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The Response Of Middle School Special Education Students To Differentiation Of Reading Instruction Based On Student Choice And Interest In The Seventh Grade Academic Enrichment Classroom

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THE RESPONSE OF MIDDLE SCHOOL SPECIAL EDUCATION STUDENTS TO
DIFFERENTIATION OF READING INSTRUCTION BASED ON STUDENT CHOICE
AND INTEREST IN THE SEVENTH GRADE ACADEMIC ENRICHMENT CLASSROOM

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DEDICATION

I dedicate this dissertation to my children, the ones who call me Mom as well as the many others who have impacted my life along the way.

ACKNOWLEDGEMENTS

I would first like to thank Dr. Christopher Bogiages. Your support, guidance, and encouragement have been essential to the completion of this process. To Dr. Crystal McSwain, thank you for not only serving on my committee but for believing in me when I struggled to believe in myself. Without your influence, I may never have started this journey. To my administration and colleagues, thank you for your part in this study. You make coming to work each day fun and meaningful, and I would not want to do it without you. To my students, past and present, I did this as much for you as for me; always remember, “In spite of, not because of.” To the two young ladies whom I love as my own daughters, you are as much a part of who I am as the children who have lived with me daily. To Preston and Chloe, you are my purpose and my heart. As big of an accomplishment as this is, you both are my greatest accomplishments. Being your mom will always be the most important job I will ever have. I love you so much. I know I would not be who I am today without my beautiful Granny White. I am thankful for the time I had with you, and I miss you daily. Most importantly, I thank God for loving me in a way that I do not deserve. I owe everything to you, and I know I am blessed.

ABSTRACT

This action research study describes the influence of differentiation of reading instruction based on student choice and interest on the reading growth of seventh-grade special education students in the academic enrichment classroom. This research was grounded in the theoretical framework that involves differentiation of instruction (Tomlinson, 2001), special education students (Bender, 2012), and middle school reading instruction (Robb, 2010). This action research study implemented a parallel mixed methods design to explore the following research question: What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? The participants in this study included 10 special education, inclusion/academic enrichment, seventh-grade students. The data collection methods used in this study were field observations, interviews, and pre- and post-assessments. Data was analyzed for growth over time in amount of time off task; reading accuracy, comprehension, and fluency; and in overall willingness to read and attitude about reading. The results of this study indicated that when responding to differentiation of reading instruction based on student choice and interest, seventh-grade special education students displayed positive responses in amount of time off task, reading growth, and willingness and attitude about reading.

Key words: learning disabilities, special education, middle school reading instruction, interests, differentiation of instruction, student choice

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LIST OF ABBREVIATIONS

ELA.....	English Language Arts
ESOL.....	English for Speakers of Other Languages
IDEA.....	Individuals with Disabilities Education Act
IEP.....	Individual Education Plan
ITLCS	Informational Text: Language, Craft, and Structure
ITMC.....	Informational Text: Meaning and Context
LRE	Least Restrictive Environment
LTLCS	Literary Text: Language, Craft, and Structure
LTMC	Literary Text: Meaning and Context
MAP	Measures of Academic Progress
OHI	Other Health Impairment
RtI	Response to Intervention
SSR	Self-Selected Reading
wpm.....	words per minute

CHAPTER 1

INTRODUCTION

Overview

Problem of Practice

As a middle school special education teacher, I work primarily with students with some type of specific learning disability or learning difference. The Individuals with Disabilities Education Act (IDEA) of 2004 defines a specific learning disability as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which the disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do calculations. (IDEA, 2004)

These students are generally of average or above average intelligence (Kumar & Raja, 2009). In my experience with special education students in middle school, specifically those in this study, they struggle to meet their full potential in reading. The majority of my seventh graders are reading below grade level and struggle to make much progress. Among my students 88% of my seventh-grade caseload and 90% of the students in my seventh-grade academic enrichment class are reading below grade level. This data is consistent with the seventh-grade, special education students in our sister middle schools within the same district. This is also consistent with generalized research on students with learning disabilities in that reading difficulties are more often observed among students with learning disabilities than any other deficit (Bender, 2001). Reading is the most

prevalent type of academic difficulty for students with learning disabilities, with an estimated 90% of students with learning disabilities having reading difficulties (Bender, 2001). My students often have difficulty in the areas of accuracy, comprehension, and fluency, coupled with difficulty with focus or time on task. Many of the students I teach in the inclusion/academic enrichment classroom seem to have developed a dislike of or an aversion to reading, and it is therefore difficult to engage them in reading instruction. This greatly limits the reading growth for these students throughout the school year.

This is the problem of practice addressed in this action research study: special education middle school students are not meeting their full potential in reading growth. This study examines the reading challenges of seventh-grade students with an Individualized Education Plan (IEP) in the academic enrichment classroom. The purpose of this study was to determine the possible impact of implementing student choice and interest-based differentiation on those challenges.

Theoretical Framework

Differentiation. In my experience, an important contributing factor to the lack of progress for my students is their lack of interest in the texts that have been selected for them to read. Student interest, especially for students with learning difficulties, has been shown to be a key factor in motivation to learn (Tomlinson, 1999). Therefore, one approach that can leverage student interest is differentiated instruction (Tomlinson, 1999). Differentiation of instruction is an approach to instruction that includes a variety of learning strategies and is responsive instruction designed to meet the unique needs of individual students (Watts-Taffe et al., 2012). There are many ways in which differentiation of instruction can occur. Differentiation of instruction based on student

readiness, interest and learning profile can be effective in helping students meet their full potential. The identification of strengths, weaknesses, and interests may lead to better differentiation strategies for struggling learners (Tomlinson et al., 2003). Teachers trained to recognize differences and differentiate instruction may be better prepared to accommodate all students. Differentiation of instruction can be a struggle for teachers as it involves tailoring instruction to individual needs (Willis & Mann, 2000).

Differentiation of instruction includes focusing on the process, the products, or demonstrations of learning, the environment in which learning is taking place, or the content or instruction (Tomlinson, 2001; Watts-Taffe et al., 2012). For this study, student interest and choice shaped and informed the process for reading instruction. Additionally, students were given choice about the environment in which they read. This is a differentiation strategy that is entirely feasible in any classroom but specifically in my own classroom. Teachers must get to know their students and what works for each one individually. Effective differentiation is found in decisions made by teachers based on their understanding of the reading process, knowledge of their students, consideration of effective instructional practices supported by research, and ability to select models, materials, and methods required for effective reading instruction tailored to individual student needs (Watts-Taffe et al., 2012).

Special education. Underachievement in reading is the most common and most serious academic problem for students with learning disabilities (Bender, 2001). A contributing factor in individuals with learning disabilities overcoming their disabilities is having an unusually intense interest in a certain area (Kim & Young-gun, 2007). I get to know my students well in the years I teach them, which makes taking their interest and

choice into consideration a simple process. Often, even academically talented students who also have learning disabilities or learning differences fail to live up to their potential (Reis & Ruban, 2005). Researchers and educators need to consider a new area of focus for differentiation in order to mobilize energies and resources to assist students in reaching their maximum potential, whether it relates to standards, level of services, or educational goals (Reis & Ruban, 2005). Even after receiving sound reading instruction early in their education, many older struggling readers continue to have difficulty with reading fluency or comprehension due to learning disabilities (Torgesen, 2005). Students with learning disabilities tend to struggle with more than one component of reading (Torgesen et al., 2007). Some students with learning disabilities struggle with identifying new or unfamiliar words, with fluency, and with comprehension (Roberts, Torgesen, Boardman, & Scammacca, 2008). This study was designed to investigate methods to engage special education students and enhance reading instruction and growth.

Middle school reading instruction. The general idea for reading instruction in middle school versus early elementary school is the transition from learning to read to reading to learn (Robb, 2010). The premise is that in grades kindergarten through third, students are learning the process of reading, which consists primarily of decoding and memorizing basic sight words (Robb, 2010). Beginning about fourth grade, the focus shifts to reading to gain information (Robb, 2010). In grades 4 through 8, expectations for readers change as teachers expect students to apply their previously learned reading skills to more challenging content-area information (Robb, 2010). Many students, as observed in my experience teaching special education, still require intense reading instruction and have not yet mastered the basic skills necessary to read for understanding. In this study,

reading instruction continues to work toward strengthening gap skills based on individual student need.

Research Question

In designing the intervention for this study based on my theoretical framework outlined above, I hoped to find a way to engage my students in reading instruction that would lead to increased time on task and time spent reading. I spend hours each day with my students, allowing me to get to know each student in a way that allows for differentiation of instruction and encouragement for their learning needs. Differentiation of instruction based on student interest may include learning and interest surveys, interviews, close monitoring of students, and open communication and trust between teacher and student. The research question that served as the basis of this action research plan was, What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? This research question was identified as the basis of this action research plan based on the need identified in the problem of practice as well as on a review of literature and previous studies indicating reading success with the implementation of differentiation for student interest and choice.

Methodology

Action Research

This research will be carried out as an action research study (Mertler, 2014). Action research is a cyclical process that allows an educator to solve a problem of practice in the classroom and ultimately promotes the academic achievement of the students (Mertler, 2014). This will include ongoing research within the educational

setting in order to better the current educational environment (Mertler, 2014). The five goals of action research are as follows: (1) generation of new knowledge; (2) achievement of action-oriented outcomes; (3) education of researcher and participants; (4) results that are relevant to the local setting; and (5) a sound and appropriate research methodology (Herr & Anderson, 2015). As I will discuss in the following chapters, in this study these elements of action research have been accomplished.

The practice of action research is also a reflective one. Reflection allows the teacher-researcher to examine the study and determine what went right or wrong and what could be done better. It is reflection that allowed me, as the teacher-researcher, to design an action plan of implementation to improve my classroom practice (Shanks, Miller, & Rosendale, 2012). The benefit of action research is that it enables educators to solve problems that are specific to the needs currently in their own classrooms and schools through guided research. It is not enough simply to identify a problem, but an effective educator must find a way to fix the problem or at least make the situation better. Professional reflection is one of the most important stages in an action research project, providing opportunities for reflecting on the research, on what has been learned from the research, and on where the action research can take the instructor and students during future instruction (Mertler, 2014).

Research Design and Data Collection Methods

The research question used in this study was, What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? In order to address this research question, this action research study utilized a parallel mixed

methods design (Creswell, 2014). In this approach, parallel indicates that I was simultaneously gathering both types of data in order to merge the data for comprehensive analysis (Creswell, 2014). Mixed methods indicates the use of both quantitative and qualitative data to analyze the effect of the intervention on my problem of practice (Creswell, 2014). During the study and following the intervention period, I analyzed the data to look for patterns and progress in individual students as well as a collective whole. I gathered both qualitative and quantitative data in order to paint an effective picture of the progress of my small class. Among the benefits of a mixed-method approach is the opportunity to see multiple dimensions of the data collected (Driscoll, Appiah-Yeboah, Salib, & Rupert, 2007). Quantitative data was collected in assessment scores and growth and qualitative data was used to measure time on task and overall attitude about reading. Both were used to measure growth over time. There are limitations to all methods of data collection, but the collection of both qualitative and quantitative data offered the opportunity for triangulation of data, allowing a combination of the strengths of each form of data collection (Mertler, 2014).

Data collection methods. Data was collected using a number of methods to examine the impact that differentiating instruction based on student choice and interest had on reading growth. Data was collected concurrently as described above. Data analysis began quickly, often occurring during the cycles of intervention. This provided opportunities to modify the intervention in response to what was being learned through data analysis.

Qualitative data. Data collection was also through interviews (see Appendix A) and observations prior to the start of the study as well as during the intervention period

(see Chapter 4 Figures 4.1-4.6). Students were interviewed to determine interests, willingness to read, and overall attitude about reading. Students were observed for engagement and time off task.

Quantitative data. Students were given pre- and post-assessments to monitor progress (the Measures of Academic Progress reading assessment and the Fountas and Pinnell reading assessment). The Measures of Academic Progress assessment (MAP) and running records were the primary measure of quantitative data and were administered at the start and end of the study. Students were grouped, instructed, and assessed based on their responses on interviews and surveys revealing their interests and attitudes about reading. Students made their own text selections, and student choice was honored in independent work activities. Data was collected also regarding improvement in number of times off task (see Figures 4.1–4.6 in Chapter 4).

Validity, Reliability, and Trustworthiness

It is important to be aware of the specific threats to validity, reliability, and transferability in any research study. Validity refers to the accuracy of the collected data in that it is measuring what it asserts to be measuring (Mertler, 2014). Reliability refers to consistency of the data being collected (Mertler, 2014). Trustworthiness is the determination that the researcher has established credibility and dependability (Mertler, 2014). The goal of action research is to solve a problem of practice, not create reproducible results (Mertler, 2014). However, knowing what relates to a small sample size is only relevant if the data can be used to implement instructional practices that will be beneficial to these students. I ensured validity, reliability, and trustworthiness by conducting consistent and multiple observations both prior to and during the intervention

period. I implemented descriptive statistics in summarizing, organizing, and simplifying data (Mertler, 2014). I created a triangulation of data in using multiple data sources throughout my research (Mertler, 2014). I established consistency in administering the same pre- and post-assessments to all students and comparing the results to the previous year in order to establish progress patterns over time.

Positionality

Herr and Anderson (2015) clarify that action research is always conducted by insiders in an organization. As a special education classroom teacher I was an insider throughout this study. I travel with my students from sixth to eighth grade, therefore, I taught this group of students the previous year as well. This allowed me to get to know the students and gather necessary information about them in order to conduct this study effectively. I will also be able to continue to use the collected data in order to inform my instruction with the same group of students during the upcoming school year when they are in eighth grade. I have taught in the same middle school in the same position as the special education, academic enrichment/inclusion teacher for six years, allowing me to realize routines and procedures. Working in the inclusion classroom allows me to observe the students in the general education setting as well as in the academic enrichment classroom.

Participants

The participants of this action research study were all from one grade level in a small rural middle school. The ten participants were from my personal special education caseload and were seventh graders at the time of the intervention period. Although minority representation is limited in this setting, within this group are one African

American student, one mixed-race student, and three Hispanic students who are also served with English for Speakers of Other Languages (ESOL) services. All participants were assigned a number to ensure anonymity. These students were chosen because they all have identified learning disabilities or other health impairments and could possibly benefit from the type of intervention used in this study. Each of these students has an Individualized Education Plan (IEP). Not all students from my caseload were included. The study focused only on those seventh graders in my academic enrichment classroom daily.

Significance and Limitations of the Study

Significance

This action research study was significant because it allowed the opportunity for special education students to take an active role in their reading instruction and progress. Students were encouraged to take ownership of their learning opportunities. During the intervention period in this study, students showed progress over time, and although this progress cannot be definitively linked to the intervention, it did occur during the intervention period and the rate of progress was greater when compared to the previous year's numerical data.

As a long-term special education teacher, with multiple years of experience in this school and at the middle school level, I have witnessed and attempted multiple intervention strategies. It has not been my experience thus far to experience this much positive growth across an entire group of students. Changes and improvements in time off task and overall attitude about reading could also impact behavior and progress in the general education classroom.

Because this study collected both quantitative and qualitative data and both came out to the positive, it can be inferred that the progress was not coincidental or lacking in either area. It would be of interest to me to conduct similar studies within the inclusion class to determine if similar results occur, therefore leading to further implementation and staff development for future instructional plans.

Limitations

Action research is not designed to generalize results, and knowing what relates to a small sample size is only relevant if the data can be used to implement future instructional practices. A limitation of this study would be the very small sample size taken from an equally small student population. The only way to avoid this limitation in a school this size would have been to venture out of the school into other groups in the district. This would have compromised the validity of the results due to teacher–student relationships being a key component in the study. Another limitation of the study was that it only took place in the fall months of the school year and not across the entire year. In the previous year, winter MAP assessments were not administered, making it more difficult to compare exact results.

Some of the students I teach are served using only the inclusion model. I would have liked to have included these students in the study, but again, this change in schedule would have compromised validity. This study was only developed with students who have an individual education plan, but in fact many other general education students have learning differences and reading difficulties. It would be informative to perform a similar study in the future with the whole general education inclusion class.

Organization of the Dissertation

Following this introductory chapter, there will be four other chapters within this dissertation. Chapter 1 has provided an overview of the problem of practice, theoretical framework, and research question. Background information was provided on the researcher and participants. The primary focus of Chapter 2 is a review of existing literature consisting of prior research in the area of the value in knowing the students, including understanding the choices and interests of the learners as well as differentiating with these differences in mind. Chapter 3 focuses on methodology. This includes the purpose and problem statement, research design, instrumentation, and data collection strategies with a more in-depth view of the story as it unfolded. Chapter 4 consists of the research findings of the action research plan and well as a discussion and interpretation of this data. Chapter 5 is the concluding chapter and reviews and recalls as well as offers a summary and discussion of the future implementation plan. Through the research, I intend to explore the idea that differentiation of instruction based on student choice and student interest had a positive impact on the reading growth of seventh-grade, special education students within the academic enrichment classroom.

Conclusion

The problem of practice for this action research plan is that special education students do not always progress in the area of reading in a way that meets their full potential. This action research plan focuses on the importance of getting to know the whole child in order to differentiate on the basis of student choice and interest. The research seeks to analyze student need and interest and differentiate based on this to determine the impact on classroom reading performance. The research will be used

within my classroom, school, and district to implement more effective differentiation procedures.

Definition of Terms

Differentiation of Instruction: Differentiation of instruction consists of tailoring instruction to meet individual needs. Differentiation of content, process, products, or the learning environment is possible. The use of ongoing assessment and flexible grouping makes this a successful approach to instruction. Differentiation can be based on student strengths, weaknesses, and/or interests (Tomlinson, 1999).

Interest: “A feeling of wanting to learn more about a subject or to be involved in something; a quality that attracts your attention and makes you want to learn more or to be involved; an activity (such as a hobby) that a person enjoys learning about or doing” (Interest).

Learning Disability: A disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written; the disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations (IDEA, 2004).

Other Health Impairment (OHI): Limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli that results in limited alertness with respect to the educational environment, that both (a) is due to chronic or acute health problems, such as asthma, attention deficit disorder, or attention deficit/hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis (a kidney disorder), rheumatic fever, sickle-cell anemia, and Tourette’s syndrome; and (b) adversely affects a child’s educational performance (IDEA, 2004).

Struggling Learner: A student who has difficulty keeping up with classmates of the same age in a developmentally appropriate learning environment. The struggling learner does not necessarily qualify for special education services; where the learning disabled child has peaks and valleys in knowledge and skill levels, often the struggling learner's strengths and needs can be described as "flat." Struggling learners often have difficulty organizing themselves and their work environment, do not take oral instructions the first time given, are overwhelmed by work tasks and need work chunked for them, and/or have weak social and emotional skills (Robbins, 2006).

Struggling Reader: For the purpose of this study, a struggling reader is identified as a student who reads on a level that is one or more grade level below same-age peers and has difficulty in the area of decoding, comprehension, or both.

Running Record: According to the Fountas and Pinnell forum, running records are tools used to determine what the student has learned and still needs to learn. This analysis can be compared to the behaviors in the continuum to decide if the student is ready to move to the next level. The running record involves coding the oral reading of a text following the same standards for coding, scoring, and analysis. The difference is you use the text that was introduced, read, discussed, and taught in a guided reading lesson on the next day or two before the student rereads the text again. The analysis provides evidence of whether the student learned what was taught (Magoulick, 2016).

CHAPTER 2

LITERATURE REVIEW

Introduction

This action research study investigated the implementation of student choice and interest-based differentiation in reading instruction and the influence it may have on the reading growth of seventh-grade, special education students. This chapter will include a review of existing literature related to the problem of practice. In order to convey full understanding, the review of literature will begin with an examination of the historical context of differentiation of instruction, the needs of special education students as well as middle school reading instruction. Beyond the examination of historical context, I will provide a review of relevant literature for the theoretical framework that guided this action research study. The theoretical framework is grounded in the belief that all students can learn and that certain processes must be in place for this to happen (Leverette, 2006). These processes include varying instructional approaches applicable to differing students, differentiation of instruction, and consistently exposing students to high-quality instruction (Leverette, 2006). The theoretical framework is also grounded in the idea that validating the choices of students leads to students taking ownership of their own learning and that having intense interest in an area can be a contributing factor in individuals with learning disabilities overcoming their disabilities (Kim & Young-gun, 2007).

This literature was the basis of my decision to proceed as I did in regard to the problem of practice addressed in my study. This led to the implementation of differentiation of reading instruction based on student choice and interest to determine the influence on reading growth.

Historical Context

Differentiation of Instruction

Over a hundred years ago, teachers in one-room schoolhouses faced the challenging task of dividing their time and energy between students of varied ages and abilities (Tomlinson, 2016). Once the school system moved to individual classes where students were approximately the same age, the problem was not automatically eliminated; students were expected to learn in much the same way at the same time (Tomlinson, 2016). Long before Carol Ann Tomlinson was a leader in the area of differentiation of instruction, educators were struggling in mixed-ability classrooms (Snyder, 2009). In December 1953, *Educational Leadership* devoted a full issue to what was referred to then as “The Challenge of Individual Difference” (Snyder, 2009). The typical classroom at this time would consist of thirty or more students who may range in mental ages of four years difference and also range four to five years difference in academic ability (Washburne, 1953). The system of grading at this time was developed assuming children of the same chronological age could learn the same things if they tried hard enough (Washburne, 1953). Students who could not learn in the manner in which they were taught often quit school and went to work (Washburne, 1953). Some of the first attempts at differentiation of instruction included self-instructive materials, project methods, grouping by ability, grouping by mental age, and grouping by individual mastery

(Washburne, 1953). This same issue contained articles titled “Ways of Providing for Individual Differences” and “Matching Ten Reading Levels in One Classroom,” proving the idea of differentiation of instruction is not a new one.

Differentiation is a method of instruction designed to meet individual student need (Watts-Taffe et al., 2012). Differentiation can be based on student strengths, weaknesses, and/or interests, and takes place by focusing on the process, the products, the content, or the environment in which students learn (Tomlinson, 2001; Watts-Taffe et al., 2012). Student diversity is also a primary reason to seek out differentiated instruction. There are multiple categories of diversity essential to literacy instruction, including gender, ethnicity, language, race, socioeconomic status, and physical, mental, emotional, and intellectual exceptionalities (Tatum, 2011; Watts-Taffe et al., 2012). It is important to acknowledge the multiple ways in which students are diverse by offering appropriately differentiated instruction (Tatum, 2011; Watts-Taffe et al., 2012).

Differentiation of process. One way to differentiate the process of learning (Tomlinson, 2000) would be to select texts based on student interest. Differentiating instruction means to recognize students’ varying background knowledge, readiness, language, and preferences in learning and interests, and then to act on that knowledge in planning, content, process, and product dimensions (Dixon, Yssel, McConnell, & Hardin, 2014). A truly differentiated classroom is one in which learners are understood to be constantly growing and changing as they participate in various literacy events (Watts-Taffe et al., 2012).

Often, even academically talented students who also have learning disabilities or learning differences fail to live up to their potential (Reis & Ruban, 2005). Researchers

and educators need to consider a new area of focus for differentiation, to mobilize energies and resources to assist students in reaching their maximum potential, whether it relates to standards, level of services, or educational goals (Reis & Ruban, 2005).

Having an unusually intense interest in a particular area is known to help in overcoming a learning disability (Kim & Young-gun, 2007). In any classroom, there are students from varying cultures and economic backgrounds, inclusion students, English language learners, struggling learners, and gifted learners (Robb & Bucci, 2015). This diversity alone calls for differentiation of instruction and reflects different areas of student interest. Differentiation does include identifying the students' weaknesses in order to meet them where they are and continue to build, but it also means incorporating their interests to actively engage them (Tomlinson, 2001). Student interest inventories can offer insight into learning opportunities to engage students (Tomlinson, 2001). Identified specific instructional recommendations include making connections between instruction and students' experiences, fostering student autonomy, making effective use of strategic grouping, and providing research-based cognitive strategy instruction (Tatum, 2011; Watts-Taffe et al., 2012). A fully differentiated classroom is one in which it is understood that students are constantly growing and changing (Tatum, 2011; Watts-Taffe et al., 2012). The purpose of differentiated instruction is to maximize each student's growth by recognizing students' different ways of learning, different interests, different ways of responding to instruction, and different preferred ways of learning (Lauria, 2010).

Differentiation of product. The product of a particular lesson or unit tends to be tangible evidence of student understanding (Tomlinson & Allan, 2000). This could

include reports, tests, brochures, speeches, or performances (Tomlinson & Allan, 2000). Differentiation of product is another option for differentiation of instruction (Moon, 2005) and can involve levels of challenge, variety, and choice that give students options about how to express understanding (Tomlinson & Allan, 2000). Examples of differentiation of product could include creating a puppet show, writing a letter, or developing a diagram (Tomlinson & Allan, 2000). Allowing students to help design their final products and encouraging students to express what they have learned in varied formats encourages independence and creativity (Wormeli, 2006). Students should be encouraged to use varied types of resources in preparing products at varying degrees of difficulty to match student readiness (Tomlinson & Allan, 2000).

Differentiation of content. Differentiation of content includes curriculum topics, concepts, or themes that reflect the standards or objectives of the lesson (Tomlinson, 2000). Differentiation of content involves providing students with choices to add depth to learning and providing additional resources that match students' levels of understanding (Tomlinson & Allan, 2000). Pre-assessments can be used to determine where instruction should begin (Tomlinson & Allan, 2000). Examples of these pre-assessments could include short conferences with students, K-N-W Charts (what do I *know*, *need* to know, and *want* to know), journals, concept maps, and pretests (Tomlinson & Allan, 2000). Teachers may decide to elaborate for students who are moving ahead, to reteach students who need further demonstration, or even to exempt students who already demonstrate mastery (Tomlinson & Allan, 2000). Teachers may use texts, computer applications, recordings, and videos as a way of conveying key concepts to varied learners (Tomlinson & Allan, 2000).

Differentiation of environment. Another component of differentiation of instruction is differentiation of the learning environment (Tomlinson, 2001). Flexibility is more than a school design buzzword; it is a critical element in creating spaces that enhance student learning (Kennedy, 2017). Classrooms designed to support active learning increase student engagement on multiple measures (Kennedy, 2017). Seating that works for a student who learns best by reading and writing likely will not be the same choice as someone who prefers hands-on activities (Kennedy, 2017). Flexible seating provides space for traditional teacher-led instruction, a place where students can work by themselves, where one-on-one work can take place between student and teacher or between student and student, and where small groups can form to work together (Kennedy, 2017). Some students, especially those with learning difficulties or differences, struggle with sitting still in the traditional classroom setting (Kennedy, 2017). Flexible school furniture allows students to shift position, rock, rotate, and roll, and provides alternatives for various activities, learning styles, and special needs (Kennedy, 2017). Students who benefit from differentiation of instruction can also benefit from differentiation of and student choice in seating.

Some students want and need more comfortable learning environments similar to the ones in elementary school or in spaces like coffee lounges or local bookstores (Carter, 2017). Flexibility such as this is more common in the elementary school setting and should carry over to the secondary classroom but seldom does (Carter, 2017). This flexible seating movement is necessary in the classroom; the physical environment should be relaxed, comfortable, and conducive to collaboration (Carter, 2017). The classroom should be a space for students to think creatively, team up with a partner or

small group, or have the option to work quietly on their own (Carter, 2017). To meet the needs of all students, learning spaces should include flexible seating options that enable students to meet their own needs (Carter, 2017). Students are the largest stakeholders, and the advice should come from them; talking to the students and asking them to describe the environments in which they feel they will learn best is a positive option (Carter, 2017). Their voice will save teachers time, energy, and resources (Carter, 2017). In allowing student choice in multiple aspects of their instruction, teachers are validating them as individuals and allowing them to take ownership in their own learning. Other ways to differentiate the learning environment include providing places to work quietly and without distraction, providing places that invite student collaboration, providing materials that reflect a variety of cultures, setting clear guidelines for independent work, helping students understand that some learners need to move around to learn while others do better sitting quietly, and providing classroom management procedures that make the learning environment safe and supportive (Tomlinson & Allan, 2000).

Special Education

The original concept of differentiated instruction was based on the need for teachers to meet the needs of diverse learners in the general education class (Tomlinson, 1999). In 1975, Congress passed the first Individuals with Disabilities Education Act (IDEA), ensuring that children with disabilities have equal access to public education (Weselby, 2014). In order to accommodate this student population, many educators turned to differentiated instruction strategies (Weselby, 2014).

A large component of IDEA is the concept of least restrictive environment (LRE), which has been one of the guiding principles for the education of students with special

needs (Hyatt & Filler, 2011). LRE requires that children with disabilities be educated in the regular education environment to the maximum extent appropriate (Hyatt & Filler, 2011). An effective way for students with disabilities to remain in their least restrictive environment is the implementation of differentiation of instruction because it includes factoring in students' individual learning styles and levels of readiness before designing lesson plans (Tomlinson, 2001; Weselby, 2014).

For many years, the most utilized model in the identification of a learning disability was the discrepancy model (Lewandowski & Lovett, 2006). This is described as identifying a discrepancy between an individual's ability and achievement (Lewandowski & Lovett, 2006). In recent years, there has been a shift to what is referred to as the Response to Intervention (RtI) model (Lewandowski & Lovett, 2006). In 2004, Congress made many changes to the Individuals with Disabilities Education Act (IDEA, 2004), and RtI was a big part of that. For struggling students RtI is a framework that promotes a system connecting general, compensatory, gifted, and special education by providing high-quality, standards-based instruction and intervention that is matched to students' academic, social-emotional, and behavioral needs (Colorado Department of Education, 2008). This supports the need for differentiation of instruction for special education students and for programs that fit individual students.

Reading achievement is the most common and most serious academic problem for students with learning disabilities (Bender, 2001). A contributing factor in individuals with learning disabilities overcoming their disabilities is having an unusually intense interest in a certain area (Kim & Young-gun, 2007). Often, even academically talented students who also have learning disabilities or learning differences fail to live up to their

potential (Reis & Ruban, 2005). Even after receiving sound reading instruction early in their education, many older struggling readers continue to have difficulty with reading fluency or comprehension due to learning disabilities (Torgesen, 2005). Students with learning disabilities tend to struggle with more than one component of reading (Torgesen et al., 2007). Some students with learning disabilities struggle with identifying new or unfamiliar words, fluency, and comprehension (Roberts et al., 2008).

Reading Instruction

Since 1999 there has been consistent increase in fourth-grade reading scores; this has unfortunately not led to an increase in the literacy levels of adolescent readers (Rampley, Dion, & Donahue, 2009). As the texts become increasingly complex, middle school students must adapt by using more advanced strategies for deeper understanding (Moje, 2008; Shanahan & Shanahan, 2008). There is a great need for students to be engaged for at least two hours a day (Biancarosa & Snow, 2006). In many middle schools a large number of students are struggling with reading, and there must be ongoing literacy instruction for struggling readers to catch up (Heller & Greenleaf, 2007).

In education, relevance was once defined by the curriculum developers' or teachers' point of view (Hagay, Baram-Tsabari, & Peleg, 2012). The rationale for this is that students essentially do not know what is relevant to them (Hagay et al., 2012). The interests of the students themselves were rarely taken into account in reading instruction (Hagay et al., 2012). Reading instruction often does not focus on appealing to student interests, offering choice, or responding to the needs of all readers (Little, McCoach, & Reis, 2014). For many readers, the problem of waning interest and engagement can be exacerbated by limited differentiation in reading instruction (Little et al., 2014). Intensive

focus in schools on bringing all students up to minimum proficiency levels often limited instruction tailored to the needs of individual students and offered little encouragement or support to undertake challenging reading (Little et al., 2014).

Textbook-driven instructional programs have been common in reading (Little et al., 2014). These programs provided few opportunities for all levels of students to read at challenging levels (Little et al., 2014). These programs also left little room for students to have choices in what they read in school or to have challenging conversations about what they read (Little et al., 2014). Traditional reading approaches in the middle school classroom did not involve independent, self-selected reading (SSR) coupled with individualized instructional support (Little et al., 2014).

Theoretical Framework

Teachers who know very little about the students they are teaching are teaching them in ways they don't understand (Peters, 2006). This process makes it nearly impossible for students to grasp new concepts (Peters, 2006). Teaching without first getting to know the students can be frustrating for both students and teachers because the relationships that exist between teachers and students are the key to educational success and excellence in school (Peters, 2006). The following comments are from a list of student replies when questioned about teachers: Some teachers really don't care; Some teachers think some students are just too "bad" to be taught; Teachers should be more involved in extracurricular activities; Students should be allowed get to know other students through organized activities; Schools should not forget to bring people in to motivate the students; Schools should show teachers the neighborhoods the students came from; Students should be asked to be part of the "solution" (Peters, 2006). When a

student believes someone is interested and believes in him or her, it makes a difference (Peters, 2006). Lively interest is a powerful motivator (Hagay & Baram-Tsabari, 2015; Krapp, 2005). Interest plays a role in learning through its contribution to individuals' connections to the content; it helps maintain this connection long enough for learning to take place (Ainley, Hindi, & Berndorff, 2002; Hagay & Baram-Tsabari, 2015). Students need to feel a teacher is interested in them in order to build a relationship that fosters learning (Peters, 2006). It is essential to remember that the most important part of teaching and learning is the relationship between the teacher and the student (Peters, 2006). When teachers teach to the test, or are primarily concerned with achievement scores, students know (Peters, 2006). Student also knows when someone believes in them and will eventually believe in themselves, and that confidence goes a long way (Peters, 2006). Students want teachers to care and to be interested in them, but they also need the instruction to be interesting to them and hold their attention (Peters, 2006). Students respond with greater engagement and effort when they believe that their teachers care about them (Hagay & Baram-Tsabari, 2015). When a teacher is involved enough with a student to get to know his or her interests, the depth of concern is evident (Hagay & Baram-Tsabari, 2015).

Special Education

Most students demonstrate considerable variation in their learning characteristics, but students with learning disabilities or other learning disorders are likely to further necessitate a variety of learning activities (Bender, 2012). Students with learning disabilities and other learning disorders tend to be less engaged in educational tasks; some are unable to cope with multiple instructions and are poorly organized in their

thinking and work habits (Bender, 2012). Differentiated instruction, while appropriate for all students, is particularly helpful to students with learning disabilities or challenges (Bender, 2008).

Some instructional environments do not work for all students, including those with learning disabilities (Bender, 2012). Students with learning disabilities are more likely to be stressed in the classroom and more difficult to engage (Bender, 2012). Often, if special education students do not experience a warm, positive environment that challenges them at an appropriate level, they will actually become less capable of learning (Bender, 2012).

Teachers expect their students to leave their classroom and make reasonable and informed choices; therefore, teachers must offer choices within the classroom (Bender, 2012). Special education students must be coached in making informed choices, including the option to demonstrate competence or understanding or to make choices among assignments (Bender, 2012). When students are offered choices, they are likely to use their own understanding of their learning styles and preferences to make their choices (Bender, 2012).

Middle School Reading Instruction

The major difference in reading instruction in middle school versus early elementary school is the belief that students have moved from learning to read to reading to learn (Robb, 2010). The premise is that from kindergarten to about third grade, students are learning the process of reading, which consists primarily of decoding and memorizing basic sight words (Robb, 2010). Starting about fourth grade, the focus shifts away from basic reading instruction to reading to gain information (Robb, 2010). In

grades 4–8, expectations for readers change as teachers expect students to apply their previously learned reading skills to more challenging content-area information (Robb, 2010). Research has now shown that learning to read and reading to learn should be happening simultaneously from preschool through at least middle school (Robb, 2010).

Middle school teachers are aware that not all students have properly learned to read by the time they leave elementary school (Denton, Bryan, Wexler, Reed, & Vaughn, 2007). There are still many students in the middle grades that have reading difficulties (Denton et al., 2007). Research-based instructional approaches help to ensure that all students are moving toward reading and learning from academic texts and that they will be motivated to engage in reading for different purposes (Denton et al., 2007). These approaches include meeting the needs of all students by providing them with instruction specifically designed to help them comprehend vocabulary and content and to increase their motivation (Denton et al., 2007). Some components of effective reading instruction, for middle school students in particular, includes providing a solid foundation of high standards, strong leadership and instructional excellence, and a safe and positive school environment (Denton et al., 2007). Effective reading instruction also incorporates strategic instruction in reading classes or intervention settings and intensive intervention for students with more serious reading difficulties (Denton et al., 2007).

Unfortunately, reading instruction often does not focus on appealing to student interests, offering choice, or responding to the needs of all readers (Little et al., 2014). Little et al. (2014) conducted a study to examine the effects on achievement of an instructional approach involving choice, differentiated instruction, and extensive, supported, independent reading, alongside corresponding elimination of regular reading

instruction. Within this study, Ivey and Broaddus (2001) and Pitcher et al. (2007), as cited in Little et al. (2014), related to these achievement concerns that researchers have also demonstrated a frequent mismatch between the needs and preferences of middle school readers and the instructional opportunities provided to them. Several researchers, as cited in Little et al. (2014), including Greenberg, Gilbert, and Fredrick (2006); Pitcher et al. (2007); and Unrau and Schlackman (2006), have demonstrated students' waning levels of interest and engagement in reading across the secondary school years. This would support the need for identifying interests and differentiating instruction based on student choice and interest. For many readers, the problem of limited interest and engagement is exacerbated by limited differentiation procedures in reading (Little et al., 2014). Many textbook-driven instructional programs in reading leave little room for students to have choices in what they read (Little et al., 2014).

The challenges facing reading instruction in middle school may be alleviated by the implementation of an interest-based, enrichment-oriented approach to reading instruction in middle school, with an eye to improving achievement for all learners (Little et al., 2014). By starting in students' areas of interest, providing related reading materials at challenging levels, and differentiating instruction through reading conferences, teachers can raise achievement and encourage higher engagement in reading (Little et al., 2014). Results of the 2014 study by Little et al. showed that the intervention resulted in similar or higher scores for reading fluency and similar scores for reading comprehension between the groups. Teachers were able to replace whole- and small-group instruction with differentiated individual conferences and increased independent student reading time leading to an increase in achievement scores (Little et al., 2014). The study also

indicated that this approach, involving independent, self-selected reading, coupled with individualized instructional support, is at least as effective as more traditional approaches in the middle school reading classroom (Little et al., 2014).

Differentiation of Instruction

Whole group is no longer an acceptable form of instruction and was likely never an effective one (Tomlinson, 2000). Students are not the same and require differentiation of instruction so that when given a certain goal and provided resources, instruction, and support, they are able to meet the objective of that goal (Tomlinson, 2000).

Differentiation of instruction gives all students equal access to the same classroom curriculum by tailoring entry points, learning tasks, and outcomes to students' learning needs (Hall, Vue, Strangman, & Meyer, 2003; Watts-Taffe et al., 2012). This means not a single strategy, but an approach to instruction that incorporates a variety of strategies (Watts-Taffe et al., 2012).

Differentiation can and should take place in all areas of the curriculum but especially in the area of literacy (Watts-Taffe et al., 2012). The key to effective differentiation is understanding students' learning needs and matching instruction to each student profile (Watts-Taffe et al., 2012). Educators must get to know students and their interests and differentiate in order to increase student engagement (Tomlinson, 2000). Differentiation provides a framework for responding to differences in students' levels of readiness, their learning profiles, and their interests, to optimize student learning opportunities (Dixon et al., 2014; Tomlinson & Jarvis, 2009). The very nature of differentiation requires teachers to be flexible in their approach to teaching and to adjust the curriculum and presentation of information to learners rather than expecting learners

to adjust to the curriculum (Hall et al., 2003). In a 2012 study, researchers generated a logic model to describe how members of a two-teacher team collaborated to differentiate instruction and examine the learning connections of five seventh graders (Strahan, Kronenberg, Burgner, Doherty, & Hedt, 2012). Data from interviews, observations, and work samples showed how teachers encouraged engagement by identifying students' strengths, interests, and thoughts (Strahan et al., 2012). Student engagement varied according to connections students made with teachers and content (Strahan et al., 2012). Other research studies similar to this one have concluded that teachers who are adept at differentiation embrace individual student differences, learn more about individual students as learners, and structure activities to help students make connections with new information (Strahan et al., 2012). Teachers can create academic connections by learning more about students as individuals, and students' levels of understanding will vary by the types of connections they make with teachers and with ideas (Strahan et al., 2012). Lesson observations, interviews with students, and analysis of work samples documented the process of differentiated instruction that encouraged students to make stronger connections (Strahan et al., 2012). The students participating in this study processed information related to concepts, learned new terminology, and expressed personal connections with ideas. The students strengthened connections, demonstrated higher levels of reasoning, and progressed from understanding information in isolation toward more integrated comprehension (Strahan et al., 2012).

Methodology

Action Research

Action research has been referred to as teacher or classroom research because, as Giles, Wilson, and Elias (2010) explained, action research assists teachers in bettering their practice by systematically developing a question, then attempting to answer that question through gathering and analyzing data. According to Mertler (2014), action research allows teachers to study in their own classrooms, using their own instructional methods, their own students, and their own assessments. Mertler (2014) describes action research as a cyclical process, including planning, acting, developing, and reflecting.

Educators at various levels have embraced action research because it makes conducting classroom research a more manageable task (Mertler, 2014). Action research brings about informative and directive results (Mertler, 2014). Research is one of the many ways to find answers to questions, and action research offers teachers an effective route to solving problems of practice within the classroom (Mertler, 2014). Traditional educational research is most often conducted by researchers removed from the educational environment, but action research is a hands-on approach for those practitioners who are involved in the classroom daily (Mertler, 2014). Action research encourages educators to try new ideas in teaching by helping them to develop their professional knowledge (Bolghari & Hajimaghsoodi, 2017). Through action research, teachers are more likely to share their professional experiences with their colleagues, creating new learning opportunities (Bolghari & Hajimaghsoodi, 2017).

Like all research opportunities, action research does have challenges and limitations (Bolghari & Hajimaghsoodi, 2017). Time, training, and interest are included

in the challenges of action research (Bolghari & Hajimaghsoodi, 2017). As an educator conducting action research, I was hesitant that these challenges would be greater due to working with such a small sample size, but I was able to resolve my hesitation as I achieved positive results.

One example of action research in the area of differentiated reading instruction involves a fourth-grade teacher who utilized action research in order to make data-driven decisions about reading (Mims & Lockley, 2017). The teacher implemented the broad intervention of differentiating reading instruction, collected data, and continuously adjusted interventions based on the data (Mims & Lockley, 2017). In this action research study, the reading scores for both reading groups increased using differentiated reading instruction (Mims & Lockley, 2017). The primary focus was on the teacher implementing what was learned in a master's education program concerning action research and making data-driven decisions in the classroom (Mims & Lockley, 2017). The teacher/researcher examined a problem of practice in the classroom, researched possible interventions, implemented and monitored the interventions, and reinforced the process of action research within the classroom (Mims & Lockley, 2017). My own action research was similar in that it involved differentiation of instruction and reading instruction.

Mixed Methods Research

A mixed methods research design includes the gathering and analyzing of both qualitative and quantitative data. All methods of research have weaknesses and potential for bias; however, in gathering both qualitative and quantitative data, some of these weaknesses are neutralized (Creswell, 2014). This is a study relevant to getting to know the whole child and using that information to better instruct the student. The only fair

way to paint that picture was to gather and analyze both types of data in order to develop the entire classroom scenario. Numerical data reveals growth over time on assessments but shows little about student attitude or engagement. Qualitative data is useful for this portion. Analyzing both types of data offered a triangulation of data necessary to see effective growth over time. Blakeslee (2012), Griffin and Murtagh (2015), and Zayyad (2009) provided examples of mixed methods research in the area of reading instruction for special education students. I was able to use these studies to inform decisions about the methods I used in my mixed methods study.

Blakeslee (2012) conducted a mixed methods research study on special education teachers' knowledge and perceptions in the teaching of reading. He implemented this study because significant changes in requirements for reading instruction and special education teacher preparation had occurred due to provisions of the No Child Left Behind legislation of 2001 and the 2004 Individuals with Disabilities Education Improvement Act (Blakeslee, 2012). Blakeslee (2012) examined reading instruction preparation in the context of the knowledge and skills associated with reading instruction acquired in two university reading courses. A mixed methods, sequential explanatory design-participant-selection model was implemented (Blakeslee, 2012). The role of reading courses in special education teachers' knowledge and beliefs related to reading instruction was investigated (Blakeslee, 2012). A reading credentialing exam measured the knowledge of prospective special education teachers in four domains. A questionnaire and follow-up interviews were also used to determine special education teachers' beliefs concerning their preparation (Blakeslee, 2012). Quantitative findings indicated that prospective special education teachers acquire significant knowledge of reading instruction in

assigned reading courses but may require further procedural knowledge for application (Blakeslee, 2012). Questionnaire items suggested that teachers believed their preparation resulted in a lack of procedural knowledge related to differentiating reading instruction for struggling readers (Blakeslee, 2012). The follow-up interviews identified similar concerns (Blakeslee, 2012).

Griffin and Murtagh (2015) conducted a mixed methods study on increasing the sight vocabulary and reading fluency of children who require reading support. This study investigated the impact of an eight-week Precision Teaching (PT) intervention on the sight vocabulary, reading fluency, and reading attainment scores of a group of primary students (Griffin & Murtagh, 2015). Another purpose of this study was to evaluate the role of PT in facilitating formative assessment of the students' progress (Griffin & Murtagh, 2015). A mixed methods approach was employed in this study, including a quasiexperimental design and qualitative interviews involving 40 Irish primary school students and seven learning support teachers (Griffin & Murtagh, 2015). Following intervention, an analysis of variance confirmed the growth in sight vocabulary scores (Griffin & Murtagh, 2015). Semistructured interviews highlighted PT as an effective strategy and a highly motivational tool (Griffin & Murtagh, 2015). The quantitative component of this study involved a pre-post (measures were taken before and after the intervention) experimental design using an experimental group and a control group (Griffin & Murtagh, 2015). Students' levels of sight vocabulary, standard scores in reading accuracy, rate, fluency, and comprehension, and overall reading ability composite scores were measured in the study (Griffin & Murtagh, 2015). The qualitative component included use of semistructured interviews (Griffin & Murtagh, 2015).

Zayyad (2009) conducted a mixed methods research study to examine the impact of mediated cognitive strategy intervention on the reading comprehension and self-efficacy of middle school students with learning disabilities. Eighteen seventh-grade students with learning disabilities in two self-contained special education classrooms and their two special education teachers participated in this study for eight weeks (Zayyad, 2009). A multicognitive strategy reading comprehension intervention was introduced (Zayyad, 2009). All students were assessed for vocabulary and comprehension at pre- and post-intervention using a standardized measure and researcher-designed tests for comprehension (Zayyad, 2009). The students were also assessed for their self-efficacy in reading using self-report surveys (Zayyad, 2009). Results indicate that both groups improved their vocabulary and comprehension from pre- to post-intervention on both standardized and researcher-designed comprehension measures (Zayyad, 2009). Students who were identified as good decoders reported an increase in their self-efficacy while students with poor decoding abilities reported a decline in self-efficacy (Zayyad, 2009). Analysis of interviews with the participating teachers revealed that they considered themselves and their students to have benefitted from the intervention (Zayyad, 2009).

In my research, I used a mixed methods approach to examine the influence of student choice and interest-based differentiation on the reading growth of seventh-grade, special education students. These studies were effective examples for my research design in that they were all examining the reading instructional process for special education students. The three studies implemented the interview approach to data collection for qualitative data. Griffin and Murtagh (2015) and Zayyad (2009) also implemented pre- and post-assessments with analysis for growth over time. My study did differ from the

above in that my mixed methods approach was implemented within action research, but the examples provided guidance in the area of mixed methods data collection.

Conclusion

This literature review examined the historical context of differentiated instruction, special education, and middle school reading instruction and the theoretical framework of differentiated instruction, reading instruction for special education students, and middle school reading instruction. A review of primary and secondary sources revealed the themes that guided my action research study. The literature relating to the history of differentiation of instruction strengthens the idea that differentiation of instruction is a necessary component of reading instruction (Tomlinson, 1999). The additional research on the differentiation of instruction, special education students, and middle school reading instruction outlines the importance of differentiating instruction in all academic settings but especially for special education students (Bender, 2012). The research shows that reading is an area of key concern for special education students and the area of most limited growth (Bender, 2008). Middle school reading instruction does not typically lend itself to continuing to teach basic reading skills (Robb, 2010). The research included in this literature review supports the researcher's belief that it is worth investigating if differentiation of instruction based on the identification of student interest and choice would have a positive impact on classroom performance in the middle school special education classroom. Teachers who encourage a wide range of reading, give their students plenty of opportunity for self-selected reading, and read aloud to their students on a regular basis increase students' opportunities to develop a positive attitude toward reading, to improve fluency and vocabulary, and to improve comprehension (Beers,

2003). Teachers who provide opportunities for students to participate in small- and large-group discussions, encourage self-selection of some texts, and recognize that students become better readers by reading also increase students' opportunities to develop a positive attitude toward reading, to improve fluency and vocabulary, and to improve comprehension (Beers, 2003).

CHAPTER 3

METHODOLOGY

Introduction

This action research study delved into reading instruction for seventh-grade students with an IEP with goals and services in the area of reading. The purpose of the study was to consider the influence differentiation of reading instruction based on the choice and interest of students had on reading growth of students in the seventh-grade academic enrichment classroom. I was the researcher in this study and also the classroom teacher for these students. I teach these students in the academic enrichment classroom and in the inclusion classroom as well. The research question that guided this action research study was, What influence does student differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? This study seeks to answer the research question as well as use the research to create a differentiation plan in order to better instruct students with an IEP for reading. This chapter addresses the methodology associated with this research question.

Student interest can be a powerful motivator in the instruction of reading, especially for students with learning disabilities (Tomlinson, 1999). Reading is the most common area of underachievement and the most serious academic problem for struggling learners (Bender, 2001). Often individuals with learning disabilities are able to overcome their

disabilities by having an unusually intense interest in a certain area and building on that interest (Kim & Young-gun, 2007). Reading instruction in middle school focuses more on the comprehension of instructional material when many students are still struggling with decoding and accuracy (Robb, 2010).

Rationale for Selected Methodology

Action research allows an educator to conduct a systematic inquiry for the purpose of gathering information about his or her own school, teaching methods, and students' learning styles (Mills, 2011). I am an educator conducting research within my classroom and school and will be using the research to develop teaching strategies to better guide and instruct my students. Action research is a good fit for this process because I am attempting to solve a problem of practice in my own classroom and determine the best process for moving forward (Mertler, 2014). Professional reflection is one of the most important stages in an action research project, providing opportunities for reflecting on your research, what you have learned from the research, and where your action research can take you (Mertler, 2014). The research for this study was conducted using a parallel mixed methods design for action research. The mixed methods approach possesses several strengths, among which is the opportunity to see multiple dimensions of the data collected (Driscoll et al., 2007). The data was collected concurrently and is qualitative and quantitative. Qualitative data is the narrative piece, appearing primarily as words and usually collected through observations, interventions, or journals or by obtaining existing documents or records (Mertler, 2014). Quantitative data is the numerical component and includes data that can be counted, tallied, or rated (Mertler, 2014). I conducted participant observations and interviews in order to determine

participants' areas of interest, time engaged or off task, and overall thoughts and feelings about reading. A parallel mixed methods research design allows the researcher to merge quantitative and qualitative data in order to provide a comprehensive analysis of the research problem (Creswell, 2014). The five goals of action research include the generation of new knowledge, the achievement of action-oriented outcomes, the education of the researcher and the participants, results that are relevant to the local setting, and a sound and appropriate research methodology (Herr & Anderson, 2015). In the study, as the educator/researcher, the hope was to meet all five of these goals in that I planned for the students to show growth throughout the process of differentiation of instruction based on student choice and interest; I researched the impact of interest-based differentiation in reading instruction and how it can help students daily in my classroom; the students and I became more familiar with the differentiation process and improved upon it over time; the need for growth in the area of seventh-grade students with an IEP is a critical one in the academic setting; and the research process was developmentally and academically appropriate for my students.

Context and Participants

This action research study was conducted in a small rural middle school in the Upstate of South Carolina. The school serves approximately 261 students with 45% free and reduced lunch. About 14% of the student population receives special services as students with an IEP for academic services.

Participants involved in the study were students within the middle school where the research will take place. Middle school special education teachers teach the same or similar groups of students for three consecutive years, sixth through eighth grade. In the

fall of 2016, the school gained a new group of fourteen special education sixth graders; the following year these students started their seventh-grade year, during the research semester. Ten of these students receive special education academic services in the academic enrichment classroom daily; these are the 10 participants involved in the study. Of this group of ten students, six are male and four are female; five are Caucasian, one is African American, one is mixed race, and three are Hispanic students who are also served with ESOL services.

Research Methods

Instrumentation

Analysis of present levels as well as past performance was conducted. The school-based computer program of Enrich is available to educators within the school district. This program contained the scores for the Measures of Academic Progress (MAP) assessment for the school year during which this research study took place as well as previous years. Data containing reading levels and Lexile scores determined by the Fountas and Pinnell reading assessment is also included in Enrich. As a teacher in this school, I have access to PowerTeacher, a program which contains any present and future grades for my students in all subject areas, and I also have access to each of my students' IEPs. Student conversation, interviews, and observations revealed information necessary to the study as well as helped to build bonds and relationships in order to form a mutual trust between teacher and students. Progress was measured by student scores on the MAP reading assessment, the Fountas and Pinnell running records, and analysis of changes in students' time off task, and in students' overall attitude about reading.

Diversity is an important component of interest-based instruction. It is for this reason that as I explored interest-based differentiation, I ensured available texts include minority representation for minority students as well as exposure for nonminority students. Minority representation was not limited to race or ethnicity representation but was determined by student interest, including religion, family makeup, gender, physical and academic ability level, and socioeconomic status. Reading texts that reflect a student's culture and reflect it accurately is important (Davis, 2006). Fountas and Pinnell (2012) support the idea that even in the most stubborn readers, making connections to their own lives and to texts can build motivation (Davis, 2006).

Methods

Overview of methods. My research question asked, What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? As previously explained, my action research study implemented a parallel mixed methods design; I collected both qualitative and quantitative data concurrently for a comprehensive analysis of the research question (Creswell, 2014). This data collection method allowed me to examine the effect of the implementation of student choice as well as interest-based differentiation on the reading growth of the students in my academic enrichment classroom. I implemented multiple data collection methods. I began my study by conducting observations of the participants involved in the educational process (Butin, 2010; Mertler, 2014). This was to assess student engagement and time on task. I recorded field notes of all observations (Butin, 2010; Mertler, 2014). These observations took place in both the regular education English Language Arts (ELA) inclusion classroom

and my academic enrichment classroom, and the documentation of these observations can be found in Table 4.1 and Figure 4.1 in Chapter 4. I also conducted interviews (see Appendix A) to collect data from the students (Mertler, 2014). These interviews were used to determine students' overall attitude about reading as well as their interests and preferences in reading. At the start of each academic year, the MAP reading assessment (see Appendix B) is administered to each student, and each student in my academic enrichment classroom is assessed with the Fountas and Pinnell reading assessment as well (see Table 4.2). I analyzed these documents and records along with the data on the students' present levels (Mertler, 2014). I used this data as a starting point for reading instruction.

As I began the study, students were allowed choice in flexible seating, independent work activities, and text selection for guided reading. Throughout the study, I conducted further observations in the academic enrichment classroom to determine student time off task (see Figures 4.2–4.6 in Chapter 4) and progress over time. I held guided reading groups for reading instruction with small groups or individual students using student-selected texts. Students were greatly involved in the selection of text materials and were allowed time for self-selected reading each day. All reading lessons were centered around student interest with consideration for individual student need. Student choice was implemented in more than just text selection. Students chose from a variety of flexible seating options, including wobble seats, balance ball chairs, traditional desks, and a variety of “comfy” seats (see Appendix C). Students were also given choice of independent activities while other groups were reading with me. Guided reading is interpreted in different ways, but some of the common elements include working with

small groups, matching student ability levels to text levels, giving everyone the same text, and listening to students read (Burkins & Croft, 2010). My guided reading groups included all of these elements with the exception of matching student ability to text levels. My students selected the texts themselves based on student interest. The students determined the text selections and the groups who would read together. One student chose to read individually with the teacher. A schedule was designed to include self-selected reading, independent work activities, and reading with me, the teacher, in small groups. Each group met with me at least twice each week in a scheduled rotation, more if time allowed. Length of group time was determined by chapter length, number of students, and student discussion. Each group was at least 20 minutes long at least twice per week, but leftover time was utilized for shorter meetings and bonus reading time. Instruction within the groups was based on student need and ability, but text selection was not.

At the end of the intervention period, I reassessed all students with both the MAP assessment (see Tables 4.3 and 4.4) and the Fountas and Pinnell assessment (see Table 4.6) to determine growth over time (Mertler, 2014). Table 3.1 below provides an overview of the data collection methods used in this study.

Field observations. One of the first steps of collecting data in action research can include the researcher observing participants involved in the educational process (Mertler, 2014). Classroom observations are useful in that they allow the researcher to gather data based on the behavior of students as they occur rather than depending on a student account (Mertler, 2014). Prior to the start of intervention, I conducted field

Table 3.1 Data Collection Methods

Data Collection Methods	Description	Frequency	Documents
Field Observations (Butin, 2010; Mertler, 2014)	Conducted by the researcher to determine student engagement and time off task	Three observations prior to intervention and four observations during intervention period	Table 4.1 Figure 4.1 Figures 4.2–4.6
Student Interviews (Mertler, 2014)	Conducted by the researcher to determine student interest and overall attitude and preferences about reading	Once prior to intervention with open dialogue throughout intervention period and once post-intervention	Appendix A
Pre-Assessments and Existing Data (Butin, 2010; Mertler, 2014)	Pre-assessments of the Measures of Academic Progress reading assessment, conducted in the general education classroom and the Fountas and Pinnell reading assessment, conducted by the researcher	Once prior to the intervention period	Table 4.2 Appendix B
Post-Assessments (Mertler, 2014)	Re-administration of the MAP, conducted in the general education classroom and the Fountas and Pinnell reading assessments, conducted by the researcher	Once at the end of the intervention period	Tables 4.3–4.6

observations in both the inclusion and academic enrichment classrooms to examine student engagement and time on task.

I conducted three observations in the inclusion classroom during whole-group reading of a teacher-selected text that was being read aloud through the Audible reading application. I was observing students for behaviors indicating student engagement, such as eyes on text, questioning, and participating in class discussions. I was also able to observe behaviors indicating lack of engagement, such as books closed or on the wrong page, talking, no discussion or questioning, and playing with other objects. I conducted three weekly observations in the academic enrichment classroom prior to the start of the intervention to assess time off task. During the intervention period, I observed on four additional occasions at the same time of day, for the same length of time. These observations allowed me to compare behaviors from before and during the intervention period.

Student interviews. Data collected through observations can lead to additional data collected through interviews (Mertler, 2014). In addition to a formal interview with each individual student, I kept an open dialogue throughout the study, keeping notes of student comments and taking student suggestions and comments into consideration in instruction. I audio recorded student interviews for accuracy to be scribed at a later time. Recordings were erased to protect student privacy, but a transcript of the interviews can be found in Appendix A. I teach my students for three consecutive years and taught this group of students the previous school year. This also allowed for a prior relationship and knowledge of the students. I asked all students questions such as (1) Do you like to read?; (2) How do you feel about reading out loud?; (3) What are you most interested in?; and

(4) Do you like to choose the book or for the teacher to choose the book? Individual questions varied based on student response and willingness to open up. I was able to use this information to provide interest-based text selections as well as to know how to approach students based on their willingness to read, especially aloud in a guided reading group.

Pre-assessments and analysis of existing data. Mertler (2014) suggests that the analysis of existing records is a less time-consuming method of gathering helpful information. I reviewed the prior year's IEP assessments as well as previously established relationships with students to determine student interest as well as present levels of performance. At the start of the study, I analyzed data from the MAP reading assessment, broken down into the five areas of Literary Text: Meaning and Context; Literary Text: Language, Craft, and Structure; Informational Text: Meaning and Context; Informational Text: Language, Craft, and Structure; and Vocabulary: Determine, Clarify Word Meaning. I also administered a running record on each student in the study to establish levels of fluency, word accuracy, and comprehension. I used student present levels of performance to determine areas of need for reading instruction during guided reading groups. This data also offered a baseline for analyzing growth over the time of the study.

Post-assessments. Another form of data collection includes tests and other formal assessments that are routinely used in schools (Mertler, 2014). At the end of the intervention period, the MAP and the Fountas and Pinnell reading assessments were administered a final time to provide a comparison of progress from the start of the study to the end. The data was compared to the pre-assessments as well as to the previous year's data to determine patterns and growth.

Data Analysis

Overview of data analysis. This research was conducted using a parallel mixed methods research design. As explained previously, with this type of research design, quantitative and qualitative data are collected concurrently and then the information is integrated in the interpretation of results (Creswell, 2014). I collected data in three areas throughout my research: student engagement and time off task (see Table 4.1 and Figures 4.1–4.6), growth over time on the MAP and Fountas and Pinnell reading assessments (see Appendix B and Tables 4.3–4.6), and student attitude and interests through interviews and open communication (see Appendix A). Observations for student engagement and time off task took place prior to the start of the intervention period and four times weekly throughout the intervention period. Data was analyzed quantitatively and qualitatively. Present levels of performance in reading and progress assessments were given at the start and end of the study and analyzed quantitatively. Student attitude and feelings about reading were collected through interviews at the start of the study and analyzed for change qualitatively throughout the study through open communication and dialogue.

Given the smaller sample size, I was dependent upon descriptive statistics for the numerical data. Descriptive statistics are used for simple mathematical procedures to simplify numerical data (Mertler, 2014). Descriptive statistics were used to analyze scores, growth, and numerical data. Descriptive statistics refers to the analysis of data that helps to describe, show, or summarize data in such a way that patterns may emerge (Mertler, 2014). The goal of action research is to solve a problem of practice, not create reproducible results, but knowing what relates to a small sample size is only relevant if the data can be used to implement instructional practices.

Field observations analysis. Students were observed multiple times pre- and post-intervention for student engagement and time off task. Data collected in the field observations was qualitative and quantitative (Creswell, 2014). I was documenting behaviors for student engagement as well as the number of times off task. The behaviors charted in the inclusion classroom were simply used as a comparison point for student engagement and time off task versus behavior in the academic enrichment classroom during the intervention period. Prior to the start of the intervention, three observations were conducted in the academic enrichment classroom, and the data was later merged and averaged for a comparison point for before and during the study. Once the intervention period began, four more weekly observations were conducted at the same time of day, in the same class, for the same length of time. This data was then compared to the pre-intervention observations to determine the possible impact of the interventions on student time off task.

Student interview analysis. Students were interviewed (Mertler, 2014) individually to determine student interests and overall attitude about reading and text selection. Although these interviews did reveal that some students like to read and were satisfied with instruction, there were multiple students with strong feelings against reading. This information was compared with data gathered during dialogue and open communications throughout the intervention period. Students were involved in a brief post-intervention interview as well. Student willingness to read, discuss, and remain on task was an indicator of growth.

Pre- to post-assessment analysis. The MAP and Fountas and Pinnell reading assessments were administered prior to the start of the study. The MAP assessment was

broken down into five subgroups to determine present levels of performance in each area. The Fountas and Pinnell assessment results were also broken down into three subgroups of accuracy, comprehension, and fluency or words per minute (wpm). At the end of the intervention period, both reading assessments were administered and again broken down into subgroups. A comparison was analyzed from the start of the study to the end, including comparing growth or regression in each subgroup. The overall growth and average growth per student were also compared and analyzed. The student growth on the MAP reading assessment from the intervention period was then compared to the data from the previous school year. The only data available was for fall to spring, meaning that the comparison was for the previous full school year versus the intervention period of only one semester. During this analysis, I searched for patterns that could be used to move forward with an effective instructional plan.

Triangulation of Data

Relating multiple sources of data to establish trustworthiness is referred to as triangulation of data (Mertler, 2014). Any one of these areas of data collection may not be enough on its own to indicate a positive impact of the intervention on the reading growth of these students. By analyzing all components of data collection side by side, it is possible to see patterns of improvement or a negative impact, if applicable.

Validity, Transferability, and Trustworthiness

Validity of research data refers to the extent to which the collected data accurately measures what it is implied to measure (Merter, 2014). Trustworthiness is the accuracy and believability of the data and is also an important component of action research (Mertler, 2014). I have ensured validity, transferability, and trustworthiness in multiple

ways. My research is grounded in research of previous evidence of success. For quantitative data, both of the assessments are research-based measures that have been used in our district for multiple years to measure student progress. Both the MAP reading assessment and the Fountas and Pinnell reading assessment are trusted, valid assessment tools. I did not rely on only one measure but combined the two varied quantitative pieces of data with several components of qualitative data as well. I used the quantitative data, student observations, and student attitude results to produce a triangulation of data for consistent results. Triangulation of data is the use of multiple data sources and data collection materials to support the findings of the study (Mertler, 2014). With the collection of qualitative data, I conducted multiple observations and did not rely on one brief observation. I conducted observations both before and during the intervention period. All observations were at the same time of day, in the same location, for the same period of time. I compared student engagement in the general education classroom and in the academic enrichment classroom. I used the same assessment and observation procedures with all ten participants in the study. I questioned all students for interests and interviewed them all in the same format. All results were analyzed in the same manner, looking for the same patterns. I also compared growth during the study to growth in the previous school year as well as compared patterns of growth in the quantitative subsections the previous year.

Ethical Considerations

First and foremost in ethical considerations is the safety, comfort, and confidentiality of all students. It does not require a set of guidelines to know that sharing their private details with other students is unacceptable. If my research identifies an area

of academic growth or interest that may help the student progress but in the process violates the confidentiality of the student by sharing information about his or her specific learning disability or area of weakness, then I will have failed as a teacher and a researcher. It does help that there are guidelines and resources available to ensure ethical research is conducted. One of these includes the *Publication Manual of the American Psychological Association* (6th ed.) which guides research in many ways, including ethics. One of the manual's purposes is to ensure accuracy, to protect the rights and welfare of participants, and to protect intellectual property rights (American Psychological Association, 2010b). While conducting this action research plan, I have abided by the American Psychological Association Ethics Code (American Psychological Association 2010a).

I have explained the purpose of the research plan as well as the process that took place. All parties were informed of the possible benefits of the research, and that the threats to their confidentiality were limited. I have made myself available for any questions or concerns about the process of the research and participants' rights. There will be no use of any student's name or specific identifying qualities such as the name or location of the school or classroom. I have also informed and made available all details of the plan to the school administrators as well as district officials as required. I submitted a written request to both the school and district level administration and received approval from both to conduct research within my classroom. At all times, the best interest of the students involved was the utmost priority. I did my best to ensure minority, gender, and cultural representation in instructional materials and text selection.

Developing an Action Research Plan

The purpose of this action research study was to solve a problem of practice, so if the process ended here, the study would have been pointless. The next step, as outlined in chapter 5, is to reflect on what I have observed during the process of intervention, reflecting on where my action research has taken me, reflecting on what I have learned from engaging in action research, and reflecting on where my action research can take me as I move forward (Mertler, 2014).

I have considered my research question, my findings, and my interpretation of the data, and I have developed an implementation plan for moving forward with this group of students as well as future groups of students. With action research, the process is cyclical and never really ends (Mertler, 2014). I found patterns of data that may be able to be combined in order to develop an effective academic plan for reading instruction for my students and others as well.

Conclusion

This chapter on methodology has addressed the research question that has guided this study, explained my methodology, setting, and participants, and briefly touched on where to go from here. The following chapter, Chapter 4: Findings and Discussion, includes the analysis of the quantitative and qualitative data collected in this study and also the interpretation of this data. I will present my data from both before and during the intervention period as well as discuss what I began to see unfold throughout the course of the study.

CHAPTER 4

FINDINGS AND DISCUSSION

Introduction

Chapter 4 explores the findings of the research question that guided this study: What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? Special education students often struggle in the area of literacy (Bender, 2001) as well as with time on task and engagement (Little et al., 2014). These difficulties can hinder reading progress and limit comprehension. Students can develop an aversion to or an attitude about reading that, in addition to their identified area of difficulty, increases the challenge of instructional practice.

The interventions used in this study include allowing student choice in seating, independent instructional activities, and text selection within guided reading groups. These interventions were chosen based on the theoretical framework of the study that indicates differentiation of instruction based on student choice and interest is an effective intervention. This process takes student individuality into account as part of the instructional process as well as allows students to take ownership of their own learning experiences. Students were interviewed to determine individual interests as well as factors that contribute to their willingness to read alone or in a group. The key choice

given to students within this study was text selection with consideration given to student interest. Each student chose the book they wanted to read for instructional time and decided whether they wanted to read individually or in a group of their peers. Instruction was based on strengths and weaknesses, but text selection was not. In addition to choice of text, student choice was implemented during independent work as well. Flexible seating was implemented as students were able to choose balance ball chairs, wiggle seats, comfy chairs, or traditional desks. As long as weekly minimum requirements were met, students were granted flexibility in independent activities. Some of the activity choices included completion of one lesson on the required math program, completion of one lesson on the required reading program, completion of class work or homework for the ELA class, participating in guided reading time with the teacher, and participating in self-selected reading.

Data was collected, both before and during the study, in the areas of time off task and student engagement, achievement, and overall attitude about reading. In addition to reporting the findings, this chapter will include a discussion and analysis of the findings and overall components of the study.

Findings: Prior to the Intervention Period

Student Engagement and Time Off Task

All students were observed before and during the intervention cycle to develop comparison points. Student interviews as well as ongoing communication within the study were conducted, two varied reading assessments were administered, and teacher observations were charted.

Prior to the start of the intervention, students were observed both in the regular education classroom during whole-group reading for student engagement and during the academic enrichment class for time on task. The ten students in this study were observed for engagement in the regular education ELA classroom, during whole-group reading of a teacher-selected text. During each of three observations, three of these students were unengaged the entire time and three were unengaged for a portion of the observation. Behaviors included eyes off text, being on the wrong page, playing with pencils, taking shoes off, and talking. The text in this observation was teacher selected and read aloud by Audible, a computer application that reads books orally. Students were sitting in traditional desks during the reading (see Table 4.1 below).

Students were also observed for off-task behavior in the academic enrichment classroom. At this point, students were only allowed to sit in the flexible seating as a reinforcement or reward. No students were using flexible seating during the pre-intervention observations. Students were completing teacher-assigned tasks, and if reading, they were reading teacher-selected texts. Three pre-intervention observations were conducted, each lasting 30 minutes and yielding similar results (see Figure 4.1). On average, all 10 of the students were off task at least once with 5 of the students off task one to three times. Students 1 and 10 were off task an average of four times, student 8 was off task an average of eight times, student 2 was off task an average of ten times, and student 9 was off task an average of thirteen times. Each observation was conducted the same time of day with the same group of students. All students were sitting in traditional desks and completing a similar cycle of activities.

Table 4.1 Regular Education Reading Instruction Engagement Observation 1

Student	Engaged: Yes/No/Partially	Engagement Behaviors
1	Partially	Eyes on text but eyes often wandering, asking questions but not an active participant in discussions, limited comprehension
2	No	Refused to look at text, says does not like this book and is not going to read
3	Yes	Eyes on text, following along, turning page with Audible, questioning, active in discussions
4	Yes	Eyes on text, following along, turning page with Audible, questioning, active in discussions
5	Partially	Eyes on text but eyes often wandering, asking questions but not an active participant in discussions, limited comprehension
6	Yes	Eyes on text, turning page with Audible, active in discussions
7	Yes	Eyes on text, following along, turning page with Audible
8	No	Asking for page number often, playing with shoes, looking around, no discussion
9	No	Book closed, wrong page, eyes wandering, playing with pencil, shoes on and off
10	Partially	Eyes on text but eyes often wandering, asking questions but not an active participant in discussions, limited comprehension

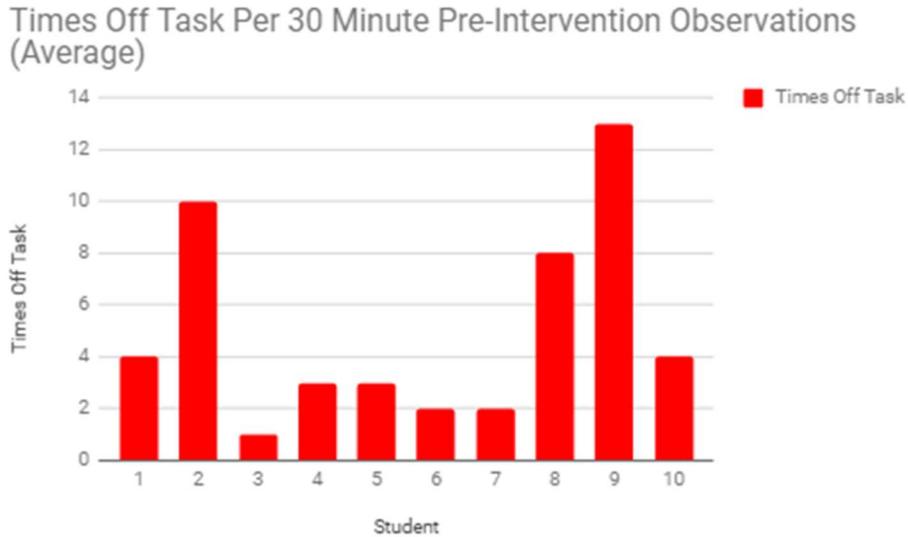


Figure 4.1 Pre-Intervention Observations: Average

Measurements of Present Levels in Reading (Pre-Intervention)

Prior to the start of the study, each of the 10 seventh-grade students were administered the MAP reading assessment and the Fountas and Pinnell reading assessment. In addition to an overall score and a Lexile score, the MAP assessment breaks scores down into five areas: Vocabulary; Literary Text: Meaning and Context; Literary Text: Language, Craft, and Structure; Informational Text: Meaning and Context; and Informational Text: Language, Craft, and Structure. The overall score range for the 10 students in the study was 154–216 with an average score of 186. The two lowest and the one highest score could be considered outliers, leaving seven of the students in the range of 178–199 with an average score of 189. Progress was measured from each individual student’s starting point, not a grade-level equivalent.

The Fountas and Pinnell reading assessment assesses accuracy, comprehension, and fluency at a particular level of text. The books are leveled by letters that are equivalent to grade-level texts. These levels are an instructional tool and not to be used to

label a student (Fountas & Pinnell, 2012). For the purpose of this study, text levels were used as a measure of growth over time but were not a factor in instructional text selection. The overall range for these 10 students was level M (late 2nd grade) to level W (early 6th grade), and progress was measured by individual student growth over time, not reaching a specific grade level. The norm passage rate for an independent text level is 95% accuracy with at least 70% comprehension. In order for a student to score 100% comprehension, he or she would have to go beyond the text by inferring or drawing conclusions to indicate a deeper understanding. Therefore, 90% comprehension is an exceptional comprehension score. In order for a level to be considered passed, a student must pass both accuracy and comprehension. As always, individual student skills and needs are considered, and by the seventh grade, in the case of lower accuracy (but still above 90%) and exceptional comprehension, a student may attempt the next level to determine how much information the student is able to gain from a particular text. My students do have learning differences that could affect decoding accuracy even when the student is gaining a great deal of information. Although it can limit comprehension, by the seventh grade words per minute is not always an indicator of appropriate text level. Fountas and Pinnell results for the ten participants in this study are charted below (see Table 4.2 below).

Student Interviews

All students were previously in the same class with the same teacher, and all have IEPs. As the teacher/researcher, I had the opportunity, prior to the study, to spend time with and get to know the students individually. When students are in middle school, they reach the age of transition, and this must be addressed in their IEPs. This requires interest

Table 4.2 Fountas and Pinnell Results: Pre-Intervention

Student	Text Level/ Grade Equivalent	Accuracy	Comprehension	Fluency
1	O/mid 3rd	95%	70%	68 wpm
2	W/early 6th	97%	75%	79 wpm
3	T/early 5th	91%	100%	104 wpm
4	N/early 3rd	94%	100%	53 wpm
5	R/mid 4th	94%	40%	77 wpm
6	M/late 2nd	94%	100%	36 wpm
7	S/late 4th	97%	100%	94 wpm
8	R/mid 4th	94%	70%	68 wpm
9	R/mid 4th	98%	80%	57 wpm
10	R/mid 4th	94%	40%	65 wpm

surveys and career assessments. In addition to this prior knowledge, at the start of this study each student was interviewed (complete list of interview questions available in Appendix A) to determine each student’s attitude about reading as well as individual interests. One of the questions asked was, “Do you like reading?” Four of the students answered no to this question.

T: Do you like to read?

S1: No. I don’t like to read. I just don’t like it. I can’t read. Well, I can read but I just don’t understand it.

S2: No. I don’t like to read, it’s boring.

S3: Yes, I like reading by myself when I pick the book.

S4: No. It’s not fun.

S5: A little, books that are interesting.

S6: Yes, sometimes, but most of the time I'm drawing or playing video games.

S7: Yes, [laughter] I like listening to the sound of my own voice.

S8: Not really. It makes me nervous when I read in front of everybody. I like it a little better when I read to myself.

S9: Yes, certain books. At first, I'll be like man, I don't want to read this, then, I get into it. I still like rhyming books like Dr. Seuss.

S10: Yeah, but in groups and sometimes by myself.

When asked if they liked reading the teacher-chosen book in ELA class as a whole group, four answered no, and the six who said yes all mentioned that it was because Audible read the book to them and they did not have to read the book out loud.

T: You were reading a book in ELA as a whole class, did you like that?

S1: No! I don't like reading or looking at books. It was boring but sometimes a little fun listening.

S2: No! That book was boring. I didn't wanna read it.

S3: Yes, because I liked that the recording read it to us.

S4: Yes, I liked that.

T: Why?

S4: I liked that Audible read the whole thing out loud to us. I don't like reading out loud. It's hard for me to read out loud. I can read better in my head.

S5: I liked the project at the end, it was fun.

S6: I like when the man was reading to me because it did all the voices and emotions of the characters.

S7: I liked it because if I didn't know the words, it was reading to me. If I don't

know the words, my voice won't sound as good and I won't want to hear it.

S8: It was okay when Audible was reading to me.

S9: I like reading in a big group because there are more people to catch me up if I forget where I was at. I like when the voice reads to us because it does different voices.

S10: I like the small groups. That recording reads fast and sometimes I can't catch up.

When asked, "Do you like when the teacher chooses the book or you choose the book?" six of the students responded that they like when they are able to choose their own books. As indicated above, student engagement was limited during whole-group reading instruction with a teacher-chosen text (see Table 4.1).

Findings: After the Intervention Period

Time Off Task

Interventions of the study included implementing student choice and taking student interest into consideration for text and group selection during guided reading instruction as well as independent work time. Students were allowed choice in their seating, independent activities and text selections. During the intervention period, four more time-on-task observations were completed with each one indicating considerable improvement. The three pre-intervention observations yielded 49, 45, and 50 total times off task, respectively. Four observations were conducted during the intervention period. These observations were also conducted at the same time of day as pre-intervention observations, with the same group of students, for the same length of time.

During the first observation early in the study, the total number of times off task

decreased from the first pre-intervention observation by 16. The range during this observation was now 0 times off task to 10 times off task during a 30-minute period with 7 students off task only 0–3 times. Student 8 was still off task 5 times, student 2 off task 8 times, and student 9 was off task 10 times (see Figure 4.2 below).

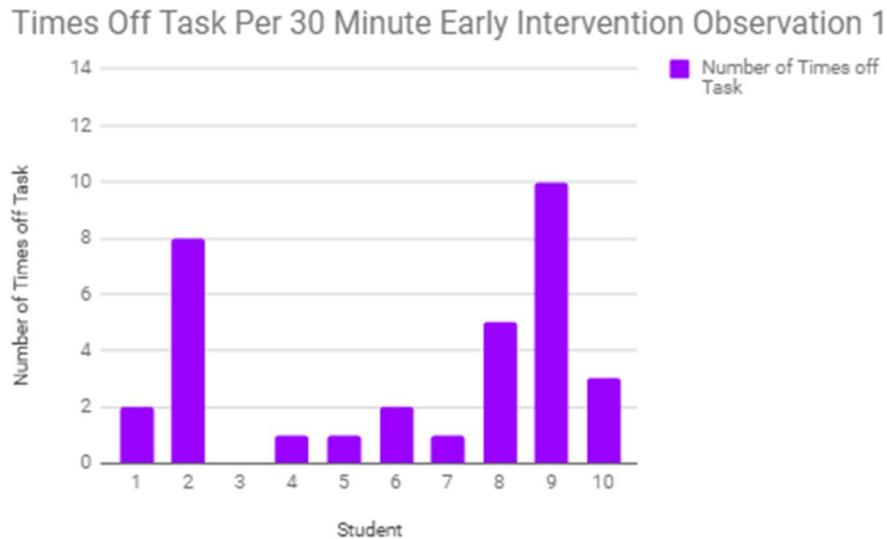


Figure 4.2 Early-Intervention Observation 1

During the second mid-intervention observation, time off task decreased by another 17 times, lowering the range to 0–6 times off task. Nine of the students were only off task 0–3 times. Student 9 was off task 6 times. This was considerable improvement even for the student who was still frequently off task (see Figure 4.3 below).

The third observation during the intervention period, time off task decreased by another five times with the range being only 0–4 times off task. Four of the students were not off task during the 30-minute period at all, and three of students were only off task once. Student 9 was off task only four times. Student time off task and engagement were improving (see Figure 4.4).

Times Off Task Per 30 Minutes Mid-Intervention Observation 2

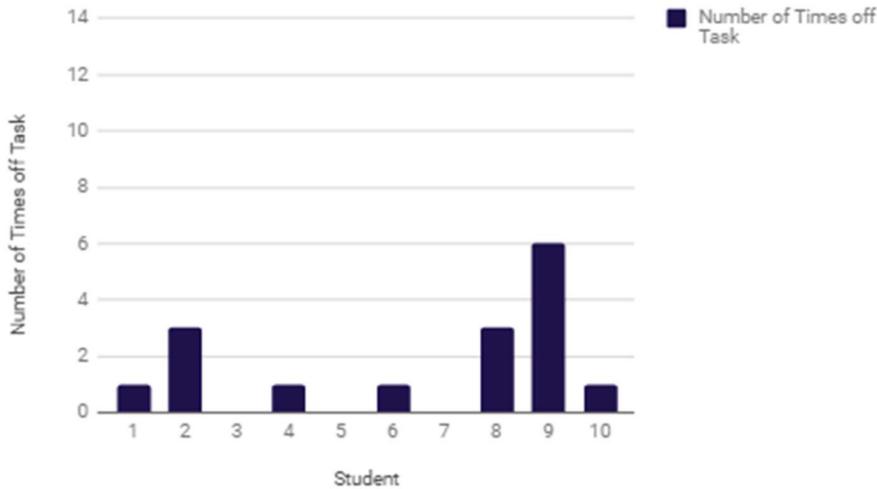


Figure 4.3 Mid-Intervention Observation 2

Times Off Task Per 30 Minute Mid-Intervention 3

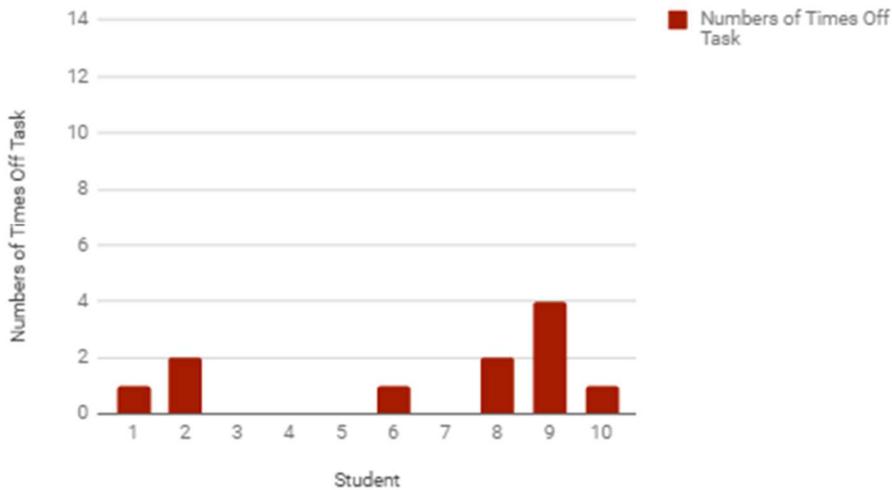


Figure 4.4 Mid-Intervention Observation 3

The final observation during the study had only a total of 4 times off task. This was an improvement from 45 total times off task from the first pre-intervention observation. This final observation had a range of only 0–2 times off task with 7 of the students on task the entire time. Only 3 students were off task at all with the most number

of times off task being student 9 with 2 total times off task. This was a drastic decrease from pre-intervention observations (see Figures 4.5 and 4.6 below).

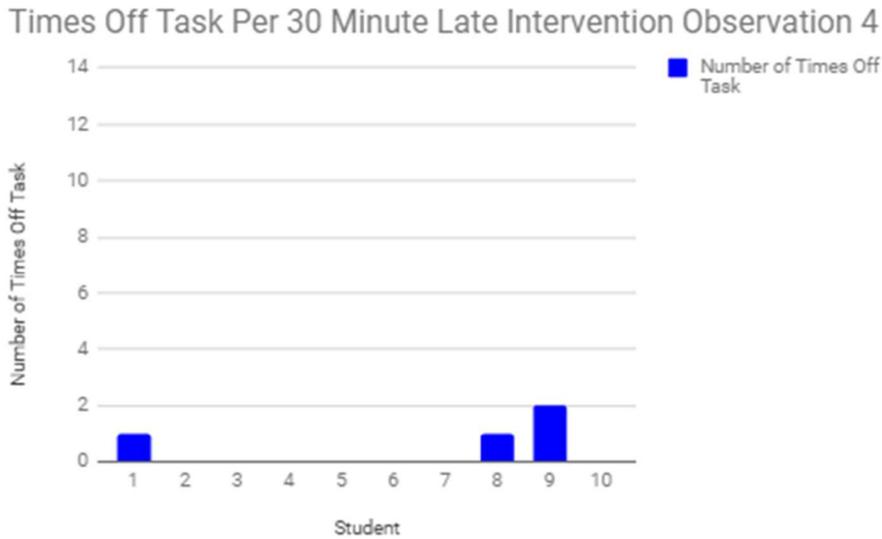


Figure 4.5 Late-Intervention Observation 4

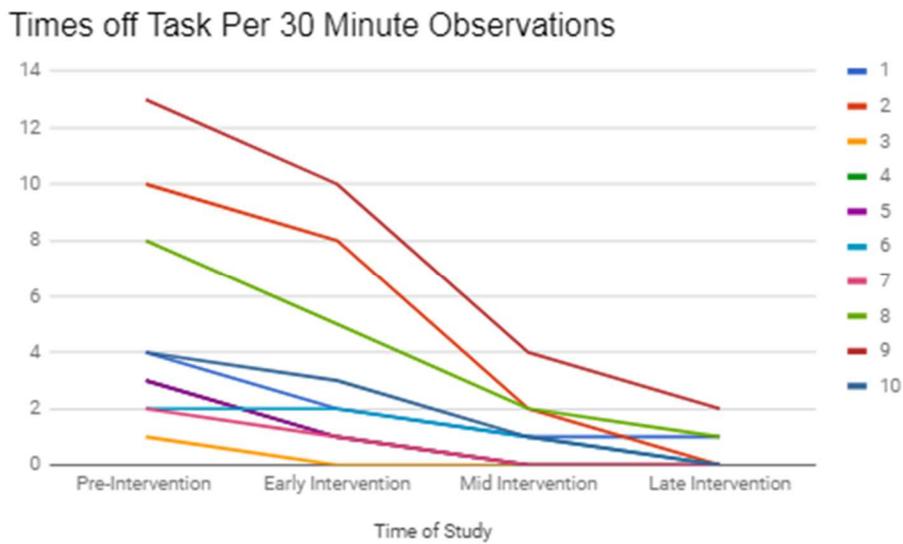


Figure 4.6 Times Off Task: Pre-Intervention Observation 1 to Late-Intervention Observation 4

Measures of Present Levels in Reading (Post-Intervention)

The MAP reading assessment was administered again following the intervention

period. The 10 students grew a combined total of 89 points or an overall average of 8.9 points from the original assessment. Eight of the students showed an overall growth (see Table 4.3 below). The growth ranged from 5 to 22 points indicating a range of approximately .5 grade level of growth to 2 grade levels growth for these 8 students. While student 3’s scores did go down, she was one of the outliers in the data for the first MAP assessment. Student 5’s score also declined 3 points.

Table 4.3 Measures of Academic Progress: Overall Growth

Student	Pre-Score/ Grade Equivalent	Post-Score/ Grade Equivalent	Growth
1	197/late 3rd	205/late 4th–early 5th	+8
2	199/early 4th	207/early–mid 5th	+8
3	216/early–mid 7th	211/early 6th	-5
4	181/early–mid 2nd	191/early–mid 3rd	+10
5	190/early–mid 3rd	187/late 2nd	-3
6	154/mid–late K	159/early 1st	+5
7	192/early–mid 3rd	207/early–mid 5th	+15
8	166/mid 1st	188/early 3rd	+22
9	188/early 3rd	204/mid–late 4th	+16
10	178/early–mid 2nd	191/early–mid 3rd	+13

Each score on the MAP reading assessment is broken down into five subgroups: Literary Text: Meaning and Context; Literary Text: Language, Craft, and Structure; Vocabulary; Informational Text: Meaning and Context; and Informational Text: Language, Craft, and Structure. Table 4.4 below shows the breakdown of student growth for each individual student.

Table 4.4 Student Growth by Subgroup

Student	Literary Text: Meaning and Context	Literary Text: Language, Craft, and Structure	Vocabulary	Informational Text: Meaning and Context	Informational Text: Language, Craft, and Structure
1	+18	+4	+6	-5	+13
2	+0	+4	+8	+2	+29
3	-4	+4	-11	-6	-11
4	+2	+11	+8	+16	+16
5	-16	+5	-6	+8	-6
6	-2	+3	-2	+8	+17
7	-4	+25	+14	+18	+21
8	+19	+24	+15	+20	+26
9	+2	+30	+16	+11	+23
10	+4	+13	+17	+17	+13
Average Growth	+1.9	+12.3	+6.5	+12.8	+10.2

MAP scores were compared to the previous year's scores for the same group of students. The available scores were from fall to spring, therefore comparing the intervention period measuring a semester's growth the last school year with a full school year's growth. The entire year of growth the previous year was a combined total of 75 points or an average of 7.5 points per student compared to the intervention period showing an overall total points growth of 89 points or an average of 8.9 per student. When broken down into subgroups, four out of five subgroups indicated greater growth during the intervention period than in the previous school year (see Table 4.5 below).

Table 4.5 Comparison of Average Subgroup Growth from 2016/17 to Intervention Period

Time Period	Literary Text: Meaning and Context	Literary Text: Language, Craft, and Structure	Vocabulary	Informational Text: Meaning and Context	Informational Text: Language, Craft, and Structure
Fall 2016–Spring 2017 (full school year)	+10.8	+4.5	+6.4	+7.7	+6.2
Fall 2017–Winter 2017 (intervention period)	+1.9	+12.3	+6.5	+12.8	+10.2
Average Difference	-8.9	+7.8	+2	+5.1	+4

The Fountas and Pinnell assessment was administered again at the end of the eight-week intervention period. All 10 of the students made progress from the beginning to the end of the study. Six of the students attempted the next level text and passed. The other four were assessed on the same level with a different text due to the fact that they had not passed the level at the start of the study based on either accuracy or comprehension. Although fluency was measured as a point of progress, it would not necessarily be a measure of growth. A lower fluency score when reading at a higher level would not indicate a diminishment in progress. Each of these students passed the level by the end of the study with all four students making progress in fluency, accuracy, and comprehension (see Table 4.6 below).

Student Interviews (Post-Intervention)

At the end of the intervention period, students were briefly interviewed once again (see Appendix A). Students were asked again if they like to read. Nine of the

Table 4.6 Fountas and Pinnell Results Pre- to Post-Intervention

Time Period/ Student	Text Level/Grade Equivalent	Accuracy	Comprehension	Fluency (wpm)
Pre/1	O/mid 3rd	95%	70%	68 wpm
Post/1	P/late 3rd	94%	85%	94 wpm
Pre/2	W/early 6th	97%	75%	79 wpm
Post/2	X/mid 6th	99%	75%	58 wpm
Pre/3	T/early 5th	91%	100%	104 wpm
Post/3	T/early 5th	94%	100%	105 wpm
Pre/4	N/early 3rd	94%	100%	53 wpm
Post/4	O/mid 3rd	95%	100%	60 wpm
Pre/5	R/mid 4th	94%	40%	77 wpm
Post/5	R/mid 4th	100%	90%	94 wpm
Pre/6	M/late 2nd	94%	100%	36 wpm
Post/6	N/early 3rd	95%	100%	42 wpm
Pre/7	S/late 4th	97%	100%	94 wpm
Post/7	T/early 5th	94%	100%	74 wpm
Pre/8	R/mid 4th	94%	70%	68 wpm
Post/8	R/mid 4th	96%	80%	94 wpm
Pre/9	R/mid 4th	98%	80%	57 wpm
Post/9	S/late 4th	95%	90%	68 wpm
Pre/10	R/mid 4th	94%	40%	65 wpm
Post/10	R/mid 4th	98%	80%	82 wpm

students who participated in the study indicated they liked to read. This is compared to five at the start of the study. The students were asked who should select the texts they read. Again, nine of the students answered that they would like to select their own texts compared to six at the start of the study. The final question was only asked of the three students who changed their answer from no to yes, from the start to the end of the study, when asked if they liked reading. Their responses were as follows:

T: Earlier this year, you told me you don't like to read. We have been reading a lot lately, do you like to read now?

S1: No, not really. I like the book we have been reading in here okay, but I really just don't like to read.

T: Who should choose the books you read, you or the teacher?

S1: Me, always me.

T: Earlier this year, you told me you don't like to read. We have been reading a lot lately, do you like to read now?

S2: I think I actually do. I really like the book we have been reading in here.

T: Who should choose the books you read, you or the teacher?

S2: Me, I should choose my own books.

T: May I ask, what changed your mind? Why do you like reading?

S2: I was not sure about the first book we were reading and you let us switch. This book was much better because I love football and it is a good story.

T: Earlier this year, you told me you like to read. We have been reading a lot lately, do you still like to read?

S3: Yes, I really like to read, especially the book we have been reading.

T: Who should choose the books you read, you or the teacher?

S3: Me, I know what I like and what I want to read.

T: Earlier this year, you told me you don't like to read. We have been reading a lot lately, do you like to read now?

S4: I have liked reading this book, so yeah, I guess I do like to read.

T: Who should choose the books you read, you or the teacher?

S4: I think I should choose most of the time.

T: May I ask, what changed your mind? Why do you like reading?

S4: This was a good book and there are probably other good books I might like to read, so yeah, I guess I do like to read now.

T: Earlier this year, you told me you only like to read a little, if the book is interesting. We have been reading a lot lately, do you like to read now?

S5: The book still has to be interesting, but I do like to read.

T: Who should choose the books you read, you or the teacher?

S5: I should choose my own books.

T: Earlier this year, you told me you like to read sometimes but you're usually doing other things. We have been reading a lot lately, do you still like to read?

S6: I like to read more now. I like to go home and tell my brother about the book.

T: Who should choose the books you read, you or the teacher?

S6: I still think it should be me sometimes and the teacher sometimes.

T: We have been reading a lot lately, do you still like to read?

S7: I like to read even better now.

T: Who should choose the books you read, you or the teacher?

S7: I should choose the books I read.

T: Earlier this year, you told me you didn't really like to read. We have been reading a lot lately, do you like to read now?

S8: Yeah, reading is kinda cool.

T: Who should choose the books you read, you or the teacher?

S8: I like choosing my books.

T: May I ask, what changed your mind? Why do you like reading?

S8: I like reading the book that you let me read, and I like reading in the new chairs.

T: Earlier this year, you told me you only like to read certain books. We have been reading a lot lately, do you like to read now?

S9: I like to read, I just want to pick my own books.

T: Well, that answers my next question.

T: We have been reading a lot lately, do you still like to read?

S10: Yes, I still like to read.

T: Do you still think you should choose your own books?

S10: Yes ma'am, I sure do.

Discussion

As I analyzed the data from this study, I realized there were some powerful indicators of positive influence. Student 2 was off task a total of 29 times during the three pre-intervention observations. He stated with intensity that he did not like to read. Twice

during reading in the ELA classroom, he had to be removed from class because his off-task behavior was so disruptive. He said he “did not like that book,” he hated reading, it was boring, and he was not going to read. Often, he would never even open the book. This student is highly interested in sports, especially football. Together we chose a book about football that he and student 8 would read together with me. This was going okay and we spent a couple of class periods on this book when student 2 looked over at the bookshelf and said, “I want to read *The Blind Side*.” Student 8 agreed and we switched books. Both boys were instantly engaged with eyes constantly on text. Both boys knew where we were, turned pages on time, read out loud with no complaints, and did not want to leave my class when the bell rang. The next day in the hallway before my class, student 2, who has always refused to read and said he hated reading, ran over to me and asked if we could read again today. This was more substantial data for me than any piece of numerical findings. I did not want to interrupt the excitement, but after a few reading sessions, I asked the boys what the difference was. Student 2 replied, “This book is good, I like this book. You let me pick the book.” Student 8 replied, “This book is interesting. I like reading this book, it’s about football.” Student 2 was one of the students who, in the first interview, had answered no, he did not like reading. In the post-intervention interview, his answer changed to yes. On the final three observations for times off task, student 2 was off task, respectively, three times, three times, and zero times. The entire atmosphere of my classroom changed, and in addition to this, in the short period of the study this student not only went up to the next level on the Fountas and Pinnell reading assessment but read it with 99% accuracy.

I have the opportunity to teach my students for three consecutive years; therefore, I was able to get to know them prior to this study. Last school year, before I was conducting research, I observed student 3 find a new series she found very interesting. Before long she had read all three books in the series, and throughout the process, I witnessed her fluency, accuracy, and comprehension improve. At the start of this study, she had the highest score by far on the MAP reading assessment, which had not previously been the case. In her individual interview, this student stated that she likes reading when she picks the book herself and that when she is interested in the book, she loves to read. One of the choices during independent work time is self-selected reading (SSR). Student 3 chooses this option every chance she gets. This student's MAP reading score declined by 5 points after the intervention period; however, she had an unusually high growth of 14 points from spring to fall. This is uncommon after the summer break. Her score of 211 is higher than the class average and looks to be a true indicator of her reading ability. I would attribute her considerable jump from spring to fall to her growth in the spring and her newfound interest in reading, so I am not discouraged by this decline. Her current score is a more accurate indicator of her current performance and I am excited for things to come.

Another example of positive influence is found in the next account. The first week of sixth grade, student 4 told me in his own words, "If I ain't interested, I ain't reading it!" He was not being rude or disrespectful; he was only stating a fact. This student struggles greatly with reading accuracy but does very well with comprehension. When interviewed prior to the intervention period, student 4 said he does not like to read: "It's not fun." In our reading groups, during the intervention period, he has been the first to

ask to read out loud. It is not always perfect, but he is willing to try. At the end of this study, when I re-administered the Fountas and Pinnell reading assessment, student 3 read with more fluency than he had ever before. He passed the next level with 95% accuracy, 100% comprehension, and improved fluency. Student 6 also grew 10 points on the MAP reading assessment, indicating a full grade level growth.

Some days now, since the interventions period, in between lessons or reading groups, when students are working independently, I look around my classroom and find it hard to believe it is the same group of students as the start of the semester, prior to this intervention. In the past it was a requirement to read or conference with me, and it was a chore to gather the students when it was their turn, especially the male students who “did not like to read.” Now I have students begging for it to be their group’s turn and arguing over who will read with me today. The first observation for times off task that I completed had a total of 49 times off task. The last observation had only four total times off task. The students are enjoying flexible seating, and they are appreciative of the choices they have during independent work, but each day at least three students ask if it is their group’s turn to read with me. Student 7 asks me each morning, hours before my class, if her group is reading today. I have established a schedule, but no group wants to wait their turn. Even if the numerical data was not in support of what I have seen in my classroom, I would know that allowing student choice has made a big difference. My students are excited about reading—for some of them, for the first time ever.

Focus is not a strength for many students I teach, and engagement and time on task have greatly improved. By allowing students flexibility in their instructional tasks, they are taking ownership and responsibility for their work. I do have students who do

not like the math requirement of my classroom, but they are more than willing to complete the one required math lesson, knowing that it means moving on to a more preferable activity. The same goes for those students who are not fans of independent reading activities or self-selected reading. When they are aware that they can meet requirements and move on to preferred activities, they are willing to work and are making progress as a result. I no longer have to “start” my class. Students are aware of the expectations, and they come straight in and begin working with no complaints. When I read with a group, the remaining students are silently working and always have something to show for their time at the end of the class. Behavior for at least 40% of my class is an ongoing concern, but since the start of this instruction there has been little cause for concern. Students enjoy making themselves comfortable with flexible seating options and feel validated in their opportunity to choose their seating and their order of activities. I have had students thank me, ask not to leave my class when the bell rings, ask to stay in my class all day, and beg to read, both during self-selected reading time and in instructional groups.

The change in attitude, behavior, and engagement is supported with numerical growth indicated in both the measures of Fountas and Pinnell and Measures of Academic reading data. In comparing the semester’s current data to the previous full year’s growth, three of five areas displayed more growth in half a year than in the entire year. The area of vocabulary was very close in average points per student, but again, this was a semester’s growth compared to growth from fall to spring. The one area that showed noticeably more growth the previous year was in the category of Literary Text: Meaning and Context. I find this useful data in developing a future instructional plan. The

instructional approach the previous year with this group of students was very different from that of the study. It is possible that even what looks like it could be discouraging data can be used to develop effective practices to best instruct this group of students.

Conclusion

The research question that guided this action research study was, What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? Using a mixed methods research design, both qualitative and quantitative data were gathered. Data was collected on student attitude, time on task, and overall reading growth in the seventh-grade, special education classroom. There may be portions of this study that could be broken down into more precise studies of their own. There may be question as to what measure of choice had more impact on attitude, engagement, and performance than another. It could be a useful future study to determine the impact on student progress in the regular education class, grade improvement, and impact on overall office referrals and behavior. This study may possibly lead to more questions than answers, but what I know for sure is that my students are reading; my students are asking to read; my students are engaged. The numerical data is in support of the progress I am seeing daily in my classroom. Allowing students to take ownership of their education by giving them choice in their instruction and validating them as individuals by taking their interest into account has led to growth in attitude, engagement, and overall reading progress in my seventh-grade, special education classroom. The data in this study supports the possibility that the impact of allowing student choice and

implementing interest-based differentiation is a positive one, promoting time on task, improved overall attitude about reading, and increases in measurable numerical data.

CHAPTER 5

ACTION PLAN AND IMPLICATIONS FOR FUTURE PRACTICE

Reflection

The purpose of this action research study was to answer my research question: What influence does differentiation of reading instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? As demonstrated in the findings and discussion of Chapter 4, my special education seventh graders responded positively to the implementation of student choice and interest-based differentiation. Student response was measured by improvement of time off task, growth on the MAP and Fountas and Pinnell reading assessments, and overall attitude about reading and willingness to read. The data analysis reported in Chapter 4 indicated that students showed the most positive results in the areas of time off task and reading growth in Informational Text: Meaning and Context and Literary Text: Language, Craft, and Structure. The previous chapters and analysis of this action research study leads to the self-reflection included in this chapter. Action research is a cyclical practice consisting of planning, acting, developing, and reflecting (Mertler, 2014). This chapter of reflection and future planning now completes the cycle of action research process. I have worked to determine which steps in the intervention process were most beneficial, what other contributing factors may have occurred, and how I can use this information to better

instruct my students in reading (and possibly other areas) now and in the future. I do not believe it was one component but a combination of multiple factors that created a positive impact.

Flexible Seating

My students were granted student choice in their seating in the academic enrichment classroom. They were provided with traditional desks, which some students preferred to continue using even when other choices rolled out. My students were also provided with balance ball seats, wiggle cushions, an array of office and “comfy” chairs (see photograph for seating examples in Appendix C). I do teach students who have difficulty with attention and hyperactivity as well. My students not only enjoyed the use of the flexible seating but appreciated their role in choosing the seating that worked best for them.

Student Choice in Independent Work

There are academic requirements that must be met in the classroom each day and week. We work toward IEP goals in both ELA and math, attempting to stay on track in the general education classroom, working to improve our weaknesses, and continuing to grow in our strengths. Everyone works at different levels and on differing tasks, which can make the academic enrichment classroom a hectic class. For the purpose of this study, as a group we created a list of minimum requirements that must be completed each week but allowed student choice in what order these were completed. Weekly requirements included the following:

- Complete one lesson in the computer-based reading program (students were allowed to complete more if other options are completed)

- Complete one lesson in the computer based math program (students were allowed to complete more if other options are completed)
- Twenty minutes of self-selected reading (in addition to daily SSR in the general education classroom)
- Complete weekly ELA assignment for general ed if not completed at home
- Read with the teacher a minimum of one cycle each week
- Check academic enrichment folder for other assignments as necessary

This list allowed students who were not fans of one program or assignment to work in the order of their choice and spend any additional time in the area of their choice. Students responded well to the ability to choose rather than being directly told what to do.

Text Selection

Each student chose the text they wanted to read with the teacher. They were not limited by Lexile level or genre. They had complete control. We discussed their interest, and if I had a book in mind for that interest, I introduced it, but the choice was theirs. If I did not have a book in my classroom library, we found it in the school library or an electronic version as appropriate. It turned out that we did not face the dilemma of anyone choosing a text that was way below or above the appropriate place for them.

There were challenges but not to an extreme level. One group in particular changed their minds a few days into their chosen book and were allowed to change. Students chose to read with the teacher alone or in a group of their peers. There was no pressure to read aloud in a group unless the student chose to do so. Each student did have to show they were tracking text and staying with the group, even if not reading aloud, and all students were required to participate in group discussions.

Reading Instruction

Reading instruction was based on student need. Students who needed a vocabulary focus still had one. Students who struggle with accuracy or comprehension were still given strategies in these areas. Instruction based on need was not a new component in the intervention.

Data Review and Patterns

As discussed in Chapter 4, positive data trends did occur. Observations of times off task showed a great deal of improvement with all students, individually and as a group. When compared to the previous school year, the MAP scores improved at a greater rate overall in this one semester of measure than in the entire school year the previous year. When broken into subgroups, all areas except Literary Text: Meaning and Context showed student growth at a higher rate than the previous year. This was the one area that showed greater growth the previous year when text selection was primarily based on MAP score groupings. This led to the question of possible future instructional designs for successful interventions.

Implications for Next Steps

As I have reflected upon the processes in this action research study, I am aware that there are limitations to being fully aware which component of student choice had the greatest influence on student progress. I am also aware that other factors contributed to student success, such as instruction in the general education classroom, student maturity and responsibility, and home strategies and support. However, I am satisfied in the knowledge that the overall positive atmosphere change in the academic enrichment classroom is worth developing an action plan based on the results of this study. I also

understand that action research is never complete and is an ongoing process (Mertler, 2014). I will continue to monitor progress and results while determining what works best for individual students. I stand beside the notion that what works for one does not work for all. I am open to the idea of data flaws and researcher imperfection and willing to update my plan continuously to find what works best for my students. I am unable to say definitively that student progress was a direct result of the interventions, but I have not observed any hindrance to my students, their progress, or their reading growth as a result of the interventions implemented in this study.

As I analyzed numerical data, I noticed a distinct difference in the growth in one component of reading growth than in any other. Incidentally, this is the area that showed greater growth in the previous school year. As the academic enrichment and inclusion teacher, I taught this same group of students last year both in academic enrichment and in the inclusion ELA classroom. Therefore, I am very aware of the strategies implemented. The biggest difference was that last school year guided reading groups were formed strictly on the basis of reading ability, strengths, and weaknesses. There was student choice in text selection within reading levels, but it was greatly limited due to program choice and exact text level selection. Based on the success of the intervention period in this study along with the comparison of data to that of the previous year, I am prepared to discuss an action plan to attempt to implement a program designed to enhance student growth in all areas.

Developing an Action Plan

Developing an action plan is a time-consuming and thoughtful process which requires looking back across the study, starting with the initial problem of practice or

research topic, the strategies for research design, data collection, and data analysis (Mertler, 2014). I have thought about my initial problem of practice and area of concern. This concern centers around the reading growth of seventh-grade students in the academic enrichment classroom. I have developed the following plan based on previous educational knowledge, knowledge of my individual students, and the results of this action research study.

Action Plan

Purpose. Just as the purpose of this research study was to find ways to better instruct students in the area of reading, this is also the purpose of this action plan. The findings of this action research study indicated that student choice may have a positive influence on the reading growth of seventh-grade, special education students in the academic enrichment classroom. Implementing student choice with seating and assignments may have led to a decrease in time off task, which could possibly contribute to academic success.

Objectives.

1. Students will continue to show improvement in time off task during independent work and reading instruction.
2. Students will continue to improve overall attitude about reading and willingness to read.
3. Student reading progress will continue to improve in all subgroups of reading.

Suggested strategies. The results of this action research study indicated no negative influence of the interventions used in this study. These interventions included

allowing for student choice with flexible seating, activities in independent work time, and text selection for guided reading groups. It is suggested that in the academic enrichment classroom, students continue to have choice in these three areas.

At the start of this study, there was a great deal of off-task behavior, especially during independent work. Although there could have been many other factors contributing to the decrease in time off task, students seemed to appreciate taking ownership in their own learning experiences and having their preferences validated. There was a response to having student choice considered in daily activities. Students were more willing to work diligently and remain on task for longer periods of time when allowed to choose their seating as well as have some control in their choice of activities. The amount of work completed increased as the time off task decreased.

Students were allowed to choose the texts they read in guided reading groups. This stimulated an interest in reading with the teacher as well as willingness to read out loud in a small group and attend to text. This made it easier for the instructor to implement strategies necessary to further reading growth and comprehension skills. Overall the students were reading more often and more willingly, which contributed to improved decoding, fluency, and comprehension skills.

Implications for Future Practice

The overall action research study was a positive experience that yielded positive results, but it is important to keep student individuality in mind when considering future instruction with this group of students and future groups of students. Some students prefer traditional desks, being assigned specific assignments in a particular order, and a teacher who tells them what is best for them to read and when. It cannot be assumed that

the positive results in this study should limit what is best for all students. In fact, what made these interventions successful was that students were allowed to choose what worked best for them, even if it was different from what worked for the student beside them. I had students within this group who chose to sit in traditional desks, students who changed their preferred seating from day to day, students who chose to read with a group, and students who chose to read with me alone. Student choice was honored, as it should be with students in the future.

In the process of analyzing the data collected during this study and data from the MAP assessment in the previous school year for the same group of students, an interesting observation was made. During the period of intervention, there was overall growth in all subgroups of the MAP reading assessment (see Table 5.1 below).

Table 5.1 Measures of Academic Progress Subgroups: Average Growth

Measures of Academic Progress Subgroup	Average Growth for all Students
Informational Text: Meaning and Context	12.8 points
Literary Text: Language, Craft, and Structure	12.3 points
Informational Text: Language, Craft, and Structure	10.2 points
Vocabulary	6.5 points
Literary Text: Meaning and Context	1.9 points

The lowest area of increase was considerably lower than the others. This area was Literary Text: Meaning and Context, where the overall student growth was an average of only 1.9 points. Although I am unsure of the exact reason for this difference, a logical

reasoning is the amount of figurative language and inferencing skills required in comprehension of literary text. This is not a definitive answer, as all students were reading literary text, there did not seem to be difficulty with comprehension, and there was growth overall with the Fountas and Pinnell assessment. However, when comparing this data to the previous year's data, it was abundantly clear that the highest overall area of student improvement from the previous year was Literary Text: Meaning and Context. This improvement was a range of 3.1–6.3 average points higher than the other subgroups. The previous year, with this same group of students, the guided reading groups and texts were selected based on reading levels and ability groups. The only student choice was between texts of the same Lexile level. It would be worth further investigation to attempt to combine the successful portions of each method and determine continued success.

I am satisfied with the practice I implemented during the intervention period in this action research study, and I plan to continue this practice as long as my students continue to benefit from it and make progress. I believe student choice is essential in the classroom, especially with a group that has difficulty remaining on task. Flexible seating, choice of independent activities, and choice in text for reading instruction will remain the norm within my academic enrichment classroom for as long as it appears to be what is best for my students. I would like to attempt to add in guided reading time based on student reading levels. I would not take away the reading groups using the text that students chose solely on interest but add in another reading group and alternate reading opportunities with me. Whenever possible, if student choice happens to be within the correct level, multiple groups would not be necessary. The students thrived on making their own selections and taking ownership of their own learning. I would not take this

experience away; however, I will attempt to offer choices within reading levels. If this does suffice, then alternating groups would then occur. I do not believe this will alter the atmosphere in the classroom, but I do believe it could add to student success. The texts for level-based groups would be shorter so that students are not keeping up with two novels at once. It could prove difficult to balance simultaneous groups, in which case the alternating groups would occur in six or nine week periods, depending on the length of student-selected texts. This is an idea in progress and must be adjusted as I learn what works best for all students.

Conclusion

The problem of practice addressed in this action research study was the challenge of instructing special education students in the area of reading in a way that they make progress that aligns with their potential. The research question that guided this study and was addressed to help solve this problem of practice was, What influence does differentiation of instruction based on student choice and interest have on the reading growth of seventh-grade, special education students in the academic enrichment classroom? Data for this study was collected on time off task, student attitude about and willingness to read, and student progress on both the Fountas and Pinnell reading assessment and the Measures of Academic Progress reading assessment.

Prior to the start of the study, students were observed for engagement and time off task in both the general education and academic enrichment classrooms. Students were interviewed as to specific interests as well as to their overall thoughts and feelings about reading. During the intervention period, students were granted choice in flexible seating, independent work activities, and text selection for guided reading groups.

Throughout the process of the study, there was a great decrease in time off task for all students. Students began to work independently, on task, completing assigned tasks. Students who had previously indicated that they did not like to read later begged to read with the teacher next and frequently. Student scores were analyzed on both reading assessments as well as compared to the previous year. There was overall increase in all areas. A pattern was discovered that indicated the lowest area of increase during this period was the highest area of increase the previous year, possibly suggesting a combination of strategies could be implemented in the future.

In reflecting on my personal experiences during this process, I feel I have had the opportunity to get to know my students further as individuals and discover what works for them. I had to let go of control, and this has made me a better educator who puts my students' needs first and foremost. I watched my classroom transform into a class of rigor, engagement, and success. I realize I have so much more to learn and this study is just the beginning of possibilities. I would like to see this research branch out into the general education ELA classroom and determine the success rate outside of the academic enrichment classroom. I have grown and learned as an educator and watched my students progress and change. I look forward to this continuing process and development.

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APPENDIX A
STUDENT INTERVIEWS

Student 1:

T: Do you like to read?

S: No, I don't like to read. I just don't like it. I can't read. Well, I can read but I just don't understand it.

T: You were reading a book in ELA as a whole class, did you like that?

S: No! I don't like reading or looking at books. It was boring but sometimes a little fun listening.

T: How do you feel about reading out loud?

S: I don't like to read around a lot of people.

T: You told me you were most interested in soccer. The book you chose to read in here wasn't about soccer. Why did you choose *Hoot*?

S: I chose *Hoot* because it looked cool, the front cover looked cool, and I've seen a lot of people reading it.

T: You said you don't like reading but what about *Hoot*?

S: Yes, I like reading that because I picked it myself.

T: So you like it when you choose the book?

S: I like when I choose the book because I know what I want to read. If I don't like it, I can find a new book.

When we were first talking about allowing the students to choose the books they read, this student went back to the classroom library bookshelf and asked (very excitedly and a bit surprised), “You mean we can even read Hoot if I want to?” When I told him yes, he said, “That’s the book I want to read.” He has been excited and animated. He is an ESOL student and we have really been able to work through some vocabulary in a way he can understand because he is so engaged and wants to understand the story.

Post-Intervention:

T: Earlier this year, you told me you don’t like to read. We have been reading a lot lately, do you like to read now?

S: No, not really. I like the book we have been reading in here okay but I really just don’t like to read.

T: Who should choose the books you read, you or the teacher?

S: Me, always me.

Student 2:

T: Do you like to read?

S: No, I don’t like to read, it’s boring.

T: You were reading a book in ELA as a whole class, did you like that?

S: No! That book was boring. I didn’t wanna read it.

T: How do you feel about reading out loud?

S: Good, I guess. I don’t like to do it around a whole bunch of people.

T: You told me you were most interested in football. Do you think you will enjoy reading the book you chose about football?

S: Yes, I like football.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I like when I choose the book better than when the teacher chooses the book. I like reading when I pick the book.

The first book this student chose to read with one other student was going okay, but one day when we met, the boys asked to switch to reading The Blind Side. Both boys were instantly excited and engaged. I have never seen either boy's eyes on text so long or either so willing to read out loud. When reading as a whole group, in the regular education class, I had to pull this student out multiple times because he was causing such a disruption. He said, "I don't want to read," "Reading is boring," "I hate Reading!" After day one of reading The Blind Side, this student ran up to me in the hall and begged to read with me that day even though it was not "his turn." I did also download football books onto the Kindles for SSR.

Post-Intervention:

T: Earlier this year, you told me you don't like to read. We have been reading a lot lately, do you like to read now?

S: I think I actually do. I really like the book we have been reading in here.

T: Who should choose the books you read, you or the teacher?

S: Me, I should choose my own books.

T: May I ask, what changed your mind? Why do you like reading?

S: I was not sure about the first book we were reading and you let us switch. This book was much better because I love football and it is a good story.

Student 3:

T: Do you like to read?

S: Yes, I like reading by myself when I pick the book.

T: You were reading a book in ELA as a whole class, did you like that?

S: Yes, because I liked that the recording read it to us.

T: How do you feel about reading out loud?

S: I don't like to read aloud.

T: But you ask to read in our groups, why do you do that?

S: I ask to read because I feel like I need to be a part of the group.

T: You told me you were most interested in art. Why didn't you choose a book about art.

S: I like to do art. I like to read a book I am interested in the story. I love to read.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I like when I choose the book.

T: You chose the book *Romeo Blue*, why was that?

S: The title reminded me of *Gnomeo and Juliet* and I liked that movie. Also, it sounded like a good story and the kids were about our age.

Student 3 discovered a vampire series last school year that she became deeply interested in and moved through the whole series on her own. I was able to watch as her reading drastically improved before my eyes. Her scores improved; her vocabulary and fluency improved. This led to improved confidence and further reading. It was a miraculous process to watch.

Post-Intervention:

T: Earlier this year, you told me you like to read. We have been reading a lot lately, do you still like to read?

S: Yes, I really like to read, especially the book we have been reading.

T: Who should choose the books you read, you or the teacher?

S: Me, I know what I like and what I want to read.

Student 4:

T: Do you like to read?

S: No, it's not fun.

T: You were reading a book in ELA as a whole class, did you like that?

S: Yes, I liked that.

T: Why?

S: I liked that Audible read the whole thing out loud to us. I don't like reading out loud. It's hard for me to read out loud. I can read better in my head.

T: When we read in our class, you volunteer to read out loud; why do you do that?

S: I read the passage in my head before I volunteer.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: Sometimes I like when the teacher chooses the book because of the mystery of what she will choose.

T: You chose your own book in our class, why did you choose *Romeo Blue*?

S: You read the back of the book and it sounded interesting, so I wanted to read it.

T: What did you tell me you were most interested in?

S: NASCAR

T: Do you like to read about NASCAR?

S: Yes, that is fun!

Although this student chose a book that is not NASCAR related, he did choose the book because the description sounded interesting to him. I downloaded several NASCAR books for him on the class Kindles. He has spent a great deal of SSR time reading these books. I also ordered books for the classroom library about NASCAR.

Post-Intervention:

T: Earlier this year, you told me you don't like to read. We have been reading a lot lately, do you like to read now?

S: I have liked reading this book so yeah, I guess I do like to read.

T: Who should choose the books you read, you or the teacher?

S: I think I should choose most of the time.

T: May I ask, what changed your mind? Why do you like reading?

S: This was a good book and there are probably other good books I might like to read, so yeah, I guess I do like to read now.

Student 5:

T: Do you like to read?

S: A little, books that are interesting.

T: You were reading a book in ELA as a whole class, did you like that?

S: I liked the project at the end, it was fun.

T: What about listening to the story?

S: I don't like when that guy reads it, I like it when students read and a teacher in a group.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I like it when I can choose the book to read with the teacher.

T: Do you know what you are interested in?

S: I want to be a teacher and I want to play volley ball.

T: What book did you choose to read in our class?

S: *Star Girl*.

T: Why did you choose *Star Girl*?

S: I never read it so I read a couple of pages and it sounded good, so I wanted to read it.

T: You chose to read alone with me, why did you do that?

S: I wanted to be able to read more.

Student 5 is the only student who asked to read with just me and not a group of students.

She seems to really be enjoying her one-on-one time. She is an ESOL student and this time has offered many opportunities to discuss vocabulary and focus on comprehension.

Post-Intervention:

T: Earlier this year, you told me you only like to read a little, if the book is interesting.

We have been reading a lot lately, do you like to read now?

S: The book still has to be interesting but I do like to read.

T: Who should choose the books you read, you or the teacher?

S: I should choose my own books.

Student 6:

T: Do you like to read?

S: Yes, sometimes, but most of the time I'm drawing or playing video games.

T: You were reading a book in ELA as a whole class, did you like that?

S: I like when the man was reading to me because it did all the voices and emotions of the characters.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: Sometimes I like both, do I have to choose?

T: No, you don't.

T: You said you know what you are interested in, please tell me again.

S: Drawing, comics, and designing video games.

T: You chose the book *Romeo Blue*. It has nothing to do with video games or comics.

S: My brother read that book when he was in your class. He talked about it all the time and it sounded good. I always wanted to read it in your class.

T: So, do you like it when you choose the book or the teacher chooses the book?

S: If a book doesn't look good, I don't read it and I know you are not supposed to judge a book by its cover. Sometimes, the teacher chooses the book because she has already read it and she knows it's interesting. The only problem is that if it is interesting to her, it may not be interesting to me but I usually just go along with it.

Student 6 is an inquisitive student but a very low reader for his current grade. He does comprehend much better than he decodes. He has been very interested in the book he chose, Romeo Blue. He has even read out loud a few times and he does not like to read in front of others at all.

Post-Intervention:

T: Earlier this year, you told me you like to read sometimes but you're usually doing other things. We have been reading a lot lately, do you still like to read?

S: I like to read more now. I like to go home and tell my brother about the book.

T: Who should choose the books you read, you or the teacher?

S: I still think it should be me sometimes and the teacher sometimes.

Student 7:

T: Do you like to read?

S: Yes, [laughter] I like listening to the sound of my own voice.

T: You were reading a book in ELA as a whole class, did you like that? You did not get to hear your own voice.

S: I liked it because if I didn't know the words, it was reading to me. If I don't know the words, my voice won't sound as good and I won't want to hear it.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: Sometimes the teacher because they have already read the book and know it will be good. I like to read books about romance.

T: What are your interests?

S: Reading-romance, sports-softball, when I grow up-photographer.

T: You chose the book *Romeo Blue*. Why did you choose this book?

S: It sounded good, like romantic details.

T: So, do you like reading better in a whole group like in your ELA classroom, or in a small group like when we are reading *Romeo Blue* in here?

S: I like reading in here better because I chose the book and when we read in a small group, we take turns. I get to read more. If we mess up, we mess up, it's okay.

Mistakes are okay. It is more comfortable to read in here.

Student 7 has enjoyed reading Romeo Blue so much that she asks me throughout the day, in other classes, if her group can read with me today. She actually gets upset when it is

not her group's turn to read. She has asked and answered questions and volunteered to read often.

Post-Intervention:

T: We have been reading a lot lately, do you still like to read?

S: I like to read even better now.

T: Who should choose the books you read, you or the teacher?

S: I should choose the books I read.

Student 8:

T: Do you like to read?

S: Not really. It makes me nervous when I read in front of everybody. I like it a little better when I read to myself.

T: You were reading a book in ELA as a whole class, did you like that?

S: It was okay when Audible was reading to me.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I don't know how to choose interesting books.

T: Do you know what you are interested in?

S: Yes, football and basketball. I want to read about football with [student 2].

This is the other student I referred to with student 2. When we switched to The Blind Side, his engagement was clear as was his willingness to read out loud. For both of these boys, I have rarely called on them to read and have them actually know where we are. Since we began the new book, they have kept up, tracked with their finger, and been completely ready and willing to read out loud.

Post-Intervention:

T: Earlier this year, you told me you didn't really like to read. We have been reading a lot lately, do you like to read now?

S: Yeah, reading is kinda cool.

T: Who should choose the books you read, you or the teacher?

S: I like choosing my books.

T: May I ask, what changed your mind? Why do you like reading?

S: I like reading the book that you let me read and I like reading in the new chairs.

Student 9:

T: Do you like to read?

S: Yes, certain books. At first, I'll be like, man, I don't want to read this, then, I get into it. I still like rhyming books like Dr. Seuss.

T: You were reading a book in ELA as a whole class, did you like that?

S: I like reading in a big group because there are more people to catch me up if I forget where I was at. I like when the voice reads to us because it does different voices.

T: How do you feel about reading out loud?

S: I like to read out loud in here but not in there. I like reading in my head better. I read better in my head.

T: What did you tell me you were most interested in reading about?

S: I told you about that gorilla who got killed at the zoo. I like to read about stuff like that. I like monkeys. I wish I had a pet monkey. I like Dr. Seuss books. I like anything with animals. I like to read about animals.

T: Is that why you choose the book *Hoot*?

S: It sounded like an owl so I figured there were owls or animals in the book.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I like when I choose the book.

I have an array of Dr. Seuss books in my classroom. The stories may be elementary, but the reading is actually more difficult. I also downloaded information on the Kindle about Harambe, the gorilla who was killed at the zoo.

Post-Intervention:

T: Earlier this year, you told me you only like to read certain books. We have been reading a lot lately, do you like to read now?

S: I like to read, I just want to pick my own books.

T: Well, that answers my next question.

Student 10:

T: Do you like to read?

S: Yeah, but in groups and sometimes by myself.

T: You were reading a book in ELA as a whole class, did you like that?

S: I like the small groups. That recording reads fast and sometimes I can't catch up.

T: How do you feel about reading out loud?

S: I like to read out loud.

T: What did you tell me you were most interested in?

S: Volleyball, basketball, soccer.

T: You chose the book *Romeo Blue*. It doesn't have any sports at all. Why did you choose that book?

S: It looked interesting and really good for me, like a book I could read. I like that book.

T: Do you like it when the teacher chooses the book or when you choose the book?

S: I like when I choose the book.

This student is also ESOL, and we have been able to focus in the small group on vocabulary and comprehension. She enjoys reading out loud. I did download some women' athletics books onto the Kindles for SSR.

Post-Intervention:

T: We have been reading a lot lately, do you still like to read?

S: Yes. I still like to read.

T: Do you still think you should choose your own books?

S: Yes ma'am, I sure do.

APPENDIX B

MEASURES OF ACADEMIC PROGRESS FALL 2017

Student	Score	Lexile	Vocab	LTLCS	LTMC	ITLCS	ITMC
1	Fall 17 197	688	197	199	182	198	210
2	Fall 17 199	709	198	203	205	200	189
3	Fall 17 216	873	211	214	221	214	221
4	Fall 17 181	507	182	184	176	180	180
5	Fall 17 190	612	191	194	193	189	183
6	Fall 17 154	149	159	163	153	144	153
7	Fall 17 192	634	190	191	199	193	186
8	Fall 17 166	316	170	167	166	160	166
9	Fall 17 188	589	189	178	190	200	182
10	Fall 17 178	471	176	178	180	173	181

APPENDIX C
FLEXIBLE SEATING



Bean Bag Chairs



Balance Ball Chairs



Saucer Chairs



Wiggle Seats



Comfy Seats



Bean Bag

APPENDIX D
RESEARCH SETTING APPROVAL FORMS

Date

Mr. XXX,
Principal of XXX Middle School
XXX County
School District XXX

Re: Permission to Conduct Research Study

Dear Mr. XXX:

My name is Autumn Hudson and I am a doctoral student at the University of South Carolina. I am writing to request permission to conduct an action research study at XXX. I am examining the effects of interest based-differentiation in reading instruction within the middle school special education classroom. I am seeking approval to conduct research within your district, specifically within my current school placement.

The study will implement a parallel mixed methods design. The data collection methods will include: field observations, interviews, and pre- and post- assessments.

Data collected through this research can prove beneficial to school and district leaders as we seek to better the differentiation process in all classrooms. All students shall remain anonymous as well as the school and school district protected.

Your approval would be greatly appreciated.

Please feel free to contact me with any questions or concerns at autumn.hudson@spart1.org

Sincerely,

Autumn M. Hudson

Approved By:

Name and Title:

Signature: _____ Date: _____

Date

Mrs. XXX
Coordinator of Personal
XXX County School District XXX

Re: Permission to Conduct Research Study

Mrs. XXX:

My name is Autumn Hudson and I am a doctoral student at the University of South Carolina. I am writing to request permission to conduct an action research study at XXX. I am examining the effects of interest based-differentiation in reading instruction within the middle school special education classroom. I am seeking approval to conduct research within your district, specifically within my current school placement.

The study will implement a parallel mixed methods design. The data collection methods will include: field observations, interviews, and pre- and post- assessments.

Data collected through this research can prove beneficial to school and district leaders as we seek to better the differentiation process in all classrooms. All students shall remain anonymous as well as the school and school district protected.

Your approval would be greatly appreciated.

Please feel free to contact me with any questions or concerns at
autumn.hudson@spart1.org

Sincerely,

Autumn M. Hudson

Approved By:

Name and Title:

Signature: _____ Date: _____