, and her frontal lobe generally develops at an earlier age (Rich, 2000). These are the decision-making areas of the brain (as well as the reading/writing/word production areas). These factors can lead to girls being less impulsive than boys are. Girls are usually better able to sit still and read, able to read and write earlier, and better at literacy in general. When teachers are unaware of these brain differences, they may misdiagnose normal boys as having learning disabilities and conduct disorders.

Neural rest states. Boys' brains go into what neurologists call a rest state many times each day. You will notice this when you look at who is drifting off, zoning out, or sleeping through class. You'll also notice that some boys will try to avoid these rest states by engaging in such activities as tapping their pencils or hitting a classmate with a spitball. For some boys—especially those with behavioral issues—these self-stimulating and disruptive behaviors are symptomatic of emotional or psychological problems. But for many boys these disruptions simply reflect male brains trying to stay awake in a classroom that is not well suited for their kind of learning. Single Photon Emission Computed Tomography (SPECT) scans have enabled us to better understand the rest states of male and female brains (Gurian & Stevens, 2005). When the male's brain gets bored, some of his brain functioning shuts down. There is a drift into a brain state that negates learning and performance. When the female brain gets bored, however, more of her brain functioning stays active. Even when she's bored, a girl is more likely to retain the ability to take notes, write words down, and listen carefully.
Cross talk between hemispheres. Structural differences in girls' brains generate more cross talk between hemispheres, leading to better multitasking. Boys' brains, on the other hand, tend to lateralize and compartmentalize brain activity (Rich, 2000). Thus, girls tend to pay attention to more information on more subjects at any given time, whereas boys tend to heap a lot of information into a single-task focus. They concentrate best, in general, when they follow steps A to Z without distraction. Boys also take more time than girls to transition between tasks (Havers, 1995). They tend to become more irritable (and to underperform in learning and classroom behavior) when teachers move them continually between tasks. Multitasking is, of course, crucial to life performance, but boys are better served by balancing multitasking with project-driven and depth-driven learning.

Natural aggression. For a number of neural and chemical reasons, boys are more naturally aggressive and competitive than girls are (Gurian, 1996). Girls generally gravitate less toward competitive learning and relationships characterized by aggression nurturance (the hitting and playful “dissing” that boys continually engage in to support one another). The bonding chemical oxytocin greatly affects this male/female difference. With less oxytocin in the male neural and physiological system, boys tend toward greater impulsivity, more aggression, and less reliance on bonding malleability (Taylor, 2002). They have less desire than girls to comply to please others, including teachers. (p.61).

Research notes different outcomes regarding gender based reading achievement. An Australian study of a remedial reading intervention program conducted between 2005 and 2010 with students in year 4 and year 5 reports that if provided systematic instruction
boys do not require a different approach than girls (Limbrick, Wheldell, & Madelaine, 2011). Securro, Jones, and Cantrell (2010) report that in a study conducted using extensive computer based instructional reading program, the treatment group receiving the intervention, the girls significantly outperformed boys. In addition to the research on reading instructional interventions and gender differences, there are additional studies that examine if achievement is linked to motivation between girls and boys (Logan & Medford, 2011).

Since the 1970s, teaching practices and the influence individual teachers have on student achievement continued to be examined (Marzano, Pickering, & Poll, 2001). A teacher using research-based instructional strategies is a possible predictor of student achievement (Roshenshine, 2012). Marzano et al. (2001) identified nine strategies that have a strong effect on student achievement. Curriculum publishers and authors have incorporated instructional strategies into commercial reading programs and aligned the essential components of reading instruction as recognized by the National Reading Panel. Reading Strategies and Interventions.

Torgesen (2004) suggests reading interventions should be different and supplemental to general coursework. Wanzek, Wexler, Vaughn & Ciullo (2010) reported that when systematic instruction is provided in the areas of phonological awareness, phonics, fluency, word meaning, and understanding of text have been associated with “reducing the incidence of reading difficulties” (p. 1). According to Vaughn, Wanzek, Murray and Roberts (2012), when intensifying instruction for students with significant learning difficulties teachers should include strategies that support cognitive processing, adequate instructional time and individualized student learning environment.
Educators continue to have differences as to the method that should be used when teaching reading as students get older (Moats, 2002). Due to the lack of opportunities for direct instruction and reading strategy instruction at the secondary level, older students may not gain the fundamental skills needed to become a proficient reader (Vaughn et al., 2008). Students may take longer to accurately decode words, resulting in fluency deficits (Hawkins, Hale, Sheely & Ling, 2011). The increased level of complexity of text in the upper grades may also lead students to struggle with fluency and comprehension (Hawkins et al., 2001).

Reading interventions for middle school students must address not only decoding, that is taught during elementary, but multiple components of reading must be addressed (Vaughn et al., 2008). Vocabulary, background knowledge, and the ability to fluently read higher level content becomes a challenge (Vaughn et al., 2008). Multiple reasons may be contribute to middle school students reading below grade level (Sedita, 2011). Varied levels of reading in a classroom and the demands of teaching the standards complicates the time that is allocated for teaching reading during the school day at the secondary level.

Effectiveness of Commercial Reading Programs

The effectiveness of commercial reading programs is often difficult to determine (Allington, 2013; Duncan-Owens, 2009) due to the lack of research and evidence of effectiveness of the commercial based reading programs (Hancock, 2002; Rashotte, MacPhee, &Torgesen, 2001; Torgesen et al., 2006). According to Slavin, Cheung, Groff, and Lake (2008), there is little research in secondary reading programs, and “there are fewer large high quality studies of middle and high school programs” (p. 309). A
challenge when using commercial reading programs is that when skills need to be reinforced, tracking down appropriate level of supplemental material may be difficult. Commercial reading programs may not offer any supplemental remediation materials that students may need, and teachers do not have the time or resources to provide the intervention time students may require (Torgesen, 2005). According to Allington (2013), there is no core reading program supported by research that fosters growth in the area of reading. However, commercial reading program developers continue to promote the claim they are effective in reading achievement (Allington, 2013; Torgesen, Myers, Schirm, Stuart, Vartivarian, & Mansfield, 2006).

There are various reasons as to why commercial reading programs may not maintain the results they are marketed to obtain (Allington, 2013). Essentially, the ways a program should be implemented and teachers should learn to maximize the benefits associated with the use of the program is many times overlooked until after the purchase (Duncan-Owens, 2009). Additionally, commercial program developers may focus on literacy subskills rather than overall literacy development or the program may not have a balance of skill reinforcement needed (Allington, 2013). Researchers have proven teachers will modify or adjust the instruction from a scripted commercial program (Duncan-Owens, 2009). Program fidelity is often a reason stated as to why a commercial reading program does not meet the achievement expectations it claims. Regardless of program recommendations, teachers typically maintain a level of autonomy while teaching, resulting in both experienced and inexperienced teachers potentially changing the program (p.27). The primary difference is that experienced teachers may know
research-based strategies, while the inexperienced teachers may not; therefore, resulting in missed opportunities for learning for the students.

District leaders must make decisions regarding commercial reading programs and resource materials. Leaders are looking for high quality and evidence of effectiveness; however, this task can be time consuming. To support these leaders with making informed decisions when choosing commercial reading programs; What Works Clearinghouse (WWC) was established in 2002 by the Institute of Education Sciences (IES), the U.S. Department of Education (WWC Find What Works, 2018). The WWC Find What Works (2018) website provides a description of What Works Clearinghouse as a team of researchers that identifies studies that provide evidence of the effectiveness of an instructional practice, program or policy. Recommendations are not published by WWC. Only the effectiveness of programs are reported.

Florida State University’s Florida Center of Research provides a report that synthesized the WWC research reviews of identification of effective literacy program and practices with student in grades 6-12 (Herrera, Trukenmiller, & Foorman, 2016). Out of the 7,144 studies reviewed, 111 met the WWC criteria for further review and only 33 programs met the WWC standards with or without reservation (p.3). Twelve of the 33 were reviewed as having positive or potentially positive effects in reading comprehension, vocabulary, or general literacy. All twelve programs included curricula, instructional methods, and were commercially available. The What Works Clearinghouse has reviewed many different reading programs; however, this paper will only highlight two of those programs; *Language! The Comprehensive Literacy* 

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Curriculum, and READ 180. Effectiveness of the programs will be based on whether the program meets the protocol of WWC evidence standards.

Language! The Comprehensive Literacy Curriculum

Language! The Comprehensive Literacy Curriculum program is distributed by Voyager Learning, a division of Cambium Learning Group (Language! Adolescent Literacy, 2013). Dr. Jane Greene authored the Language! The Comprehensive Literacy Curriculum (Sopris West, 2005). As described by What Works Clearinghouse (2013) Language! The Comprehensive Literacy Curriculum program was designed for students in grades 3-12 who score below the 40th percentile, however, Voyager Sopris West’s Learning website (What is Language! Fourth Edition, n.d) reports that the curriculum being designed for students in grades 4-12. The What is Language! Fourth Edition (n.d.) document describes the curriculum as having six levels of reading domains with the beginning level of A and progressing to level F. Each level has six units of instruction and 10 lessons per unit. Students with basic decoding begin the program at level A. Students with higher levels of word analysis begin the program at level C and students in grade 7-12 who are proficient with sound/symbol relationships and have a higher level of word analysis begin the program at level E. Each lesson is recommended for 90 minutes.

The instruction is distributed across six literacy strands: Reading, Writing, Spelling, Vocabulary, Grammar, and Speaking.

Language! The Comprehensive Literacy Curriculum program (Green, 2006) includes all five critical reading components identified by the National Reading Panel and is described by the publisher as being a research-based and validated reading and language arts curriculum designed for struggling non-readers readers in Grades 3–12.
The program can also be used with English language learners (Greene, 2006).

*Language! The Comprehensive Literacy Curriculum* program has six components or what the publisher refers to as steps: (a) phonemic awareness and phonic, (b) word recognition and spelling, (c) vocabulary and morphology, (d) grammar and usage, (e) speaking and writing (Sopris West, 2005).

According Nancy Eberhardt (n.d.), *Language! The Comprehensive Literacy Curriculum* program uses the instructional technique of explicit instruction. Explicit Instruction and Direct Instruction are considered the same, however, there are The National Institute for Direct Instruction (2015) defines Direct Instruction (DI) as:

A model for teaching that emphasizes well-developed and carefully planned lessons designed around small learning increments and clearly defined and prescribed teaching tasks. It is based on the theory that clear instruction eliminating misinterpretations can greatly improve and accelerate learning (p.1).

The National Institute for Direct Instruction (2015) describes the features of Direct Instruction as modeling, guided practice, and independent practice. *Language! The Comprehensive Literacy Curriculum* program employs these features as the I do, we do, and you do model in each lesson (Greene, 2006). Green (2006) describes a gradual transition from teacher-guided instruction to student practice and application is used. The *Language! The Comprehensive Literacy Curriculum* program provides unit and lesson objectives that are stated in student outcome, therefore, proclaiming this feature is correlated to Direct Instruction. The *Language! The Comprehensive Literacy Curriculum* program and Direct Instruction provide immediate corrective feedback to students on a daily basis. Lessons are fast paced in both the *Language! The Comprehensive Literacy Curriculum* program.
Curriculum program and Direct Instruction (Greene, 2006; National Institute for Direct Instruction, 2015).

An extensive internet and multiple databases search was conducted on Language! The Comprehensive Literacy Curriculum program with limited results. One criteria frequently missing is that studies do not have control groups (Slavin, Cheung, Groff, & Lake, 2008). The studies found regarding the effectiveness of Language! The Comprehensive Literacy Curriculum program were primarily publisher materials. The What Works Clearinghouse (2013) identified 16 studies on the effects of program on the literacy skills of adolescent readers. What Works Clearinghouse (2013) identified one study of Language! The Comprehensive Literacy Curriculum program that fell within the scope of the adolescent literacy topic area and met What Works Clearinghouse (2013) evidence standards. The evidence standards met are in the literacy skill areas of reading fluency and comprehension. The effectiveness for the reading fluency domain is reported as negative, but not statistically significant between the Language! The Comprehensive Literacy Curriculum program group and the comparison group. The effect size reported was not large enough to be considered substantially important according to WWC criteria of an effect size being 0.25. The summary of effectiveness for comprehension reported negative, but not statistically significant between Language! The Comprehensive Literacy Curriculum program and the comparison group. Effectiveness according to the What Works Clearinghouse (2013), Language! The Comprehensive Literacy Curriculum program, was found to have no discernible effects on reading fluency and comprehension for adolescent reader.
During the 2006-2007 school year, a Los Angeles County school district in California implemented the *Language! The Comprehensive Literacy Curriculum* program in three middle schools. (Voyager Sopris Learning, 2018). *Language! The Comprehensive Literacy Curriculum* program was a replacement core reading program used for all students in grades 6-8 who performed below the 60th percentile on a test of reading comprehension and fluency. The California Standards Test for English-Language Arts (CST-ELA) and the Test of Silent Word Fluency (TOSWRF) were analyzed for 775 students in grades 6 through 8. After eight months of implementing the *Language! The Comprehensive Literacy Curriculum* program, 33% of students grew by one or more achievement levels on the CST-ELA. The sub-group of students receiving special education services grew by one or more achievement levels on the CST-ELA. As measured by the TOSWRF, students demonstrated statistically and educationally grade equivalent increases.

An additional research summary provided by Voyager Sopris Learning (2018) shared results from a Sacramento County school district in California that collected data on 345 students who were taught the *Language! The Comprehensive Literacy Curriculum* program in 7th, 8th or 9th grades. Students from 11 different schools participated in instruction for eight months. Students participating included English Language Learners (n=42), Special Education (n=36), and students in general education scoring below the 25th percentile on the Stanford Achievement Test (n=267). The comprehension scale of the Gray Oral Reading Test, 3rd edition was used to measure improvement. The results were measured in percentile ranks. The 7th and 8th grade students in April of 1999 scored an average of 15.6 percentile. In April of 2000 the students scored in the 42.8 percentile.
Ninth grade students in April of 1999 scored in the 12th percentile and in April 2000 they scored in the 30th percentile (Voyager Sopris Learning, 2018)

Further studies published by Voyager Sopris Learning (2018) on the Language! The Comprehensive Literacy Curriculum program conducted between 2004 and 2007 were Montana Great Falls Public School District, Colorado Denver Public School District, and California Hawthorne School District studies’ whose students were in the sixth to eighth grade range. A study in Caldwell County school system in North Carolina included grades three through seven. Elk Grove Unified School District in California conducted their study using grades four through twelve. Each study included a percentage, ranging from 24%-100%, of special education students. These studies showed student progress in various forms such as grade equivalent gains and an increase in meeting expectations on state assessments; however, the studies did not meet WWC criteria because they did not have a single case design, comparison group, or groups were not equivalent. (What Works Clearinghouse, 2013).

READ 180

According to READ 180 What Works Clearinghouse Intervention Report (2016), Houghton Mifflin Harcourt is the company that currently distributes READ 180. In 1985 developers of READ 180 included, Dr. Ted Hasselbring of Vanderbilt University, a team from the Cognition and Technology Group at Vanderbilt University, the Orange County Literacy Project in Florida and selected staff at Scholastic, Inc. (p.2). The first version of READ 180 was published in 1998, and in 2006 Scholastic Achievement Manager (SAM) an online management system designed to collect data on a district will collect data on a district-wide basis was added. Scholastic, Inc. released READ 180 Next Generation
program in 2011. READ 180 Next Generation program included new technology and a system of data analysis. The content was designed to provide teachers with a simpler system for instruction. READ 180 was developed as the result of ten years of research by experts at Vanderbilt University in Tennessee and Orange County Public School System in Florida. The use of technology is combined with research-based reading practices to form the foundation of READ 180.

The READ 180 What Works Clearinghouse (WWC) Intervention Report (2016) provides the following program description of READ 180 as a blended learning instructional model that is 45-90 minutes long and is composed of three parts: whole group, direct instruction, small-group rotations, and whole-group wrap-up. The instruction begins with 20 minutes of whole-group direct instruction, in which the teacher provides instruction in reading, writing, vocabulary, and grammar to the entire class. This is followed by rotations of smaller groups of students through three activities:

Small-group direct instruction, in which the teacher works closely with individual students using an interactive work text (called the ReaL Book). Instruction focuses on language development, comprehension, vocabulary, writing, and fluency across six workshops. Each workshop is a 4–6 week module that has distinct subject content, focus questions, anchor videos, and career focus. At the end of each workshop, students complete a career-focused, project-based learning assessment.

• Students’ independent use of a computerized READ 180® Student Application that includes six components (called “zones”): (1) Explore, which includes anchor videos with vocabulary activities; (2) Reading, which involves close reading of
individualized texts based on a student’s instructional reading level; (3) Language, which includes vocabulary building and practice; (4) Fluency, which includes practice in spelling and reading; (5) Writing, which includes crafting argumentative, narrative, and informative essays; and (6) Success, which includes progressively more complex fluency and comprehension activities.

- Modeled and independent reading, designed to build comprehension and accountability. Students can select from over 100 paperbacks, eBooks, or audiobooks using a digital bookshelf or classroom materials. The instruction ends with a brief wrap-up discussion with the whole group. The goal of the READ 180 software is school to continually adjust the level of instruction based on student performance (p. 2).

The *READ 180 Next Generation* program professional paper (2011) was developed as the result of ten years of research by experts at Vanderbilt University in Tennessee and Orange County Public School System in Florida. The use of technology is combined with research-based reading practices to form the foundation of READ 180. The *READ 180 Next Generation* program aims to address gaps in individual students’ skills through 90-minute sessions.

The Reading Inventory is the assessment used as a screener in the district to help teachers with Lexile levels. The Reading Inventory also serves as part of the system used to determine if students will participate in the students in the *READ 180 Next Generation* program. Knuston (2016) described the Reading Inventory as an adaptive reading comprehension measure that is designed to allow teachers to track student progress.
toward goals. MetaMetrics, Inc., the creators of the Lexile Framework partnered with
Scholastic and created the Scholastic Reading Inventory. When the Scholastic
educational technology was purchased by Houghton Mifflin Harcourt (Chen, 2015) the
name of the inventory changed from Scholastic Reading Inventory (SRI) to Reading
Inventory (RI). Features of the inventory remained the same. The publisher recommends
the Reading Inventory is recommended to be administered three times per school year.

The Reading Inventory reports student growth in reading in Lexile levels
(Scholastic Reading Inventory Technical Guide, 2014). The Scholastic Reading
Inventory Technical Guide (2014) includes a framework called a Growth Expectation
Guide that is used to assist teachers when setting goals for students. The Reading
Inventory reports in Lexile levels that are based on the frequency of word difficulty and
the complexity of sentences based on the length of sentence. Lexile levels are reported in
numerical measures typically ranging between 200L and 1700L. The lower numerical
level represents a less complex level text.

According to Houghton Mifflin Harcourt’s professional paper, *Interpreting
Assessment Results* (2016), there are times when student growth expectations do not align
with a student’s goals and there may be fluctuations of scores. This inconstancy is
referred to as a Standard Error of Measurement (SEM) in the Reading Inventory. The
SEM in the Reading Inventory is 56 Lexile levels (p.4).

The Reading Inventory attributes the cause of measurement error to two sources:
systemic error that are repeatable factors inherent in the measuring instrument and
random error that result in unintended factors which cannot be controlled. Systematic
error can be controlled and does not contribute to fluctuations in scores as much as
random errors. Houghton Mifflin Harcourt’s professional paper, *Interpreting Assessment Results* (2016) recommends the following features to reduce systemic error:

Before the first administration, teachers identify the general level of the student’s proficiency.

*Save Test:* Teachers are allowed to save the test at any time. The test can be administered over multiple days.

*Locator Test:* For students in grades 7 or above that are performing below grade level, two or more tests items are included at beginning to locate their true starting point.

*Skip Items:* students can skip up to three items if the passage or question is unclear.

*Test Administration Practices:* timing, interruptions, conditions in test room, clarity of the test directions, attitude of the test administrator, and the perceived consequence of the score.

*Student motivation:* state of mind; alertness; feelings of fatigue, hunger, or illness; lack of interest or attentiveness; guessing; speed, and/or carelessness.

*Other factors:* misreading items or answers, misunderstanding the instructions, clerical errors.

Administration practices and student motivation may impact the scores (p.5).

*READ 180 Next Generation* program sessions can be completed in multiple class periods. Students rotate through small-group activities that include direct instruction from the teacher, independent computer work, and independent reading. The program goals are
to increase students’ decoding, fluency, vocabulary, comprehension, and writing skills (News and Events READ 180, 2018).

The *READ 180 Next Generation* (News and Events READ 180, 2018) instructional model is made up of one whole group teacher led session, technology based instructional word work, and independent group. The small groups focus on the individualized needs of students, instructional software with individualized focus, and modeled and independent reading. Lastly, the daily session ends with a whole group wrap-up. Based on the research, the WWC was unable to draw conclusions regarding the effectiveness of the program on students with learning disabilities (READ 180 WWW Intervention Report, 2016).

The Read 180 WWC Intervention Report (2016) provided a summary of findings from a systematic review of the evidence. WWC provided the following program description of READ 180:

READ 180 is a reading program designed for struggling readers who are reading 2 or more years below grade level. It provides blended learning instruction (i.e. combining digital media with traditional classroom instruction), student assessment, and teacher professional development. READ 180 is delivered in 45-90 minute sessions that include whole-group instruction, three small group rotations, and whole-class wrap up. Small-group rotations include individualized instruction using an adaptive computer application, small group instruction with a teacher, and independent reading. READ 180 is designed for student students in elementary through high school (p.1).
What Works Clearinghouse Intervention Report (2016) states that Houghton Mifflin is the company that currently distributes READ 180. The WWC Intervention Report continues to describe that in 1985 the development of READ 180 included Dr. Ted Hasslebring along with a team from Vanderbilt University, a literacy project team from Orange County Florida, and a development team as Scholastic, Incorporated. The first version of READ 180 was published in 1998. Features continued to be added to the program such as; an interactive workbook that introduces reading skills and strategies, supportive features for English learners, and a Scholastic Achievement Manager (SAM) which is an online management system designed to collect data on a district will collect data on a district-wide basis. In 2011, Scholastic released *READ 180 Next Generation* program which included new technology, data analysis, content designed to maximize student engagement and teacher effectiveness.

**Summary**

Providing effective instruction to students with disabilities is a concern in today’s schools as school districts attempt to meet the state accountability measures. Budget constraints have significantly influenced the purchases of commercially designed programs. A school district must conduct a thorough review of the materials or commercial reading programs that are being considered for purchase. According to the literature review, *READ 180 Next Generation* program has the components of a balanced literacy program and meets the five critical areas of reading instruction as indicated by the National Reading Panel. Additionally, the *READ 180 Next Generation* program program aligns with the practices of Direct Instruction. Theorist have contributed to the development and understanding of how students learn to read and are integrated in many
commercial reading programs. The literature review shows a progression of how the development of reading has occurred and how the development has influenced commercial programming of reading.
CHAPTER III - METHODOLOGY

The purpose of this study was to determine if academic reading achievement for students with disabilities (SWD) in grades 6-8 were impacted as a result of using the *Read 180 Next Generation* program. The study obtained and analyzed information collected from teacher surveys and archival data regarding the use of the program. The *Read 180 Next Generation* program is currently being offered in a large metropolitan school district in Georgia for students with disabilities in grades 3-12 who are reading two or more years below grade level. This researcher studied whether the use of a research-based reading program such as *Read 180 Next Generation* program impacted reading achievement of students with disabilities as measured on a state standardized test. A comparison of academic reading achievement of students with disabilities who participated in *Read 180 Next Generation* program with the amount of teacher experience, gender, and teacher perception of the program implementation impact standardized test results as measured by the Georgia Milestones Assessment System was conducted.

Design

This study employed a research design that examined quantitative data from three different sources: (a) quantitative data included the test results from the reading domains on the Georgia Milestones Assessment System and the Reading Inventory for students with disabilities in Grades 6, 7, and 8; (b) demographic information to be collected from both students (gender) and teachers (years of experience), and (c) data to be derived from a survey of program implementation completed by teachers using the *Read 180 Next Generation* program.
Four research questions guided the study.

1. Is there an increase in Georgia Milestones or HMH Reading Inventory reading scores of students with disabilities who participated in direct instruction using the Read 180 Next Generation Program?

2. Does teacher perception relate to student gains when implementing the Read 180 Next Generation program?

3. Does teacher experience relate to student gains when implementing the Read 180 Next Generation program?

4. Is there a difference in the reading scores based on the gender of students with disabilities using the Read 180 Next Generation Program?

The independent variables in the study were, (a) student gender, (b) teachers’ years of teaching experience and (c) teachers’ perceptions of programs. The dependent variables were (a) the Georgia Milestones Assessment System reading domain scores of SWDs in Grades 6, 7, and 8, (b) the implementation survey regarding the use of the Read 180 Next Generation program and (c) the HMH Reading Inventory scores.

Participants

The data collected were from students with disabilities in grades 6, 7, and 8 in a large metropolitan school system in Georgia. This district is second of the largest in the state, with an enrollment of approximately 113,000 students. The district has more than 13,000 students with disabilities. The system employs approximately 14,000 teachers and staff and operates from a general fund budget of over $907 million.

The study participants included students with disabilities in Grades 6, 7, and 8 from 19 out of 25 middle schools who are participating in the Read 180 Next Generation
program in small group class instruction. The study include 145 students with disabilities. The students from the 19 schools had similar enrollment and demographics. All of the students participating in the Read 180 Next Generation program received direct instruction of READ 180 Next Generation program from a certified general education teacher or a certified special education teacher. All students with disabilities participating in the Read 180 Next Generation program were included in the study regardless of race, gender, or categorical disability.

Teacher participants were trained by an Houghton Mifflin Harcourt Read 180 Next Generation program company representative or a trained district support staff member on all the components of the program and how to correctly administer each lesson of the Read 180 Next Generation program Assessment training was provided for the teacher participants as part of initial training. There were no face to face training follow-up provided; however, support personnel and coaching visits were available upon request and multiple support resources were accessible through the district intranet. Questionnaire data were obtained to determine teacher perceptions of the implementation of the Read 180 Next Generation program. This data was gathered from a distributed questionnaire. The items were categorized by domains as follows: preparation training, planning and scheduling, materials, curriculum and content, and student outcomes. The forms will be analyzed on a Likert scale of 5 (Strongly Agree) through a 1 (Strongly Disagree) scale.

Role of the Researcher

As a special education supervisor employed by the school district, this researcher was provided the opportunity to oversee the implementation of Read 180 Next
Generation program. The researcher did not participate in the development or delivery of instruction; however, to gain an understanding of the program this researcher conducted Read 180 Next Generation program walk-throughs and participated in conversations with the publisher and teachers using the program.

Instrumentation

Data for this study was collected through the use of Georgia Milestones Assessment System, Houghton Mifflin Harcourt Reading Inventory, and teacher questionnaires.

Georgia Milestones Assessment System Test

The state mandated assessment, the Georgia Milestones Assessment System English Language Arts tests was used to obtain student achievement data. According to the Georgia Department of Education (2018), the administration of the Georgia Milestones Assessment System is mandated by the state of Georgia for all students in grades three through high school. End of grade assessments are given in grades three through eight, and end of course assessments are administered in selected courses in grades nine through twelve. The Georgia Milestones Assessment System contains selected response items, open-ended constructed response items, extended-constructed response items and extended writing response items. The Georgia Milestones Assessment System measures how well students acquire, learn, and accomplish knowledge and skills set forth by the state content standards.

According to the Georgia Milestones Assessment System (2018) scores on all Georgia Milestones reports are expressed as scale scores:
The scale score reported for each EOG assessment is derived by converting the total number of points earned on the test (i.e., the raw score) to the Georgia Milestones scale for each particular EOG assessment. Scale scores are comparable across all test forms and administrations for the same EOG assessment. For example, a scale score of 525 on the Grade 4 English language arts EOG assessment from one form of the test, or from one administration, indicates the same examinee ability as a score of 525 from any other form or administration of the Grade 4 English language arts EOG assessment. Each time a test is administered, a new form of that test has been equated with previously administered forms to adjust for differences in difficulty, and the scores on the different forms share the same reporting scale. Scale scores are not comparable across different EOG assessments. Thus, a scale score of 525 on the Grade 4 English language arts EOG assessment does not indicate the same level of ability as a scale score of 525 on the Grade 8 English language arts EOG assessment or the Grade 4 mathematics EOG assessment. Scale Scores and Achievement Levels to provide more meaning to an assessment’s scaling system, achievement levels are established. A process known as standard setting helps to define points along the scale score range and gives additional meaning to student performance. These points that define different achievement levels are known as cut scores. Georgia educators and stakeholders from around the state participated in the standard setting process for the Georgia Milestones EOG assessments in August 2015. The cut score recommendations from this statewide committee were presented to the State Board of Education and adopted in September 2015. (p. 7)
According to the Georgia Department of Education (2018), descriptors of achievement levels on the Georgia Milestones Assessment System were developed by Georgia educators. Achievement levels on Georgia Milestones Assessment System are titled; Beginning Learner, Developing Learner, Proficient Learner, and Distinguished Learner. The Georgia Milestones Assessment System (2015) describes the general meaning of each of the four levels below:

**Beginning Learners** do not yet demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia’s content standards. The students need substantial academic support to be prepared for the next grade level or course and to be on track for college and career readiness.

**Developing Learners** demonstrate partial proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia’s content standards. The students need additional academic support to ensure success in the next grade level or course and to be on track for college and career readiness.

**Proficient Learners** demonstrate proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia’s content standards. The students are prepared for the next grade level or course and are on track for college and career readiness.

**Distinguished Learners** demonstrate advanced proficiency in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia’s content standards. The students are well prepared for the next grade level or course and are well prepared for college and career readiness. (para. 2)
Reading status scores on the Georgia Milestones English language arts assessment are also reported as one of the following: below grade level or at or above grade level. This reading status scoring is used to assist in determine promotion in grades 3, 5, and 8.

Houghton Mifflin Harcourt Reading Inventory

One instrument used during this study was the Houghton Mifflin Harcourt Reading Inventory (RI), formerly known as the Scholastic Reading Inventory (SRI). The Scholastic Technology Division was purchased by Houghton Mifflin Harcourt in 2015, resulting in a name change from Scholastic Reading Inventory to Reading Inventory (HMH, 2015). According to the Scholastic Reading Inventory College and Career Technical Guide (2014), the print version of the Scholastic Reading Inventory (SRI) was developed in 1998 and 1999. The computer based version of the SRI was introduced in 1999, and further development of versions were introduced between 1999 and 2014. The updated version named SRI College and Career included two subtests: The Foundational Reading Assessment and the Reading Comprehension Assessment. The Foundational Reading Assessment subtest features three strands of assessments in the areas of: phonological awareness, letter word identification, and word attack. The Reading Comprehension Assessment subtest features: an adaptive algorithm to adapt the test to the reader, and comprehension skills that include finding details, drawing conclusions, and making comparisons and generalizations.

The Reading Inventory measures reading growth on a Lexile framework developed by Metametrics (HMH, 2015). The Reading Comprehension Assessment uses Lexile Theory to convert the student’s raw score from the assessment into the Lexile metric (Scholastic Reading Inventory Technical Guide, 2014). Lexile levels are
determined on the frequency of word difficulty and the complexity of sentences based on the length of sentence. Lexile levels are reported in numerical measures usually ranging between 200L and 1700L. The lower numerical Lexile level, the less complex is the level of text. Using the same metric is used for both readers and texts allows for the possibility of a direct comparison. (Scholastic Reading Inventory Technical Guide, 2014).

When reader and text measures match, the Lexile Framework forecasts 75% comprehension. The operational definition of 75% comprehension is when given 100 items written to assess comprehension of a text, the reader will be able to correctly answer 75. When a text has a Lexile measure 250L higher than the reader’s measure, the Lexile Framework forecasts 50% comprehension. When the reader measure exceeds the text measure by 250L, the forecasted comprehension is 90%. (p. 12)

Questionnaire

A questionnaire was completed by the teachers in the study using Read 180 Next Generation program to determine the overall perception of the program. The questionnaire was originally developed by Dr. Jamie Ladnier-Hicks and with permission, this researcher adapted the questionnaire (Appendix A). The questionnaire was reviewed by a focus group consisting of three teachers not participating in the study, an English Language Arts Instructional Program Specialist, a teacher of the Read 180 Next Generation program and the researcher. The questionnaire consists of 35 items with responses measured by a 5 point Likert-type scale ranging from strongly agree (1) to strongly disagree (5).
The University of Southern Mississippi IRB permission (Appendix B) and permission from the school principals and district (Appendix C) was obtained prior to conducting the study. Questionnaires were given to the teachers of the Read 180 Next Generation program that participated in the study completion of the questionnaires was completed on a voluntary basis. A statistical analysis of the questionnaire was used to identify mean scores in each major interest area regarding the usage of Read 180 Next Generation program as follows: preparation/training & support, planning & scheduling, materials, curriculum & content, and outcomes. The questionnaire was designed to collect demographic data about each survey participant. IRB permission was obtained and permission from the principals were granted.

Analysis of the Data

The independent variables were (a) student gender, and (b) teachers’ years of teaching experience. The dependent variables were the Georgia Milestones Assessment System domain reading scores of students with disabilities in grades 6, 7, and 8 and the Houghton Mifflin Harcourt Reading Inventory scores of students with disabilities in grades 6, 7, and 8. The quantitative data were analyzed using analyses of variance and correlation. A paired samples test was used to determine if there was a difference in reading scores on the Georgia Milestones and Houghton Mifflin Harcourt Reading Inventory after the implementation of the READ 180 Next Generation program. Analysis of data from the Georgia Milestones and Houghton Mifflin Harcourt Reading Inventory were used for each student. Questionnaire data were gathered from teachers of READ 180 Next Generation program. Questionnaire forms regarding implementation of the Read 180 Next Generation program were used to determine teacher perceptions. The
questionnaire data were analyzed and reported by grade level, subscale averages, and 
standard deviations. Multiple Regression was used to determine if statistically significant 
differences in reading achievement exist between teacher experience who received direct 
instruction using the *READ 180 Next Generation* program and between male and female 
students who received direct instruction using the *Read 180 Next Generation* program.

**Delimitations**

The participants were enrolled in middle school grades 6, 7, and 8 in a 
metropolitan county in north Georgia. The students were not separated by categorical 
disabilities; therefore, a variety of categorical disabilities was represented. Boys and girls 
participated in the study. This researcher included nineteen schools; the sample of 
students was adequate; however, only data were used that aligned with completed and 
returned questionnaires.

**Summary**

This research study used quantitative data from three sources to determine if the 
use of a research-based reading program such as the *Read 180 Next Generation* program 
 Improved reading achievement of SWDs as measured on a standardized test. The data 
collected were from SWDs in a large metropolitan school system in Georgia. The study 
participants were SWDs in grades 6, 7, and 8 from 19 selected middle schools who 
participating in the *Read 180 Next Generation* program during the 2017-2018 school 
year. The participants’ gender was compared with teacher experience as measured by 
Lexile score from the Georgia Milestone. The results from the teacher questionnaire 
included questions that related to the teacher’s perception of using the program was 
reported.
CHAPTER IV – RESULTS

Introduction

The purpose of this study was to determine if there was an increase in reading achievement, as measured by the Georgia Milestones Assessments, of students with disabilities in grades 6-8 who participated in reading instruction using the READ 180 Next Generation program. This study examined whether relationships existed among reading achievement of students with disabilities, student gender, teacher experience, and teacher perception of the READ 180 Next Generation program implementation. The information gained from the study could potentially serve as supporting evidence as to whether the program should continue being purchased by the school district and used with student with disabilities.

Caution should be used when making curriculum decisions based only standardized data such as the Georgia Milestones state mandated test (Mertler, C. 2014). There may be a variety of reasons as to why students with disabilities reading achievement growth continues to be problematic (Shulte, Elliot, Stevens, Tindal, & Nese, 2016). Another consideration, according to Shulte, et.al (2016) students with disabilities may have been excluded from large scale achievement programs, and exclude from or included in longitudinal for growth, but the students with disabilities not specifically examined.
Descriptive Data

The specific category of disability for each participant was not included in this study. Student test data and questionnaire responses were collected and analyzed using SPSS. Lexile level reading data from the HMH Reading Inventory and Georgia Milestones Assessment was collected from 168 sixth grade special education students, 239 seventh grade special education students, and 80 eighth grade special education students participating in the READ 180 Next Generation program during the 2017-2018 school year. A distribution of Lexile level scores were transformed into a distribution of z scores by grade level for all 487 students. However, student data used in this study was used if their teacher completed and turned in the READ 180 Next Generation questionnaire resulting in 48 sixth grade special education students, 45 seventh grade special education students, and 53 eighth grade special education students for a total 146.

It was also of value to determine if the variables of the questionnaire completed by the teachers were related to the student Lexile reading scores. Data were collected from questionnaires completed by teachers currently employed within the school district located in the metro Atlanta area. During the 2017-2018 school year, students with disabilities attended twenty-five middle schools in this metropolitan public school district. Nineteen middle schools were selected and participated in this study. Selection was based on principal approval for this study and the school must have implemented READ 180 Next Generation program during the 2017-2018 school year. Student selection for this study was based on the following criteria: the student participated in the READ 180 Next Generation program during the 2017-2018 school year, the student has pre and post Lexile data as measured by the Houghton Mifflin Harcourt Reading
Inventory, and has reading Lexile scores as measured by the Georgia Milestones Assessment.

Table 1 reveals the frequency and percentage of individual variables associated with grade level and teacher experience. Different grade level participation appeared equal with sixth, seventh, and eighth grade. Sixty-four percent of student participants were male, and 53% were female. Teacher participant years of classroom experience was fairly evenly distributed with teacher participants with 11-15 years exhibiting the highest participation (32%) and 6-10 years and 21 years and over exhibiting the least participation rate (11%, 12%).

Table 1

*Frequencies and Percentages of Demographic Variables of Questionnaire Responses*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade Level</strong></td>
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</tr>
<tr>
<td>Sixth</td>
<td>48</td>
<td>33%</td>
</tr>
<tr>
<td>Seventh</td>
<td>44</td>
<td>30%</td>
</tr>
<tr>
<td>Eighth</td>
<td>54</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Student Gender</strong></td>
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<td></td>
</tr>
<tr>
<td>Boys</td>
<td>93</td>
<td>64%</td>
</tr>
<tr>
<td>Girls</td>
<td>53</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Years of Experience</strong></td>
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<td></td>
</tr>
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<td>0-5 Years</td>
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<td>27%</td>
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<td>6-10 Years</td>
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<td>11%</td>
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<td>47</td>
<td>32%</td>
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<tr>
<td>16-20 Years</td>
<td>25</td>
<td>17%</td>
</tr>
<tr>
<td>21 or More Years</td>
<td>18</td>
<td>12%</td>
</tr>
</tbody>
</table>

The data in this chapter are organized by answering the following research questions.
Research Question 1:

Is there an increase in Georgia Milestones or HMH Reading Inventory reading scores of students with disabilities who participated in direct instruction using the Read 180 Next Generation Program?

There was no statistically significant difference between Georgia Milestones Lexile Scores of Sixth, Seventh or Eighth grade special education students enrolled in the 19 selected middle schools before and after implementation of READ 180 Next Generation program. After students participated in the READ 180 Next Generation program, there is no significant increase between 2017 and 2018 on the Georgia Milestones lexile scores, $t(145) = -1.267$, $p < .001$. 2017 and 2018 Houghton Mifflin Harcourt Reading Inventory Lexile scores reveal a significant increase in Houghton Mifflin Harcourt Reading Inventory Lexile scores between 2017 and 2018, $t(145) = -4.027$, $p < .001$.

Table 2

*Results of Paired Samples t-test*

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t</th>
<th>Sig.</th>
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<tr>
<td>Georgia Milestones 2017</td>
<td>-.11035</td>
<td>1.05</td>
<td>-1.267</td>
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<tr>
<td>Georgia Milestones 2018</td>
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<tr>
<td>Houghton Mifflin Harcourt</td>
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<td>.658</td>
<td>-4.027</td>
<td>.000</td>
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<td>Reading Inventory 2017</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Houghton Mifflin Harcourt</td>
<td></td>
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<tr>
<td>Reading Inventory 2018</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

*Indicates statistical significance at <.01 level*
Research Question 2:

Does teacher perception relate to student gains when implementing the Read 180 Next Generation program?

The questionnaire was divided into the following 5 subsections: Preparation/Training & Support, Planning and Scheduling, Materials, Curriculum and Content, and Outcomes. Participants were required to respond to each item via a Likert response scale. READ 180 questionnaires completed were adapted from an earlier Reading Street questionnaire that was created by Dr. Jamie Ladnier Hicks for her 2010 dissertation on teacher perceptions on Scott Foresman Reading Street Program. Dr. Hicks granted permission for this researcher to use and adapt the study as needed. Reliability of the original questionnaire was calculated and revealed an overall Cronbach’s alpha of .926 indicating the instrument was reliable. The READ 180 Next Generation questionnaire had an overall Cronbach’s alpha of .891. The subscales of Preparation/Training & Support .784; Materials .772 and Outcomes, .868 exhibited good reliability ratings. Planning & Scheduling, Curriculum & Content exhibited lower Cronbach’s alpha of .532 and .601 respectively. There is a statistically significant relationship between attitudes of teachers toward the READ 180 program by years of classroom experience in 3 of the subscales of the questionnaire: Preparation/Training & Support $F(3,142)=9.30, \ p<.001, \ R^2 = .16$. Planning and Scheduling $F (3,142)=27.7, \ p=.001, \ R^2 = .37$. Curriculum and Content $F(3, 142), \ p = .001, \ R^2 =.11$. The results obtained from Materials component $F(3, 142)= 1.82, \ p=.085, \ R^2 =.020$ and the
Outcomes component $F(3, 142) = .52, p = .671, R^2 = .01$ revealed no statistical significance between attitudes of teachers toward READ 180 program by years of classroom and each these components.

The questionnaire components for each subscale were measured as the dependent variables and compared the predictor variable of teacher classroom experience with each component. Perception levels on the questionnaire were measured using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) Each component of the questionnaire was reported in this study as an average. The questionnaire subscale averages for grade 6, 7, and 8 range from the highest average of score 5.0 and to the lowest score 3.67. Beginning with the subscale of Preparation; the results obtained were exhibiting the highest average of 5.0 at 38% with the lowest being 4.5 at 4.1%. Teachers of grades 6 and 7 rate the subscale of Preparation lowest. The subscale of Preparation included statements reflecting preparation, training and support provided by the school district. The Planning subscale average of 5.0 results exhibit the highest average of 60%, the average of 4.0 results exhibit the lowest being at 4.8%. The subscale of Planning reflects on planning and scheduling options that are provided by the READ 180 Next Generation program. Individual grade level ratings for 6, 7, and 8 are closely related. The Materials subscale included reflection statements regarding the organization of all materials, including teacher and student materials, provided by READ 180 Next Generation program. The rating average of 5.0 resulted in 73% frequency among grade level teachers, and the average of 3.5 rating was being the lowest response frequency of 7.5%. Ratings for grades 6, 7, and 8 are closely related. The Curriculum subscale average of 5.0 resulted in 47% frequency, the average of 3.67 was the lowest frequency of 12%.
The curriculum subscale included statements about strategies, pacing of the content and theme integration. Grade levels are closely related. The final subscale of Outcomes resulted in 5.0 being the highest frequency of 43% and 4.5 resulted in the lowest frequency of 11%. Outcomes subscale statements reflect teacher perception on student improvement in the area of decoding, fluency, reading comprehension, and vocabulary. Grade level subscale averages are closely related. The results of teacher questionnaire are contained in Table 3.

Table 3

*Teacher Questionnaire*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Subscale Average</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>1.0</td>
<td>11</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>3.00</td>
<td>38</td>
<td>26.0%</td>
</tr>
<tr>
<td></td>
<td>3.50</td>
<td>23</td>
<td>15.8%</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>12</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>6</td>
<td>4.1%</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>58</td>
<td>38.4%</td>
</tr>
<tr>
<td>Planning</td>
<td>4.0</td>
<td>7</td>
<td>4.8%</td>
</tr>
<tr>
<td></td>
<td>4.33</td>
<td>41</td>
<td>28.1%</td>
</tr>
<tr>
<td></td>
<td>4.67</td>
<td>10</td>
<td>6.8%</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>88</td>
<td>60.3%</td>
</tr>
<tr>
<td>Materials</td>
<td>3.5</td>
<td>11</td>
<td>7.5%</td>
</tr>
<tr>
<td></td>
<td>4.38</td>
<td>17</td>
<td>11.6%</td>
</tr>
<tr>
<td></td>
<td>4.63</td>
<td>12</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>106</td>
<td>72.6%</td>
</tr>
<tr>
<td>Curriculum</td>
<td>3.67</td>
<td>18</td>
<td>12.3%</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>38</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>4.33</td>
<td>22</td>
<td>15.1%</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>68</td>
<td>46.6%</td>
</tr>
<tr>
<td>Outcomes</td>
<td>4.00</td>
<td>17</td>
<td>11.6%</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>16</td>
<td>11.0%</td>
</tr>
<tr>
<td></td>
<td>4.75</td>
<td>50</td>
<td>34.2%</td>
</tr>
<tr>
<td></td>
<td>5.0</td>
<td>63</td>
<td>43.2%</td>
</tr>
</tbody>
</table>
Table 4

Subscale Preparations

<table>
<thead>
<tr>
<th>Subscale Preparation</th>
<th>Grade 6 Mean</th>
<th>Standard Deviation</th>
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</thead>
<tbody>
<tr>
<td>Grade 6 Preparation</td>
<td>4.6875</td>
<td>.43301</td>
</tr>
<tr>
<td>Grade 7 Preparation</td>
<td>2.7614</td>
<td>1.04819</td>
</tr>
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<td>Grade 8 Preparation</td>
<td>3.9630</td>
<td>1.00870</td>
</tr>
<tr>
<td>Subscale Planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6 Planning</td>
<td>4.58812</td>
<td>.32779</td>
</tr>
<tr>
<td>Grade 7 Planning</td>
<td>4.5984</td>
<td>.37381</td>
</tr>
<tr>
<td>Grade 8 Planning</td>
<td>4.743</td>
<td>.33960</td>
</tr>
<tr>
<td>Subscale Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6 Materials</td>
<td>4.9075</td>
<td>.16191</td>
</tr>
<tr>
<td>Grade 7 Materials</td>
<td>4.3855</td>
<td>.58404</td>
</tr>
<tr>
<td>Grade 8 Materials</td>
<td>4.7844</td>
<td>.42459</td>
</tr>
<tr>
<td>Subscale Curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6 Curriculum</td>
<td>4.5825</td>
<td>.43808</td>
</tr>
<tr>
<td>Grade 7 Curriculum</td>
<td>4.3036</td>
<td>.59048</td>
</tr>
<tr>
<td>Grade 8 Curriculum</td>
<td>4.4148</td>
<td>.52156</td>
</tr>
<tr>
<td>Subscale Outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 6 Outcomes</td>
<td>4.8750</td>
<td>.12632</td>
</tr>
<tr>
<td>Grade 7 Outcomes</td>
<td>4.4318</td>
<td>.39753</td>
</tr>
<tr>
<td>Grade 8 Outcomes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In an effort to allow teacher participants to provide additional comments they would like to share about READ 180 Next Generation, an open-ended response box was added to the bottom of the questionnaire. Of the 44 questionnaires distributed to certified instructional teachers of READ 180 Next Generation, 19 participants responded to the questionnaire, resulting in a return rate of 57%. Fourteen of the questionnaires included qualitative comments. Responses were divided into two categories: positive and negative feedback. All comments received are listed below:

Positive Feedback:

- Great program to help students
• Most student growth diagnosed was with learning disability as opposed to those with OHI (such as ADHD)
• Students are able to connect with stories; high interest, low readability
• The software is perfect.
• The software instruction provides immediate clear feedback for the students.

Negative Feedback:

• Overall, students showed growth throughout the program. They did get a little bored with the same structure of the class every day.
• READ 180 should have their own headphones; have been through four different kinds trying to find what works best.
• There is a lot of learning as you go.
• Teachers should be provided with the resources at the beginning of the year.
• Some of the workshops are not appropriate, some students are too sensitive for the topics.
• Lessons have to be adapted.
• Too much information to be taught within the time frame allotted.
• Some students like it, some don’t.
• Training materials were overwhelming. Too many materials with no instruction on how to assess. Very time consuming where to find other materials and how to utilize reports for assessment purposes.
Administrators in the building are unfamiliar with the program and did not
and could not support effectively. Space is too small to run the program
effectively.

Research Question 3:

Does teacher experience relate to student gains when implementing the Read 180
Next Generation program?

Out of the respondents who reported number of years as a teacher, 27% reported
that they had 0-5.0 years of experience, 11 % reported 6.0-10.0 years of experience, 32%
reported 11.0-15.0 years of experience, 17% reported 16.0-20.0 years of experience, 12%
reported 21.0 years or more of experience. A bivariate regression obtained the following
results: Georgia Milestones Lexile scores 2017 F(1,144), = 4.02, p = .047, R2 = .020. and
Georgia Milestones Lexile scores 2018 F(1, 144), p = .224, R2 = .010 Results indicate
there is a relationship between teacher experience and Georgia Milestones Lexile Score.
Results obtained from HMH Reading Inventory 2017  F(1,144) = 11.9, p < .001, R2 =
.076 and HMH Reading Inventory 2018  F(1,144) = 21.26, p = .000, R2 = .129 indicate
teacher experience may influence the HMH Reading Inventory Lexile scores.

Research Question 4:

Is there a difference based on gender in the reading scores of students with
disabilities using the Read 180 Next Generation Program?

A multiple regression analysis was conducted to determine whether a statistically
significant relationship existed between Georgia Milestone Lexile scores, HMH Reading
Inventory and the independent variable of gender and READ 180 program participation.
According to the analysis, sixth grade f(1,46), p=.436, R2 =.013, seventh grade f(1,42),
p = .864, \( R^2 = .001 \), eighth grade \( f(1, 52) \), \( p = .155 \) \( R^2 = .038 \) shows no significant relationship between the academic reading scores found between the 2017 and 2018 Georgia Milestones scores and the 2017 and 2018 HMH Reading Inventory while comparing scores to with the independent variable of gender. No statistically significant results were obtained regarding predictors that may improve student performance.
CHAPTER V – DISCUSSION

The purpose of this study was to determine if the reading scores of sixth, seventh, or eighth grade special education students in an Atlanta metropolitan school district increased as a result of the READ 180 Next Generation program. In addition, a questionnaire regarding perceptions and overall satisfaction levels of the certified teachers implementing the program was obtained. The questionnaire was divided into the following 5 subsections: Preparation/Training & Support, Planning and Scheduling, Materials, Curriculum and Content, and Outcomes. Teacher perception and demographics gathered from the questionnaire were analyzed and included in this study.

Four research questions guided the study.

1. Is there an increase in Georgia Milestones or HMH Reading Inventory reading scores of students with disabilities who participated in direct instruction using the Read 180 Next Generation Program?

2. Does teacher perception relate to student gains when implementing the Read 180 Next Generation program?

3. Does teacher experience relate to student gains when implementing the Read 180 Next Generation program?

4. Is there a difference based on gender in the reading scores of students with disabilities using the Read 180 Next Generation Program?

During the 2017-2018 school year, the READ 180 Next Generation program was the reading intervention program primarily used for all students in the school district that is the focus of this study. Two assessments were used as dependent variables in this study. One assessment, the Reading Inventory, was a dependent variable that was
administered to all students 3 times per year. The second assessment, Georgia Milestones used as a dependent variable was a state-mandated assessment administered once a year. Using this data to compare outcomes, the study findings indicated that no statistically significant differences occurred between the performance of sixth, seventh, and eighth grade student participants before and after implementation of the READ 180 Next Generation program. Statistical analysis revealed no specific predictors within the data that may inform the improvement of future student performance within the participating population. In addition, results of the questionnaire data indicated the certified instructional personnel perceptions were positive.

Although the results from this study do not reveal any statistically significant difference in student performance after the implementation of the READ 180 Next Generation program; a review of literature appeared to indicate the program is aligned with research regarding best practices curriculum implementation. National Reading Panel (2000) found that systematic and explicit instruction in the following areas should be components of reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension.

A questionnaire was given to teachers of the READ 180 Next Generation program. The questionnaire data inquired about their perceptions of using the READ 180 Next Generation program and requested teacher demographic information. The results of the questionnaire data indicated that certified personnel perceptions were generally positive about the READ 180 Next Generation program.

No Child Left Behind Act (2002) held the expectation that all students be proficient in reading by 2014 (Wei, X., Blackorby, J., & Schiller, E., 2011). However,
NCLB (2002) did not recognize students with disabilities as having unique needs and require specialized instruction. Categorical disabilities of students with disabilities were not taken into consideration; therefore, resulting in the majority of students eligible for special education being counted for in a single subgroup. Reporting students with disabilities as a single subgroup raised awareness for all students to meet reading proficiency; however, the strict school improvement plans that states required led to instances of teaching to the test and placing extreme levels of stress regarding progress that is primarily based on a state mandated test (Andrew, & Lee, 2019). Every Student Succeeds Act (ESSA) that replaced NCLB (2002) placed more emphasis on state led accountability measures (Samuels, 2015). The Office of Special Education and Rehabilitation Services letter of guidance issued November 16, 2015, affirms that states must continue to require an expectation of rigor and access to grade level content standards for students with disabilities. Districts are faced with challenges such as showing progress on one test measure and increasing rigor. Scores on one measure are disaggregated into the subgroup of special education, however, the categories of disabilities are not reported.

IDEA (2004) states as part of the definition of specially designed instruction is to meet the unique needs of a child with a disability; however, testing scores are reported as a whole group with no individual considerations. Testing all students with the same measure and reporting outcomes that are not considering the disability of the student is not aligned with the definition of special education. To be eligible for special education, a student must require specialized instruction. Teachers instruct using instructional strategies that meet the unique needs of the individual student. This instruction can look
very different; however; districts are required to use the same measure to report student growth.

Research has found early reading programs should provide systematic instruction that includes all components of reading (Calhoon, Sandon, & Hunter, 2010). Regardless of the targeted age group of students, many commercial programs follow reading components found in early reading programs. There is a gap in literature supporting that commercial reading programs show growth (McDonald, 2013); however, What Works Clearinghouse, Florida Center for Reading Research and the Best Evidence Encyclopedia review commercial programs and provide districts research on program effectiveness (Kelly, 2018). According to Kelly (2018), many of these programs available for purchase do not have supporting evidence of effectiveness of the program and these programs may not meet the needs of all students. Guidelines for effectiveness must be established by the district. The question of why this commercial reading program being chosen, and how will the district determine effectiveness of the program. According to Gusky (2007) the need to use multiple measures of assessments and other information pertaining to reading should be considered when making instructional decisions. Standardized testing of students is not always a clear measure of instructional effectiveness (Stanovich & Stanovich, 2003). The recommendation by Koretz (2009) is not to rely completely on high stakes tests, unless the test can be confirmed by other data. It should not be assumed the READ 180 Next Generation program is ineffective based on the results of this study.

Kini, T. & Podolsky, A, (2016) published a review of 30 research studies focusing on teacher experience and its impact on student outcomes. The majority of these studies showed a positive relationship between teacher experience and teacher effectiveness.
Research shows that teacher experience is an indicator of student achievement (Goe & Stickler, 200). However, the amount of teacher experience required when implementing a commercial reading program is in question. Quinn, K & Kim, J., (2017) discuss how teachers may adapt the program’s instructional practices; however, there is caution that the changes they make may alter the program and impact the effectiveness of the program. An inexperienced teacher may lack the skills and insight to make appropriate instructional changes.

There is research that found that gender differences affect student achievement; such as boys in the area of reading and girls in the area of mathematics (Callan, Marchant, Finch, & Flegge, 2017). Callan et. al 2017 reported that girls and boys use strategies differently indicated that girls are more likely to set goals, plan, and seek assistance; males are found to use less strategies. This study shows no difference in achievement between gender; however, there are more boys participating in the READ 180 Next Generation program.

Two assessments were used as dependent variables in this study. One assessment, the Reading Inventory, was a dependent variable that was administered to all students 3 times per year. The second assessment, Georgia Milestones, used as a dependent variable was a state mandated assessment administered once a year. Using this data to compare outcomes, the study findings indicate no statistically significant differences between the performance of sixth, seventh, and eight grade participants before and after implementation of the READ 180 Next Generation program. A questionnaire was given to teachers of the READ 180 Next Generation program. The questionnaire data included perception about using the READ 180 Next Generation program and teacher demographic
information. The results of the questionnaire data indicated that certified personnel that taught the *READ 180 Next Generation* program revealed that perceptions were generally positive.

**Summary**

Two assessments were used as dependent variables in this study. One assessment, the Reading Inventory, was a dependent variable that was administered to all students 3 times per year. The second assessment, Georgia Milestones, used as a dependent variable was a state mandated assessment administered once a year. Using this data to compare outcomes, the study findings indicate no statistically significant differences between the performance of sixth, seventh, and eight grade participants before and after implementation of the *READ 180 Next Generation* program. A questionnaire was given to teachers of the *READ 180 Next Generation* program. The questionnaire data included perception about using the *READ 180 Next Generation* program and teacher demographic information. The results of the questionnaire data indicated that certified personnel that taught the *READ 180 Next Generation* program revealed that perceptions were generally positive.

Research findings indicated no statistically significant differences in Lexile reading scores between the performances of the sixth, seventh and eighth grade students with disabilities after the implementation of the *READ 180 Next Generation* program. Statistical analysis revealed no specific predictors within the data that may improve future student performance within the participating population. In addition, results of the questionnaire data indicated the certified instructional personnel perceptions were positive.
Conclusions and Discussion

Although the results from this study do not reveal any statistically significant difference in student performance after the implementation of the *READ 180 Next Generation* program; a review of literature appeared to indicate the program is aligned with research regarding best practices curriculum implementation. National Reading Panel (2000) found that systematic and explicit instruction in the following areas should be components of reading instruction: phonemic awareness, phonics, fluency, vocabulary and comprehension.

Legislation has pushed for accountability for schools to improve scores since the end of the 20th century. Educational reform has been and continues to be a topic and debate at the forefront of communities. Specifically, there has been concern regarding the performance and growing achievement gap of students with disabilities. Historically, there has been problems concluding as to reasons why students with disabilities are not performing. Reasons why the studies may not be conclusive; students with disabilities may have been excluded from large scale achievement testing, excluded from longitudinal studies on reading growth; or included and the reading growth of students with disabilities not examined by categorical disabilities.

Limitations of the Study

There were various limitations noted in this study. The study had an adequate sample size (N=146); however, limitations included population concerns, limited use of formative assessments, teachers completing and answering questionnaire. This study has limited generalizability due to population concerns such as the multiple categorical disabilities of the student participants. Categorical disabilities were not considered and
there may have been trends related to the disability and reading growth. The study did not include data from formative assessments used during the implementation of the *READ 180 Next Generation* program. Teachers may not have used formative assessments to adjust instruction for students. All teachers that received the questionnaire completed and returned the questionnaire.

Study limitations were created by investigating the 2017-2018 school year only; data was not available from previous year. No literature was found that indicated that increased student achievement specific on summative evaluations such as the Georgia Milestones rarely reveal statistically significant gains in student reading achievement. Additionally, each school included in the study has a Support Services Administrator assigned to their building. These are administrators that can assist in seeking assistance if needed for the *READ 180 Next Generation* teachers, however, each school in the study did have a literacy coach. Literacy coaches are trained, supervised and supported by local and district school administrators; therefore, these school would have another layer of support with planning, preparation, and delivery of *READ 180 Next Generation* lessons. These literacy coaches could collaborate with the district *READ 180 Next Generation* and conduct walk-throughs to informally assess the implementation of the reading program. Documentation from these collaboration meeting at participating schools may have been collected and analyzed. The level of fidelity to which the *READ 180 Next Generation* program was being implemented would have been ongoing and there may have been opportunity for *READ 180 Next Generation* implementation adjustments as needed. Finally, the *READ 180 Next Generation* questionnaire could have been completed as more formal assessment of implementation process.

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Recommendations for Practice

This study should be used to provide data for the implementation of READ 180 Next Generation in middle schools. Researchers and administrators should consider the limitation when reviewing this study. Additional research is needed and should be encouraged by the district in order to provide a more accurate view of student achievement and the implementation of READ 180 Next Generation program. Teacher suggestions and comments should be shared with the district’s READ 180 Next Generation coach. Study participants should be given an opportunity to review the overall outcomes of the implementation process as recognized in this study.

Recommendations for Future Research

Follow up studies should be conducted. Formative and summative data should be analyzed to determine if any, statistical significance revealed. Independent variable of categorical disabilities of the students participating should be compared with Lexile outcomes from both the Georgia Milestones and the HMH Reading Inventory. Student perception of the program should also be measured. A student questionnaire should be developed and given to students mid year and end of year.
APPENDIX A– Questionnaire Permission

September 1, 2012

Kathy Arnold
80 Battle Gate Lane
Dallas, GA 30157

Dear Kathy,

This letter is in reference to your email regarding the use of my piloted curriculum questionnaire. You may use my questionnaire to complete your study as long as you reference my original work (Ladnier-Hicks, 2010) on the questionnaire.

Good luck in your endeavors! If I may be of further assistance to you or your committee, feel free to contact me.

Sincerely,

Jamie Ladnier-Hicks, Ph.D.
8520 Oliver Clark Road
Irvington, AL 36544
251-454-1903
jamie.ladnier.hicks@gmail.com
The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits. The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately, but not later than 10 days following the event. Problems should be reported to ORI via the Incident template on Cayuse IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: IRB-18-29

PROJECT TITLE: READ 180 Dissertation

SCHOOL/PROGRAM: School of Education, Educational Research and Admin

RESEARCHER(S): Katherine Arnold
Lilian Hill

IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited
PERIOD OF APPROVAL: October 25, 2018 to October 25, 2019

Edward L. Goshorn, Ph.D.
Institutional Review Board Chairperson
August 29, 2018

Kathy Arnold
311 Argyle Court
Holly Springs, GA 30115

Dear Ms. Arnold:

Your research project titled The Effects of READ 180 Next Generation Intervention Reading Program with Middle School Students with Disabilities in Grades 6-8 has been approved. Listed below is the school where approval to conduct the research is complete. Please work with the school administrator to schedule administration of instruments or conduct interviews.

School

Barber MS  
Daniell MS  
East Cobb MS  
Lindley 6th  
Lovinggood MS  
Palmer MS  
Smitha MS

Campbell MS  
Dodgen MS  
Griffin MS  
Lindley 7th – 8th  
Mabry MS  
Pine Mountain MS

Cooper MS  
Durham MS  
Hightower MS  
Lost Mountain MS  
McClure MS  
Simpson MS

Should modifications or changes in research procedures become necessary during the research project, changes must be submitted in writing to the department of Accountability, Research & Grants prior to implementation. At the conclusion of your research project, you are expected to submit a copy of your results to this office. Results cannot reference the Cobb County School District or any District schools or departments.

Research files are not considered complete until results are received. If you have any questions regarding the process, contact our office at 770-426-3450.

Sincerely,

Cindy Nichols
Grants & Research Manager
Accountability, Research & Grants

BOARD OF EDUCATION
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SUNPENDINGENT  
Chris Baggsdale
APPENDIX D-READ 180 Questionnaire

Please check the response that reflects your opinions of the READ 180 program. The following terms have been used: Strongly Disagree (SD-1), Disagree (D-2), Neither Disagree or Agree (N-3), Agree (A-4), Strongly Agree (SA-5).

<table>
<thead>
<tr>
<th>Preparation, Training &amp; Support</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree or Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>1. Sufficient training prior to implementing the READ 180 program.</td>
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<td>□</td>
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<td>2. Materials required for the implementation of the READ 180 program.</td>
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<td>□</td>
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<tr>
<td>3. Sufficient support from the district during the course of implementing the READ 180 program.</td>
<td>□</td>
<td>□</td>
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<td>4. Lesson overviews that are beneficial when planning for instruction.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>5. Differentiated instructional options.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>6. Scheduling ideas and suggestions that are easily implemented.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>7. Necessary materials to implement lessons.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>8. Well organized materials.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>10. Good ideas and suggestions for managing materials.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>12. Student’s editions that are visually appealing.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>13. Student’s editions that contain stories that are age or grade appropriate.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>14. Student’s editions that contain stories that capture the interest of my students.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum &amp; Content</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>15. Strategies that are simple to follow.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>16. Pacing that is appropriate for my grade level(s).</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
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<tr>
<td>17. Integrated themes that are appropriate for my grade level(s).</td>
<td>□</td>
<td>□</td>
<td>□</td>
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</table>

<table>
<thead>
<tr>
<th>Outcomes</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Overall, since the implementation of READ 180 my students have shown improvement.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>18. In the area of decoding.</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>
18. In the area of fluency. □ □ □ □ □ □
20. In the area of reading comprehension. □ □ □ □ □ □
21. In the area of vocabulary. □ □ □ □ □ □

The following demographic information will be coded and used for statistical analysis only.

<table>
<thead>
<tr>
<th>Please check the appropriate responses:</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. I teach the following grade level(s): □ Sixth □ Seventh □ Eighth</td>
</tr>
<tr>
<td>23. I have the following years of classroom teaching experience:</td>
</tr>
<tr>
<td>□ 0-5 years □ 6-10 years □ 11-15 years □ 16-20 years □ 21 or more years</td>
</tr>
</tbody>
</table>

Please add any additional comments you would like to share regarding the READ 180 program:

Please note. By completing this questionnaire, you are agreeing to participate in a voluntary study designed to gather teachers' opinions of the READ 180 program. Your responses will be anonymous and completely confidential. If you have any questions or concerns, please contact Kathy Arnold at 678-538-5887.
APPENDIX E-Participant Letter

The University of Southern Mississippi
Department of Educational Leadership and School Counseling

The Impact of the Read 180 Reading Intervention Program on the Academic Achievement of Middle School Students with Disabilities

Dear Participant,

For the completion of my dissertation as a requirement for earning a doctoral degree in Educational Administration at The University of Southern Mississippi, you are being solicited to complete a survey regarding your perception of the effectiveness of the Read 180 reading intervention program and the fidelity of the implementation of the program in your school. Your participation in this study is strictly voluntary and is in no way related to your employment status. You have the right to decline or discontinue participation at any point in the process without penalty, prejudice, or consequence. The survey consists of 21 questions and should take no more than 10-15 minutes of your time. Your responses will be kept strictly confidential. You or your school will not be identified by name in the draft or final publication of the paper. All survey data will be kept secure in location and after the study will be destroyed.

By completing and returning this survey, you are giving consent, as a participant, for this information to be used as part of this study. Survey responses will be coded and identified by number only for data analysis and reporting the results. The information will only be used for the purpose outlined above.

Should you have further questions regarding this study, please feel free to contact me at 678-858-5027 or karnold1460@hotmail.com. I appreciate your support of my research in the area of Educational Leadership.

Sincerely,
Kathy Arnold

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the institutional Review Board, The University of Southern Mississippi.
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