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The Implementation and Impact of the Leveled Literacy Intervention System on Middle School Students in Special Education

Krystin McCormick Williams

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THE IMPLEMENTATION AND IMPACT OF THE LEVELED LITERACY
INTERVENTION SYSTEM ON MIDDLE SCHOOL STUDENTS IN SPECIAL
EDUCATION

By

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DEDICATION

This dissertation is dedicated to my uncle, Harry “Buzzy” Cowan, who raised me as his own. You believed in me before I believed in myself. You gave me opportunities I never would have had without your selflessness of taking me in when my mother passed away. You gave up so much of your life to give me a bright future. From reading countless books to me as a young child to doing whatever it took to make sure I was a first-generation college graduate, and all the years in between, you instilled in me the importance and value of an education. You have shared with me the love you have for the beautiful state of South Carolina and the great University of South Carolina. I love them both as much as you do. From my freshman move-in day in 2006, to receiving my Doctor of Education through this university, I hope I have made you proud. Thank you for making it all possible.

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ABSTRACT

The purpose of this mixed-methods action research study was to determine the effects of a direct, individualized, and intensive reading intervention on middle school students with identified learning disabilities in the area of reading. The Leveled Literacy Intervention System was used as the reading intervention in this study. Oral reading fluency and reading comprehension skills were measured, as well as the student participants' attitude toward reading. Data collection methods included LLI system assessments, district level benchmark reading assessments, and student questionnaires. The teacher-researcher analyzed the data and determined the 18-week LLI intervention had positive impacts on the student participants' oral reading fluency, comprehension, and attitudes toward reading.

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CHAPTER ONE

LITERACY AND ADOLESCENT LEARNERS

Introduction

Literacy demands in the general education curriculum are present in all subject areas by the time a student reaches middle school. The importance of literacy in an adolescent's educational career is immense. For adolescents with a learning disability in the area of reading, these demands can sometimes be daunting. It is the role of special education teachers to help these students achieve success in all areas by addressing their reading deficits. Individualized Education Programs (IEP) and interventions are put in place to support learners with disabilities. Middle school students with an IEP are able to receive accommodations that make the general education curriculum accessible, even with their disability in reading. These accommodations allow struggling readers to demonstrate their knowledge in other subject areas without their learning disability (LD) in reading impacting their grades.

Reading skills have an astronomical impact on a student's overall performance in school. When students struggle with reading, their motivation, self-esteem, and overall interest in reading can be negatively impacted (Glenn et. al., 2017). Skerett (2012) reported a pattern of school officials having ingrained negative responses to students who are considered struggling readers. Without success in reading, students could also quickly lose interest in reading and school. Reading deficits also limit students in terms of being independent learners in the general education setting (Lombardi, 2016). Interventions are

provided to these learners in an effort to build foundational reading skills and increase their oral reading fluency (ORF) rate and comprehension accuracy. The Fountas & Pinnell Leveled Literacy Intervention System (LLI) allows special educators to provide small group, intense reading interventions to students who are not sufficiently achieving grade level reading expectations (Fountas & Pinnell, 2021).

Problem of Practice

Students with deficits in reading fluency and comprehension typically score lower on achievement assessments in the general education curriculum. The problem of practice in this study explores middle school students who are not making adequate progress in closing the educational gap that exists for them in reading with current instructional practices. Reading deficits negatively impact student performance in all subject areas. Special education students receiving instruction in the general education setting are expected to achieve all standards at mastery, just as their non-disabled classmates. Coursework in these general education classes is presented at a much higher level than the students' reading level, making it difficult for them to effectively comprehend assignments and assessments. In this rural middle school, students enrolled in the general education setting are required to take and score a mastery of 80% or higher on district benchmark assessments. The special education students in this middle school, who are receiving services in reading, on average score significantly lower than the 80% expectation. The lack of improvements in oral reading fluency and reading comprehension revealed greater opportunity gaps for learning as compared to same-grade peers. Outcomes based on opportunity gaps grow exponentially larger as students progress through their K-12 educational career.

Fountas and Pinnell’s Leveled Literacy Intervention System will be used to enhance their opportunities to learn and potentially reduce the differential in their present level of performance and grade level expectations. This intervention will be taught at the individual’s instructional level, rather than at their grade level. Students will be given the opportunity to build foundational reading skills starting at their level by targeting oral reading fluency and reading comprehension accuracy. This concept introduces social implications of meeting students where they are academically and acknowledging their strengths rather than their deficits. Breaking away from the “deficit model” of teaching and learning is the key concept. “Students know their shortcomings, and so many—especially minority males—act up, act out, or drop out to rebel against the prevailing, unsubstantiated notion that all one has to do is *work harder*” (Lombardi, 2016, p. 2). This supports the idea of raising expectations by creating reachable, achievable goals based on data and scaffolding instruction. Focusing on individual strengths will help mitigate students fear of failure (Lombardi, 2016). A longitudinal study completed by the NCES (National Center for Education Statistics) reported that teacher expectations impacted student success rates more than their own motivation. The study found that tenth-grade students, when compared to low teacher expectations, were three times more likely to graduate from college when their teachers held high expectations (Segal, 2014). The Center for American Progress (2014) reported high school teachers believed high-poverty students were 53% less likely to graduate college and African American students were 47% less likely to graduate college compared to their white peers (Lombardi, 2016).

According to the National Center for Learning Disabilities, African American male students made up 16% of the national student population during the 2013-14 school

year, however made up 20% of the student makeup of students identified as having a learning disability through special education departments. The NCLD also reports that while 55% of white students receiving special education spend more than 80% or more of their day in general education settings, only one-third of African American students in special education spend the same amount of time in general education settings. African American students are more likely to be taught in separate classrooms, despite the evidence suggesting inclusion is an effective educational method for students with disabilities (National Center for Learning Disabilities, 2021).

Purpose of Study

The purpose of this study is to determine the effects of a direct, individualized, and intensive reading intervention on middle school students with identified learning disabilities in the area of reading. Leveled Literacy Intervention (LLI) is being implemented in a small-group of special education students in the resource room. This intense intervention focuses on building reading fluency and comprehension skills among readers that are reading below grade level expectations. In addition to increasing fluency and comprehension skills, improving the participants' self-confidence about reading is a focus of this study. After analyzing the data, the researcher will determine if the LLI intervention program will be implemented in all special education reading classes at Latta Middle School. It is also the goal to use this intervention to bring these students' reading levels to a point in which they can be placed back in general education classes. This would ensure they receive an appropriate education in their least restrictive environment.

Significance of the Study

The significance of this study is to increase reading fluency and comprehension skills in students with learning disabilities in reading at Latta Middle School. Middle school is an important time in students' educational careers. Increasing reading skills will enhance intrinsic motivation. Reading deficits can potentially lead to increased unmotivated behaviors. (High, 2018) and behavior concerns (Strong, 2004). Building self-esteem in students with a special education label is also significance in this study. Students may begin having negative attitudes and feeling of self-worth when they understand they are labeled as struggling readers. Perceived conceptions about this label may cause them to begin identifying themselves as a struggling learner and negatively impact their identity as a reader (Glenn et al., 2018). Students may begin viewing reading as just schoolwork and separate reading from their outside world. Students with reading deficits may be reluctant to seek reading outside of school and only associate the need to improve reading skills only for schoolwork. Teaching basic reading skills may also seem child-like to adolescent readers. There is often a disconnect between the teaching of foundational reading skills at the middle school level and providing age-appropriate content. Adolescent students do not want to feel as if their schoolwork is "kid-like" (High, 2018).

LLI takes a different approach to reading interventions. As many programs focus on early interventions with young children, Fountas and Pinnell (2021) developed a short-term intervention program that instructs students in a small group setting as a supplement to general education literacy skills. LLI provides engaging leveled books that are fast-paced and on the student's instructional reading level. This program is designed

specifically for students reading below grade-level. Books are on a lower reading level but also written without losing interest of adolescent readers. LLI has five core values. These values are as follows: 1) Building a cohesive learning community that sustains literacy growth and success; 2) Engages in authentic inquiry and ignite intellectual curiosity; 3) Believe in themselves while using literacy to acquire learning and for enjoyment; 4) Read, talk, and think about relevant content in today's world; and 5) Texts are culturally sensitive and reflect diversity as well as varying in genre, content, and perspective.

According to the National Center for Learning Disabilities (2021), one in five children in this country are diagnosed as having learning or attention issues. One in 16 public school students in the United States have IEPs that address either specific learning disabilities or attention deficits. This number is alarming to many. Even so, lots of students are not formally identified as having a learning disability or attention deficits. Comorbidity, having more than one learning or attention issue, is also alarmingly high. Forty-five percent of children with ADHD also have a learning disability (DuPaul et al., 2013). IDEA (Individuals with Disabilities Act) requires districts to evaluate children with suspected learning disabilities and provide special education services to those who are eligible. This will help teachers tailor a child's learning and meet needs to enable them to be successful and involved in the general education setting. The goal for students with IEPs who also receive general education instruction, like the students in this study, is to not only be a part of general education, but to make adequate progress in the general education curriculum.

Reading deficits can bring about barriers to success. These barriers can include repeating a grade, behavior concerns, or even dropping out of school. Unemployment also is a post-school concern for these students. The National Center for Learning Disabilities (2021) reports only 46% of working-age adults with specific learning disabilities are employed. When comparing adults with learning disabilities to non-disabled adults, they are twice as likely to be unemployed. The significance of this study will keep students from falling further behind and prevent them from losing intrinsic motivation.

The need for this study was determined after the researcher analyzed special education data from district reading benchmark scores. Students with IEPs that addressed reading were not regressing, however they were not making adequate progress to close performance outcome discrepancies. Middle school literacy instruction is beyond teaching a student to read. Rather, children rely on their reading skills to learn new things. The South Carolina School Report Card was also used to analyze data of ELA students in the rural middle school. In 2018-19, Latta Middle School had a proficiency or higher rate of 39.7% in ELA state standardized assessments. This rate is compared to the district rate of 40.1% and the state rate of 45.4%. The school district's overall on-time graduation rate in 2019 was 81.5%, slightly higher than the state average of 81.1%. The concerning part of this is that the on-time graduation rate has dropped in the past four years from 87.5% in 2016, 83.5% in 2017, 88% in 2018, and 81.5% in 2019. This was particularly alarming and in part promoted this study to determine the impacts LLI has on the district's most at-risk and vulnerable population.

Research Questions

Throughout this study, four questions were examined. These research questions were investigated to address the problem of practice:

1. What is the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group?
2. What is the mean growth in reading comprehension demonstrated by students who participated in the LLI intervention group?
3. What is the mean growth in reading achievement on district level benchmark assessments demonstrated by students who participated in the LLI intervention group?
4. Did the students' attitudes about reading change?

Overview of Action Research Methodology

Action research is research that is undertaken by practitioners in the area of study. These practitioners identify a problem and design a study to address the issue. They work to improve current practices using evidence and findings of the study. Studies are completed on the job and typically target ways to be more effective at current practices. In education, findings from action research studies can be used to influence thinking skills, sense of efficacy, and the willingness to address the process of change (Ferrance, 2000).

In educational action research, the practitioner is the teacher. A teacher researcher will identify a problem he or she sees in their classroom and creates a plan to address the problem at hand. Research in education leads to evidence-based practices in classrooms. Their practices are based on studied methods that were found to be effective. The teacher

will identify a problem in their classroom, research historical background of the issue, and explore educational theories that address the problem. Teachers also identify if there are any gaps in the current published research that can be addressed in their own study. A researcher's ability to understand, critique, and apply findings of their completed study is essential in influencing others in the educational field (Suter, 2012).

In the field of education, practices and policies seem to be ever-changing. Making data-driven decisions are important to ensure the most effective practices are used with students. Educational action research addresses gaps and ethical principles and practices. It is a systematic, practical approach to research. The findings lead to recommendations for future practice (Nolen & Putten, 2007).

Methodology

A mixed-methods, concurrent research design was used to conduct this study. Qualitative data was collected through interviews and questionnaires that examine student perceptions and attitudes about reading. Quantitative data was collected through pre- and post-test assessments, LLI data, oral reading fluency assessments, comprehension assessments, and district level benchmark assessments. Both qualitative and quantitative data collection was conducted concurrently.

The LLI intervention program was implemented in a small group of students identified as having a learning disability in reading. The intervention was the special education instruction provided to these students in the resource classroom. Four students participated in this direct intervention daily for 90 school days. Students were interviewed and given a questionnaire to discover their attitudes and perceptions of reading, both before and after the 18-week intervention. Participants are special education

students receiving services in both the general and special education setting. All students have IEPs and diagnosed learning disabilities in reading. The researcher collected and analyzed data over the 18-week intervention.

Limitations of the Study

As with many action research studies, the limitations of this study falls within a limited sample size. The sample size of only four makes it difficult to generalize findings to other special education and general education populations. The shorter intervention and time constraints, allowing only 30 minutes daily, also pose limitations to the study. Scheduling limitations exists for students only receiving thirty minutes daily of special education reading instruction.

Summary

Research has revealed students achieve higher levels of academic success when teachers focus on individual strengths, rather than teaching from the deficit model (Lombardi, 2016). The present study aimed to implement the LLI reading program that meets students at their reading levels and builds upon their strengths. Focusing on building self-esteem in the area of reading in African American special education students with a specific learning disability is another focal point of this study. Glenn et al. (2018) demonstrated that perceived conceptions about having a special education label may lead students to take ownership of the “struggling learner” mindset and negatively impact their attitudes and feeling of self-worth, as well as their identity as a reader.

The intervention, Leveled Literacy Intervention, at the center of this study was implemented within the guidelines of the program recommendations. Students were

given direct, explicit instruction in a small group of four. The intervention focused on reading fluency and comprehension, as well as the students' mindset toward reading.

Following the literature, the researcher surveyed students about their attitude toward reading, implemented the intervention, and administered post-assessments for data collection. Assessments were also completed at intervals throughout the intervention period. Following this intervention period, the researcher also designed a post-survey to determine if the students' overall attitudes toward reading changed following the intervention.

Chapter 2 of this dissertation reviews the literature and examines social implications of teacher expectations, student representation, and inclusion of African American special education students in the general education setting. Chapter 3 describes the methodology, problem of practice, and research design of the study. An overview of the study and presentation and analysis of the data is discussed in Chapter 4. In the final Chapter 5, a summary of the study addresses the research questions, explores recommendations for policy, and reviews implications for future educational practices.

CHAPTER TWO

LITERATURE REVIEW

Introduction

With the increase of special education students being serviced in the general education classrooms, teacher perspectives on effectiveness of practices, strategies, and procedures are necessary to strengthen current and pre-service teacher preparation of educating this student population (Forlin & Chambers, 2011). Evidence gained from this study adds to the knowledge of educational research that will allow public K-12 schools and higher education institutes to appropriately use the information gained to train, guide, and support current and pre-service general education teachers working with special education inclusion students.

Understanding the relationship between the experiences and perspectives of special education students in general education classes and the impact special education students have on general education teachers' knowledge base is a focus of this study. Riitaoja et. al. (2019) conducted research that focused on special education student experiences, ages 13-16, and found a clash between personal experience and inclusive thinking among teachers. A major concern for special education students in this study related to social matters and overall differences of school experiences and student schedules. Some students felt as if only certain student voices are heard and special education students are heard differently compared to their non-disabled peers. Some teachers in this study downplayed the differences of experiences of special education

students. Taking student voices and individual student experiences seriously empowers special education students in the general education setting by giving them a voice (Riitaoja et. al., 2019).

There is a lack of knowledge of specific factors that impact general education teacher perspectives of inclusive practices makes it difficult for appropriate training provided for teachers (Ji-Ryun, 2011). Findings from this study can lead to improved understanding and open communication among teachers, administrators, and teacher preparation program developers about special education inclusive practices. The problem of having a lack of true representation of general educators' perceptions of inclusive services can be due to insecure feelings of study participants of how their responses will be used and represented (Robinson, 2018). Accurately reporting general education teacher perspectives on special education services may be difficult due to the teachers' reservations of truthfully expressing their opinions, thoughts, and/or concerns. These concerns may include fear of administration learning of negative feelings of inclusion or current practices. Resistance to openly and honestly answer questions from a special education teacher stems from fear that it may impact the coworker relationship and may also be another concern for the participant to withdraw from these useful discussions (Benstead, 2019).

The view of special education student perspectives is particularly important because general education teachers are increasingly servicing students with special needs in their classrooms. This is a shift of educational practices from educating special education students in a separate, isolated setting. By listening to their perspectives and giving them a voice, general education teachers can gain insight on how to better service

special education students inclusively. Collecting data from special education students can enlighten the design of curriculum used in inclusive settings and add to knowledge base of these teachers. It can also be used to design better curriculum used to prepare pre-service educators in their teacher preparation programs.

This literature review is divided into five subtopics related to inclusive practices of special education. These topics will be labeled with the following subheadings: Historical Perspectives, Social Justice and Educational Equity, Professional Development for Current Educators, Preparing Future Educators, and Related Research. Historical special education practices in public school settings will be examined through reviewing existing studies. The social justice and educational equity section will focus on special education current practices that ensure social justice and equal educational opportunities for students with disabilities. The section on professional development for current educators reviews existing literature that provides recommended next steps for current teachers to receive adequate trainings and supports to feel confident in their delivery of instruction and providing accommodations and modifications to students with special needs in their classrooms. Following this section, research is reviewed to analyze best practices for preparing future educators in their work with special needs students. This literature review concludes with examining various related inclusive special education research and studies.

Purpose of Literature Review

The purpose of a literature review is to examine the nature of the problem identified by a study through the analysis of existing information. This review synthesizes knowledge already published in relation to the research questions.

Researchers complete literature reviews to build their thesis and argument statements. Completing a literature review allows researchers to draw conclusions about the existing data and state a position on the knowledge found through research. One can think of completing a literature review as organizing the existing research found into a clear and ordered method (Machi & McEvoy, 2016).

Strategies used in this literature review include an online search of current publications through the EBSCO database. Types of sources reviewed include peer reviewed journals, websites, and conducted studies that are relevant to the research questions of the study. Peer reviewed journals used include School Psychology Review, International Journal of Inclusive Education, International Journal of Special Education, Journal of Learning Disabilities, and Cambridge Journal of Education.

Theoretical Framework

“Disability as a single category does not allow theorists to communicate with each other with clarity because it conceals the heterogeneity of various disabling conditions” (Anastasio & Kauffman, 2011, p. 375). The social constructionist model can be seen in present day special education practices. Using the social constructionist approach to consider the reality of special education students is one way educators can learn about disabled students’ experiences (Anastasio & Kauffman, 2011). Using a general framework of social constructivism can lead to the promotion of effective teaching and learning practices of students of all ages and ability levels (Watson, 2001).

Social constructivism is centered around the belief that knowledge is individually constructed via one’s experiences (Schreiber & Valle, 2013). It is derived from Vygotsky’s theory that emphasizes the importance of social and cultural influences on

student learning. The varied backgrounds of students in groups shape students' learning and help students learn from each other. "Vygotsky believed that learning does not just take place within the individual. He argued that learning is a social and collaborative activity where people create meaning through their interactions with one another" (Lourenco, 2012, p. 287). When students with special needs are taught in inclusive environments, they are exposed to many other students with various backgrounds and educational abilities that differ from their own. Understanding their varied perspectives may improve educators' ability to effectively address their needs.

Historical Perspective

Over the last century, special education practices changed gradually. The progressive change in special education also brought about changes in general education. Special education students now learn along-side typically developing peers in general education classroom. This practice is known as inclusion. The level of inclusion varies greatly but even at the lowest level, inclusion is still a progressive move compared to practices in the early twentieth century.

Excluding students with special needs from the general education population can be traced back to 1893 (Smith, 2004). It was this year that the Massachusetts Supreme Court upheld the expulsion of students solely based on their academic progress (Yell et al., 1998). Three decades later, the Wisconsin Supreme Court denied a students' education due to his cerebral palsy, citing he caused nausea and depression to students and teachers (Smith, 2004). In these years, individuals with disabilities were not provided a fair and equal education as compared to their non-disabled peers (Esteves & Rao, 2008).

The special education movement has experienced three phases: isolation and exclusion, access and inclusion, and accountability and empowerment (Dray, 2008). During the isolation and exclusion phase individuals with disabilities were often removed from their families and housed in institutions that excluded them from the world. As the civil rights movement rippled through the 1950s and 1960s, as did the concerns about unwarrantable treatment of individuals with special needs. With landmark legal trials concerning education, such as *Brown v. Board of Education* (1954), special education students were beginning to receive their education in schools with non-disabled peers. This moved special education into the access and inclusion phase. Today we are in the accountability and empowerment phase. Student with disabilities are now being empowered and provided an equal education and opportunities as their non-disabled peers. Educators responsible to ensure their success are being held accountable in doing so (Dray, 2008).

Social Justice and Equal Educational Opportunities

The civil rights acts of the 1950s and 1960s opened the doors for social justice and equal educational opportunities for individuals with disabilities. *Brown v. Board of Education* (1954) was the first court case to lay the foundation of future laws to protect those with disabilities. “The Brown decision led the way to a growing understanding that all people, regardless of race, gender, or disability, have a right to a public education” (Esteves & Rao, 2008, p. 12). In 1975, the federal law, now known as Individuals with Disabilities Education Act, was passed and required public schools to provide an education to individuals with disabilities. Prior to this law, approximately one million children in the United States were not receiving an education (Antosh & Imparato, 2014).

Of the eight million children with disabilities as late as 1975, up to half were being educated through exclusive settings or inappropriately educated in inclusive schools (Pulliam & Van Patten, 2006).

Section 504 of the Rehabilitation Act of 1973 was the first law passed to protect individuals with disabilities from discrimination of any programs that receive federal assistance (U.S. Department of Education, 2018). Even with this act and the 1975 law, the level and quality of education was not clearly defined. In 1982, *Board of Education of Hendrick Hudson Central Schools District v. Rowley* landed in the U.S. Supreme Court as the first special education case. In this case, the court determined students with individuals must have access to public education that will meet their individual needs. The lower courts were then provided with a standard to follow when determining what a free and appropriate public education is for all students (Yell et al., 2004). Many amendments were made to the IDEA act in the years to follow. By 1990, special education programs had increased 23% since the passing of the 1975 Education for All Handicapped Children Act. However, the overall expectations schools had for students with disabilities continued to be low, there was a lack of focus for effective practices, and paperwork requirements were extensive (Yell & Shiner, 1997). With No Child Left Behind Act and the IDEA, 2004, special education programs have become more effective and inclusive (Pulliam & Van Patten, 2006).

With the more inclusive environments, general education teachers are now receiving more training and professional development in the area of differentiating instruction to reach students with special education students in their inclusive general education classrooms (Tomlinson et al., 2003). With this structural shift, there are

concerns. Teacher perceptions and resistance to the changes are among these concerns. Other concerns include the fear of some that the lines between general and special education will be blurred and that the core of special education, individualization, is being lost in the inclusive models (Kavale & Forness, 2000). In Australia, the start of inclusive education in 1984 brought about many changes of the special education teacher's image and role (Holzinger & Wohlhart, 2009).

Professional Development for Current Educators

Weiss et al. (2018) investigated the requirements for teaching students with moderate and severe intellectual disabilities in inclusive settings as well as special educational settings. This study focused on the skills, knowledge, and attitudes teachers needed to effectively serve these students in inclusive settings. This study was conducted through group discussions among 20 principals and 20 teachers from interdisciplinary and various schools. Experience ranged from 6 to 35 years. Participants were divided into twelve discussion groups with four categories. Each discussion group was moderated. Statements of participants were ordered into categories and analyzed and coded. Four key points for teaching students with moderate and severe intellectual disabilities were found. The first key point focuses on key skills that require effective differentiation and adapted learning materials. The second key point included cooperation from the school and home environments. The conflicts among them is influenced by the difference of opinions of how situations should be handled. Counseling and leadership skills are also needed for these educators. The third key factor focuses on teacher-student relationships. The teacher-student relationship should have a balance and positive attitude toward the inclusive environment. The fourth key point is that continuous teaching students in

inclusive settings requires teachers to take care of their own mental and physical health. This is because existing challenges of working with students with disabilities can be very taxing, yielding high levels of daily stress (Weiss et al., 2018).

General education teachers report difficult behaviors as a concern for providing inclusive services to students with disabilities. These difficult behaviors often are stemmed from the students' intellectual disabilities that are related to emotional and behavior difficulties (Kokkinos & Davazoglou, 2009). They can be in the form of kicking, beating, spitting, and various other behaviors that disrupt classrooms instruction and learning. Teachers often feel anxiety and irritation toward these behaviors. Teachers even report not having the skills to handle these situations. This causes stress in the classroom among teachers and other classmates. It can also cause stress between home and school relations. Teachers may interact less with these students, leading to a less effective inclusive model. When general education teachers and special education staff and teachers have differing views of how these situations should be handled, tensions can be caused during collaboration and decision-making processes (Krischler et al., 2018). Special education teachers have also expressed the expectation to handling these situations in classrooms brings added stress (Muscott, 1996).

Teacher preparation programs in colleges and universities work to prepare future educators for inclusive general education settings. Current educators are expected to provide the same inclusive experience as their preservice counterparts are training to provide. Providing professional development to current educators will give them the tools and efficacy needed to lead an effective inclusive classroom.

Pickl et al. (2016) found that special education and general education teachers both agree lifelong learning is the key to successful and satisfying career as a teacher. Teachers interviewed by Pickl et al. reported preferred learning opportunities by visiting other schools, seminars on didactic approaches, movies and books. They all emphasize the importance of having a modeling experience in professional developments. When interviewing these teachers about inclusive services for special needs students, they prioritize differentiating and teaching in an individualized mode. These teachers also felt the special education teachers should be the one to acquire knowledge regarding disabilities. Still, the participants do not all agree on how teacher preparation programs should train the general and special education teachers and what each should focus on. Some believe that special education teachers should be the ones to specialize in acquiring diagnostic competence of disabilities. Others believe general education teachers should also be specialized in diagnostic competence instead of just having access to those with the competence (Pickl et al., 2016).

Woodcock and Hardy (2017) completed a study to determine the impacts on professional development of current teachers on their perspectives on inclusive services. Formal professional development actually led to mixed effects of inclusive beliefs for general educators. Special education teachers reported more negative feelings of inclusion after formal professional development. They did not believe inclusive services were beneficial to all special education students. However, informal professional development led to more positive feelings toward inclusive services (Woodcock & Hardy, 2017).

Preparation for Preservice Educators

Preparing future teachers for their role in providing an equal educational experience for special education inclusion teachers is critical for teacher preparation programs at the collegiate level. Teacher preparation programs set the tone for the first year in the classroom for teachers and their overall career in education. It is important for colleges to prepare future educators through a realistic approach and provide explicit teaching methods for working with students with disabilities. With inclusive practices increasing, general education teachers should be adequately prepared to meet the needs of all students in their classrooms.

Teacher training programs at the collegiate level should include preparations for working with special needs students to preservice special education teachers as well as preservice general education teachers. Hamilton-Jones and Vail (2014) discuss themes and categories that emerged through their study of preservice special education teachers by documenting thoughts of collaboration through interviews and journals. Perspectives of collaboration were examined. Five themes and categories emerged from approximately 300 participants. These themes include: definitions of collaboration, outcomes of collaboration, collaborative behavior between teachers, challenges to collaboration, and preparedness. These preservice teachers defined collaboration largely by working together to achieve a shared goal. The outcomes of this collaboration were positive outcomes, student success, and extra attention provided to students. Preservice teachers reported the following should be strong in order to have a positive co-teaching or collaborative experience: shared professional responsibility, positive co-teaching models, encouraging teacher behaviors, and shared planning and resources. This does not come

without challenges. These preservice teachers interviewed reported the following challenges to collaboration situations: power struggle between teachers, one teach-one assist situation, school-wide recognition of collaboration, time/schedule limits, and failure to share responsibility. Lastly, these preservice teachers recommended the following to better prepare future special education teachers: Build confidence/belief in performance, critical look at collaboration, and additional coursework. This is relevant to my study of special education students progressing through the general education curriculum in that so much of the success of inclusion relies on teacher collaboration.

Another relevant study is one in which preservice teacher perceptions of their needs related to inclusion were examined (Stites et al., 2018) The importance of preparedness of preservice teachers was emphasized leading to effective inclusive practices. This study found that early childhood preservice teachers felt slightly better prepared to teach in collaborative and co-teaching environments compared to their fellow education students of other majors. This study also revealed that most preservice teachers do not have a full understanding of the term inclusion. In addition, it was also found that special education preservice teachers participating in this study did not feel adequately prepared to work in inclusive settings. It was also noted that there was no difference found in the perceived level of special education preservice teachers to teach general education students than the perceived level of general education teachers to teach special education students. It is suggested that there is a general belief the general education teacher is responsible for the implementation of inclusion, leading to higher self-efficacy than compared to their special education counterparts who are generally not perceived to be responsible for the implementation of inclusion. Overall, preservice teachers in this

study found that both general education and special education preservice teachers needed additional experiences in rich, inclusive environments that include practice and working directly with students with disabilities and differentiating instruction for these students. Longer internships led to higher feelings of preparedness to work in inclusive settings.

Swain et al. (2012) said:

Given that the ultimate goal of inclusion is to create schools with prepared teachers that recognize all students have a right to participate in all aspects of the school community environment, teacher training institutions must provide the education necessary for effective implementation of inclusionary practices. (p. 1)

With many general education teacher preparation programs only requiring students to take one class that gives an overview of students with disabilities, it leaves these future educators unprepared for the real makeup of students that will be present in their classrooms (Everett, 2017). Everett (2017) stated that even with this course required for general education preservice teachers, it is often a course that generally covers characteristics of disabilities rather than preparing these preservice educators by providing strategies and differentiating methods that will help special needs students in their classrooms. Everett provides specific strategies a graduate instructor passed to him that allowed him to enter his first year teaching secondary mathematics with a sense of preparedness for special needs students who are receiving services through the inclusive model.

Everett (2017) stated the purpose of sharing his experience of becoming a more effective secondary mathematics teacher in inclusive settings is to support the success of general education teachers, both preservice and current practitioners, no matter the age,

grade level, or specialized subject. His paper discusses the following elements: co-teaching, methods, self-advocacy and motivation among students, and empowerment.

The co-teaching section discusses the challenges of having extra personnel in the classrooms, co-teachers and paraprofessionals, and having supervisory roles of the paraprofessional. Everett (2017) emphasized the importance of collaboration and both teachers being willing to adapt to changes and adopt strategies that will benefit students in inclusive settings. A mutual give and take relationship between both teachers will permit for learning from each other and sharing responsibilities. The biggest challenge noted was finding mutual planning time to prepare for lessons. Another challenge was the unprepared responsibility of being in a supervisory position over the paraprofessional working with one particular student in the classroom. Everett stated that approaching the paraprofessional as another co-teacher helped build the relationship. He noted that this was not a component of his teacher training and he was not taught how to supervise paraprofessionals in the inclusive settings.

Methods that Everett (2017) and co-teachers found to be exceptionally effective for students with special needs in inclusive settings include mnemonics, visual aids, manipulatives, and music. These methods were not only effective for students with Individualized Education Programs, IEP, but also for general education students in the inclusive classroom. Using hands-on learning methods, such as manipulatives, visual timers, short musical lyrics that follow along the melodies of popular songs, memory techniques through acronyms, and graphic and visual organizers all proved to be effective ways to improve success of students meeting their IEP goals and objectives.

Perhaps one of the most important factors in student achievement is self-advocacy and motivation. Everett discusses how individual student conferences with the student, general education, and special education teacher led to more positive interactions, a relevancy of material taught, and a shared view of direction for the student. During these conferences, students reviewed their IEP, post-graduation goals, educational ambitions, and personal interests. These conferences helped make learning the math curriculum in Everett's class relevant to their future goals. Everett (2017) reported a decrease of behavioral outbursts and removal from the classroom.

Everett (2017) also stated that during his teaching training he was not made aware that he had access to students' IEPs. By reviewing the IEPs carefully, he was more aware of the strengths, deficits, and needs of the students in his inclusive classes. It also helped him understand the benefits and laws that surround IEPs. He noted that this information was invaluable to him as a general education teacher. Student empowerment played a vital role in student achievement in this particular study. Supporting students' self-advocacy, interests, and motivation for learning increased student achievement among students with special needs. Everett found that not only empowering students but also empowering co-teachers and allowing them to empower him led to increased feelings of confidence. Key concepts throughout his experience included keeping an open mind by welcoming challenges, differences, and new strategies.

Hopkins et al. (2018) completed a study that required preservice teachers to tutor adults with an intellectual disability in an effort to provide these students with additional fieldwork experience when working with individuals with disabilities. It is noted that teaching students with special needs is one of the most challenging aspects for first-year

and other beginning teachers. Many studies have revealed that teacher preparation programs need to provide more of a rigorous experience for preservice teachers to learn about working with students with disabilities. Hopkins et al. reviews initiatives taken by higher education institutions to better support experiences for pre-service teachers that will further prepare them for inclusive teaching.

Legislation in many countries around the world has passed to move special education students towards inclusive environments. This increases the need for teacher preparation programs to further prepare their students to work in inclusive environments. In Australia, for example, all graduates of teaching programs must be able to demonstrate the knowledge and understanding of working with students with disabilities in their classrooms. Universities in Australia are required to report the measures taken to achieve this with all preservice teachers.

This is not an easy task for teacher preparation programs. It was reported that in Australia, future teachers had limited understanding of their responsibilities, had positive attitudes but lacked confidence, and reported the need for more preparation in teacher education classes for working with students with special education students. One of the major challenges teacher preparation programs found is providing practical experiences to pre-service teachers that will allow them to work directly with individuals with special education needs. To combat this challenge, some programs have developed fieldwork experiences that is supervised in mainstream schools that will allow them to work with students with disabilities. In Australia, pre-service teachers are involved in mentoring situations in secondary schools with inclusive settings. These teachers also participate in a buddy system in which they partner with an individual with a disability at a local

inclusive public school. Similar preparations have taken place in the United States of America to prepare future educators for inclusive settings.

Hopkins et al. (2018) discovered an important part of preparing future teachers to work in inclusive settings is provide opportunities to apply the pedagogical-content knowledge that is taught in courses. These programs may offer stand-alone courses in special education that can cover topics such as disability natures, medical and social needs of disabilities, and the rationale for providing inclusion services; or they can be provided through a practice-based course such as designing curriculums and fostering cooperative learning situations. It is necessary for preservice teachers to learn the history of inclusive ideas, policies and practices, and best practices and measures of assessments for learners with disabilities. It is critical for fieldwork experiences to be connected and linked to these pedagogical units.

Hopkins et al. (2018) partnered with local disability-service provider that sponsors a program known as Keep on Learning (KoL). Preservice teachers in Victoria, Australia worked with this program to provide tutoring services to adult learners. Hopkins and his team used data collected from teacher responses to investigate the benefits of pre-service teachers participating in supplementary fieldwork experiences.

The pre-service teachers were able to collaborate and develop strategies, share ideas, and support one-another throughout the program. These PST (pre-service teachers) often reported that they were not expecting the level of difficulty it would be to teach basic reading and math skills to students with disabilities. They also reported they were not prepared for unexpected setbacks of the students' learning that occurred in relation to their disabilities.

Two key findings were evident throughout the study. The first is that the strategies used to teach were differentiated and were not learned from textbooks but were developed through the PST experiences, collaboration, trial and error, and peer modeling. Another key finding indicated that teachers who participated in the KoL tutoring program of adults learners with disabilities developed a teacher identity. The experience helped them gain a sense of confidence and knowing one's professional ability in their practice. The PSTs reported they did wish to have more time to collaborate with fellow teachers about differentiating strategies following each tutoring session. Hopkins et al. (2018) determined it to be beneficial for these PSTs to participate in this hands-on field experience in preparing them for inclusive classroom environments. They reported the benefit to also be to the entire teaching profession and students with disabilities in inclusive schools.

Da Fonte and Barton-Arwood (2017) analyzed both general education and special education future teacher perspectives and strategies for effective inclusive practices. With schools increasingly serving special needs students in inclusive general education classroom, the needs are great for teachers to focus on collaborative practices. Da Fonte and Barton-Arwood interviewed six future general education teachers and twenty future special education teachers to determine their perspectives on inclusive settings. They found three major themes to be reoccurring. These themes are time management, content knowledge, and communication.

Having time for mutual planning and collaboration was a major reoccurring theme for most of the participants. One participant even reported the lack of time leading to the lack of interest and passion to collaborate was concerning. Knowing time is scarce

in schools and a resource that should be used wisely, it is important any time that is allotted for collaboration be structured and used specifically for the planning of lessons, accommodations, and differentiation for students. It is important for school administrators to support the collaboration between general and special education teachers by incorporating shared planning into teacher schedules.

The second reoccurring theme was gaps in content knowledge. Special education teachers were concerned they do not have the same specialized content preparation as their general education co-teachers. This is because special education programs aim to certify teachers in a K-12 setting. This broad range covers all subject areas and grades. It is not feasible for the special education teacher to have an equal level of expertise to the subject matter as all these teachers combined. This does cause concern for these pre-service teachers entering inclusive classrooms. General education teachers reported a concern of not fully understanding IEPs, accommodations, modifications, and how to differentiate the material for students with special needs. A way to combat this is to provide content knowledge sheets to special education teachers and provide IEP information sheets to general education teachers.

The final reoccurring theme in this study was the concern for proper communication. These future educators expressed a want for proper and open communication in a professional manner. The importance of understanding each other and being open to other perspectives were valuable for these pre-service teachers. Participants also expressed the importance of building the relationships between co-teachers. With all three of these themes addressed, effective collaboration should occur between general education and special education teachers.

Related Research

Including special needs students in the general education classroom opens opportunity to include them in all areas of the school. On the other hand, it could also present concerns with exclusion. “Schooling has always produced exclusion” (Slee, 2001, p. 118). It is possible for special needs students to feel excluded from social situations when included in the general education setting. When thinking of inclusion, many tend to only think of the educational aspects, not showing enough attention to the social aspects of inclusion. “Viewing inclusion in terms of placement alone can be regarded as an integrationist attitude” (Tutt, 2007, p. 16).

Benstead (2019) suggested successful approaches to inclusive practice should value the benefits of both social inclusion and academic inclusion. Both should be goals that are sought out when serving students in inclusive methods. With academic inclusion, some students fail to participate socially with their non-disabled peers. This can be due to their lack of self-esteem, social experiences, or low levels of social competence. The ultimate goal of inclusion should be for students with disabilities to be successful in both realms, the academic and social (Benstead, 2019). Qvortrup and Qvortrup (2018) argued the definition of inclusion should include three dimensions of inclusion: different levels of inclusion, different types of social communities that students are included/excluded from being a part of, and different degrees of inclusion. The levels of inclusion in the social aspect focuses on whether the student is a member of the class and an active participant. The second level of focuses on if the student is included in social groups that are self-organized, such as playground activities. The final and third dimension of social inclusion focuses on the type of participation of the student, whether the student is in the

center of the group or just a peripheral member of the group. All of these dimensions of inclusion are factors of student success in inclusive settings (Qvortrup & Qvortrup, 2018).

Providing students with a quality education in the least restrictive environment is what ultimately led to inclusive practices. Educators, general and special, have their own individual perspectives on these practices and how they impact their classrooms and other students in the general education setting. In a study that examined preschool teachers' experiences and perspectives on inclusive practices, it was found that preschool teachers were overall positive about the experience. Teachers expressed their wants to be involved in the education of all students in the classroom. They noted that the support from administration and other educational leaders made a difference in their perspectives. Preschool teachers also noted that adequate training is needed for teachers to perform their duties and optimally teach their students in inclusive settings. Creating a positive and welcoming learning environment for all was a requirement for successfully engaging in inclusive practices. Providing adequate teacher training to enhance teacher knowledge will ultimately impact their attitudes and perceptions toward preschool inclusion (Bryant, 2018).

Not all have positive perceptions of inclusion practices. Gilmour (2019) explained the assumption of IDEA that students with disabilities will be exposed to the general education curriculum at their grade-level but states this exposure does not always mean progress through the curriculum. Gilmour pointed out that students are typically identified by the special education team in schools because they are falling behind and not making adequate progress in the general education curriculum. Gilmour also

examined inclusion through an ecological perspective. With majority of research focusing on the benefits of inclusion on students with disabilities, this perspective looks at the benefits of inclusion for general education teachers and students. “Without understanding how inclusion influences all three groups and the complex interactions among them, inclusion is unlikely to be successful for all involved” (Gilmour, 2019, p. 30). There is limited research on impacts of inclusion practices on non-disabled students and general education teachers.

Zweers et al. (2019) cited reasons to provide inclusive practices to students with disabilities. This includes the exposure to the general curriculum can increase academic knowledge and skill acquirement that students with disabilities gain from learning alongside typically developing peers. Opportunities to improve social skills were also noted as a reason to provide inclusive services. On the other hand, Zweers et al. (2019) stated that educating students in exclusive settings allows for more individualized and specialized education. This is the direct and explicit instruction special education teachers are trained to provide. This instruction is tailored to the needs of the individual student. This study particularly looks at students with emotional behavioral disorders and determining the most appropriate setting for these students. Teacher factors that influence their ability to handle behavior problems are self-efficacy and teacher attitude toward inclusive/exclusive education. Consistently, research has proven that inclusive practices are more successful when teacher perceptions are positive.

Robinson (2018) examined secondary teacher perception on improving inclusion of exceptional children. This article also examined the differences of inclusion practices between elementary and secondary schools. Elementary schools utilize co-teaching,

tiered instruction and assignments, and Response to Intervention (RTI). Co-teaching is considered to be one of the best methods to provide inclusive practices (Friend & Cook, 1992). Teaching strategies used in secondary inclusive settings include creating supportive environments, providing accommodations and modifications, activity-oriented lessons, multiple teaching methods and presenting material in multiple ways, teachers let students take responsibility for their own learning, and they collaborated with other teachers. The participants of this study also emphasized the importance of understanding student Individual Education Programs and working with the special education teacher (Robinson, 2018).

The Science of Reading, a comprehensive body of research that examines the way in which we learn to read, supports the teaching methods used in the Leveled Literacy Intervention System that is used in this study. The Science of Reading supports direct, explicit, and systematic instruction of phonics, sight words, and comprehension skills that are used in LLI. This body of research examines what we know about reading, how we teach it, and what we teach. The Science of Reading emphasizes five components in reading to teach. These are phonemic awareness, phonics, fluency, vocabulary, and comprehension. The LLI intervention used in this action research study addresses each of these five components (Ordetx, 2021).

Gaps in Research

The gaps in this research include determining what factors impact general education and special education teachers' perceptions of inclusive services for students with disabilities. There are also gaps in knowing specific ways to develop current and future educators for inclusive environments. Additional research is also needed to

determine what can schools and educational leaders do to improve preservice and current educators' attitudes toward inclusive practices.

CHAPTER THREE

METHODOLOGY

Introduction

Literacy intervention research within elementary-grade students is widespread. Research focusing on middle school-age, African American males is exceptional. The aim of this study is to implement a literacy intervention program in a special education class made up of only African American middle school males. Collecting data from these special education students can enlighten the design of the curriculum provided within the general education classroom. This data can also help shape the design for curriculum used in educator preparation programs by adding to the understanding and approach to teaching special education students. Fountas and Pinnel's Leveled Literacy Intervention is implemented within this class with the goal of improving oral reading fluency rates and overall reading comprehension abilities. This study also tracks the attitudes students have about reading. The teacher-researcher conducted a mixed-method design to gather quantitative and qualitative data.

Problem of Practice

The problem of practice this study addressed was that African American male students in the special education program were not making adequate progress in closing the educational gap in reading with the current instructional practices. Reading deficits have a negative impact on all other areas of general education coursework. This is due to the coursework being presented at much higher reading levels than their current levels of

performance. These reading deficits make it difficult for these African American male students to achieve success in the general education setting. A lack of progress on district reading benchmark assessments compounds in other subject areas. The impact of opportunity gaps grow exponentially larger as students progress through the grade levels of their education. LLI was used to reduce the differential in their present levels of performance and grade level expectations. This intervention was needed to address the deficit model of teaching and learning used in many general education classrooms and to help general education teachers focus on individual student strengths. LLI was also needed to mitigate student fears of failure by setting reasonable and achievable goals through differentiation instructional practices.

Research Questions

This mixed-methods design study addressed the following questions: What is the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group? What is the mean growth in reading comprehension demonstrated by students who participated in the LLI intervention group? What is the mean growth in reading achievement on district level benchmark assessments demonstrated by students who participated in the LLI intervention group? Did the students' attitudes about reading change?

Research Design

Action research was chosen to complete this study as opposed to a traditional educational research study design. Traditional educational research differs from action research in that it is conducted by researchers outside of the organization (Mertler, 2013). A problem is identified and formed into a hypothesis. The research is completed by

performing an experiment using a control group and a treatment group. It is linear and provides explanations of findings through theories and practices (Bon, 2014).

Action research in education is conducted by the teacher that has identified a problem(s) within their class or school. It is used to advance the teacher-researcher's current practice and improve their students' learning outcomes. This research is also used to enhance their abilities to educate students, grow professionally, take responsibility in their own practice and become active participants in leading school improvement efforts (Efron & Ravid, 2020).

Efron and Ravid (2020) describes the difference between traditional and action research as traditional research focuses on the process of developing universal theories and generalize principles to improve the quality of education and action research focuses on studying the process of teaching to improve instructional practices. Educational changes from traditional research is a top-down approach as action research produces instructional changes directly in the teacher-researcher's own practice.

This action research study is based on a mixed-methods design. It uses both qualitative and quantitative measures to find solutions to problems that occur in the teacher researcher's school. Action research provides a scientifically proven method to address the issue at hand rather than providing an educational theory of the causes of the issue. Six steps in action research include: identifying a problem, gathering background information, designing a study, collecting data, and analyzing and interpreting the data (Efron & Ravid, 2020). This method allows the researcher to take ownership of changes in instructional practices.

Rationale for Mixed-Methods Design

Conducting a mixed-methods research design involves the researcher analyzing both qualitative and quantitative data. Using multiple sources of data can be beneficial in increasing validity and dependability as both sets of data supplement each other (Zohrabi, 2013). A trend of researchers using mixed-methods study designs is growing. This can be due to the ability to address and explore the needs of practitioner - researchers, teachers in educational researchers, by seeking more comprehensive solutions with multiple sources of data. Qualitative and quantitative data is complementary to one another. Using both allows the researcher the opportunity to explore confirmatory (verifying knowledge) questions and exploratory (generating knowledge) questions simultaneously. These can lead to answers to “What?” “How?” and “Why?” questions related to the issue in their professional setting (Ivankova, 2015).

Ivankova (2015) describes mixed-methods research as an approach that focuses on questions that need real-life understandings, multi-level perspectives, and cultural influences; utilizing multiple research methods of intervention trials and in-depth interviews; and using philosophical and theoretical positions to support the investigation. Using a mixed-methods research design enables the researcher to elicit another perspective to collect data in ways that the first method is unable to access. It adds a double layer of the description of the issue at hand and provides supplemental evidence in investigating the questions being researched (Morse, 2016).

A mixed-methods research design was chosen for this study because it facilitated a multi-level of data collection. The LLI intervention provided allowed the teacher-researcher to collect quantitative data on reading fluency and comprehension rates of the

student participants. Student interviews about the attitude toward reading allows the researcher the opportunity to collect quantitative data. The student interviews also provide data that the quantitative data cannot access. The convergence of student perspectives and intervention data complement each other. It provides multi-levels of the investigative process. In this study, both the quantitative and qualitative methods hold an equal amount of significance. Figure 3.1 illustrates the research design.

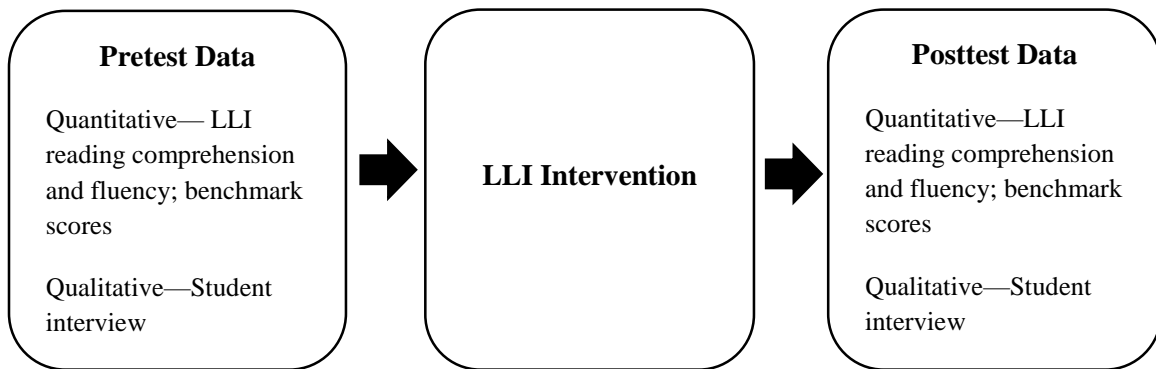


Figure 3.1 Summary of the research design. LLI = Literacy Intervention System.

Context and Setting of the Study

This mixed-methods research study took place at Latta Middle School (LMS). Latta Middle School is one of three schools in the district of Dillon Three located in Latta, South Carolina. This is the only middle school in the district and houses students in grades fifth through eighth. The elementary school in the district is a Montessori school. Students in this study received Montessori education from 4K through third grade. Fourth grade is used as a transition year to prepare students for traditional learning styles of the middle and high school in the district. Latta is a rural town in the northeastern part of South Carolina. During the 2020-2021 school year, the year of study, LMS had 488 enrolled students. Demographic breakdowns, as shown in Figure 3.2, of the school are as follows: 63% white, 27 % black, 3% Hispanic, 1 % Native American, and 6% 2 or more.

The school was 48% male and 52% female. 65% of students qualified for free and reduced lunch. A total of 44 students, or 9% of the student population, are identified through the special education program and have an Individualized Education Plan (IEP).

Faculty demographics, as shown in Figure 3.3, are as follows: 90% of teachers are white female, 7% are white male, 3% are black female, and 100% of administration is white female (South Carolina Department of Education, 2021).

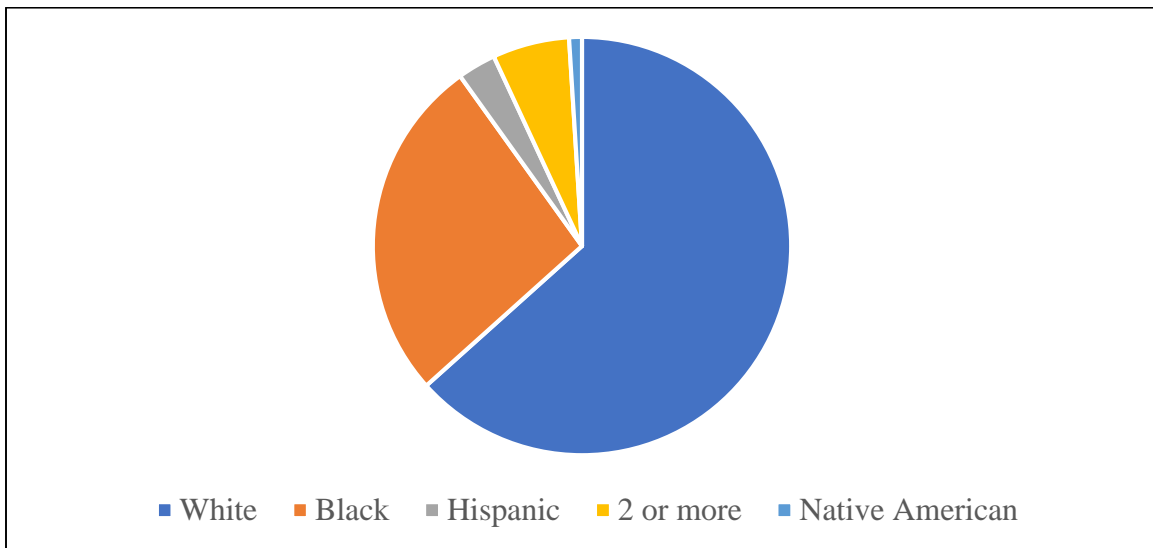


Figure 3.2 Demographics of student population at Latta Middle School.

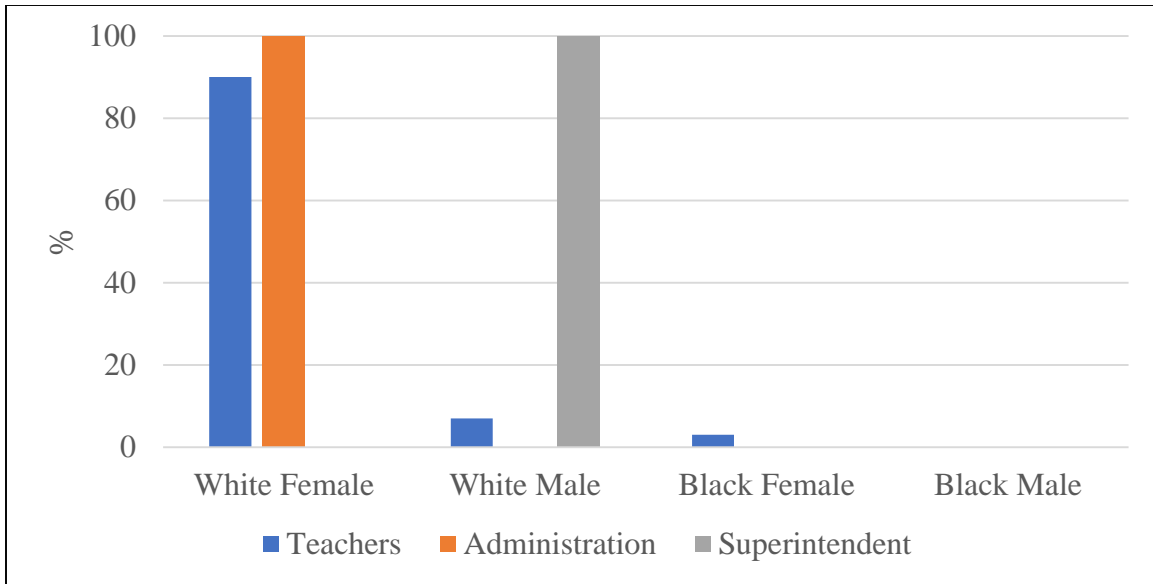


Figure 3.3 Demographic makeup of faculty/staff at Latta Middle School.

This study focused on a sixth grade group of African American male students receiving special education services in a resource, pull-out, method. Their day consists of an ELA and Social Studies block, a math and science block, and two elective courses. The first of the elective courses for these students is a block of resource provided in the special education classroom. During this elective time, students in this study were provided with Leveled Literacy Intervention instruction.

Latta Middle School's curriculum reflects a rigorous course of study that prepares students to be college and career ready. In South Carolina, SC Ready state assessments are given at the end of each academic year to measure student growth and achievement. Each of these students participated in the administration of the SC Ready ELA, Math and Science state assessments. The students receive various and applicable accommodations on these assessments. Accommodations received include: preferential seating, dictate to scribe, and oral administration. They also received these accommodations on classroom assignments and classroom and district assessments. Teachers use the South Carolina

College and Career Readiness (SCCCR) state standards to prepare students for success on the state assessments. Social Studies is the only core subject that sixth grade students are not tested in through SC Ready in South Carolina.

Although the elementary school in this district is fully Montessori taught, the middle school has a traditional approach to teaching and learning through project-based learning. Project-based learning (PBL) and hands-on learning approaches are used in core classes. This teaching style is based is inquiry based learning and is an engaging, learner-centered approach that explores the learner's natural curiosity. It also focuses on peer collaboration, problem-solving, and 21st century skill (Mulcahy & Wertz, 2021). The students' Montessori educational experience at the elementary level helped prepare these special education students to learn through project-based learning. Project-based learning uses multi-sensory methods of teaching to reach students with learning differences and is supported through the Science of Learning body of research (Ordetx, 2021). Teachers at Latta Middle School give students opportunities to conduct authentic research using technology. The technology ratio of students to Chromebooks in this school is one-to-one.

Mulcahy and Wertz (2021) reported that much research is emerging that project-based learning aligns with best practices in special education and is especially useful when it comes to engaging students who at risk for failure. PBL allows teachers to monitor student progress more intently. Identifying struggling learners through this monitoring progress provides teachers the opportunity to scaffold and individualize instruction. Project based learning is also aligned with a framework, Universal Design for Learning (UDL), that utilized in the special education self-contained classroom at Latta

Middle School (CAST, 2018). The UDL recognizes the “why,” “what,” and “how” of learning. This is done by providing multiple means of engagement, representation, and action and expression. The primary goal is to produce learners who are purposeful and motivated, resourceful and knowledgeable, and strategic and goal-directed (CAST, 2018). Teachers at Latta Middle School incorporate these concepts through their project-based learning instructional approach.

Role of the Researcher

The researcher in this study is the special education teacher of the student participants. The teacher instructed students by providing small group, direct instruction of the Leveled Literacy Intervention program. The researcher planned all lessons and ensured each lesson addressed annual goals on the students’ Individualized Education Plan (IEP). The role of the researcher in this study is an active role. Addressing problems of practices in a local level, a classroom in this study, with the anticipation of finding immediate answers and solutions to solve these problems is the main goal of action research. A teacher-researcher conducting an action research study can connect theory to practice, improve educational practice, experience professional growth and teacher empowerment, and be a part of social justice advocacy (Mertler, 2013).

The teacher-researcher was in her tenth year of teaching students with special needs and fourth year at Latta Middle School. During her teaching career, she has worked closely with students with various disabilities, especially students with identified learning disabilities in reading. She has also taught all grade levels between kindergarten through twelfth grade with various levels of academic supports provided through their special education department.

Student Participation and Demographics

Students were chosen to be a part of the study based on their deficits in reading and placement in the sixth grade special education resource class. These students demonstrated reading levels of two or more grade levels below current grade level expectations. Students participated in this resource class as part of their elective courses. Sixth grade students at this school are offered two electives. The first of these students' electives is their special education resource class. The title of the class is Academic Enrichment. They were not removed from core classes such as English Language Arts, math, science, or social studies to receive this intervention. The Academic Enrichment course is taught in a forty-five-minute block daily; thirty minutes being devoted solely to reading skills. Each of the students in this course have received special education services since their kindergarten year of their academic career. They have consistently scored below grade level expectations in each of their grades.

The Leveled Literacy Intervention group of sixth graders consisted of four African American male students with specific learning disabilities in reading. The selection was random in that this was the entire population of the sixth grade resource class. It was not purposeful to select all African American male student participants; however the sample is indicative of overrepresentation for this demographic in special education classes. The first student had a specific learning disability in reading only. The second, third, and fourth students had specific learning disabilities in the areas of reading and math. The first student in the study receives occupational therapy to address fine motor deficits. The fourth student received speech/language therapy throughout the year of study but was placed out of speech/language services at the end of the 2020-2021

school year. also has been diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD) and was prescribed medication to address this during the time of study. Each of these students were identified and placed in the special education program during their kindergarten year. At the time of this study, they have completed six years of participating in special education resource courses. Table 3.1 shows individual student disabilities and testing accommodations.

Table 3.1 Student Disabilities and Testing Accommodations

Student	Disability	Testing accommodations
1	SLD—Reading	Preferential seating in area of minimal distractions Extended time
2	SLD—Reading and math	Oral administration (excluding reading assessments) Preferential seating in area of minimal distractions Dictation to scribe
3	SLD—Reading and math	Preferential seating in area of minimal distractions
4	SLD—Reading and math	Preferential seating in area of minimal distractions Oral administration (excluding reading assessments)

Note. SLD = specific learning disability.

Data Collection Instruments

Both qualitative and quantitative data collection instruments were used in this action research study. Students were assessed in reading comprehension and fluency at the beginning, and every 4.5 weeks during the intervention. District level benchmark assessments were given at the end of each quarter of the 2020-21 school year, excluding the fourth. This study used the end of the first quarter as a beginning data point, second quarter as a mid-point in the intervention, and the third quarter district benchmark as a final data point at the conclusion of the intervention. Reading fluency assessments were also given every 4.5 weeks. The student reading interest interview was conducted at the

beginning of the intervention and at the conclusion of the intervention. This data was collected in a way to answer the four research questions of this study.

Quantitative Data

Quantitative data included reading fluency, comprehension, and district level benchmark scores. The reading fluency and comprehension assessments were given in the special education resource classroom. The district-benchmark assessments were given in the general education classroom.

Reading Fluency

Reading fluency assessments were given every 4.5 weeks, at the time of school interim reports. Each of these assessments were given in the special education classroom with the teacher and student in a one-on-one format. Students were given an unfamiliar reading passage and timed. Student performance was collected by the teacher totaling the number of words the student read in the first minute, including words read incorrectly. The number of errors the student made were noted. The total words read correctly was then divided by the total number of words read to get a reading fluency accuracy data point. Student performance was documented by total number of words read and their percent of accuracy. For example, if Student 1 read 79 words per minute with 9 errors, the data would be reported as the student read 79 words per minute with 88% accuracy.

These unfamiliar reading passages were also used for the reading comprehension assessment. The timer was stopped after the first minute to end the fluency assessment, but the students continued reading any remaining words in the passage. The aim for assessing reading fluency is to answer the first question of this research study: What is

the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group?

Reading Comprehension

The teacher-researcher collected reading comprehension data using the same LLI unfamiliar reading passages that were used to assess reading fluency rates. Students' reading comprehension was measured after completing the reading passage orally in a discussion format. Students were asked to discuss the passage with prompting questions. Students were expected to discuss various parts in the passage. Three groups of key understandings were scored: Within the Text, Beyond the Text, and About the Text. Each of these subgroups were scored on a 0-3 rating, the lowest possible score being a 0 and highest a 9. The LLI scoring chart for this is found in Table 3.2. The guide to the total score is found in Table 3.3.

The purpose for collecting reading comprehension data is to determine if the LLI intervention provided impacted student comprehension levels. Data collected from this measure also answers the second question of this study: What is the mean growth in reading comprehension demonstrated by students who participated in the LLI intervention group?

Table 3.2 Comprehension Scoring Key

Score	Description
0	Reflects unsatisfactory understanding of the text. Either does not respond or talks off topic. Student's comprehension is not proficient.
1	Reflects limited understanding of the text. Mentions a few facts or ideas but does not express the important information or ideas. Student is limited proficiency in understanding the text.
2	Reflects satisfactory understanding of the text. Includes important information and ideas but neglects other key understandings. Student is approaching proficiency in understanding the text.

Score	Description
3	Reflects excellent understandings of the text. Includes almost all important information and main ideas. Student demonstrates proficiency in understanding the text.

Table 3.3 Guide to Total Score

Total score	Description
8–9	Proficient
6–7	Approaching proficiency
4–5	Limited proficient
0–3	Not proficient

District Benchmark Scores

The teacher-researcher collected data using district level benchmark assessments to determine if the LLI interventions had an impact on grade-level performance. Latta Middle School administers three district level benchmarks yearly. At the end of each grading quarter, students take benchmarks in reading, writing, and math, excluding the fourth. The researcher collected data from the first, second, and third quarter benchmarks. The first quarter benchmark was collected because it marked the beginning of the second quarter, the time the intervention began. The second quarter marked the middle of the intervention. The third quarter district benchmark marked the end of the intervention.

District level benchmarks are given in the general education classroom, as all students in the school take these assessments. Testing accommodations were provided to the students as applicable to the reading assessment. The assessment is given on the students' issued Chromebook in a digital, self-grading format. Grade level passages in various genres, depending on the units of study during the quarter. After reading the passages independently, students answer questions based on the selection. Question types

include, but not limited to, comprehension style, making inferences, comparing/contrasting, finding text evidence, determining the author's point of view and perspective, and analyzing the text. These assessments are aligned with the South Carolina College and Career Readiness state ELA standards. Data collected from district benchmarks allows the researcher to answer the third question of the study: What is the mean growth in reading achievement on district level benchmark assessments demonstrated by students who participated in the LLI intervention group?

Qualitative Data

Qualitative data was collected through a student interview questionnaire. Prior to the start of the intervention, students were asked to complete a questionnaire that surveyed their overall interest and feelings about reading. Open-ended questions were used to allow students to elaborate in areas they wished.

The personal reading interview consisted of a questionnaire that allowed students to share their feelings about reading through open-ended questions. Students completed the questionnaire before the first LLI lesson began. The teacher-researcher stressed the importance of answering honestly. Students answered questions that addressed their feelings about reading aloud in class, their interests in reading, describing themselves as a reader, and their reading habits outside of school. The same questionnaire was given to students after the final LLI lesson at the end of the study. A total of six questions on the questionnaire surveyed the students' overall feelings about reading. The questions are as follows: 1) How do you feel about reading? 2) Describe yourself as a reader. 3) How do you feel when you are asked to read aloud in class? 4) Do you enjoy reading when someone else is reading to you? 5) Do you read outside of school? If so, what do you

read? 6) Do you want to be a better reader? The answers to these questions were analyzed by the teacher-researcher. Answers were categorized by positive, neutral, and negative responses. This questionnaire allows the teacher-researcher to answer the fourth and final question of this research study: Did the students' attitudes about reading change?

Data Collection Measures

Data collection measures consisted of pretest and posttest assessments, along with reading comprehension and fluency assessments at each 4.5-week interval. Table 3.4 shows a breakdown of data collection that was analyzed to answer research questions of the study.

Intervention

The teacher-researcher provided LLI to student participants in this study for a total of eighteen weeks. Fountas and Pinnell (2021) define Leveled Literacy Intervention (LLI) as a supplementary intervention system designed to help provide powerful and daily instruction in small groups for students who are reading below grade level expectations. LLI is designed to increase the literacy achievement of students who are not meeting their grade level expectations. With high interest texts, LLI provides content that is especially appealing to boy students. A variety of genres are studied within nonfiction and fiction books. LLI lessons are fast-paced with high-intensity activities that engage students. One key principle of LLI is that it helps students increase their overall reading volume daily by having them spend time reading books on their level that they are successfully able to read independently (Fountas & Pinnell, 2021).

Table 3.4 Summary of Data Collection Measures

Research question	Data collection measure
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1. What is the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group?	LLI fluency assessments
2. What is the mean growth in reading comprehension demonstrated by students who participated in the LLI intervention group?	LLI comprehension assessments
3. What is the mean growth in reading achievement on district level benchmark assessments demonstrated by students who participated in the LLI intervention group?	District-level benchmark scores
4. Did the students' attitudes about reading change?	Pre- and poststudy questionnaires

Note. LLI = Literacy Intervention System.

As opposed to reading in the general education setting, LLI matches texts to the students' instructional level, which allows instruction to begin at a level just above their independent level. This increases the students reading abilities to read unfamiliar texts and use strategies for word decoding/solving and comprehension skills. Vocabulary and high frequencies words are also intentionally taught and developed through a direct method prior to beginning the daily reading. Text discussion follows the reading and is guided into three categories: About the Text, Within the Text, and Beyond the Text.

The teacher-researcher selected the Red LLI kit to use with this group of sixth grade students in the special education resource class. This kit begins with Level L, which is on a third grade reading level. Based on pre-assessment scores and previous data collected on these students, it was determined that these four students all read around the third grade level. Following LLI's key principle to provide instruction at the students' instructional level, the teacher-researcher determined this system was most appropriate.

The special education classroom is set up for small group instruction. A half-circle table with the teacher centered is where this intervention took place within the room. The first 5 minutes of a lesson was dedicated to practicing high frequency words

on flash cards. These words were provided by the LLI system. This was followed by a short, 10-minute phonics/word study, also provided by LLI. The second half of the lesson was spent on reading the book and discussion. Prompts were used by the teacher to guide the discussion in the three categories: Thinking About the Text, Thinking Within the Text, and Thinking Beyond the Text. The students participated in this 30- minute LLI intervention Monday- Friday for eighteen weeks.

Research Procedure and Timeline

Weeks 1–9

Prior to beginning the first lesson, students completed the reading interest questionnaire. The goal of this was to determine any change in attitude about reading at the completion of the intervention period. Week 1 was the first week of the third quarter of the 2020-2021 school year. Students had already attended the resource class during their elective class since the beginning of school. Classroom procedures and expectations were already established, and the class community was already built. Implementing the intervention meant a change in class routine. A new routine of LLI lessons was quickly established. Students were first introduced to what LLI is and how we would be using it to build comprehension and fluency skills. The lessons began with high frequency word study, vocabulary, and phonics/word studies. The high frequency word study lasted about five minutes and was in the form of a sight word flash card game. A ten-minute word study followed the high frequency word study. This included studying vocabulary words, unfamiliar words, decodable words, etc. These words were found throughout the book, prior to the reading, and written on the board. Following this, students read and discussed the book of the day. During oral reading, the teacher focused on reading behaviors that

need to be reinforced. The oral reading and comprehension discussion lasted approximately 15 minutes. Some students found that using a highlighted line overlay helped them keep their place when reading. Some preferred not to use these highlighted strips. If the student reading came across a difficult word, prompts were provided to help the student read the word. If the student needed additional help, the word was written on a handheld white board and decoding strategies were used to decode the word. The teacher-researcher led the discussion by prompting students with questions provided in the Fountas & Pinnell Prompting Guide. During the middle of the fourth week, students took a reading fluency and comprehension assessment in the LLI Benchmark Assessment System. This was given through a one-on-one method. While individual students were being assessed, other students in the group practiced high frequency words. At the end of Week 9, students took the district benchmark reading assessment given in their general education reading course. The teacher-researcher proctored the benchmark assessments with the general education teacher. Students also took another LLI reading fluency and comprehension assessment at the end of Week 9.

Weeks 10–18

By the beginning of Week 10, a solid routine was established in the resource class. Students quickly grew to know the order of each lesson. This provided consistency for them each day. During the oral reading of the selections, the teacher-researcher reinforced maintaining and strengthening fluency. This involved practicing pausing at punctuations, changing the tone of their voice while reading phrases that needed expression, and reading as if the character in the story was talking. The teacher also modeled reading aloud to students. As the lessons progressed, readings became more

advanced. Themes, plots, text features, text structure, genre, and illustrations were all discussed during the reading. In the middle of Week 13, students took another reading comprehension and fluency assessments. They were able to reflect on their progress throughout the intervention. The assessment was given for a final time at the close of Week 18, along with the final district benchmark of the year.

Data Analysis

The teacher-researcher used descriptive statistics to analyze the data that answers questions one, two, and three of the action research study that addressed student performance in reading fluency and comprehension. Inferential statistics was used to answer this question due to the small, limited sample of students in the study.

Inductive analysis was used by the teacher-researcher to answer the final question of the action research study: Did the students' attitudes about reading change? Responses from student questionnaires were analyzed by the teacher-researcher by determining if they answered each question in a positive, neutral, or negative way. These answers on the pre-intervention questionnaire were compared to the answers on the post-intervention questionnaire. If there was a change in their answers, positive or negative, the researcher noted the difference.

Summary

The action research study was centered around the impacts an eighteen week Leveled Literacy Intervention had on students' reading fluency, comprehension, district benchmark scores, and attitudes about reading. A mixed-methods design enabled the teacher-researcher to use both quantitative and qualitative data to answer the research questions. The sample population of a group of four students included African American

male students who receive special education services in reading. Each of these students has been identified by the school's special education program as having a specific learning disability in reading. The teacher-researcher used LLI program assessments, district benchmark assessments, and student questionnaires to collect quantitative and qualitative data. At the conclusion of the intervention period, the teacher-researcher analyzed data collected to determine if there was any growth in the areas evaluated in the study.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA

Overview of the Study

Problem of Practice

The problem of practice at the center of this research study is inadequate progress in reading made by special education African American males at Latta Middle School. Special education students who receive general education instruction are also expected to master grade-level SC College and Career Readiness standards, just as their neurotypical peers. Coursework presented in the general education ELA course is presented at a much higher reading level than the instructional reading level of the student participants. This impedes their ability to effectively comprehend assignments and assessments.

After a review of overall student achievement, the students receiving special education services in reading were consistently scoring significantly less than the grade level expectation of 80% or more for mastery. The school offers special education services through an inclusion method and pullout method. Students reading on levels that are much lower than their current grade level expectation receive services in the special education classroom through the pullout method. This course is provided as an elective course. This means these students are missing the opportunity to take courses in arts, STEM, and physical education. The primary goal of this study was to determine if the Leveled Literacy Intervention enabled these students to make gains in reading and increase their reading scores in comprehension and fluency. A long term goal was to

determine an effective reading intervention that would enable these students to make adequate growth in reading and bring their reading levels to a level in which they could receive special education inclusion services, rather than resource, pullout services. In this school, when a student receives inclusion services, they participate in all areas of the general education curriculum and are not pulled out for any special education services. They are supported within their general education setting by the special education teacher.

Prior to the implementation of this study, there was no specific intervention in reading being provided in the special education resource classes at Latta Middle School. LLI was implemented to address the overall problem of lack of student gains from year to year in reading comprehension and fluency skills.

Significance of the Study

The significance of this study is to increase reading fluency and comprehension skills among African American special education students who have previously demonstrated little to no gains in reading achievement. Prior to the implementation of this study, the students in the special education resource class had not received an intervention program taught in a direct, explicit method. Deficits in reading can lead students to face many obstacles in finding academic success, as well as success in adult life.

Students with significant reading deficits are at-risk to having increased unmotivated behaviors (High, 2018), displaying negative behaviors (Strong, 2004), and having negative attitudes and feelings of self-worth (Glenn et al., 2018). Other barriers may include being at-risk of repeating or even dropping out of school completely. In

2021, the National Center for Learning Disabilities reported only 46% of working-age adults with specific learning disabilities are employed. They are twice as likely to be unemployed as compared to non-disabled adults. The significance of this study may prevent students with specific learning disabilities from falling further behind in their reading achievement and in turn, increase intrinsic motivation and combat obstacles these students face.

According to the National Center for Learning Disabilities, African American male students made up 16% of the overall student population during the 2013-14 school year, however made up 20% of the student makeup of students identified as having a learning disability through special education departments. The NCLD also reports that while 55% of white students receiving special education spend more than 80% or more of their day in general education settings, only one-third of African American students in special education spend the same amount of time in general education settings. African American students are more likely to be taught in separate classrooms, despite the evidence suggesting inclusion is an effective educational method for students with disabilities (National Center for Learning Disabilities, 2021).

The teacher-researcher of this study intended to determine an appropriate reading program for middle school students identified with a specific learning disability in reading that would lead to fluency and comprehension gains. The study's aim was to expand the Leveled Literacy Intervention program in all other special education courses at Latta Middle School. This study is also significant to the field of academia by adding to the body of research that is specific to middle school literacy interventions.

Data Collection Methods

Quantitative and qualitative data were collected by the teacher-researcher in this study. The four student participants completed a reading interest questionnaire prior to the first day of the intervention to retrieve qualitative data. This questionnaire was also given at the conclusion of the intervention. Quantitative data was collected through LLI reading fluency and comprehension assessments and district-level reading benchmark assessments. The teacher-researcher kept the data in a secured file cabinet throughout the intervention. Students were assigned numbers 1-4 to keep collected data confidential.

Sample Characteristics

This action research study consisted of four student participants. Each of these students has received a diagnoses in specific learning disabilities in reading. Three of the four students also have a specific learning disability in the area of math. One student was recently released from speech/language services and one student receives occupational therapy at school. This group of students was chosen for the study because each of them had a reading level below grade-level expectations. Even though these students were demonstrating large deficits in reading, each of their cognitive abilities suggests they have the capability to increase their reading achievements. These students also received various classroom and assessment accommodations that include extended time, assessed in area of minimal distractions, hard copy of notes, preferential seating, oral administration on non-reading assessments, and dictate written responses to scribe.

Intervention Strategy

The Leveled Literacy Intervention was conducted over a period of 18 weeks. This intervention was provided during the third and fourth quarters of the student participants'

sixth grade school year. The red LLI kit, a third-grade level, was used for the intervention, as this was determined to be their instructional reading level. The intervention took place in the special education classroom in 30-minute daily sessions. Weeks 1-9 consisted of establishing a new routine in class, getting students comfortable with the structure of LLI lessons, and strengthening the class atmosphere. A student questionnaire was given prior to the implementation of the intervention period. The first week consisted of a pre-test of LLI fluency and comprehension assessments. Each daily session of the intervention consisted of a high frequency word study, vocabulary, and phonics/word study. A daily book was also read and discussed orally by student participants. Weeks 9-18 consisted of additional LLI fluency and comprehension assessments, a district benchmark, and continuous daily lessons. At the conclusion of the intervention, a final LLI assessment and district benchmark was given.

General Findings

Reading Fluency

Students were assessed using a Leveled Literacy Intervention fluency assessment (Appendix A) to determine an initial data point for reading fluency. Students were assessed at their instructional level, all within the third grade reading level. An initial assessment was given prior to beginning the intervention. Students were assessed at the same time district interims and report cards were scheduled. This was at the end of every nine-week grading quarter and at a four-and-a-half week interim. The end of sixth grade level reading fluency expectations is 160-200 words per minute with 95% accuracy. It is important to note that these assessments were given at the students' reading instructional level, following LLI guidelines. These students were assessed in the red level LLI kit, a

third grade level, as this was determined to be their instructional level. The expected oral reading rates at the end of the third grade is 100- 140 words per minute. Prior to beginning the intervention, the overall student average reading fluency of the group was 73.25 words per minute with 92% accuracy on instructional level material. Post-test data yielded an average student fluency rate of 88 words per minute with 96.25% accuracy on instructional level material. Student 1 made a total gain of 17 words per minute and a 2% accuracy gain. Student 2 made a total gain of 5 words per minute and a 4% accuracy gain. Student 3 made a total gain of 20 words per minute and a 4% accuracy gain. Student 4 made a total gain of 21 words per minute and a 7% accuracy gain. Table 4.1 displays this data.

Table 4.1 Reading Fluency Assessment Data

Variable	Pretest	Assessment				Analysis
		4.5 weeks	9 weeks	13.5 weeks	18 weeks	
Student 1						
Words/min	79	82	87	91	95	+17
% accuracy	98	98	98	99	100	+2
Student 2						
Words/min	48	47	49	50	53	+5
% accuracy	83	84	80	84	87	+4
Student 3						
Words/min	78	80	80	86	98	+20
% accuracy	95	92	95	95	99	+4
Student 4						
Words/min	88	89	91	98	109	+21
% accuracy	92	94	95	98	99	+7

Reading Comprehension

Students' reading comprehension was assessed using the LLI fluency and comprehension assessments. The passages used to assess fluency was also used to assess reading comprehension proficiencies. This assessment is conducted through a comprehension conversation. The student is assessed in the following categories: Within the Text, Beyond the Text, and About the Text. The Within the Text category assesses if the reader grasps the literal meaning, can retell plot and key facts, and can provide an accuracy summary of the text. The category of Beyond the Text assesses if the student can make predictions, connections, inferences, and synthesizing information about the text. Finally, the About the Text category assesses if the reader is able describe literary elements of the text and the writer's craft, as well as overall critically thinking about how the text was written. A total comprehension score corresponds with the following score categories: not proficient, limited proficiency, approaching proficiency, and proficient. Table 4.2 displays student reading comprehension data. Student 1 increased his comprehension score by 2 points, advancing from approaching proficiency to proficient. Student 2 increased his comprehension score by 5 points, advancing from not proficient to approaching proficiency. Student 3 increased his score by 3 points, advancing from approaching proficiency to proficient. Student 4 increased his score by 6 points, advancing from not proficient to proficient. A mean increase of 4 comprehension points was demonstrated by student participants.

Table 4.2 Reading Comprehension Assessment Data

Student	Pretest	Assessment				Analysis
		4.5 weeks	9 weeks	13.5 weeks	18 weeks	
1	7 ^b	7 ^b	8 ^a	8 ^a	9 ^a	+2

Student	Pretest	Assessment				Analysis
		4.5 weeks	9 weeks	13.5 weeks	18 weeks	
2	2 ^d	4 ^c	6 ^b	7 ^b	7 ^b	+5
3	6 ^b	5 ^c	7 ^b	7 ^b	9 ^a	+3
4	3 ^d	5 ^c	7 ^b	9 ^a	9 ^a	+6

^a Proficient. ^b Approaching Proficiency. ^c Limited proficiency. ^d Not proficient.

District Reading Benchmarks

District-level benchmark assessment data was used by the teacher researcher to determine if the intervention would have an impact on student performance in the general education setting. These district benchmarks are on a sixth grade reading level and measure grade-level standards performance. Students take three district benchmarks a year, at the end of each grading quarter, excluding the fourth quarter. The teacher-researcher collected data on all three benchmarks given throughout the year. Table 4.3 displays the data of each district benchmark. Student 1 made an overall gain of 6 points, Student 2 gained 4 points, Student 3 demonstrated a gain of 7 points, and Student 4 made the most gain of 8 points. The 18 week intervention of LLI, yielded an average gain of 6.25 on grade-level district reading benchmarks within this group of four students.

Table 4.3 District Reading Benchmark Data

Student	Benchmark			Analysis
	1	2	3	
1	52	53	58	+6
2	44	47	48	+4
3	48	50	55	+7
4	51	53	59	+8

Note. Benchmarks 1, 2, and 3 were measured prior to the intervention, in Week 9 of the intervention (the midway point), and in Week 18 of the intervention, respectively.

Student Reading Interest

Prior to beginning the intervention, students were given a reading interest questionnaire. At the conclusion of the intervention, the same questionnaire was given to the students. The teacher-researcher used student answers as qualitative data. Post-intervention answers were compared to their pre-intervention answers to determine if students had a positive attitude change, no change in attitude (neutral), or a negative attitude change. Tables 4.4 and 4.5 display student answers on the questionnaire. Students 1 and 4 had no change in attitude, neutral. Both students answered questions in a positive way on pre and post-intervention questionnaires. Students 2 and 3 had a positive change in attitude about reading. Their answers went from a negative response to a positive response at the end of the intervention.

Research Question 1

The first research question of this action study examined the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group.

Table 4.4 Student Reading Questionnaire Preintervention

Item	Student			
	1	2	3	4
How do you feel about reading?	I like to read.	I hate it.	Its okay.	I like to read some stuff.
Describe yourself as a reader.	I'm a good reader.	I can't read.	I don't read good.	I read with a good voice.
How do you feel when asked to read aloud in class?	I like to.	I hate it.	I get nervous.	I don't mind it.
Do you enjoy reading when someone else is reading to you?	Yes.	No.	Sometimes.	Yes.
Do you read outside of school? If so, what?	Yes, magazines and library books.	No.	No.	Some stuff. Not really.

Item	Student			
	1	2	3	4
Do you want to be a better reader?	Yes.	I don't know.	Yes.	Yes.

Table 4.5 Student Reading Questionnaire Postintervention

Item	Student			
	1	2	3	4
How do you feel about reading?	I still like to read.	I don't want to read a lot.	I like it.	I like to read some.
Describe yourself as a reader.	I'm good at reading.	I still can't read good.	I'm better than before.	I'm alright.
How do you feel when asked to read aloud in class?	I like to read more to my class.	I just don't want to.	My teacher said I was getting better.	I feel okay.
Do you enjoy reading when someone else is reading to you?	Yes.	Sometimes.	Yes.	Yes.
Do you read outside of school? If so, what?	Yes, books from school and a sports magazine my dad gets.	No.	I read my library books sometimes.	Some stuff on my phone.
Do you want to be a better reader?	Yes.	Yes.	Yes.	Yes.
Overall positive, neutral, or negative change	Neutral	Positive	Positive	Neutral

Overall, the mean growth of oral reading fluency growth 15.75 words per minute and 4.25 accuracy percentage points.

The reading fluency assessments given to students prior to, in interim periods, and at the conclusion of the intervention were from the Leveled Literacy Intervention red kit assessment book. These fluency assessments were given at the students' instructional reading level, a third grade level. According to Dewey et al. (2014), a student performing below the 50th percentile in reading fluency should make a fluency growth of one word per week. They note the challenge with students who do not read lose an average of one

word a week. Because the average student loses anywhere from 11% to 14% of their fluency rates over summer breaks, the first quarter of school is used to regain this lost fluency (Dewey et al., 2014). This intervention began at the beginning of the second quarter of school. By this time of the school year, students should have rebounded from any summer regression in reading fluency. The students in this study are expected, based on grade level expectations and LLI oral reading rates, to read between 160-200 words per minute. Student 4 made the most gains throughout the intervention, increasing words per minute by 21 words and making a gain of 7% accuracy points. His final oral reading fluency was 109 words per minute. Student 3 made the second highest gains of 20 words per minute and 4% accuracy points. Student 1 made the third highest gains with 17 words per minute with 2% accuracy points. Finally, Student 2, the student with the lowest beginning oral reading fluency, made the least measure of gains with 5 words per minute and a 4% accuracy gain. All students made gains in both words per minute and accuracy.

Weekly words gained per minute were also analyzed by the teacher researcher. Student 1 gained an average of .94 words per week, just below the suggested word gain of one word per week. Student 2 demonstrated a slow reading fluency gain of just .27 words per week. Student 3 gained an average of 1.11 words per week. Student 4 gained an average of 1.17 words per week, above the suggested one word gain a week. Two of the four student participants gained more than the suggested one-word-a-week gain for non-disabled students. One student came .06 words per week short of meeting the expectation of non-disabled students. One student made gains at a much slower rate, compared to other student participants and national norms. Prior to the LLI intervention, the student participants were not making gains in reading fluency. Each student

participant demonstrated overall gains in oral reading fluency, words per minute and accuracy, on the post-intervention assessment. Figure 4.1 displays oral reading fluency gains throughout the duration of the provided Level Literacy Intervention.

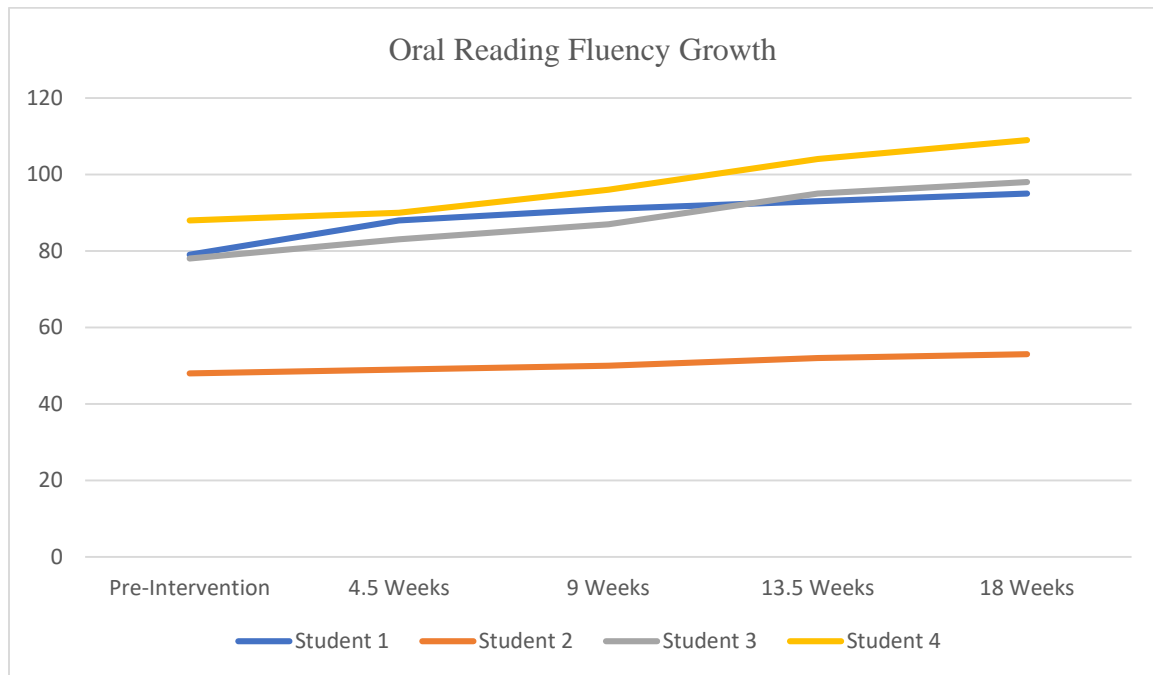


Figure 4.1 Oral reading fluency growth in words per minute.

Research Question 2

The second research question addresses reading comprehension growth in the four student participants using the Leveled Literacy Intervention. The mean of the four student participants' growth in reading comprehension was 4 points on the LLI reading comprehension assessments that has a scoring rubric of 0-9.

Each of the four students made gains in reading comprehension. The largest gains came from students who scored the lowest on the preassessment. Student 1 made a 2 point gain, advancing from Approaching Proficiency to Proficient. Student 2 made a 5 point gain, advancing from Not Proficient to Approaching Proficiency. Student 3 made a 3 point gain, advancing from Approaching Proficiency to Proficient. Student 4 gained 6

points, advancing from Not Proficient to Proficient. 75% of students scored the highest possible score of 9 and reached proficiency in reading comprehension at the end of the intervention. Student 4 made the highest overall gains in both reading fluency and comprehension. Student 2 made the second highest gains in reading comprehension but made minimal gains in reading fluency. Student 3 made the second highest gains in reading fluency and scored the highest possible score in reading comprehension. Finally, Student 1 made the least measure of gains in reading comprehension but started out with the highest pre-intervention score. As the student participants' oral reading fluency rate increased, their reading comprehension proficiency also increased on instructional level reading material. Figure 4.2 demonstrates the reading comprehension gains over the 18 week LLI intervention period.

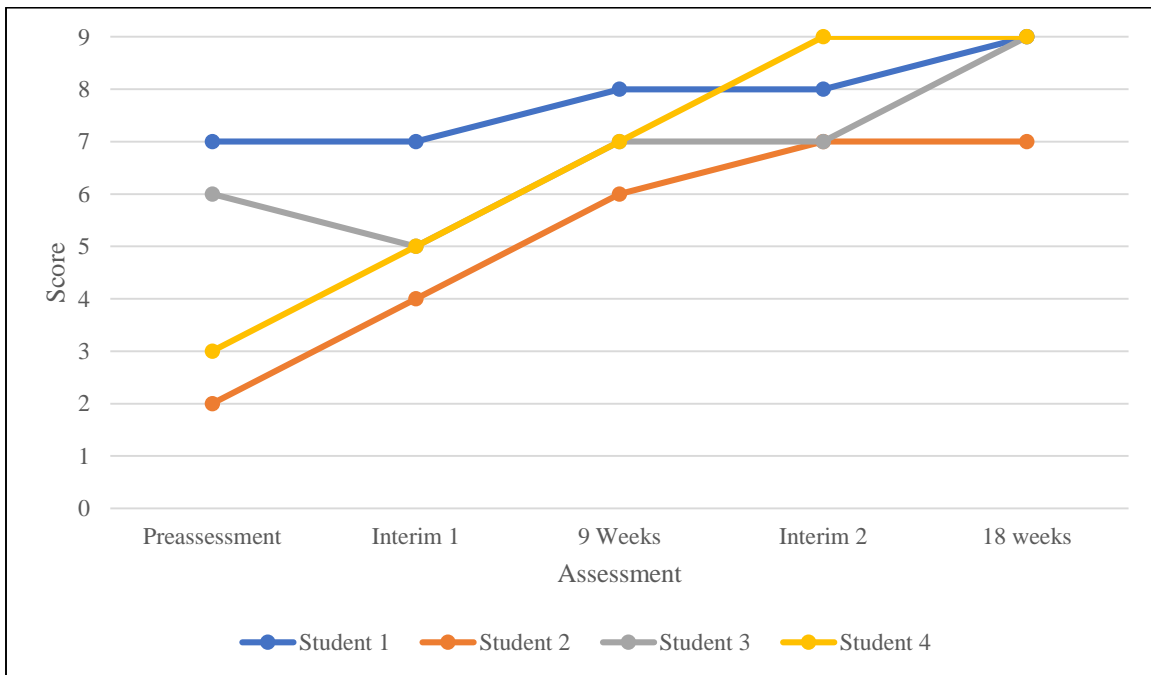


Figure 4.2 Leveled Literacy Intervention System reading comprehension gains.

Research Question 3

The third research question examined the impact of the 18 week LLI intervention on their performance on district level benchmark reading assessments. The teacher-researcher collected all three district benchmarks given during the 2020-2021 school year. The first benchmark score was used as a pre-assessment score, as students took this assessment just before the intervention began. The second benchmark was given at the mid-way point of the intervention. Finally, the third reading benchmark was given at the end of the third quarter and the end of the 18 week intervention. Students demonstrated a mean growth of 6.25 percentage points on these grade level benchmarks. Student 1 gained 6, Student 2 gained 4, Student 3 gained 7, and Student 4 gained a total of 8 percentage points from Benchmark 1 to Benchmark 3. All students demonstrated gains on these grade-level reading assessments following the 18 week intervention. Figure 4.3 displays individual student scores.

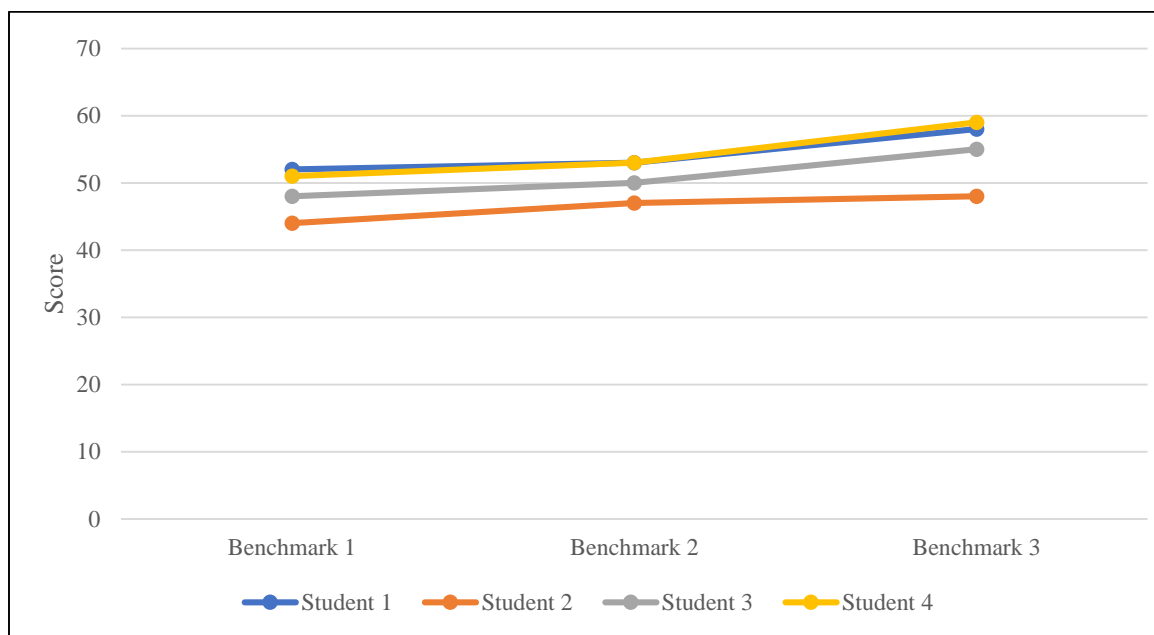


Figure 4.3 District reading benchmark scores.

Research Question 4

Qualitative data was analyzed to answer the final research question of this action study. The teacher-researcher used a student questionnaire (Appendix B) to determine if students' attitude changed following to 18-week LLI reading intervention. Students 1 and 4 did not have an attitude change overall, when comparing the pre-intervention questionnaire to the post-intervention questionnaire and were scored as neutral. Student 1 scored neutral because he answered both pre and post-intervention questions with a positive response. Student 4 answered both pre and post-intervention questions with an overall neutral response, therefore his overall attitude change was considered neutral. Students 2 and 3 had a positive change in attitude when the pre and post-intervention questionnaires were given. Table 4.6 breaks down individual question response changes for each student. There were no negative attitude changes among any of the students within all six questions. As students' scores improved in reading fluency and comprehension, students' attitudes gradually became more positive.

Table 4.6 Student Question Attitude Changes from Preintervention Questionnaire to Postintervention Questionnaire

Item	Student			
	1	2	3	4
How do you feel about reading?	Neutral	Positive	Positive	Neutral
Describe yourself as a reader.	Neutral	Positive	Positive	Positive
How do you feel when asked to read aloud in class?	Positive	Neutral	Positive	Positive
Do you enjoy reading when someone else is reading to you?	Neutral	Positive	Positive	Neutral
Do you read outside of school? If so, what?	Neutral	Neutral	Positive	Neutral
Do you want to be a better reader?	Neutral	Positive	Positive	Neutral

Summary

Qualitative and quantitative data sets were collected through reading fluency, comprehension, and grade-level benchmarks to answer questions one, two, and three of this action research study. The LLI fluency assessments were used to answer the first research question of the study. The mean growth in reading fluency among the four student participants was 15.75 words per minute and 4.25 accuracy percentage points. LLI reading comprehension assessments were used to answer the second research question of the study. The mean growth in reading comprehension among the four student participants was 4 points, on a 0-9 point scale. District level reading benchmarks that are given on grade-level were used to answer the third question of this study. On a scale of 0-100, students gained a mean of 6.25 percentages points on district level reading benchmarks. A student reading interest questionnaire was used to answer the fourth research question of the study. Two of the four students had a positive attitude change in their reading interests, and two of the four had a neutral attitude change when comparing pre-intervention answers to post-intervention answers. No students experienced a negative change in attitude toward reading at the end of the intervention.

CHAPTER FIVE

SUMMARY

Introduction

Chapter 5 is a descriptive summary of the action research study, general findings, action plan, and recommendations for future practice and policies. This study addressed the issue of special education middle school, African American males reading significantly below grade level. Before the implementation of the Leveled Literacy Intervention, there was no reading intervention program being taught in resource classes. Pre-intervention data analysis confirmed the issue at hand and led the teacher-researcher to implement the LLI intervention. The sixth grade resource group was chosen as they had the largest reading deficits when compared to grade-level expectations.

The sixth grade resource group was chosen after reviewing the first quarter data from all special education students. Data from district level benchmarks revealed none of the students in this resource class scored a passing score on the first benchmark. When students were initially assessed prior to the intervention, it was determined that all student participants read three grade levels below their current sixth grade expectations. The intervention provided for these students focused on increasing reading fluency and comprehension skills. Reading comprehension skills were broken up into three sections: Thinking About the Text, Thinking Within the Text, and Thinking Beyond the Text. Thinking About the Text covered comprehension skills such as critiquing and analyzing. Thinking Within the Text focused on skills such as searching for and using information,

monitoring and self-correcting, solving words, maintaining fluency, and summarizing. Thinking Beyond the Text focused on comprehension skills such as inferring, synthesizing, making connections, and making predictions. All of these comprehension skills are assessed through the district level reading benchmark assessments given on their grade level. The intervention was provided 5 days a week for 30 minutes during the students' special education resource class, for a duration of 18 weeks. Students were actively involved in progress monitoring of reading fluency and comprehension checks.

Research Questions

The research questions in this study focused on the impact of the Level Literacy Intervention program both on students' instructional level and on grade level assessments. Student attitudes were also studied prior to and at the end of the intervention. The research questions are as follows: 1) What is the mean growth in reading fluency demonstrated by students who participated in the LLI intervention group? 2) What is the mean growth in reading comprehension demonstrated by students who participated in the LLI intervention group? 3) What is the mean growth in reading achievement on district level benchmark assessments demonstrated by students who participated in the LLI intervention group? 4) Did the students' attitudes about reading change?

Purpose of the Study

The purpose of this study was to determine the effects of implementing the Leveled Literacy Intervention program with middle school students with identified learning disabilities in the area of reading. The intervention focused on building struggling students' reading fluency and comprehension skills through direct and explicit

teaching. It was also the goal of the intervention to improve student participants' self-confidence about reading. The ultimate goal of the action research study was to determine if the Leveled Literacy Intervention program yielded enough positive impacts to allow these students to be placed in a less restrictive educational learning environment.

Summary of the Results

Student data was analyzed throughout the study using four types of measures. The first of the measures was the reading fluency checks, provided by the LLI program. These fluency assessments were given at the students' individual instructional level, as recommended by the Fountas and Pinnell LLI program. Assessments were given with the teacher and student individually. Students were given opportunities for reflection at the end of each fluency assessment. Students took a total of five reading fluency assessments throughout the intervention. The mean growth in reading fluency for the student participants was 15.75 words per minute and 4.24 percentage accuracy points. The mean overall reading fluency achievement for the group was 88 words per minute and 96.25 percent accuracy. All students demonstrated growth in reading fluency throughout the course of the intervention. It is important to note that these student scores are still significantly below the sixth- grade level expectation of between 160-200 words per minute.

The second measure of measurement included the LLI reading comprehension assessments. Upon completion of the reading fluency assessment, students were asked to discuss the text. Answers were analyzed and scored within three categories: Thinking Within the Text, Thinking About the Text, and Thinking Beyond the Text. Students' scores of 0-9 were labeled as one of the following: Not Proficient, Limited Proficiency,

Approaching Proficiency, and Proficient. The mean growth of student comprehension score was 4 points. Three of the four participants scored within the Proficient range on a reading text on their instructional level at the conclusion of the intervention. One of the four participants advanced his score from Not Proficient to Approaching Proficiency. Each of the students made gains in reading comprehension.

The third measure of measurement used was the district level reading benchmark assessments. These assessments include sixth-grade level passages and require students to read and demonstrate comprehension skills to include but not limited to: critiquing, analyzing, inferring, synthesizing, making connections and predictions, determining author's tone and point of view, and identifying a main idea and theme. Sixth-grade standards are assessed quarterly using these benchmarks. Excluding the fourth quarter, benchmarks are given at the end of each quarter. All quarter benchmark grades were analyzed by the teacher-researcher. Benchmark 1 served as a pre-intervention assessment, as it was given just before the beginning of the intervention. Benchmark 2 was used as a mid-way data point, and Benchmark 3 was used as a final data point for the study, as it was given at the conclusion of the intervention. These benchmarks yield scores ranging from 0-100. The mean student growth on district level benchmarks of the four student participants was 6.25 percentage points.

The fourth measure of measurement in this action research study focused on student self-esteem when reading and their reading interests and behaviors. This data was collected using a pre-intervention student interest questionnaire a post-intervention questionnaire. The same questionnaire was given prior to the LLI intervention and post-LLI intervention. One goal of this study was to increase student reading interests and

self-esteem. The teacher-researcher analyzed the data by comparing student answers from the first questionnaire to the second. Students who answered in a positive way on the first questions and answered in a positive way on the second were noted to have a “neutral” change in attitude toward reading. A negative to positive answer change indicated a “positive” attitude change toward reading. Analysis of the data shows that two of the four students who answered in negative ways on the first questionnaire had a positive attitude change about reading. Two student participants had a “neutral” attitude change toward reading. As the students’ scores increased, their attitudes gradually improved.

Results Related to Literature

Findings from this research study indicated that students with an identified specific learning disability in reading can make gains in reading fluency and comprehension through direct and explicit instruction. The overall goal of this research study was to determine an effective practice that allows special education services to be provided in less restrictive environments, such as in an inclusion setting in the general education classroom. With the positive results of the study, it is the goal that special education students can receive LLI intervention in the general education classroom setting through inclusive services. Students in this intervention were excluded from an elective course, which excludes them from the opportunity to take courses involving the arts, computer skills, and STEM. Tutt (2007) noted an emphasis on the importance of examining the social aspects of excluding special education students from certain courses. Both academic and social goals should be sought out when serving students with special education needs (Benstead, 2019). When determining an inclusion placement, the ultimate goal is for students with disabilities to be successful in both realms, the

academic and social (Qvortrup & Qvortrup, 2018). Inclusion in this school means special education students participate in all area of the general education curriculum and in areas in which they demonstrate greater needs, a special education teacher joins them in the general education setting to provide services inside the classroom. Students in this school receive differentiated instruction in ELA. Teachers group students and allow them to work on differentiated learning tasks. With data supporting an improvement in reading fluency and comprehension, the LLI program could be implemented with students performing below grade level in reading within their general education classroom.

Promoting inclusion services for special education students was the main goal of the teacher-researcher after determining that middle school students with an identified learning disability in reading can make progress on both instructional level assessments and grade-level assessments, when taught using direct and explicit teaching strategies. Professional development for current educators to provide such teaching can lead to more inclusive environments for special education students. Providing additional trainings to general education teachers in the areas of teaching direct, explicit reading strategies or programs, such as Leveled Literacy Intervention, can improve their perception of having special needs students in their classrooms. Kavale and Forness (2000) reported that some general education teachers are resistant to inclusion due to having fears about student behavior, teacher roles, and the individualized instruction within special education will be lost in the inclusion model. By providing encouraging data, such as the growth made by students in this study in reading comprehension and fluency, general education teachers can be enlightened by the benefits of inclusive practices and the capabilities of special education students. Findings from this study helps general educators steer away from the

attitude of “he’s too far behind to catch up now” and move toward the attitude of “direct, explicit and individualized instruction can promote growth in reading fluency and comprehension.”

The findings from this study also has implications in preparation for preservice educators. By demonstrating growth in all areas measured in this study, preservice teachers can enter the profession with a growth mindset. This mindset can be one of “although these students are significantly below grade level, there is hope and they are capable of making gains.” Teaching students with special needs has been reported as the most challenging aspects for first-year and other beginning teachers (Hopkins et al., 2018). Hamilton-Jones and Vail (2014) conducted a study among preservice teachers to determine ways to support teachers in collaboration with special educators. They found that it is necessary for general education programs to build confidence and belief in performance among teachers, take a critical look at collaboration, and provide additional coursework in special education. To bring more attention to the middle school level special education practices, as this study focused on, early childhood preservice teachers felt more prepared to work in inclusive environments than teachers preparing to teach older students (Stites et al., 2018). Even with this finding, the majority of preservice general education teachers did not feel adequately prepared to work with special education students in inclusive environments. It was found that preservice teachers need additional experiences in inclusive environments that include practicing and working directly with special education students. It was also found that longer student teaching experiences also led to higher feelings of preparedness when working with special education students. When teachers see success and growth of special education students,

such as the findings in this study suggest, they feel more confident in their ability to teach these students (Stites et al., 2018).

Everett (2017) looked further into educator preparedness programs and found that many programs only require students to take one class that gives a general overview of students with disabilities. In these programs, preservice teachers are not provided with strategies and differentiation methods that will help special education students within their classroom and in inclusive settings. The successful growth of the student participants' in this study in reading fluency and comprehension and reading attitudes, demonstrates the abilities of special education students. With experience in working with direct, explicit reading intervention programs, such as Leveled Literacy Intervention, preservice teachers can build their confidence in their abilities to grow special education students' reading achievements.

Everett (2017) conducted a study among teachers in inclusive settings. It was found that accommodations, mnemonics, visual aids, and manipulatives proved to be beneficial for students with special needs as well as non-disabled students in the general education class. Because the Leveled Literacy Intervention program incorporates each of these in its direct and explicit teaching style, implementing this reading program in small groups within the general education setting would be beneficial for both general education and special education students.

Everett (2017) also determined that one of the most important factors in student achievement is self-advocacy and motivation. Individual student conferences with the teacher and student led to more positive interactions, a relevancy of material taught, and a shared view of direction for the student. The intervention chosen by the teacher-

researcher in this action study, LLI, incorporates individual student conferences. Students have an active role in tracking data and monitoring progress. This allows students to understand the purpose of the instruction provided and establish shared goals among themselves and their teacher. At the conclusion of this study, three out of four students reported having a positive attitude toward reading. The individual student conferences throughout the Leveled Literacy Intervention allowed students to discuss their progress and establish reasonable and achievable reading goals, making students feel more confident in their reading abilities. All four student participants in this study also reported having the will to become a better reader.

Prior to this study, a reading intervention program was not being implemented in the special education resource courses or in the general education setting. Although the school offers special education inclusive practices, it is mainly reserved for students reading on or close to grade level expectations. Those reading significantly below grade level receive direct, explicit instruction in a more exclusive, resource environment. This means the student participants miss courses in the arts, STEM, computer skills, and physical education. The goal was to find an effective reading intervention program that can be implemented in resource classes and move students to inclusion settings, and possibly provide the intervention in the general education setting through inclusive services.

By the time a student reaches middle school, literacy skills are required in all educational subject areas. Math, science, social studies, and other subjects all require students to read and acquire knowledge in a “reading to learn” method. This increases the demands on students who perform significantly below grade level in reading

achievement. Interventions such as The Fountas & Pinnell Leveled Literacy Intervention System allows students to make progress in reading on their instructional level in both resource and inclusive settings. It is the goal to increase the reading deficits among special education students in this school to ultimately provide special education instruction in the students' least restrictive environment, such as inclusion. In turn, when building reading skills, students are less likely to have unmotivated learning behaviors (High, 2018) and negative behaviors (Strong, 2004) in the general education setting. Building the self-esteem of the students in this study was also a key factor of the study. Glenn et al. (2018) report that students may begin having negative attitudes and feelings of self-worth when they are labeled as a struggling reader. Students who are pulled out for a resource class at the middle school level are aware that they are in the class because they have significant reading deficits. The Leveled Literacy Intervention System helps the teacher-researcher in this study bridge the disconnect between the teaching of foundational reading skills at the middle school level and providing age-appropriate content. The LLI program provides reading material to older students on interesting topics that are middle school appropriate. High (2018) stresses the importance of not providing students with "kid-like" material to learn foundational reading skills.

The third research question of this study focuses on student achievement and growth in the general education curriculum. Special education students are expected to continue to progress through the general education setting and at this school, their progression is measured by district leveled reading benchmarks. All four students in this action research study made gains on district level benchmarks that measure grade-level standards. The larger the growth in reading comprehension and fluency, the larger the

growth was on the grade-level benchmark assessments. Although this intervention took place in the special education setting, it can be generalized that students can also achieve reading growth in inclusive reading environments through direct, explicit teaching of reading skills through the LLI program.

The results of this study are supported by the Science of Reading body of research. The Science of Reading emphasizes the five components of teaching reading as phonemic awareness, phonics, fluency, vocabulary, and comprehension. All five of these components are directly, explicitly, and systematically taught through the LLI system used in this action research study. The Structured Literacy approach in the Science of Reading is evident in each of the LLI lessons. Structured Literacy approaches ensure students are provided repeated opportunities to decode text, dictate words and sentences regularly, and incorporates multi-sensory instructional techniques to reach students with learning differences (Ordetx, 2021).

Implications of the Study

The results of this study indicated growth in all assessed areas: reading fluency and comprehension at the student participants' instructional level, reading achievement on grade-level assessments, and student participants' attitude toward reading. The positive results indicate that students reading significantly below grade level in middle school can still make reading gains in reading foundations and in the general education curriculum. Broader implications require examining special education students who are currently receiving their services through inclusive settings, rather than the resource method. Findings from this study indicate that middle school students, who are performing significantly below grade level expectations in reading, can make progress

through a direct, explicit reading intervention program. Findings from this study also support the Science of Reading.

Action Plan

This action research study provided evidence that through the Fountas & Pinnell Leveled Literacy Intervention System, middle school, African American males who have been diagnosed with a specific learning disability in reading can make progress in reading fluency, comprehension, and their self-perception as readers. This was determined through LLI system fluency and comprehension assessments, district level reading benchmarks, and student questionnaires. Outlined in this section is a five-part action plan describing the next steps that can be taken to ensure the continuous growth of reading skills among special education students. Recommendations for studies and policy and procedural changes are also discussed.

Positive results from this action research study indicate a direct, explicit reading intervention, Leveled Literacy Intervention, is effective in teaching middle school special education students reading significantly below grade level expectations. Based on these findings, the teacher-researcher developed an action plan of five tasks: (a) provide LLI in all special education courses; (b) provide inclusion services to more special education students; (c) provide LLI in general education classes as a way to differentiate instructional practices; (d) support current general education teachers in inclusive learning environments; (e) support beginning teachers in inclusive learning environments.

Action Step 1: Provide LLI in All Special Education Courses

The first step in this action plan is to implement the Leveled Literacy Intervention System in all special education resource courses at Latta Middle School. Positive impacts

of the LLI intervention from this research study indicate that special education students reading significantly below grade level expectations can experience success in growth and attitude through a direct, explicit teaching method. The middle school in this study has four courses of special education resource yearly, one at each grade level. Students in these courses will receive the LLI intervention to increase reading fluency and comprehension skills. This will also allow a chance for middle school learners to experience success in an area they have struggled in. Self-perception of their reading achievement will also grow. Students will play an active role in monitoring their progress in reading comprehension and fluency. Shared and reasonable goals will be set to encourage growth and ownership of the students' progression in reading. This will be done in individual student conferences. Student participants in this study will continue with the intervention. Students receiving educational services after-school and through summer services, will also receive the LLI intervention.

Action Step 2: Provide Inclusion Services to More Special Education Students

The teacher researcher determined an appropriate second step in the action plan will be to provide more special education students at this middle school with inclusion services. Providing an individualized educational plan to these students in their least restrictive environment is the ultimate goal of the special education teacher. Inclusive services allow teachers to support students with special needs within their general education settings, rather than an exclusive environment. Students will learn along-side their non-disabled peers and have the opportunity to enroll in physical education, STEM, computer, or arts courses. Individual student conferences will allow students in the inclusive setting understand their present level of achievement and set goals that are

achievable and allow them to take ownership of their learning. Two of the student participants in this study will be recommended for inclusive services at the time of their next annual review of their Individualized Education Plan. These are the two students who made the most progress.

Action Step 3: Provide LLI in General Education Classes to Differentiate

Instructional Practices

The third step in this action research is for the action researcher to share the data collected and analyzed with general education teachers. General education teachers will be able to use the Leveled Literacy Intervention System to differential instruction in their ELA classes. Each ELA teacher is required to differentiate instruction within their teaching. Small group instructional sessions are also strongly encouraged for all teachers. LLI provides a way for educators to provide intervention to a small group of students within a larger class. Teachers will use LLI with special education students or non-disabled students in their classes to increase reading comprehension and fluency skills. This will also allow teachers the opportunity to target these students without singling them out from the rest, as other groups will be working on various other tasks.

Action Step 4: Support Current General Education Teachers in Inclusive Learning Environments

The fourth step in this action research study provides a support system for current general educators. Professional development in special education will allow them to grow professionally while working with special needs students within their general education classrooms. These professional developments will include topics such as: providing accommodations and modifying assignments for students with disabilities, an overview

of learning disabilities, and teaching methods and strategies for reaching students with learning disabilities. A support group will also be developed for teachers that have special education students in their classroom. This group will consist of the special education teacher, general education teacher, support service personnel, school psychologist, and the school administrator. Collaboration between the general education and special education teacher will take place during planning times. Teachers will utilize at least one meeting time a week to discuss plans and analyze student data.

Action Step 5: Support Beginning Teachers in Inclusive Learning Environments

The fifth step in this action research plan is to provide beginning teachers in inclusive learning environments an extra level of support. Providing professional development in the areas current educators will receive will reinforce ideas and strategies learned in their teacher preparedness program. Beginning and new teachers will also be supported through IEP teams that include the special education teacher, school psychologist, related service personnel, and administrators. Inclusive learning environments will be fostered through effective collaboration efforts with beginning teachers at Latta Middle School. Beginning teachers will also be assigned a veteran teacher mentor that will support the teacher through their experience and knowledge of working with special needs students.

Summary

The goal of this action research study was to determine if the Leveled Literacy Intervention System was effective in increasing African American male, special education students' reading achievement in fluency and comprehension, as well as their self-perception of themselves as readers. The teacher-researcher proved the effectiveness

of the intervention in an 18-week study that concluded with all students making gains in both reading fluency and comprehension at their instructional level and their grade-level. Student self-perceptions of themselves as readers were also positive. The implementation of the LLI reading intervention will continue in special education classes and will be expanded to the general education ELA courses. The ultimate goal is to provide more special education students, specifically African-American males, with inclusion services in their least restrictive environments.

Recommendations for Policy and Practice

The teacher-researcher recommends the continuation of the LLI reading intervention in the sixth grade special education resource class. It is also recommended that the intervention be implemented in the fifth, seventh, and eighth grade resource classes. This action research study provided evidence that with direct, explicit reading instruction, middle school students reading significantly below grade level expectations can make gains in reading fluency and comprehension. This suggests that all special education students with a specific learning disability in reading should receive a direct, explicit teaching approach to increase reading skills. Successful interventions can lead students to a less restrictive learning environment through inclusion services, rather than an exclusive resource method.

Recommendations for Future Research

The present study had limitations that include sample size and time constraints. Future research could aim to expand the findings of this study by increasing the sample size, longer time frames, studying effects of LLI in inclusive settings, and studying teacher perspectives of increasing inclusive services.

1. The small sample size of just four students is a limitation of this action research study. Future research studies should include a larger sample size. A future researcher could include all students at Latta Middle School who have been diagnosed with a specific learning disability in reading.
2. Due to a limited class schedule, the LLI intervention was provided in a short 30-minute session. Future research should include a session of 45 minutes. The researcher should also consider conducting a year-long study of 36 school weeks, rather than the half-school year study of just 18-weeks.
3. Due to the goal of the teacher-researcher of this study being providing students with inclusive learning environments rather than resource courses, future research should take place in an inclusive setting. A future action research study could include students receiving the Leveled Literacy Intervention System in an inclusive, general education setting.
4. Future research could also incorporate student retention of reading fluency and comprehension skills gained. Continuous analysis of student data would allow a future researcher the opportunity to determine long-term impacts of the LLI reading intervention provided in this study.

Implications for Theoretical Framework

The theoretical framework for this action research study focused on the social constructivism theory. Vygotsky's theory of social constructivism emphasizes the importance of social and cultural influences on student learning. Vygotsky believed that learning is a social and collaborative activity in which learners create meaning through interactions with one another (Lourenco, 2012). The focus on this study is to promote

inclusive learning environments in which special needs students are exposed to many other students with various backgrounds and educational abilities.

Incorporating a framework of social constructivism can lead to the promotion of effective teaching strategies and practices, as well as learning environments, of which all students can benefit from (Watson, 2001). Providing a student with special needs equal educational opportunities can benefit both them and their nondisabled peers in inclusive learning environments. This action research study provided evidence that middle school students with specific learning disabilities in reading can make progress both on their instructional and grade-level material. Inclusion practices embodies the social constructionist model and promotes social justice for these students and equal educational opportunities.

Conclusion

This action research study demonstrated the effect that a direct, explicit reading intervention program, Fountas & Pinnell's Leveled Literacy Intervention System, had on special education students at the middle school level. The analysis of the data provided evidence of growth in the areas of reading fluency, reading comprehension, and increasing student participants' self-perception of themselves as readers. Improvement on instructional level reading assessments and district level reading benchmark assessments, on grade level, provide evidence that student gains made on instruction reading levels led to gains made on grade-level assessments.

The teacher-researcher constructed an action plan that includes providing LLI in all resource classes, a push for providing more special education students with inclusion services, providing support for pre-service and beginning teachers in the area of special

education and collaboration, and providing current general educators with support and professional development in the areas of special education and providing a mutual collaboration time for the special education teacher and general education teacher. The teacher-researcher recommends this study be expanded by increasing the sample size, time constraints, providing the intervention in inclusive settings, and track student reading achievement data to determine long term impacts of LLI.

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APPENDIX A

COMPREHENSION AND FLUENCY ASSESSMENT EXAMPLE

RED SYSTEM LESSON 4 • *Allie and the Everything Sandwich* (FROM LESSON 3) • LEVEL L • FICTION

Student _____ Grade _____ Date _____

Teacher _____ School _____

Recording Form

Part One: Oral Reading

Excerpt is taken from pages 8–14, through paragraph 3

Place the book in front of the student. Read the introduction provided and then invite the student to read the excerpt to you.

Introduction: Allie's dad had an accident and her mom had to go to the hospital. She asked Allie to keep her brother, Mack, safe for one hour until the babysitter arrived. Mack wanted fish sticks for lunch but Allie knew she shouldn't use the stove. Read what happened next.

Summary of Scores:

Accuracy _____
Self-correction _____
Fluency _____
Comprehension _____

Sources of Information Used

Page	Start Time ____ min. ____ sec.		E	SC	E			SC		
					M	S	V	M	S	V
8		"How about a special sandwich?" I asked. "An Everything Sandwich. We can make it together." He nodded. Phew!								
9		I let Mack put anything he wanted on the sandwich. Ham, pickles, and mustard. Cheese, ketchup, and potato chips. Banana slices. And peanut butter and jelly beans. The sandwich piled up and up.								
10		Mack ate every bite. Then he washed it down with Everything Punch. That was just lemonade, grape juice, and chocolate milk mixed together.								
Subtotal										

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Part One: Oral Reading *continued*


Sources of Information Used

Page	Text	E	SC	E			SC		
				M	S	V	M	S	V
11	<p>I cleaned up the kitchen. Then I saw Mack out the window.</p> <p>He was climbing up the oak tree. He had a hammer in his pocket and boards under his arm.</p> <p>What if he fell?</p>								
12	<p>I ran out there.</p> <p>If I told him not to climb that tree, he'd just want to do it more.</p> <p>So I said, "Hey! Did you forget something?"</p> <p>"What?" he asked.</p> <p>"Dessert!" I shouted.</p>								
13	<p>We made an Everything Sundae for dessert. It had ice cream, walnuts, banana slices, and strawberries. It also had chocolate syrup, grapes, and marshmallows.</p> <p>And more jelly beans.</p> <p>It took Mack a long time to eat it all.</p>								
Subtotal									


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Part One: Oral Reading *continued*

Sources of Information Used

Page	Text	E	SC	E			SC		
				M	S	V	M	S	V
14	<p>Then he looked like he was thinking.</p> <p>"Do you think I could ride my skateboard down the stairs?" he asked.</p> <p>But I didn't care. Because just then, the doorbell rang.</p>								
Subtotal									
 End Time ____ min. ____ sec.		Total							

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Accuracy Rate	Errors	12 or more	10-11	8-9	6-7	4-5	2-3	0-1
	%	below 95%	95%	96%	97%	98%	99%	100%



Self-Corrections	_____
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Fluency Score	0 1 2 3	Fluency Scoring Key 0 Reads primarily word-by-word with occasional but infrequent or inappropriate phrasing; no smooth or expressive interpretation, irregular pausing, and no attention to author's meaning or punctuation; no stress or inappropriate stress, and slow rate. 1 Reads primarily in two-word phrases with some three- and four-word groups and some word-by-word reading; almost no smooth, expressive interpretation or pausing guided by author's meaning and punctuation; almost no stress or inappropriate stress, with slow rate most of the time. 2 Reads primarily in three- or four-word phrase groups; some smooth, expressive interpretation and pausing guided by author's meaning and punctuation; mostly appropriate stress and rate with some slowdowns. 3 Reads primarily in larger, meaningful phrases or word groups; mostly smooth, expressive interpretation and pausing guided by author's meaning and punctuation; appropriate stress and rate with only a few slowdowns.
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Reading Rate <i>(Optional)</i>	End Time ____ min. ____ sec. Start Time ____ min. ____ sec. Total Time ____ min. ____ sec. Total Seconds ____ $(RW \times 60) \div \text{Total Seconds} = \text{Words Per Minute (WPM)}$ $12,660 \div \text{_____} = \text{_____ WPM}$
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Part Two: Comprehension Conversation

Have a conversation about the book, noting the key understandings the student expresses, using prompts provided when needed. Consider understandings the student expressed during the previous lesson's book discussion so as not to be redundant. Score for evidence of all understandings expressed, with or without prompts. Circle the number in the score column that reflects the level of understanding. See the *System Guide* for further clarification of the scoring rubric.

Comprehension Scoring Key

- 3 Student demonstrates **proficiency** in understanding the text.
- 2 Student is **approaching proficiency** in understanding the text.
- 1 Student demonstrates **limited proficiency** in understanding the text.
- 0 Student's comprehension is **not proficient**.

Key Understandings	Prompts	Score
<p>Within the Text</p> <p>Allie is at home teaching herself to knit when Mom gets a phone call.</p> <p>Dad's had an accident and Mom needs to take him for an X-ray. She asks Allie to keep herself and her little brother, Mack, safe for an hour. Allie knows it won't be easy to keep Max out of dangerous situations. Mom leaves and tells Allie to make smart choices.</p> <p>Mack wants to cook something for lunch, but Allie is not allowed to use the stove, so she offers him an Everything Sandwich. Mack puts anything he wants on the sandwich and washes it down with Everything Punch. Next, Allie keeps Mack from climbing a tree by letting him have an Everything Sundae.</p> <p>Finally, Trisha's mom arrives and they hear a gagging noise in the kitchen. Allie runs for her room.</p> <p><i>Note any additional understandings:</i></p>	<p>Tell the important things that happen in the story.</p> <p>Is there anything else?</p>	0 1 2 3
<p>Beyond the Text</p> <p>Max is very active and likes to do dangerous things, like climbing a tree and riding his skateboard down the stairs. He eats a lot of food without thinking about what might happen.</p> <p>Allie is trying to keep Mack away from doing dangerous things. She is trying to keep him safe until Trisha's mom comes.</p> <p>The gagging sounds mean that Mack has an upset stomach and is throwing up all of the strange mixtures he ate. He ate too much and mixed too many foods.</p> <p>Allie makes smart choices when she doesn't use the stove and when she keeps Mack from climbing the tree. She makes poor choices when she lets him eat too much food.</p> <p>Sample response: I wanted to make some mac and cheese for lunch, and I asked my mom to do the cooking on the stove. (Accept logical responses that make a connection between the student's personal experiences and the content of this text.)</p> <p><i>Note any additional understandings:</i></p>	<p>Describe Mack's personality. Why do you think that?</p> <p>Why does Allie suggest the Everything Sandwich, Punch, and Sundae?</p> <p>Why do Allie and Mrs. Matthews hear gagging sounds in the kitchen? What makes you think that?</p> <p>Do you think Allie makes smart choices? Why or why not?</p> <p>What is an example of a smart choice that you have made?</p>	0 1 2 3

Continued on next page.

Part Two: Comprehension Conversation *continued*

Key Understandings	Prompts	Score
<p>About the Text</p> <p>This book is realistic fiction. The characters and the story are made up, but they could be real.</p> <p>The writer makes the story funny with the weird mixtures Mack invents and shows how solving one problem can cause another one.</p> <p>Sample response: The writer writes a story that has funny things happen, like mixing chocolate milk with grape juice lemonade. The characters act in real but funny ways, like when Mack climbs a tree with a hammer and boards. (Accept logical opinions and note how well students support their ideas with evidence from the text.)</p> <p><i>Note any additional understandings:</i></p>	<p>What is the genre of this book? How do you know?</p> <p>This is a funny story. Give some examples of how the writer makes it funny.</p> <p>What does the writer do to you keep you interested in the story? What else? Show an example.</p>	<p>0 1 2 3</p>

Guide to Total Score, Levels L–Z

8–9	Proficient
6–7	Approaching Proficiency
4–5	Limited Proficiency
0–3	Not Proficient

Total Score: _____ /9

APPENDIX B

STUDENT READING QUESTIONNAIRE

- 1) How do you feel about reading?
- 2) Describe yourself as a reader.
- 3) How do you feel when asked to read aloud in class?
- 4) Do you enjoy reading when someone else is reading to you?
- 5) Do you read outside of school? If so, what?
- 6) Do you want to be a better reader?

APPENDIX C

PARENTAL CONSENT FORM

Dear Parents,

My name is Krystin Williams and I am your child's special education teacher at Latta Middle School. We've been off to a great start to the school year. Currently, I am working on completing an action research study to fulfill requirements of my Doctorate of Education program through the University of South Carolina. Your student has been selected to participate in this 18-week reading intervention study. Throughout this study, the Fountas & Pennell's Leveled Literacy Intervention System will be used to strengthen reading fluency and comprehension skills. Your student's data will be used to conduct the study, but their names are not released at any point during the research. Student data will only be released as "Student 1, Student 2, etc.". With your consent, your child will be a student participant in the study. Please return this letter with your decision to regarding your student's participation in this reading intervention study.

_____ I give my permission for my child to be a student participant in the research study.

_____ I *do not* give my permission for my child to be a student participant in the research study.

Student Name _____

Parent Name _____

Parent Signature _____ Date _____