The implementation and effectiveness of Tier 2 Response to Intervention reading comprehension in 4th grade

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THE IMPLEMENTATION AND EFFECTIVENESS OF TIER 2 RESPONSE TO INTERVENTION READING COMPREHENSION IN 4TH GRADE

by

Christine R. Reichert

A Thesis
Submitted to the
Department of Interdisciplinary and Inclusive Education
College of Education
In partial fulfillment of the requirement
For the degree of
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at
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Thesis Chair: S. Jay Kuder, Ed.D.
Dedications

I would like to dedicate this manuscript to my husband, Wayne and son Brantley
Acknowledgments

I would like to express the greatest appreciation to Doctor Sydney J. Kuder for his guidance and assistance throughout my research. The knowledge I have gained throughout the thesis writing process has undoubtedly made me a better educator and prepared me for greater opportunities within my field of study. I have learned to face challenges head on and not become discouraged, for there is light at the end of the tunnel.

I would like to thank my husband Wayne and our son Brantley for their ongoing support over the last few years. It has not always been easy to juggle life as a wife, mother and graduate student but because of the support in our household anything was possible. I would also like to thank my family who loved and supported me throughout my entire academic career, when odds were against me. My late grandfather, Manuel Graca, for always encouraging me, studying with me and being my number one supporter.

Without all of these wonderful people, I would not be the woman I am today. I am a strong independent woman who stands on her own two feet because I chose to fight and be successful instead of giving up.
Abstract

Christine Reichert
THE IMPLEMENTATION AND EFFECTIVENESS OF TIER 2 RESPONSE TO INTERVENTION READING COMPREHENSION IN 4TH GRADE 2015-2016
Sydney J. Kuder, Ed.D.
Master of Arts in Special Education

The purpose of this exploratory investigation is to examine whether the use of the two strategies “Stop and Jot” and “Learning Ally” delivered as part of tier-2 Response to Intervention model, will improve the reading comprehension deficits of fourth grade students with reading difficulties. Participants in this study varied in their results, but overall there were positive outcomes. Students were assessed during the pre-intervention phase, intervention phase and post-intervention phase using the Fountas and Pinnell Reading Benchmark Assessment.

The average participant increased their reading level by one on the Fountas and Pinnell Reading Benchmark Assessment. Two students in this study still have significant deficits in reading comprehension and are currently being studied for an auditory processing delay. The other four participants increased their reading comprehension by utilizing the strategies Learning Ally and “Stop and Jot”.

Overall, this study proved to support that utilizing one or both of these strategies will increase a fourth grade students reading comprehension through tier 2 Response to Intervention. These strategies will be recommended for educators whose students need to increase their reading comprehension.
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Chapter 1

Introduction

Response to Intervention is a multi-tiered approach that identifies and supports students with learning and behavioral needs. There are three tiers in the RTI model, each addressing a different level of learning. Tier 1 allows students to receive high-quality, scientifically based instruction that is differentiated to meet their individual needs (RTI Action Network, 2015). Tier 2 is for students not making sufficient progress in tier 1. These students are provided with progressively intensive instruction that is harmonized to meet their individualized needs on their individual level of performance and rate in which they are progressing (RTI Action Network, 2015). This tier is usually addressed in a small group setting focusing on a specific skill set. An effective tier 2 intervention is critical to the success of early intervention for students who are at risk. Tier 3 students receive individualized, intensive interventions that target the students' skill deficits for the existing problems and the prevention of more severe problems in the future (RTI Action Network, 2015).

My focus for this paper is the effectiveness of two methods for tier 2 RTI reading comprehension in fourth grade students with reading difficulties. Many of these students have excellent reading fluency but struggle when it comes to reading comprehension. Understanding what is said, read, or written is a skill that is vital for every person regardless of profession, age, ethnicity, etc. This topic is important to me because many students are referred right to the Child Study Team (CST) to be evaluated for special educations services, instead of implementing interventions that may meet their individual
needs. Targeting a specific skill deficits through RTI by implementing various teaching methodologies and research based practices will increase a student’s success academically and behaviorally. In my research and data collection I hope to find an effective method to increasing a student’s reading comprehension by infusing RTI tier 2 approaches and ultimately increasing their reading levels. There are 6 students in the fourth grade class receiving RTI services for reading comprehension. Data will be collected through Fountas and Pinnell running records, ongoing progress monitoring, and through small group tier 2 instruction.

In theory, the Response to Intervention model would seem like a great idea for schools to implement interventions utilizing the staff they already have. This model allows for identifying learning disabilities through early intervention and research based best practices. A problem I foresee is not all teachers being trained in how to effectively implement RTI interventions that are skill specific, monitor student progress, and collect data. Each component is vital to the success or failure of whether or not the student is benefiting from the RTI services they are receiving.

Another problem I see with the RTI model is that students seem to be within the RTI program for years at a time, when in fact the interventions are supposed to be put into place for 6-8 weeks and then revisited to discuss whether it was successful or not. This biggest area of concern is that often time teachers are differentiating so much already for their lessons, they don’t have time to individualize an academic program for one or two students who are receiving focused RTI intervention. This then leads to students remaining within the RTI program years on end for the same skill deficit and often times referred to the Child Study Team (CST) for testing.
Statement of the Problem

Many students struggle with reading comprehension because they don’t understand what they are reading or they are not interested in the subject of the text. Students with reading comprehension difficulties may benefit from tier-2 type interventions that provide them with alternative strategies for improving their comprehension. Such strategies might include Stop and Jot strategies and listening to a text through Learning Ally. Stop and Jot strategies give students the opportunity to stop and think about what they are reading, jot about what they are picturing in their mind, what they wonder, what they think, what they feel, what they find interesting and something that they can make a connection to. Learning Ally is utilized to model fluency, expression, the growth of background knowledge, and vocabulary development so that students can increase their reading comprehension skills and ultimately become more successful readers. In this study, the outcomes of using these strategies with students who are receiving tier-2 intervention in a Response to Intervention model will be monitored and adjusted according to student progress to determine whether or not these approaches have improved the comprehension skills of fourth grade students with reading difficulties utilizing the two methods listed above.

This study will address the components of RTI tier 2 intervention, teacher professional development opportunities to implement strategies successfully, strategies to increase reading comprehension skills, maintaining the program’s effectiveness, and the cost efficiency of utilizing teachers in house instead of hiring new teachers.
Research Question

The purpose of this study is to examine whether the use of the two strategies “Stop and Jot” and “Learning Ally” delivered as part of tier-2 Response to Intervention model, will improve the reading comprehension deficits of fourth grade students with reading difficulties.

Definition of Terms

Response to Intervention: “RTI is a multi-tier approach to the early identification and support of students with learning and behavior needs through high quality scientifically based classroom instruction, ongoing student assessments, tiered instruction and parental involvement.” (RTI Action Network, 2015).

Progress Monitoring: “Assess students’ academic performance, measure a student’s rate of improvement or responsiveness to instruction, and to the evaluation of the effectiveness of instruction.” (Progress Monitoring | Center on Response to Intervention, 2007)
Chapter 2

Review of Literature

According to a study conducted in 2003 by the National Center for Education Statistics (NCES), 40% of fourth grade students in the United States scored below the basic level of reading that was expected for their age (Wright, Fugett, and Caputa, 2011). Deficits in reading comprehension stem from children being deficient in the development of grammar, semantics, metalinguistics, and pragmatics. Skills in verbal language production and auditory understanding are needed in order for children to be successful in reading comprehension (Wright, Fugett, and Caputa, 2011). Many children lack foundational skills that are required for success in reading fluency and comprehension. Without knowledge and understanding of these skills, children will continue to struggle with fluency and comprehension, and these children will continue to fall further and further behind.

In 1985, The National Institute of Child Health and Human Development (NICHD) conducted a long-term study to better understand the causes of reading difficulties in children. The strongest findings to date indicate that phonological processing is the main area in which children with reading difficulties differ from other children (Felton, Ph. D, R.). NICHD believes that teaching and learning in the 21st century reflects major educational concerns, as well as public health concern (Lyon, G. R. 2003). Their research has continuously shown that a child that has not learned to use and understand language, read and write, reason and calculate mathematics, use problem solving skills, and communicate their ideas to others are not going to be as successful in life as a child that does (Lyon, G. R. 2003).
As children grow and continue on their educational journey they become more self-conscious and embarrassed by their lack of reading skills (Lyon, G. R. (2003)). From the research that the NICHD conducted, this type of deficit affects children more negatively than was thought. As the NICHD followed students through the elementary grades and into the middle school grades, it shows that their lack of self-esteem and motivation to learn rapidly declined (Lyon, G. R. (2003)). Furthermore, this has made a huge impact on student’s abilities to be active learners in all subject areas and in the majority of cases, not be able to participate in classroom discussions due to the complexity of content textbooks (Lyon, G. R. (2003)).

From birth, children who are offered opportunities to learn, think, and talk will be more successful readers than those are not afforded those opportunities (Lyon, G. R. (2003)). By middle school, children who are fluent readers can read at least 10,000,000 words during the school year, whereas, children who have reading difficulties are limited to less than 100,000 words (Lyon, G. R. (2003)).

The studies conducted by the NICHD have shown that reading deficits can be linked to deficiencies on how the brain processes language-based tasks such as letter sounds (Bock, R. (1998)). RTI is a specific intervention put into place that is geared toward that individual’s success. If early intervention is not put in place, than a reading disability will be a constant struggle throughout their life.
**Reading Comprehension**

Reading comprehension is the ability to read text, process what we are reading, and understand its meaning. Reading consists of five essential components: phonemic awareness, phonics, comprehension, vocabulary, and fluency (Wright, Fugett, and Caputa, 2011).

Phonics is often times confused with phonemic awareness. Children who have difficulty with phonemic awareness will struggle to develop beginning reading skills (Felton, Ph. D, R.). Phonemic awareness focuses on the connection between written and spoken language in which spoken words and syllables are themselves made up of arrangements of phonemes, and the ability to influence them (Zygouris-Coe, V. 2001). Whereas, phonics is the use of letter-sound relationships and their spelling, to teach children to decode words while reading. The ability to decode words is a critical component in a child’s reading success or failure (Zygouris-Coe, V. 2001).

Comprehension is the ability to understand written material accurately, and make connections by accessing prior knowledge. While reading it is important for children to connect with what they are reading, whether it is making a connection from text to text, text to self, or text to world. Having an adequate vocabulary is an essential component of comprehension because without ample vocabulary skills students will have difficulty understanding what they read, others ideas or even expressing their own ideas.

Fluency is being able to read a text accurately, swiftly, and with expression. Children who struggle with fluency have to concentrate on figuring out the words they are reading rather than focusing on what they are reading. This is why so many children struggle with comprehension skills because they lack foundational skills required for
reading. Fluent readers are able to concentrate on what they are reading and its meaning rather than the words they are reading.

According to Wright, Fugett, and Caputa (2011), without these five crucial elements children will continue to have difficulty reading. Foundational skills are the stepping stones to becoming a proficient reader and without them children will continue to struggle in areas such as reading comprehension.

**Teaching Reading Comprehension**

Dougherty Stahl (2004), says that children are more likely to understand and recall what they read if they are active learners in using cognitive strategies including activating prior knowledge, making predictions, organization of information, higher order thinking questioning, summarizing what they have read, and creating images in their mind. The most important part of comprehension is the model in which the teacher is using to teach reading comprehension (Dougherty Stahl (2004). The models of strategy instruction usually include declarative knowledge, procedural knowledge, and conditional knowledge (Dougherty Stahl (2004). Declarative knowledge lays a foundation for students and teaches what the strategy is, the implementation of that strategy is known as procedural knowledge, and when the strategy is most useful is known as conditional knowledge (Dougherty Stahl (2004).

Gradual release of responsibility is another model teachers often use while teaching many new skills (Dougherty Stahl (2004). When teaching a new skills teachers often spend the majority of time modeling and the usage of guided practice (Dougherty Stahl (2004). This allows the students to observe the new skills being taught and gain confidence during guided practice. Eventually, students will take responsibility for their
own learning and practice implementing these skills using the strategies they were taught (Dougherty Stahl (2004).

According to Dougherty Stahl (2004), research was conducted through review a literature, informal interactions with teachers, classroom observations, and reports by teachers participating in field experiences to support the use of Question-Answer Relationships (QAR), reciprocal teaching, and teacher questioning for increasing reading comprehension in students in the primary grades. Students who are performing average or below average have benefitted greatly from the QAR method. QAR allows students to use information from the text and their own personal experiences when they respond to questions involving a text they have read (Dougherty Stahl (2004).

Cummins, Streiff and Ceprano (2012), conducted a QAR study amongst 6 fourth grade students, four girls and two boys who were enrolled in a high poverty urban school district in Western, New York. All of these students were from the same 4th grade class and teacher selected them for this study based on their day to day performance (Cummins, Streiff and Ceprano (2012). Three of these students were performing below grade level in reading and the other three students were hardly achieving grade level standards (Cummins, Streiff and Ceprano (2012). The study was conducted to increase reading comprehension skills and a love for reading. This study was conducted over fifteen sessions and students focused on building the skills necessary to break down comprehension questions and answer them correctly in regards to the QAR four sub-group categories (Cummins, Streiff and Ceprano (2012). Students identified whether the answers to questions were in the book or right there, in the book or think and search, in their head or author and them, or in their head and on their own (Cummins, Streiff and Ceprano (2012). The subgroups encourage students to identify what type of question is
being asked, identifying the questions subgroup, and how they should respond to the question.

These 6 fourth grade students were given a pretest to obtain a base line score for each student and a post-test was given to show each students growth in reading (Cummins, Streiff and Ceprano (2012). This study was conducted over a two and half month time period (Cummins, Streiff and Ceprano (2012). The students were met with fifteen times over this time period for a half hour and an hour (Cummins, Streiff and Ceprano (2012). These meetings were in a private location that was free of detraction (Cummins, Streiff and Ceprano (2012). The four QAR subcategories were reviewed at the beginning of every session and a review of how QAR is used to assist with reading comprehension (Cummins, Streiff and Ceprano (2012). This review consisted of a short passage being read to the students and questions relative to the passage were asked using QAR strategies (Cummins, Streiff and Ceprano (2012). The results showed growth in all but two students from the pretest to the post-test (Cummins, Streiff and Ceprano (2012). Although two students did not increase from their pretest to post-test, it was documented that these students were engaged in all of the lessons and understood how to use the QAR strategy (Cummins, Streiff and Ceprano (2012).

Reciprocal teaching, takes place during reading, which encourages students to self-monitor and gain meaning from the text. During reciprocal teaching, the student and teacher discuss a part of the text by using questioning, clarifying, summarizing, and predicting (Dougherty Stahl (2004). Questioning occurs when the text is read and questions are asked about the content that is being read. This is where students focus on the main ideas and check their instantaneous level of understanding (Cooper and Greive). Clarifying takes place while the text is being read and students critically evaluate the
meaning of unknown words and phrases while conferring with group members (Cooper and Greive). Summarizing allows students to re-state the main ideas and themes in their own words to demonstrate their understanding of the text. Finally, predicting allows students to stop and make inferences about what they will be reading (Cooper and Greive (n.d). According to research conducted by Cooper and Greive, teachers closely monitor student’s performance in using these four strategies and only scaffold student’s efforts when necessary (Cooper and Greive (n.d). Eventually, students are to take responsibility for this process and implement these strategies on their own while reading a text (Cooper and Greive (n.d).

Dougherty Stahl (2004), says that teacher questioning has shown that question answering and question answering instruction has made an impact on recalling what they have read, navigating through text, and gaining a deeper understanding of what they are reading. She also states that asking students a variety of higher and lower level questions will improve their reading development (Dougherty Stahl (2004).

Reading Comprehension Strategies Using Technology

Technology in the 21st century gives children many opportunities to be as successful as possible. Children today are being referred to as digital natives according to Wright, Fugett, and Caputa. These children are born into a digital world and their brains seem to be instantly wired to operate electronically operated devices. Children in this generation seem to engage in electronically operated devices more so than previous generations. With technology at our fingertips, there are endless possibilities on the resources available to engage children in learning and build upon skills they already have and create new ones.
There is evidence to prove that an increase in reading comprehension skills is linked to children utilizing technological devices. Research on digital devices is showing that children are more interested and focused in what they are reading, compared to reading from a paper-based text (Cardullo, Zygouris-Coe, Wilson, Craanen, and Stafford). Digital devices engage students in what they are reading while modeling appropriate fluency and expression. These devices also provide opportunities for teachers and children to unite and share a common knowledge of topics being read and construct relationships through literacy developing activities such as talking, singing, playing games involving sounds and words, drawing, reading and writing (Wright, Fugett, and Caputa, 2011).

Research shows that digital reading devices create a new and engaging reading environment for children (Cardullo, Zygouris-Coe, Wilson, Craanen, and Stafford). Some e-readers allow students to click on an unfamiliar word and listen to the definition. This gives children the opportunity to learn new vocabulary and gain a clear and concise meaning of that word. Unfortunately, some digital products, such as Learning Ally, do not allow students to click on unfamiliar words, which leave the students feeling frustrated and confused while listening to the text. Even though research shows the positive impact digital devices have on reading comprehension, there is also a downside. According to Wright, Fugett, and Caputa, some children who utilize digital devices for reading may have a difficult time focusing due to the complexity of digital comprehension, which in turn causes increased frustration levels. It is also recommended that students have additional comprehension skills to successfully maneuver through digital text so that it can be most beneficial to them (Cardullo, Zygouris-Coe, Wilson, Craanen, and Stafford).
Learning Ally is a nonprofit organization that assists students with visual or reading-based learning disabilities. This digitally based program offers more than 80,000 audio textbooks and literature titles with diverse genres and interests. Primary research conducted by Rutgers University from 2004-2005 showed that students using Learning Ally’s audio textbooks in the inclusion setting improved their reading in general, and made gains in word recognition, reading rate and comprehension (Learning Ally (2011). This study focused on 75 students classified as having learning disabilities, from ages 10-14 over a 28-week study. This study had both pre and post-tests, using the Qualitative Reading Inventory Assessment. Students were divided into three groups: Audio books during the language arts period, Audio books with support of a graphic organizer during the language arts period, and a control group used no audio books or supports during the language arts period (Learning Ally (2011). Students reading rate improved from 87.8 words per minute to 104 words per minutes and reading accuracy increased by 1.9% from 94.4% per 100 words to 96.3% per 100 words (Learning Ally (2011). Overall it was concluded that Learning Ally had a positive effect on reading growth for student’s with mild to moderate learning difficulties. Research also showed that there was also improvement in math and science subject areas as well.

The 2010-2011 Learning Ally conducted a study on the overall distribution of active Learning Ally members and non-Learning Ally in seven state schools in the subject areas math and reading (Learning Ally (2011). The Adequate Yearly Progress data measures year-to-year achievement on statewide assessment tests was utilized for this study. In 2010, schools that were utilizing Learning Ally outperformed non-Learning Ally schools in reading and English in all schools and with significantly higher scores in 8 out of 13 schools (Learning Ally (2011). In 2011, schools using Learning Ally also
outperformed non-Learning Ally schools in reading and English in all schools and significantly outperformed in 7 out of the 13 schools (Learning Ally (2011). In 2010, schools utilizing Learning Ally’s services for mathematics outperformed non-Learning Ally in all schools and scored significantly higher in 7 out of 13 schools (Learning Ally (2011). In 2011, school using Learning Ally outperformed non-Learning Ally schools in mathematics in 12 out of 13 schools and scored significantly higher in 6 out of 13 schools (Learning Ally (2011).

As educators we want all of our students to be successfully engaged in what they are reading. A strategy that has been used successfully by many teachers is “Stop and Jot”. “Stop and Jot” allows children to track their reading by using post-it notes using words or phrases. Lori Jamison (2010) says that giving children the opportunity to be active participants in their learning and apply reading strategies they have learned they will become better readers. Another benefit to “Stop and Jot” is writing down unknown vocabulary words and looking them up in a dictionary. This gives students the chance to be in charge of their own learning and utilize resources available to them in the classroom.

With practice, students will dig deeper into what they are reading and increase their reading comprehension skills without even realizing it. When children use the method “Stop and Jot” they are writing a few words or even a sentence to describe what they picture is going on in the text, something they wonder about the text, what they think is going to happen or what they think about what is happening, what they feel, something interesting they came across, or something they feel a connection to. These are all strategies that engage a child while they are reading.
During guided reading teachers scaffold, support and guide students in using various reading strategies so that they can apply these strategies with rightful purpose and automatically when they are independently reading. Guided reading is a great opportunity for teachers to model the strategy “Stop and Jot”. This also allows the teacher to engage the students in meaningful conversation about what they are reading. Teachers and students can discuss the “Stop and Jot” they have written and expand on their conversation from there.

It is important for teachers not just to scrap the surface when discussing a text, but to dig deeper so that their students have a greater understanding about what they are reading. The three types of questioning literal, inferential, and evaluative can be integrating into our daily discussions about a text (W&M School of Education, 2014). Literal reading comprehension questions focus on questions that have responses directly stated in the text. This allows the student to recall details, sequence events, and summarizing the text (W&M School of Education, 2014). This is probably to most frequent type of reading comprehension questioning we do as teachers. Examples would be, “What is the name of the main character?” or “Where did the event take place?” (W&M School of Education, 2014). These questions just scratch the surface and do not give the student the opportunity to dig deeper. Inferential reading comprehension questioning digs a little deeper. This line of questioning involves questions that have responses that are directly stated, implied or require additional information (W&M School of Education, 2014). This gives the reader the opportunity to connect the dots so to speak, draw conclusions about the text while coming up with answers that are not clearly stated (W&M School of Education, 2014). Some examples of inferential comprehension questions are, “What is Billy likely to do next?”, or “What types of
problems or conflicts does Billy face?” The highest level of reading comprehension questioning is the one that we often forget, evaluative. This focuses on critical thinking and having students formulate responses based on their prior knowledge, life experiences and formulating opinions (W&M School of Education, 2014). Some examples of evaluative reading comprehension questions would be, “What other characters from other books you have read does Billy remind you of?”, or “Where have you encountered similar conflicts?” These are questions that require children to critically think and access prior knowledge to answer questions.

According to the Association for Supervision and Curriculum Development (ASCD) (2014), “Stop and Jot” encourages writing across the curriculum. When students are using the stop-and-jot strategy it supports enriched classroom discussions and directs the students through the first step of the writing process: brainstorming (Association for Supervision and Curriculum Development, 2014). Stopping-and-jotting involves a pause during reading, viewing a video, listening to a lecture, a discussion taking place, any activity that is requiring the students to respond to a question and write key ideas down (Association for Supervision and Curriculum Development, 2014).

**Response to Intervention Implementation**

The implementation of RTI begins when a plan that is put into place by a committee for a student who has either behavioral or learning concerns using scientific, research-based instruction. RTI is an integrated approach that services general and special education students that provides high-quality instruction and intervention designed to meet the individual student’s needs, monitors student’s progress over time to make
educational decisions and track their level of performance (National Association of Special Education Teachers, 2007).

In the school in which this research was conducted, at the beginning of the school year reading benchmarks were given where students read a text, answered question within the text, beyond the text, and key understanding about the text. Based on the student’s accuracy, fluency, and comprehension they were scored on a rubric and placed on a reading level. Teachers use these assessments to guide our instruction and focus on key areas that the students are struggling in. This allows the teacher to place students in homogeneous groups and focus on their reading deficits. Once students are placed into groups the teacher can gear their instruction and incorporate interventions into their daily lessons for students who require additional support.

RTI tier 2 focuses on students whose performance and degree of progress substantially fall behind those in their grade level. This intervention is conducted in the general education classroom that is curriculum-based and monitors student’s success or failure frequently.

**Response to Intervention Program Effectiveness**

According to Safer and Fleischman (2005), student progress monitoring assists teachers by using student performance data to frequently assess the effectiveness of their teaching. This in turn allows the teachers to steer their instruction and interventions in certain ways. To effectively implement student progress monitoring, the teacher identifies the student’s current level of performance and identifies goals that the student’s needs to read within a certain time period (Safer and Fleischman 2005). Once the time period is determined then the rate of progress the student must make to meet those goals is
identified (Safer and Fleischman (2005). It is important to track a student’s progress so that you know when an intervention is working and when a more intensive intervention needs to be added.

Overall, progress monitoring is essential with any student regardless if they are general education, RTI, or special education. Monitoring students’ progress is an essential part of creating appropriate interventions and meaningful lessons in the classroom. This is why ongoing assessments are so critical when tracking a student’s level of progress or lack thereof. These assessments provide documentation which identifies change in the rate that the students are learning. As students complete these assessments your instruction and interventions are going to change as well. Maintaining the program’s effectiveness is extremely important to the integrity of the program. Without progress monitoring students will never exit RTI and will be life RTI students.

Monitoring the progress of an RTI intervention will ultimately lead to a child’s success or failure. If we are monitoring these interventions we can see which are beneficial to the child and which are not. This also measures the effectiveness of whether or not the RTI services put into place are beneficial to this child, if more intensive interventions are required, or if special education services are needed.

Summary

According to Zygouris-Coe (2012), print resources seem to be more reliable than digital devices and that children are required to have additional comprehension skills to navigate through digital text effectively. Technology has come a long way over the years and will continue to develop new and upcoming devices to assist students in learning various skills. Learning Ally has proven that it shows more positives than negative.
Children have made gains in their reading in general as well as in word recognition, reading rate and reading comprehension. Jamison (2010) argues states that “Stop and Jot” reading requires students to be active participants while reading because they actually have to “do” something, rather than just read. Having the student’s place a pot-it note on a page and focusing on an idea requires the reader to interact with the text (Jamison, (2010). They love using their post-it notes to take notes and identify various things in the text that stick out to them. These students also feel accepted by their peers and confident in sharing their “jot” during guided reading.

QAR has also shown to have positive outcomes for students using this strategy. QAR allows students to identify which subgroup a reading comprehension question belongs to and in turn correctly respond to it (Cummins, Streiff and Ceprano (2012). This also gives students more confidence and more positive results in their reading comprehension skills (Cummins, Streiff and Ceprano (2012).

Since I have implemented this strategy into my RTI tier 2 intervention I have noticed that my students love using this program and enjoy incorporating the “Stop and Jot” strategy while listening to the text. Students were able to recall facts and make inferences about the text while listening to the story. We recently started a new read aloud in class that is significantly above the RTI students reading level, however they enjoy listening to the text via Learning Ally and are able to recall facts and make connections to the text while discussing as a group.
Chapter 3

Methodology

This study was conducted in a public school district in southern New Jersey. The school district has a 54% poverty level according to public town information. The elementary school in which this research was conducted has a poverty level of 46%. The school consists of 121 boys and 81 girls for a total population of 202 fourth grade students. Of these 202 students, 119 boys, 83 girls, 199 of these students are in district, 3 students are out of district, 168 students are considered general education, 34 students are classified as special education, 15 of which are self-contained, 19 are placed in an in-class resource (ICR) or In-class support (ICS) classroom and 9 students are receiving Response to Intervention (RTI) services for mathematics, language arts literacy or both in the classroom.

The students who participated in this study were all fourth grade students who are currently receiving response to intervention (RTI) services. These students are identified as having difficulty with reading comprehension. The interventions were provided in a classroom setting in an elementary school in southern New Jersey. Two students received interventions in a classroom consisting of 27 students, 6 of which are classified as special education, 4 were exited from the schools English as a Second-Language Program (ESL), 2 students who have discipline difficulties, and 2 students who receive the RTI services. The second classroom is composed on 27 students, 4 who are classified as special education, 1 student who has discipline difficulties, and 4 students who are receiving RTI services. All RTI services are rendered by the special education teaching in the classroom.
Participant 1: MJ is a fourth grade Hispanic, male who currently receives Response to Intervention (RTI) services for mathematics and English language arts through the school district. MJ’s primary language in his home is English and he receives breakfast and lunch at school through the state. He was referred to the I & RS team in spring of 2015 and was found to be eligible for RTI services for mathematics and English language arts beginning fall, 2015.

Participant 2: CB is a fourth grade Hispanic, male who currently receives Response to Intervention (RTI) services for mathematics and English language arts. CB’s primary language at home is Spanish and he receives breakfast and lunch at school through state funding. CB was referred to the I & RS team in fall 2014 where he was found to qualify for intensive RTI intervention for mathematics and English language arts. Child Study team testing was recommended for CB but the family did not want to explore those options. CB continues to receive RTI intervention in both mathematics and English language arts.

Participant 3: DT is a Hispanic, female who currently received Response to Intervention (RTI) services for English language arts. DT’s primary language at home is English and she receives breakfast and lunch at school provided by the state. DT was referred to the I & RS team in the fall/winter of 2013 where she was found to be qualified for RTI intervention for English language arts. DT continues to receive RTI intervention for English language arts due to her deficits in reading comprehension.

Participant 4: SJ is a Hispanic, male who currently receives Response to Intervention (RTI) services for English language arts. SJ’s primary language at home is English and he receives breakfast and lunch at school through state funding. SJ was
referred to the I & RS team in spring of 2015 and was found to qualify for RTI services for English language arts. SJ continues to receive RTI intervention for English language arts with a focus in reading comprehension.

Participant 5: QJ is a Hispanic, male who currently receives Response to Intervention (RTI) services for English language arts. QJ’s primary language at home is English and he receives breakfast and lunch at school through the state. QJ was referred to the I & RS team during the 2013/2014 school year where he was found to be eligible for RTI services for English language arts. QJ continues to receive RTI intervention for English language arts for reading comprehension.

Participant 6: SM is a Hispanic, male who currently receives Response to Intervention (RTI) services for English language arts. SM’s primary language at home is Spanish and he receives breakfast and lunch at school provided by the state. SM was referred to the I & RS team during the 2013/2014 school year where he was found eligible for RTI services for English language arts. SM still receives RTI intervention for English language arts due to his reading comprehension and significantly below grade level reading level.

Materials

The *Fountas and Pinnell* Benchmark Assessment System (Heinemann) provides teachers with the data to assist them in gearing their instruction for students. This assessment is given one-on-one and reliably matches the student’s instructional and independent reading abilities (Heinemann, Fountas & Pinnell Literacy (2016)). This benchmark assessment system monitors students reading abilities from kindergarten through grade 12. As a student progresses through the primary, elementary, and
eventually secondary school the text becomes more increasingly challenging as well as the reading comprehension questions that go along with each assessment.

The 6 students who were chosen for this were administered the *Fountas and Pinnell* Benchmark Assessment prior to initiation of the study and all were all found to be reading significantly below the fourth grade reading level. According to Fountas and Pinnell students entering fourth grade should be reading on a level P/Q. By mid-year fourth grade students should be reading on a level R, and by the end of fourth grade students should be reading on a level S. Of these 6 students, 1 is on a level J which is a beginning of grade level for 2nd grade, 4 students are on a level K which is a second grade middle of year reading level, and 1 student on a level O which is the middle of 3rd grade reading level. Fountas and Pinnell measures reading fluency, reading rate and reading comprehension. All of these components generate a student’s reading level.

![Fountas and Pinnell Progress Monitoring by Instructional Text Reading Level](image)

*Figure 1. Fountas and Pinnell Progress Monitoring*
Procedure

The purpose of this study was to measure the effectiveness of two reading comprehension tier 2 interventions for fourth grade students with reading difficulties. The research method used during this study was through interval data collection.

At the beginning of this study baseline data was collected from the previous school year to show the students reading levels in 3rd grade. In September, running records were evaluated to group students and gear instruction. The strategies “Learning Ally” and “Stop and Jot” were implemented in September as well as daily 45 minute small group tier 2 interventions focusing on reading comprehension. Throughout the first marking period informal reading assessments were given to monitor student’s progress. In November, running records were conducted to assess whether or not the students reading level had improved or not. While administering running records students read the text aloud to the teacher and answer reading comprehension questions. These results showed if the strategies “Learning Ally” and “Stop and Jot” were assisting in increasing the students reading comprehension levels. Running Records will be conducted again in mid-February to assess further students growth. The student’s previous running record is compared to their present running record to show if progress was made. Using the Fountas and Pinnell correlation chart students are marked as being independent, instructional or hard on the given running record.

The Fountas and Pinnell Benchmark Assessment System is a formal running record that is conducted in November and again in February. This data will show whether or not a student has shown reading regression, growth or if the student showed no change in reading comprehension. The data collected from these running records will be
evaluated through a correlation measurement. The data will show that using one or both of the intervention strategies “Stop and Jot” and “Learning Ally”, will increase a student’s reading comprehension level, which will in turn increase their running record.

For example, a fourth grade student reading on a level “I” is reading 2 ½ years below grade level. If the interventions put into place throughout the school year increases their reading comprehension we will see the gap between age and reading level decrease rather than increase. If the interventions put into place are not effective, we will see that gap increase between grade level/age and reading level.

Running records are conducted formally twice a school year and informally at the teacher’s digression. These formal assessments are conducted in November and in April. The students who are a part of this study came into fourth grade reading on levels, J, K, and O in September. After utilizing the strategies “Stop and Jot” and “Learning Ally” to improve reading comprehension, running records were administered in November to track progression.

There are two areas of focus on the running records from level A-K and on levels L-Z a third area of focus is added. For students being tested on levels A-K they are asked questions within the text and beyond the text, and students on levels L-Z are asked those questions as well as questions about the text. After the reading comprehension section of the running record is complete students use the accuracy percentage and reading comprehension score to identify the students reading level. If the student is found to be independent on that level you administer another running record on the next level to find their instructional level. If the student had difficulty with that text you may have to go down a level.
Chapter 4

Results

In this pre-post group design, the effects of using the strategies “Stop and Jot” and Learning Ally to increase reading comprehension through Response to Intervention (RTI) were examined with six fourth grade students in an inclusion setting who receive RTI services through the school district. The research questions to be answered were:

1. Will the use of the strategies “Stop and Jot” and “Learning Ally” improve reading comprehension of fourth grade students with reading difficulties through Response to Intervention tier 2 interventions?
2. What effect will these strategies have on reading comprehension?
3. Will students use these strategies during reading to gain a better understanding of what they are reading?

This school district uses the *Fountas and Pinnell Reading Benchmark Assessment* and conducts three formal running records a school year. Additional running records can be done at the teacher’s discretion. Data was gathered by conducting running records on the students in this study in September, November, and February. All of the students were administered the running record following the same procedures. To gain an accurate running record, fluency and reading comprehension scores are averaged together to determine a student’s instructional and independent reading level.
Group Results

Table 1 shows the fluency and comprehension results for each of the six students in this study. This table also indicates the mean score for the group as a whole.

Table 1

*Baseline, Intervention, Post-Intervention Comprehension Results.*

<table>
<thead>
<tr>
<th>Participant</th>
<th>Pre-Intervention Phase</th>
<th>Intervention Phase</th>
<th>Post-Intervention Phase</th>
<th>Pre-Intervention Fountas and Pinnell Running Record Level</th>
<th>Intervention Fountas and Pinnell Running Record Level</th>
<th>Post-Intervention Fountas and Pinnell Running Record Level</th>
<th>Average percentage of three readings</th>
<th>Difference Between Baseline and Post-Intervention Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>70%**</td>
<td>70%**</td>
<td>60%**</td>
<td>O</td>
<td>P</td>
<td>Q</td>
<td>67%</td>
<td>+2</td>
</tr>
<tr>
<td>2</td>
<td>0%**</td>
<td>57%*</td>
<td>50%**</td>
<td>L</td>
<td>K</td>
<td>L</td>
<td>36%</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>71%*</td>
<td>71%*</td>
<td>70%**</td>
<td>K</td>
<td>K</td>
<td>L</td>
<td>71%</td>
<td>+1</td>
</tr>
<tr>
<td>4</td>
<td>86%**</td>
<td>57%**</td>
<td>71%**</td>
<td>M</td>
<td>L</td>
<td>L</td>
<td>71%</td>
<td>-1</td>
</tr>
<tr>
<td>5</td>
<td>57%*</td>
<td>57%*</td>
<td>71%*</td>
<td>J</td>
<td>J</td>
<td>K</td>
<td>62%</td>
<td>+1</td>
</tr>
<tr>
<td>6</td>
<td>71%*</td>
<td>86%*</td>
<td>71%*</td>
<td>H</td>
<td>J</td>
<td>J</td>
<td>76%</td>
<td>+2</td>
</tr>
<tr>
<td>Mean</td>
<td>59%</td>
<td>66%</td>
<td>66%</td>
<td>K</td>
<td>K</td>
<td>L</td>
<td>64%</td>
<td>+5</td>
</tr>
</tbody>
</table>
The reading assessments given were based on the students’ reading level. Each student read the passage one time and answered reading comprehension questions to confirm their understanding of what they have read. The comprehension score was calculated using a percentage that was obtained by dividing the number of questions the students answered correctly by the total number of questions asked. During the intervention phase, each student utilized the strategies “Stop and Jot” and “Learning Ally” while reading on level text.

Pre-intervention data was collected via *Fountas and Pinnell’s Reading Benchmark Assessment* in September and comprehension percentages were taken. Students were scored using the Fountas and Pinnell rubric and assigned an independent and instructional reading level. In November, running records were administered again to show students’ growth during the two month period. Adjustments were made in regards to the frequency in which the interventions were utilized based on the student’s growth or lack thereof. In February, a third running record was conducted to show students reading comprehension growth after utilizing the intervention strategies for an additional three months. Informal running records were done at the teachers’ discretion where no data was collected.

In examining reading comprehension, the results of the overall group showed a mean score of 59% in September. During the intervention phase, the mean from September through November for the group was 66% and from November through January was also 66%. During the Post-Intervention reading there was an increase in 7% from when the baseline data was collected in September until the last reading in February. The results for the overall groups *Fountas and Pinnell Reading Level* in September showed a mean score of K which is a middle of second grade reading level.
During in the intervention phases the mean from September through November was a level K and from November through January was a level L, which is where students should be in their 7th/8th month of second grade. During the Post-Intervention reading there was an increase of 1% in students running records levels from September until February.

**Individual Results**

Table 2 illustrates the results for participant 1 on the reading comprehension pre-intervention, and post-intervention. All of participant 1’s reading comprehension questions were based on a 0-10 point Fountas and Pinnell nonfiction text scoring scale. In the pre-test phase, participant 1 scored 70% in reading comprehension of on-level text. During the intervention phase, also scored 70% in reading comprehension. In the final post-intervention phase this student scored 60% in reading comprehension. Figure 2 illustrates the results for participant 1 on the *Fountas and Pinnell Running Record Level* for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level O, which is the middle of a 3rd grade reading level. In the intervention phase, this participant was tested at a level P and in the post-intervention reading this student tested at a Fountas and Pinnell level Q, which is a beginning of a fourth grade reading level.
**Figure 2.** Participant 1 Reading Comprehension

**Table 2**

*Participant 1 Running Record Level*

<table>
<thead>
<tr>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>P</td>
<td>Q</td>
</tr>
</tbody>
</table>

Figure 3 illustrates the results for participant 2 on the reading comprehension pre-intervention, intervention, and post-intervention. Participant 2’s pre-intervention reading was scored on a 0-10 Fountas and Pinnell scoring scale. The second reading in November was based on a 0-7 Fountas and Pinnell scoring scale and the final reading used a 0-10 Fountas and Pinnell scoring scale. All text used were nonfiction. In the pre-intervention,
participant 2 scored 0% in reading comprehension of on-level text. During the intervention phase, this student also scored 57% in reading comprehension. In the final post-intervention phase this students scored 50% in reading comprehension. Table 3 illustrates the results for participant 2 on the *Fountas and Pinnell Running Record Level* for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level L, which is the middle of a 2nd grade reading level. In the intervention phase, this participant was tested at a level K and in the post-intervention reading, this students tested at a Fountas and Pinnell level L, which is an end of a second grade reading level. Participant 2 made 0% progress and is currently being studied by the child study team for an auditory processing delay.

*Figure 3. Participant 2 Reading Comprehension*
Table 3

Participant 2 Running Record Level

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L</td>
<td>K</td>
<td>L</td>
</tr>
</tbody>
</table>

Figure 4 illustrates the results for participant 3 on the reading comprehension pre-intervention, intervention, and post-intervention. Participant 3’s baseline reading was scored on a 0-7 Fountas and Pinnell scoring scale. The second reading in November was based on a 0-7 Fountas and Pinnell scoring scale and the final reading used a 0-10 Fountas and Pinnell scoring scale. All text used were nonfiction. In the pre-intervention, participant 3 scored 71% in reading comprehension of on-level text. During the intervention phase, this student also scored 71% in reading comprehension. In the final post-intervention phase this student scored 70% in reading comprehension. Table 4 illustrates the results for participant 3 on the Fountas and Pinnell Running Record Level for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level K, which is the middle of a 2nd grade reading level. In the intervention phase, this participant was tested at a level K and in the post-intervention reading this student tested at a Fountas and Pinnell level L, which is an end of a second grade reading level.
Figure 4. Participant 3 Reading Comprehension

Table 4

Participant 3 Running Record Level

<table>
<thead>
<tr>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>K</td>
<td>L</td>
</tr>
</tbody>
</table>

Figure 5 illustrates the results for participant 4 on the reading comprehension pre-intervention, intervention, and post-intervention. All of participant 4’s reading comprehension questions were based on a 0-10 point Fountas and Pinnell nonfiction text scoring scale. In the pre-intervention, participant 4 scored 86% in reading comprehension of on-level text. During the intervention phase, this student also scored 57% in reading...
comprehension. In the final post-intervention phase this student scored 71% in reading comprehension. Table 5 illustrates the results for participant 4 on the *Fountas and Pinnell Running Record Level* for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level M, which is the end of a 2\textsuperscript{nd} grade reading level. In the intervention phase, this participant was tested at a level L and in the post-intervention reading this student tested at a Fountas and Pinnell level L, which is toward the end of a second grade reading level. Participant number 4 made -1% progress. This student often exhibits behavioral problems in the classroom that negatively affect his academics.

*Figure 5. Participant 4 Reading Comprehension*
Table 5

*Participant 4 Running Record Level*

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>L</td>
<td>L</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6 illustrates the results for participant 5 on the reading comprehension pre-intervention, intervention, and post-intervention. All of participant 5’s reading comprehension questions were based on a 0-7 point Fountas and Pinnell nonfiction text scoring scale. In the pre-intervention, participant 5 scored 57% in reading comprehension of on-level text. During the intervention phase, this student also scored 57% in reading comprehension. In the final post-intervention phase this student scored 71% in reading comprehension. Table 6 illustrates the results for participant 5 on the *Fountas and Pinnell Running Record Level* for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level J, which is the beginning of a 2nd grade reading level. In the intervention phase, this participant was tested at a level J and in the post-intervention reading this student tested at a Fountas and Pinnell level K, which is the middle of a second grade reading level.
Figure 6. Participant 5 Reading Comprehension

Table 6

Participant 5 Running Record Level

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>J</td>
<td>J</td>
<td>K</td>
</tr>
</tbody>
</table>

Figure 7 illustrates the results for participant 6 on the reading comprehension pre-intervention, intervention, and post-intervention. All of participant 6’s reading comprehension questions were based on a 0-7 point Fountas and Pinnell nonfiction text scoring scale. In the pre-intervention, participant 6 scored 71% in reading comprehension of on-level text. During the intervention phase, this student also scored 86% in reading comprehension. In the final post-intervention phase this students scored 71% in reading.
comprehension. Table 7 illustrates the results for participant 6 on the *Fountas and Pinnell Running Record Level* for pre-intervention, intervention, and post-intervention. During the pre-intervention phase, participant one was tested at a Fountas and Pinnell level H, which is toward the end of a 1st grade reading level. In the intervention phase, this participant was tested at a level J and in the post-intervention reading this student tested at a Fountas and Pinnell level J, which is the beginning of a second grade reading level.

*Figure 7. Participant 6 Reading Comprehension*
Table 7

*Participant 6 Running Record Level*

<table>
<thead>
<tr>
<th></th>
<th>September</th>
<th>November</th>
<th>February</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>J</td>
<td>J</td>
</tr>
</tbody>
</table>
Chapter 5

Discussion

This study examined the effects of Response to Intervention (RTI) tier II intervention for reading comprehension in fourth grade students. The six participants in this study were students who are currently enrolled in the school districts RTI program, two of whom are being studied for further classification. These two students were screened for communication impairment for an auditory processing delay, and will be studied by the child study team (CST), to see whether or not they qualify for special education services. Of these six participants four of them made progress throughout this study. One participant went down a reading level, and one participant went down a reading level and then back up to where he started. Both of these students have great difficulty with reading comprehension and are being studied by the CST. All of these participants were reading significantly below the fourth grade reading level as determined by beginning of the year assessments with the district required Fountas and Pinnell Benchmark Assessment System.

The Learning Ally and the “Stop and Jot” strategies had an overall positive effect of increasing reading comprehension on these six students. Expectations for this study were that students would increase their reading comprehension skills and in turn increase their reading level. Pre-intervention data was collected in September and interventions were put into place based on results. Two of these participants (Participant 1 and 6) made greater gains in reading comprehension improving two reading levels based on their increased reading comprehension skills. Two participants (Participant 3 and 5) improved
one reading level based on their increased reading comprehension skills due to the interventions put in place in September. One participant (Participant 2) made no progress all year in improving his reading comprehension level. One participant (Participant 4) did not improve in reading comprehension and actually went down a reading level.

According to Wright, Fugett, and Caputa, (2011), reading consists of five essential components: phonemic awareness, phonics, comprehension, vocabulary, and fluency. For the purpose of this study reading comprehension was the only component examined in this study. This study focused on increasing reading comprehension skills through tier 2 Response to Intervention. These participants all utilized the strategies Stop and Jot and Learning Ally.

Children are more likely to understand and recall what they read if they are active learners, according to Dougherty Stahl, (2004). Throughout this study the participants were encouraged to activate prior knowledge, make predictions, organize information, higher order thinking, summarizing what they have read and creating images in their mind. Participants also utilized the gradual release of responsibility model. Teachers modeled a reading comprehension skill and over time students took the lead in applying what they have learned.

Evidence supports that the utilization of technological devices increases reading comprehension. Cardullo, Zygouris-Coe, Wilson, Craanen, and Stafford (2001), conducted research on digital devices showing that children are more interested and focused in what they are reading, compared to a paper-based text. Digital devices also model proper fluency and expression for students. This gives them the opportunity to focus on what is being read and retaining the information, rather than struggling to read.
Comparing this study to the one conducted by Rutgers University in 2004-2005, (Learning Ally 2011), both showed that using Learning Ally’s audio textbooks improved students reading in general. Students in both studies made gains in reading comprehension. This study also gave a pre and post assessment to identify students growth. Overall, both studies concluded that utilizing Learning Ally helped students with mild to moderate learning difficulties improve in reading comprehension.

**Limitations**

During the study, four participants increased their reading comprehension after utilizing the strategies “Stop and Jot” and Learning Ally. The effects of this study being successful were contingent upon students using both of these strategies and applying these strategies while they read independently. If students become distracted and do not apply these strategies while reading they will have difficulty understanding what they have read. Students were taught specific strategies to increase their reading comprehension and if they cannot apply those strategies without being prompted they may continue to struggle with reading comprehension moving forward. Two participants showed little to no improvement in their reading comprehension and are being studied for communication impairment. These students utilized the strategies Learning Ally and “Stop and Jot” and still had difficulty understanding what they were reading.

In the current study, it was determined how much improvement each of these students made by conducting post-intervention assessments. The sample size of this study was limited to only fourth grade students who are currently enrolled in the school districts Response to Intervention (RTI) program. This sample was composed of students who are all on the poverty level and receiving state aid. In order to properly determine whether or
not these strategies truly worked, is to gain a larger sample size from a more diverse student background. The sample did not include special needs students in fourth grade. The participants in this study experienced the interventions of Learning Ally and “Stop and Jot” in the English Language Arts Classroom. If participants utilized these strategies in other academic areas students may have showed more improvement.

**Practical Implications**

The participants in this study experienced the interventions Learning Ally and “Stop and Jot” through the classroom setting. All interventions were carried out through a small group setting, not exceeding three students. All students in the groups were a part of this study, and strategies were applied through guided reading and independent reading. Four of the participants in this study felt that they improved in their reading comprehension due to using *Learning Ally* and “Stop and Jot” daily. The other two participants became frustrated because they cannot remember what they read, and when they reference the text have difficulty pulling out answers.

Both methods, Learning Ally and “Stop and Jot” were beneficial and caused no negative effects on students. Other educators should use these methods to assist students who are struggling with reading fluency, reading comprehension, and reading with proper expression. Learning Ally allows students to concentrate on what is being read to them and focus less on decoding words they are unfamiliar with. In turn students comprehend what they have listened to because they were able to focus on the content of the text. The “Stop and Jot” method also assisted students in increasing their reading comprehension due to the ongoing notes or “jots” being taken throughout their reading. This gave students the opportunity to dig deeper and gain a better understanding to what they are
reading. Both of these methods can be easily implemented with minimal teacher assistance. Students can work independently to adopt a love for reading and in turn increase their reading comprehension.

**Future Studies**

Further research should include a larger sample size to gain a better understanding as to whether or not these strategies are effective in multiple grade levels. Future studies may also incorporate monitoring fluency as well as reading comprehension, and feature a control group of students. Students with disabilities should also be involved in the study to see whether or not these strategies help students who are classified as having a reading comprehension deficit.

Additional assessments should be conducted throughout this study to ensure that students are being monitored more frequently and interventions can be altered at the time students are struggling. Sample sizes should be larger and include students from various socioeconomic backgrounds.

**Conclusion**

This study sought out answers to the question: Will the use of the strategies Learning Ally and “Stop and Jot” delivered as part of tier-2 Response to Intervention model, improve reading comprehension deficits of fourth grade students with reading difficulties. The data that was collected for the six participants in this study showed that the majority of students showed improvement in reading comprehension. Students voiced that they enjoyed using these strategies and really liked having a text being read to them through Learning Ally.
These participants show more confidence while reading aloud in small group. During classroom discussions these students are even contributing their thoughts and ideas while using details from the text to support them. With the combination of Learning Ally and “Stop and Jot” students have two tools to assist them while reading a text in small group or independently. Many students struggle with reading comprehension and should utilize these strategies to help them better understand what they are reading.
References


