

**A COMPARISON OF RESPONSE TO INTERVENTION EFFECTIVENESS BASED ON PROGRAM  
IMPLEMENTATION**

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A Comparison of Response to Intervention Effectiveness Based on Program  
Implementation

A Field Study Report  
Presented to  
The College of Graduate Studies  
Austin Peay State University  
In Partial Fulfillment  
Of the Requirements for the Degree  
Educational Specialist

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August 2014

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By


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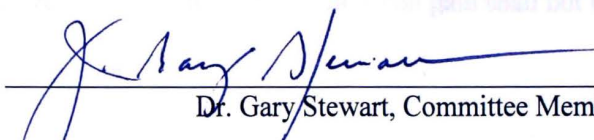
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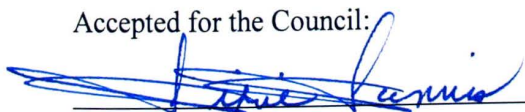
We are submitting a Field Study written by Chassie Combs entitled "A Comparison of Response to Intervention Effectiveness Based on Program Implementation." We have examined the final copy of this Field Study for form and content. We recommend that it be accepted in partial fulfillment of the requirements for the degree of Educational Specialist.

  
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VII. APPENDICES .....	49
A. Teacher Interview Questions .....	50
B. APSU IRB Approval Letter .....	51
C. Cheatham County School District Approval Letter .....	52

## Acknowledgements

I would like to acknowledge my wonderful husband for his love, support, sacrifices, and encouragement throughout my educational successes. I would like to express my appreciation to my children for their sacrifices and supporting me through this endeavor. I would like to thank my father, my mother, my niece, my mother-in-law, and extended family for their support and encouragement in my education. I would like to express my gratitude to my chair, Dr. Benita Bruster, for her dedication, guidance, knowledge, and support within my time here at Austin Peay. I would like to express thanks to my dear friend, Dr. Sherry Gibbs, for supporting me and influencing me as an educator. I would like to express gratitude to my committee member Dr. Gary Stewart, for his support and guidance during my time here at Austin Peay. Also, I would like to thank Dr. Tara Alvey for her support as a committee member of my field study. Lastly, I would like to thank Austin Peay State University for giving me this opportunity and an excellent education.

## ABSTRACT

CHASSIE COMBS. A Comparison of Response to Intervention Effectiveness Based on Program Implementation

The purpose of this study was to examine the effectiveness and the implementation of two different RTI programs at two public elementary Title I schools. Students' reading fluency growth was measured to determine RTI effectiveness. All data was collected from the easyCBM™ database and a teacher response interview was given to each RTI teacher. The study tested four null hypothesis including overall RTI effectiveness, gender, grade level and socioeconomic status. A simple t test was used to calculate two benchmark scores from each school, with a statistical significance level at .05.

The results of the study indicated there was no significant difference in RTI students' reading fluency. There was a significant difference in reading fluency based on gender, grade level and by socioeconomic status. It is important to note that the RTI teachers had a valuable difference in the time students were served. The evaluation of RTI programs being implemented are imperative to the future of school districts student achievement. Further research is highly encouraged, especially for the 2014-2015 school year. Tennessee will implement Response to Intervention and Instruction and future studies have the potential to find reveal valuable information.

## TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION .....	1
Statement of the Problem .....	1
Purpose of the Study .....	2
Significance of the Study .....	3
Limitations .....	3
Research Questions .....	3
Definition of Terms .....	4
II. REVIEW OF LITERATURE.....	5
Introduction .....	5
History of RTI .....	5
What is RTI? .....	9
RTI and Reading Programs .....	14
Problems with RTI .....	15
School-wide RTI .....	21
Additional Research .....	21
Future of RTI .....	22
III. METHODOLOGY.....	23
Introduction .....	23
Research Design .....	23

Population of Study .....	24
Instrumentation .....	24
Assumptions.....	25
Data collection .....	26
Null hypothesis .....	26
IV. RESULTS AND ANALYSIS OF DATA .....	28
Introduction .....	28
Data Analysis .....	29
Research question one .....	31
Research question two .....	32
Research question three .....	33
Research question four .....	34
Qualitative Data .....	35
Teacher Interviews.....	40
V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS .....	41
Summary .....	41
Findings .....	42
Recommendations .....	42
Future Research .....	43
Conclusions .....	43
VI. LIST OF REFERENCES .....	45

## LIST OF TABLES

TABLES	PAGE
1. Demographic Data of students in RTI programs .....	30
2. Demographic Data of RTI student gender and grade level .....	30
3. Significance of t test overall RTI .....	31
4. Significance of post-score mean with RTI program .....	32
5. Significance of t test values by gender .....	33
6. Significance of t test values by grade level .....	34
7. Significance of t test values based on socioeconomic status .....	35
8. School A & B teacher responses .....	36

## CHAPTER I

### INTRODUCTION

Response to Intervention (RTI) is a fairly recent addition to special education law and to schools across the nation. There is limited research that shows specific effects for Response to Intervention (RTI) models. “With RTI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities or other disabilities” (National Dissemination Center for Children with Disabilities, 2014).

“Response to Intervention (RTI) is a multi-tier approach to the early identification and support of students with learning and behavior needs. The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom”, as stated by RTI Action Network (2014).

There are numerous ways RTI models are being implemented from district to district around the nation. More research is needed to unify, design, and implement a program that works.

#### **Statement of the Problem**

Time is a limited resource to districts across the nation due to the requirements of the reauthorization of Individuals with Disabilities Education Improvement Act (IDEA) of 2004 and after implementing No Child Left Behind (NCLB) in 2001. The government has set annual goals for school districts to meet yearly to avoid governmental intervention. School districts are under

pressure to make Adequate Yearly Progress (AYP) and provide proof that Title I funded programs are working by monitoring and reporting student progress.

The current No Child Left Behind (NCLB, 2002) legislation requires educational institutions to utilize research-based reading programs. According to Special Education Case Law (2014), a primary focus of this law is the requirement that school districts and individual schools use effective research-based reading remediation programs so all children are reading at grade level by the end of third grade. The law authorized funds to provide assistance to state educational agencies and local educational agencies in establishing reading programs for students in kindergarten through grade 3 that are founded on scientifically based reading research, to ensure that every student can read at grade level or above no later than the end of grade three.

The evaluations of RTI programs being implemented are imperative to the future of school districts student achievement.

### **Purpose of the Study**

The purpose of this study was to examine the effectiveness and the implementation of two different RTI programs at two public elementary Title I schools. The school district has not selected a specific RTI program to use district-wide. Therefore, students in Tier III RTI programs will be evaluated through the collection of two benchmark scores using Easy CBM™ database to measure reading fluency. Student growth in reading fluency will be measured to determine RTI program effectiveness. This study will provide valuable data for the district in selecting and implementing future RTI programs.

## Significance of the Study

Schools across the country are looking for ways to help struggling readers and diverse learners. Schools are under pressure to make Adequate Yearly Progress (AYP) and prove methods are working. Response to Intervention programs are structured differently throughout the country, and individual school programs are implemented differently depending on the individual students being serving. There is not one single orthodox way of implementing RTI; therefore, school districts are searching for RTI implementation strategies that work best due to the requirement of Adequate Yearly Progress, that is mandated by law.

## Limitations of the Study

Potential limitations can affect results in any given study. The current RTI program being used for the 2013-2014 school year will not be the program used for the 2014-2015 school year. Law will mandate a specific RTI implementation for the 2014-2015 school year in Tennessee. Student attendance in RTI service time could potentially limit results. Another potential limitation is the fluctuation of students entering and dismissing RTI services.

## Research Questions

1. Which RTI program, school A or school B, provided more effective intervention for Tier III K-2 students?
2. Which RTI program, school A or school B, provided more effective intervention based on gender?
3. Which RTI program, school A or school B, provided more effective intervention based on grade level in grades K-2?
4. Which RTI program, school A or school B, provided more effective for students served for Tier III intervention based on socioeconomic status?

## Definitions of Terms

1. Response to Intervention (RTI)- Multi tiered approach designed to support struggling learners and learners with behavioral needs. Response to Intervention is an intervention system that uses data to identify students at risk early on and monitor student progress. Response to Intervention essential components to being effective are high quality instruction, ongoing student assessment, tiered instruction, and parent involvement. RTI Action Network (2014)
2. easyCBM™- Assessment and progress monitoring system adopted by school districts to measure early literacy. Easy CBM is utilized to measure grades K-8 in Reading and Mathematics. The system provides feedback to school districts through data collection and delivering instruction relevant data. Riverside Publishing (2014).
3. Student progress monitoring- Scientifically based practice that is used to evaluate and assess students' academic performance and measure effectiveness of instruction in many content areas.
4. Universal Screening- First and essential step to identifying students at risk for learning difficulties. Universal screening is normally conducted three times per year to assess student performance. Screenings are usually given once in the fall, winter, and spring of a typical school year. RTI Action Network (2014)
5. Adequate Yearly Progress (AYP)- "Under No Child Left Behind (NCLB), schools and school districts are measured on whether the students meet performance benchmarks in math, reading and attendance for grades 3-8 and math, English and graduation rate for high schools. Schools that do not meet the achievement standards for two years are deemed high priority". Tennessee Department of Education (2014).

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **Introduction**

The No Child Left Behind (NCLB) in 2002, along with the reauthorization of Individuals with Disabilities Education Improvement Act of 2004 (IDEA), focused a new light on the identification of special education students. Response to Intervention (RTI) model was the tool to begin meeting the needs of struggling readers. No Child Left Behind set standards for school districts detailing the Adequate Yearly Progress (AYP). Each school must meet AYP requirements to avoid governmental intervention. Response to Intervention was suggested through the reauthorization of IDEA as a way to improve academic performance of struggling students with and without disabilities (Fuchs, Fuchs & Vaughn, 2014). The implementation of RTI programs varies throughout different school systems at different degrees (Martinez & Young, 2011). The tiered structure of RTI is universal for most school systems, but program implementation and RTI assessment is substantially different nationwide. Some schools have implemented RTI on a student-by-student basis and other have implemented school-wide or even district-wide in an effort to improve all student achievement.

#### **History of RTI**

Lohman (2007) stated RTI was developed starting in the late 1970s by numerous researchers seeking a method of identifying learning disabilities that avoids the problems of the discrepancy model. Unlike the discrepancy model, RTI allows for early and intensive interventions in the regular education setting based on a student's learning characteristics before any referral to special education. The benefit of RTI, according to the Lohman (2007), children do not have to "wait to fail" before they receive help.

In 2002, President George W. Bush created a commission called The President's Commission on Excellence in Special Education. The commission was in charge of studying issues related to federal, state, and local special education programs in order to improve the educational performance of students with disabilities (Berdine, 2003). The commission investigated and studied over a period of seven months by receiving testimony from 109 expert witnesses and more than 175 parents, teachers, students with disabilities, including private citizens and community activists. The commission submitted the report and there were nine issues addressed. The President's Commission on Excellence in Special Education (2002) committee found the following:

- 1) The commission found that IDEA provided "basic legal safeguards and access" for children with disabilities, but that process and bureaucracy came before student results and achievement.
- 2) The special education model previously used a "wait to fail" model instead of using early intervention services to help aid student success rather than waiting on failure. Early intervention is needed to prevent students from falling further behind.
- 3) Special education students were general education children first. The two systems, general education and special education, are not separate, even though they have traditionally operated separately. Special education provides additional services to general education, not separate services from special education. General education and special education share responsibilities for children with disabilities, never separate on any level, or cost, instruction or even identification.
- 4) Parents felt the system failed their children and appeared to offer them little options or no options at all. Due to the "wait to fail" model, parents felt helping their child succeed was put

off until failing already occurred. After waiting for failure, parents were presented with options such as special education testing.

5) The threat of litigation developed a culture of compliance, which pulled the focus away from doing what schools were created to do, educate every child.

6) Methods and tools to identify children with special needs that qualified for special education were not valid. This led to misidentification of children year after year and also having other students in need slip through the cracks.

7) Children identified as having a disability require highly qualified teachers.

8) The field of special education was in need of long-term coordination to support students, parents and educators. Also, using evidence-based practices in the special education field.

9) Finally, the focus of the school system resulted in bureaucracy and compliance and not enough on actually educating the children.

The commission focused on three major recommendations to reform the issues identified. The first recommendation was to focus on results not on process. The Individuals with Disabilities Education Act must return to its educational mission: serving the needs of every child... the system must be judged by the opportunities it provides and the outcomes achieved by each child" (President's Commission on Excellence in Special Education, 2002, p. 8).

The second was to "embrace a model of prevention and not a model of failure" (President's Commission on Excellence in Special Education, 2008, p. 9).

Third, children with special needs must be considered as general education children first. Instructional methods must be effective, early intervention services must occur and children with

special needs must have access to the entire school instead of being contained to a separate program (President's Commission on Excellence in Special Education, 2002).

The reauthorization of IDEA was the beginning of RTI to use as a means of early intervention. In 2004, the IDEA authorized funding for the nation to implement RTI instruction. By 2011, seventy-one percent of all school districts had adopted RTI (Robins & Antrim, 2013). The NASDE and CASE White Paper (2006) on RTI detailed growing interest in the use of RTI due to three major changes in IDEA 2004:

(1) "...when determining whether a child has a specific learning disability as defined in section 602, a local education agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability..." [P.L. 108-446, § 614(b)(6)(A)],

(2) "In determining whether a child has a specific learning disability, a local education agency may use a process that determines if the child responds to scientific, research-based intervention as a part of the evaluation procedures ... [P.L. 108-446, § 614(b)(6)(B)], and

(3) a local education agency may use up to 15% of its federal funding "... to develop and implement coordinated, early intervening services...for students in kindergarten through grade 12 (with a particular emphasis on students in kindergarten through grade 3) who have not been identified as needing special education or related services but who need additional academic and behavioral support to succeed in a general education environment" [P.L. 108-446, § 613(f)(1)] (p.1).

The purpose of the NASDE and CASE White Paper was to express the importance of utilizing RTI by general education teachers upon the education community. Response to

Intervention leads an important role in identifying diverse learners and finding the intervention that works best for each student. Historically, RTI has helped teachers and administrators decide which children should be referred for special education services. A child who is struggling, but makes progress through receiving RTI services most likely does not need to be referred for the special education identification process. Students who do not make gains despite intensive interventions should be referred for special education evaluation.

### **What is RTI?**

Fuchs, Mock, Morgan, and Young (2003) described RTI as the front-running alternative to the IQ/achievement discrepancy model that has been the standard for identifying students as Learning Disabled. Response to Intervention uses a dynamic assessment, problem solving, and interventions to assess whether or not there is a learning disability (Fuchs et al., 2003). Fuchs et al (2003) gave the following broad description of RTI. Students are provided with “generally effective” instruction by their classroom teacher. Progress is monitored, those who do not respond get something else, or something more, from their teacher or someone else. Progress continues and those who still did not respond either qualify for special education or for special education evaluation.

Response to Intervention provided help quickly to greater numbers of struggling students (Fuchs et al., 2003). Ridgeway, Price, Simpson, & Rose (2011) stated RTI as “Response to Intervention (RTI) used to promote the use of evidence-based instruction in educational institutions, with the goal of supporting general and specialized educators and enabling these professionals to work together in a comprehensive, integrated manner” (p. 83). Ridgeway et al. (2011) also noted that “RTI provides a protocol for identifying students with specific academic deficits and who demonstrate the need for individualized forms of instruction” (p. 83). Research

indicated that RTI models have been used in reading, math, and behavior (Robinson, Bursuck, & Sinclair, 2013).

There is no standard for RTI implementation; it is implemented in many different ways. The RTI approach has been implemented nationally as a means to provide early intervention, prevent academic problems, and identify learning disabilities (LD) (Robinson, Bursuck, & Sinclair, 2013). The goal of RTI is to intervene before students become in danger of failing behind their peers. Teachers and other school personnel use data to determine a student's needs to improve student achievement. Response to Intervention structured into three different intensity of tiers. Tier I instruction is given to all students in the general education classroom. Universal screenings are given in the area of literacy, academics and behavior. Teachers implement various research-based teaching methods. Curriculum-based assessment and progress monitoring are ongoing and are used to guide differentiated instruction (National Joint Committee on Learning Disabilities, 2005).

Tier II intervention is given to students, who will benefit from extra, more individualized instruction in smaller groups. Teachers and school personnel collaborate to differentiate instruction for those students needing more intense help. Parents are informed of the interventions and are included in planning and monitoring progress. General education teachers receive support and help as needed from other highly qualified educators in order to effectively serve identified children (National Joint Committee on Learning Disabilities, 2005).

Tier III according to Robins & Antrim (2013) involves the school's most effective teachers who provide intensive, individual instruction for students who are not making progress in Tier II. This tier involves an evaluation by a multidisciplinary team to determine if a child has a learning disability or if special education and related services are required. Through the laws

required by IDEA of 2004, parents are informed of their rights and procedural safeguards. Further evaluation from the special education referral process includes standardized tests, norm-referenced measures, observations by parents, teachers, students, as well as the progress monitoring and RTI tiered data collection.

Some key components are assessment and consistency of services. Screenings are short assessments that identify students who may be in need of intervention. Progress monitoring is testing that is done frequently throughout the year to validate if interventions are effective. The data aids with planning proper interventions to use for each student. The data from all students is compiled to track progress to forecast school achievement goals and to examine the appropriateness of the core curriculum being used (National Center on Response to Intervention, 2010).

Ridgeway et al. (2011) collaborative research described further in detail the tiered instruction of RTI. Tier I, or primary tier is available to the entire student body in the general education classroom and consist of high quality, research based instruction along with a universal screening assessment. Once the universal screening is given, the student may be eligible for additional individualized instruction, which is provided by the general education teacher. Tier I is should address 80%-85% of the student population (NASDSE and CASE White paper, 2006).

Tier II, or secondary tier, is more intense than Tier I. Tier II provides individualized approaches that supplement core instruction are combined with existing Tier I interventions. Often, Tier II involves small group instruction, with location, service time and service provider varying. Tier II instruction should monitor progress over several weeks by a multi-disciplinary team. Academic progress may produce findings that students no longer need a more intensive

tier or data may show a more intensive tier is needed. Tier II is used for approximately 15% (NASDSE and CASE White paper, 2006).

Tier III, or tertiary tier, is the most intensive of all the tiers. This tier generally includes the provider and one to two students. Instruction is tailored to meet the needs of the learner. Still, if no progress is made at this tier, the multidisciplinary team seeks referral for special education eligibility. Tier III serves the smallest percentage at approximately 5% of students (NASDSE and CASE White paper, 2006).

Response to Intervention was founded on a set of core principles beginning with the effective teaching of all children and early intervention. Response to Intervention uses a multi-tier model for service delivery; interventions used must be research-based and scientifically validated to the best extent possible. Student progress monitoring and data must be collected to determine instructional decisions. Progress monitoring is imperative to determine whether interventions are having the needed effects or not (NASDSE and CASE White Paper on RTI, 2006).

Bursuck and Blanks (2010) stated: "RTI has the potential to narrow the achievement gap and reduce the number of referrals to special education by catching children before they fail," which reduces special education referrals and reduces misdiagnosing students. However, this tiered instruction offers identification of students with a true educational need that could lead to being identified as an individual needing special education services. In 2010, the National Center for Response to Interventions published *Essential Components of RTI-A Closer Look at Response to Intervention*. The center stated:

"Response to intervention integrates assessment and intervention within a multilevel prevention system to maximize student achievement and to reduce behavioral problems.

With RTI, schools use data to identify students at-risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness, and identify students with learning disabilities or other disabilities", (p.2).

Response to Intervention is not an instructional practice. It is a preventative method designed to help teachers make the best decisions on how to teach their children and to respond quickly to learning difficulties and thereby minimize the effects of learning difficulties (National Center on Response to Intervention, 2010).

Response to Intervention is based on a core set of principles beginning with the effective teaching of all children and early intervention to prevent children from falling behind. Response to Intervention uses a multi-tiered model of service delivery and a problem-solving method to make decisions within the multi-tiered model. Interventions must be research-based and scientifically proven as much as possible. Student progress must be monitored and data gathered in order to make instructional decisions. All students should be universally screened in order to identify their level of need. Diagnostics are needed to determine which children can and cannot achieve in behavioral and academic domains. Progress monitoring is necessary to prove whether the interventions are having the needed effects or not (NASDSE and CASE White Paper, 2006).

There are three components of RTI defined by the NASDE and CASE White Paper (2006):

1. High-quality instruction/intervention, which is defined as instruction or intervention matched to student needs that has been demonstrated through scientific research and practice to produce high learning rates for most students. Individual response is assessed

in RTI and modifications to instruction/intervention or goals are made depending on results with individual students.

2. Learning rate and level of performance are the primary sources of information used in ongoing decision-making. Decisions about the use of more or less intense interventions are made using information on learning rates and levels.
3. Important educational decisions about intensity and likely duration of interventions are based on individual student response to instruction across multiple tiers of intervention. Decisions about the necessity of more intense interventions, including eligibility for special education, exit from special education or other services, are informed by data on learning rate and level.

Interventions that students receive are based on a tiered system. The greater a student's need, the higher tier or intervention he or she is given.

### **RTI and Reading Programs**

Response to Intervention has primarily been used for reading interventions. Torgeson (2002) named reading difficulties as the primary reason for special education referrals. A student who struggles in the area of reading will likely struggle in every subject, as independent reading is increasingly required for taking in information and following directions (Dunn, 2010). A student who struggles with reading will have difficulty fully understanding the directions of other subjects and also math word problems that require reading skills. Comprehension of words in science or social studies will be limited if reading skills are not obtained.

Denton , Nimon, Mathes, Swanson, Kethley, Kurz, & Shih (2010) reported effectiveness of a supplemental early reading intervention with first graders provided favorable results. Their study included students of various socioeconomic status, different settings, varying levels of

teacher experience and training. Through using early interventions, 91% of their at-risk readers could read and spell adequately at the end of first grade. Standards and skills for kindergarteners are significantly more difficult in today's school systems nationwide. Gettinger and Stoiber (2007) studied the effectiveness of EMERGE (Exemplary Model of Early Reading Growth and Excellence) program as an effective intervention program for low-income children in the area of literacy development. The students in the study group outperformed the control group in all areas on the post-test. This study, while providing validity for a useful tool, was not based on a school-wide RTI program.

Hughes (2014) reviewed sixteen different RTI studies to find improvements. All of the studies reviewed examined the impact of an RTI program on academic achievement or performance that resulted in some level of improvement with all sixteen research studies. Improvements were seen at great levels when early intervention was conducted at the elementary level. Response to Intervention provided help quickly to a greater number of struggling students when implementing the three-tiered approach. (Fuchs et al., 2003).

### **Problems with RTI**

Response to Intervention Action Network pointed out some problems that schools encounter when trying to implement RTI (p.1).

1. Underestimating the magnitude of change
2. Taking on too many grade levels, tiers, or buildings in the first year
3. Jumping in without a comprehensive implementation plan
4. Failing to view the implementation as a system-wide change
5. Lacking a designated intervention block time in the master schedule for RTI

6. Focusing on too many resources on administering and collecting assessment data rather than on helping staff learn to use the data
7. Over relying on curriculum-based measurement (CBM) data instead of also using informal diagnostic assessments to further pinpoint needs (The CBM identifies the WHO and monitors progress-the diagnostics pinpoint the WHAT to teach.)
8. Confusing awareness training with implementation training
9. Using approaches to train teachers that are ineffective given the practices that have to be changed.

RTI Action Network gives a brief overview of the six stages of implementation when using RTI:

Exploration- a small team does research to learn as much as they can about RTI in determining whether to implement such an approach.

1. Installation- begins when the decision to implement is made and continues until the first use of the innovation (may include planning, assigning job responsibilities, determining how it will be organized, initial team building).
2. Initial Implementation- where the “rubber meets the road” as many teachers try to use new practices in their day.
3. Full Implementation- practices have been installed and most professionals are comfortable, with practices operating smoothly.
4. Innovation- after implementing the innovation the way it was laid out, this is the time to try to make improvements.
5. Sustainability-in which the focus is on figuring out how to sustain the innovation over the long term.

Fixen, Naoom, Blasé & Wallace (2007) suggested that RTI implementation may take 3-5 years to fully implement a human services innovation and that most schools take at least 3 years to fully implement RTI. Robinson, Bursuck & Sinclair (2013) stated one problem with RTI, “Unfortunately, at a time when interest in RTI is high nationwide, a precise blueprint for implementing it does not exist” (p.1). School districts having access to effective staff development is essential in rural regions and can be challenging when taking into account travel expenses, limited resources, and little connections to higher education (Robinson, Bursuck & Sinclair, 2013). In addition, it may be difficult for rural schools to budget funds and support RTI intervention specialists, instructional coaches, coordinators, school psychologists, and speech and language pathologist.

Noll (2013) researched the top problems and issues that destroy RTI implementation.

Noll outlined the top “seven ways to kill RTI”.

1) Attempting to improve classroom instruction by mandating a core-reading program. Districts should be cautious of commercially produced materials and focus on teacher skills and integrating research-based strategies.

2) Ignoring the high quality of Tier I instruction. Utilizing high quality instruction in Tier I can lower number of students who need more intervention. Response to Intervention service time of thirty minutes cannot make up for poor classroom instruction.

3) Administration should provide effective professional development to teachers. Schools should provide on-site professional development that is ongoing, individualized, differentiated, and data-driven.

4) People should not search for quick RTI fixes instead of seeking strategies that improve reading achievement. Districts should reach out to other districts that have proven success with RTI implementation.

5) Believing that commercially produced intervention programs can improve reading rather than knowledgeable and highly trained personnel can implement a program. Commercially produced and boxed intervention are a dominating problem, districts should use funds to implement a highly effective program.

6) Failing to include assessments that measure the effects of instruction and intervention on reading of connected text, rather than word lists. Educators should not use assessments that isolate and should incorporate assessments to evaluate the reading process.

7) Schools should provide teachers with the support they need to analyze assessment data. Teachers have little time to make instructional changes due to the time consumed administering, scoring, and recording assessment. Noll stated "... many teachers are drowning in numbers with little time or skill to do anything about it" (p. 59).

Hoover and Love (2011) called RTI a constantly evolving process. No rules have been set by the government, only guidelines for what RTI included to incorporate. Individual state departments set the boundaries for RTI, but schools are allowed to develop an RTI program that meet their school population needs. When schools design their RTI program, there is always opportunity to make changes to implementation. This can pose a threat to the success of the RTI implementation process. One critical aspect was the importance of full support, willingness, and cooperation of teachers. Hoover and Love (2011) recommended schools have a team leader who is highly qualified and training in facilitating RTI. A case study involved three different schools in the western region of the United States. Three educators assisted in solving problems that

arose when trying to implement RTI. One problem was when transitioning to the three-tiered RTI model, giving additional instruction, progress monitoring, and integrating Tier 1 and Tier 2 instruction. Hoover and Love (2011) detailed key challenges found in all school settings and provided the following guidance to educators who are attempting to implement a school-wide RTI process:

1. Operating from a clear understanding of the RTI framework to be implemented in the school is important, especially as related to transitioning from the previous referral model to the contemporary RTI model.
2. Whereas school-wide and district-wide RTI professional development provided a general knowledge base of understanding, ongoing supports assist school teams to more directly address RTI issues specific to their schools.
3. An understanding of the interactions between Tier I and Tier II instruction is essential for effective collaboration between general education classroom teachers (i.e., Tier I instruction) and those providing Tier II supplemental supports.
4. School teams responsible for making RTI instructional and eligibility decisions that establish and adhere to clear decision rules where cut scores, rate of progress, and gap analysis results are taken into consideration are best positioned to make informed data-based decisions.
5. A process for providing periodic and ongoing support to team leaders in their task of leading RTI implementation in their schools may be of significant benefit, as this model empowers a school staff to quickly and directly deal with their own site-based RTI issues in a timely and efficient manner (p.47).

Harlacher, Walker & Sanford (2010) stated that teachers must be given instruction on how to intensify and differentiate their teaching. Educators must understand how to accurately assess students and identify those who are struggling. Failing to provide the appropriate support and direction to teachers along with the lack of training will kill the true utilization of RTI. Training, assessments, data monitoring systems can be costly to a school district.

Grigorenko (2009) identified a host of limitations with RTI and through the evaluation of current research on RTI:

- A lack of clarity in translating information obtained in the context of RTI into regulations for identifying children with special education needs.
- The primary focus of RTI on elementary grades.
- The primary focus of RTI on reading, with some limited information available for Math and very little information for other academic skills and domains.
- The primary focus on SLDs and limited attention to other special needs.
- A lack of consideration of level of ability (i.e., lack of provision for children with high levels of ability who, although achieving at the average level of ability underachieve for their level of potential).
- A lack of differentiation between limited English proficiency and low SES as sources of underachievement.
- The need to combining RTI-based information with other sources of information (e.g., on general ability and cognitive functioning and behavior.
- A lack of working models incorporating RTI consistently with existing practices within the LEA or private educational settings.
- A lack of professionals and/or professional training enabling the implementation of RTI.

## School-wide RTI

Using RTI school-wide has very little research to support using the method. Response to Intervention methods used school-wide appeared to not be used often in school systems. School districts using RTI school-wide must invest in assessments, instructional material, and possibly even more personnel to pursue a school-wide RTI program. By using RTI methods, systems are costly in time and resources according to Fuchs, Fuchs, and Compton (2012). Teachers must be trained to conduct benchmarking and progress monitoring, as well as training to teach RTI interventions.

Mahdavi and Beebe-Frankenberger (2009) conducted a study involving two rural schools in Montana that implemented school-wide RTI. The main focus of their study was on social validity of the implementation, the effectiveness of collaboration, and the acceptability of RTI. They found that the longer RTI was utilized, the more effective it became, and the more comfortable the staff and the community became with it and the more the children improved. Teachers were hesitant at first, but the longer they were involved in the RTI process and when improvements were showing, the more they enjoyed and accepted the process.

## Additional Research

There is a need for additional research on RTI and in the area of RTI implementation methods. Many articles indicated how RTI should be implemented and what RTI must consist of to be successful. However, RTI used as a school-wide method has very little research. With high demands on schools to make AYP, additional research is imperative to conduct. The main goal of RTI is to prevent learning difficulties. Future research of the new RtI<sup>2</sup> program nationwide would be valuable in comparing reading fluency from 2013-14 school year to 2014-2015 school year to evaluate program effectiveness.

## Future of RTI

Beginning July 1, 2014 the state of Tennessee will be implementing an RTI program statewide required by law and mandated for all schools to implement. Other school districts across the country are implementing RtI<sup>2</sup> as well.

“Response to Instruction and Intervention (RtI<sup>2</sup>) is a path to providing instructional opportunity to any student struggling to succeed and should not be viewed as a path to special education eligibility. The Tennessee Department of Education is committed to offering support to districts throughout the transition to RtI<sup>2</sup>. Professional development for district leaders, school psychologists, and teachers in the RtI<sup>2</sup> model is available. The intent is to create a statewide RTI plan that is clear, consistent, and easy to follow along with the necessary supports to create a smooth transition” RTI Implementation Guide, 2014, pg.5”.

Tennessee is one of many states searching for an effective RTI implementation program. Taking an implementation structure statewide will pose an opportunity for research in the near future. Tennessee schools will be testing and benchmarking students' reading and math skills to begin the 2014-2015 school year. Benchmark scores will give school districts a baseline score to place students in three different tiers and begin serving struggling learners. Response to Intervention services is mandated for 30 minutes each day for Tier II and 45-60 minutes for Tier III interventions. General education and special education teachers are responsible for implementing services in their school's RTI program.

## CHAPTER III

### METHODOLOGY

#### **Introduction**

The purpose of this study was to examine the effectiveness and the implementation of two different RTI programs at two public elementary Title I schools. The school district has not selected a specific RTI program to use district-wide. Response to Intervention students in Tier III were evaluated on reading fluency through the collection of two benchmark scores using easyCBM™. Student growth was measured to determine RTI program effectiveness. This study provided valuable data for the district in selecting and implementing future RTI programs.

#### **Research Design**

This study used a mixed method design. The quantitative component of this design will consist of a simple t-test to measure student progress of reading fluency. The qualitative component of this study was an open-ended teacher interview to examine each teachers' experience and RTI program implementation plan. Response to Intervention services was the independent variable and the reading fluency rate was the dependent variable within this study. A t-test was used to test the research hypothesis. The open-ended interview was conducted with each RTI teacher at school A and school B. Archival data from easyCBM™ was collected from RTI teachers at school A and school B.

## Population of Study

The population of this study consisted of students served in two different RTI programs at two different public elementary Title I schools in grades K-2<sup>nd</sup>. Students in Tier III of each RTI program at each Title I elementary school were examined based on easyCBM™ data collection. easyCBM™ “is an enhanced district assessment system designed by researchers at the University of Oregon as an integral part of an RTI (Response to Intervention) model”. The population of students selected were all in RTI Tier III programs at each Title I school ranging from K-2<sup>nd</sup> grade. Data was collected based on student reading fluency. Teachers in School A collected data from 11 kindergartners, 11 first graders, and eight second graders. Teachers in School B collected data from 12 kindergartners, 17 first graders, and 11 second graders. Teachers in School A examined a total of 30 Tier III RTI students, and teachers in School B examined a total of 40 Tier III RTI students. Students were evaluated based on reading fluency scores from fall and spring benchmark scores using easyCBM™ from the 2013-2014 school year.

## Instrumentation

Teachers were given a questionnaire consisting of 11 questions, see Appendix A. The assessment instrument the two schools use to collect reading fluency data is easyCBM™. easyCBM™ is a data collection tool created to measure reading fluency and math. easyCBM™ has built in assessments within the database by grade level and an organized data collection system. Students are placed in the easyCBM™ database and scores are entered by the teacher after testing is completed. The assessment program easyCBM™ organizes the data and reports student data in color-coded graphs for math and reading. The assessment database easyCBM™, is used district-wide to measure reading fluency. The easyCBM™ is utilized to measure grades

K-8 in Reading and Mathematics. The data system provided feedback to school districts through data collection and delivering instruction relevant data (Riverside Publishing, 2014, easyCBM™ Progress made easy for RTI).

Students were evaluated based on reading fluency from fall and spring benchmark assessments. The archival data collected consists of reading fluency scores from RTI students in school A and school B. Two sets of scores (fall and spring of the 2013-2014 school year) were obtained from the RTI teachers. Archival data were collected through the permission of the local school district for the 2013-2014 school year.

Teacher interviews were conducted through phone interviews with each teacher. The interview consisted of questions regarding each teachers experience, education level, class size, and caseload numbers. Other questions focused on each teacher's RTI program, such as how many times per week each student is served and how consistent services are given. The teachers were asked if technology is utilized during services, materials they use and what assessments measures are used. Overall general reports were given by each teacher during the interview to express their personal feelings about their RTI program. It is important to note that each teacher serving students at school A and school B were highly qualified with over 15 years of teaching experience and both teachers hold master degrees. The qualitative data revealed some important aspects to gain a better understanding of each Title I schools' RTI programs.

### **Assumptions**

There were several assumptions made by the researcher for this study such as both teachers accurately recorded data and used the same assessments. The researcher also assumed that both teachers serving their individual program were highly qualified teachers and served their students consistently and effectively.

## **Data Collection**

Archival data was printed from easyCBM™ database and was obtained from the RTI teachers at school A and school B. The data consisted of two sets of data benchmark scores (fall and spring). The students in Tier III of RTI were evaluated through the collection of two benchmark scores using easyCBM™. Student growth was measured to determine RTI program effectiveness. The spreadsheets were collected from RTI teacher A and teacher B. Students identity was not disclosed on data sheets.

The researcher recorded the teacher interview responses through phone interviews. Both RTI teachers participated with the interview and gave the researcher valuable information regarding their schools' RTI program. The RTI teachers answered questions that gave the researcher a more in-depth knowledge of their teaching experiences and personal understandings of their RTI program. Teacher A was highly qualified with over 15 years experience and held a master's degree. Teacher B also was highly qualified with over 12 years experience and a master's degree.

## **Null Hypothesis**

*Hypothesis one (Ho1):* There will be no statistically significant difference in the reading fluency of RTI students served at each Title I school based on Easy CBM® scores.

*Hypothesis two (Ho2):* There will be no statistically significant difference in the scores of students served based on gender.

*Hypothesis three (Ho3):* There will be no statistically significant difference in the scores of students served based on grade level.

*Hypothesis four (Ho4):* There will be no statistically significant difference for students receiving RTI services based on socioeconomic differences.

## CHAPTER IV

### RESULTS AND ANALYSIS OF DATA

#### **Introduction**

This study evaluated the data collected from two Title I schools, school A and school B, for one full school year during 2013-2014 and teacher interviews. Students that did not have two benchmark scores were removed from the data pool. Students that moved out of the school during the 2013-2014 school year were also removed from the data pool. Response to Intervention teachers from each Title I school collected data on the RTI students they served. School A and school B teachers served students in Tier III of the RTI program. Students were assessed by the RTI teacher at each school using easyCBM™ assessments and data collection system. Data was collected from 70 students total; data included three benchmark scores fall, winter, and spring. For this study, fall benchmark scores were used as a pre-test and spring benchmark scores were used as a post-test to compare student growth in reading fluency.

Program effectiveness was based on results of interviews from the two Title I RTI teachers. The researcher documented teacher responses from phone interviews. Questions evaluated teacher experience, education level, caseload numbers, service hours to students, and their general feelings about their RTI program

Assessments used through easyCBM™ were the same for school A and school B. Kindergarteners were assessed based on letter sounds, first and second graders were tested on word reading passage fluency. The assessment given to kindergarten was a sixty-second timed test, testing one hundred and ten different letter sounds. Students were presented with the assessment and were encouraged by the teacher to put their finger on each letter block and follow from left to right. For example, students had to look at each letter and name the correct sound.

For example, letters are out of order and include uppercase and lower case. Teachers use an assessor's copy and students have a copy of the assessment.

First graders and second graders were assessed on reading passage fluency. Students were given a reading passage, a one-minute timed assessment, that measured their reading fluency or words per minute (WPM). Teachers make specific marks on the same assessment page as the student reads. Each RTI teacher entered the student scores collected from students' assessments into the easyCBM™ database.

### **Data Analysis**

The quantitative data of this study is presented in this chapter by each research question and null hypothesis. The quantitative data within this study was obtained by using a t-test to evaluate student reading fluency growth at each Title I school with a significance level p-value of 0.05. The mean value of school A and school B post scores were compared to analyze program effectiveness.

Qualitative data was collected through teacher interview by phone; each Title I RTI teacher participated. Following the phone interviews, all teacher responses were recorded and analyzed to determine difference between RTI programs. Throughout this study quantitative and qualitative data are presented in tables.

The demographics are given in Table 1 from school A and school B and the table gives gender and socioeconomic status for school A and school B. School A had a total of 30 students and school B had a total of 40 students receiving RTI services in Tier III. It is of interest to note that school A had 10 fewer students than school B. Also, school B had only 4 students that did not qualify for free and reduced lunch, while school A had 6 students. School A had more males than females receiving RTI services. School B had an even distribution of male and females.

School A had a total of 30 students and school B had a total of 40 students receiving RTI services in Tier III.

Table 1

*Demographic Data of students in RTI programs*

	Male	Female	Free/Reduced
School A	18	12	24
School B	20	20	36
Total	38	32	70

Table 2 outlines the demographic data for each Title I school, school A and school B.

School A had a total of 30 students receiving RTI services and school B had a total of 40 students. All students received RTI services in a Tier III program, the most intensive tier of RTI.

Table 2

*Demographic Data of RTI student gender and grade level*

	Kindergarten		First grade		Second grade	
	Male	Female	Male	Female	Male	Female
School A	7	4	7	4	4	4
School B	9	3	7	10	4	7

Research question one

The first question researched in this study was: Which RTI program, school A or school B, provided more effective intervention for Tier III K-2 students?

Null hypothesis one (Ho1)

The null hypothesis one correlates to research question one: There will be no statistically significant difference in the reading fluency of RTI students served at each Title I school based on Easy CBM™ scores.

Table 3 contains the data relevant to null hypothesis one. Pre-scores for school A and school B were analyzed to determine if the students started on the same reading level. School A and B pre-scores used in a t test presented no significant difference with a p-value at 0.973. When post scores were evaluated using a simple t-test there was no significant difference with a p-value of 0.052 based on null hypothesis one. It is important to mention that both schools pre-score p-value was 0.973 and improved to 0.052. The data suggested RTI services made some difference overall when comparing p-value scores, but null hypothesis one (Ho1) must be accepted due to p-value of 0.052. There was no statistically significant difference in the overall growth of RTI students at each Title I school based on Easy CBM™ scores.

Table 3

Significance of t test overall RTI

	Pre-score Sig.	Post-score t test Sig.
School A and School B	0.973	0.052

Significance level set at p-value 0.05

Table 4 contains the data relevant to research question one: Which RTI program, school A or school B, provided more effective intervention for Tier III K-2 students?

The data to answer research question one compared school A post scores to school B post scores by calculating the mean values of reading fluency. School A’s mean value was 35 words per minute and school B’s mean value was 27.73 words per minute. When comparing mean values, school A student reading fluency increased by 7.27 words per minute on average when compared to school B. Table 4 lists the mean values of school A and school B based on a t-test evaluating each schools’ post- score.

Table 4

*Significance of post-score mean with RTI programs*

	Mean
School A	35
School B	27.73

**Research question two**

The second question researched in this study was: Which RTI program, school A or school B, provided more effective intervention based on gender?

**Null hypothesis two (Ho2)**

The null hypothesis two compares with research question two: There will be no statistically significant difference in the scores of students served based on gender.

Table 5 contains the relevant data to research question two. To test the hypothesis a simple t-test was used to determine a significance in male and female pre and post reading fluency scores. School A and B males showed a significant difference with a p-value of 0.020

and females p-value of 0.649. Hypothesis two (Ho2) was rejected due the significance made by the male population at school A and B.

Table 5

Significance of t test values by gender

	Male		Female	
	Pre	Post	Pre	Post
School A&B	0.488	0.020	0.527	0.649
Significance level p-value 0.05				

### Research question three

The third question researched in this study was: Which RTI program, school A or school B, provided more effective intervention based on grade level in grades K-2?

### Null hypothesis three (Ho3)

The null hypothesis three correlates with research question three: There will be no statistically significant difference in the scores of students served based on grade level.

Table 6 contains relevant data to research question three. Hypothesis three was tested using a t-test to evaluate school A and school B pre and post reading fluency scores based on grade level. There was a significant difference in kindergarten with a p-value of 0.002 and first grade p-value at 0.011. Second graders did not show a significant difference with a p-value of 0.496. Hypothesis three (Ho3) was rejected due to the significant difference that was made by kindergarten and first graders at school A and B.

Table 6

Significance of t test values by grade level

	Kindergarten		First grade		Second grade	
	Pre	Post	Pre	Post	Pre	Post
School A&B	0.110	0.002	0.572	0.011	0.439	0.496
Sig. difference	Yes		Yes		No	
Significance level set at p-value 0.05						

**Research question four**

The fourth question researched in this study was: Which RTI program, school A or school B, provided more effective for students served for Tier III intervention based on socioeconomic status?

**Null hypothesis four (Ho4)**

The null hypothesis four correlates with research question four: There will be no statistically significant difference for students receiving RTI services based on socioeconomic differences.

Table 7 contains relevant data related to research question four. Hypothesis four was tested using a t-test to find the significance level of students pre and post scores based on their socioeconomic status. Hypothesis four (Ho4) is rejected due to free/reduced population p-value of 0.042. This indicates that RTI programs had an effective impact on the free and reduced student population at school A and B.

Table 7

*Significance of t test values based on socioeconomic status*

	Free/Reduced Status		Paid Status	
	Pre	Post	Pre	Post
School A&B	0.425	0.042	0.193	0.622

**Qualitative Data**

This study used a mixed method design using quantitative and qualitative components. The qualitative data used in this study consisted of an open-ended response teacher interview, see Appendix A. Each Title I RTI teacher completed the interview with the researcher. The open-ended response teacher interviews give the researcher a better understanding of each school’s RTI program implementation. Table 8 contain interview questions and teacher responses.

Table 8

*School A & B Teacher Responses*

Interview Questions	Teacher A Response	Teacher B Response
1. How many students do you serve?	Approximately 70	41
2. What grade levels do you serve?	K-4	K-2
3. Describe your RTI program.	The grade levels have a time-scheduled daily for RTI. I take the lowest students (Tier III) who are not special education. I worked with each group for an hour. K is just 40 minutes. 1 <sup>st</sup> grade is 50 minutes.	Due to our block schedule I see each grade level for 30 minutes each day. I have 3 groups of kindergarten, 3 groups of first graders, and 2 groups of second graders.

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4. How many times per week do you serve students?	5	5
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5. How consistent are you at serving each student?	Consistent, I am required to attend trainings, meetings, outside of school, etc. I am also responsible for benchmark testing and data that prevents me from having classes.	Yes, other than meetings, conferences, and special area planning days.
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6. What materials do you use?	Sight words, phrase lists, reading materials, phonics activities, computer programs, and manipulatives.	No set curriculum, Promethean board, teacher made materials and reading materials.
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7. What assessment measures	Easy CBM, Phonics Diagnostic tool, STAR	Easy CBM and Discovery Education
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do you use?                      Reading, STAR Math,  
    STAR Early Literacy,  
    and Discovery Education

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8. Do you use technology during RTI services?	Yes. Computers, iPads, Promethean board	Yes, Promethean board, computer programs
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9. Do student absences affect services?	Yes. Students miss all instruction, practice, and the reinforcement of skills if absent	Yes
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10. Do you feel your RTI program is organized?	Yes. We have scheduled a time for every grade. Some of the grade levels organize students based	No, it is in transition. I think it will be better next year due to new RTI implementation program statewide.
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on school assessment

data for that time period.

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11. What are your general feelings about your RTI program?	We have support and Title I funds are used to purchase materials and technology. I believe the extra time is great for the students who are needing extra help. Those students get that each day without missing classroom instruction.	Our block schedule conflicted with RTI scheduling and limited my time to serve students. Some of my groups were too large with 10-11 students in one group. I'm excited about next years program, I want teachers to have a better understanding of what RTI is and that it is not only done by me.
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## Teacher Interviews

It is important to note that Teacher A, at school A, reported that she served students five times per week, for one hour. Kindergarten was served for 40 minutes each day, first graders 50 minutes per day, and second grade for 60 minutes. Teacher B, at school B, reported she served students for 30 minutes, each grade level was served for 30 minutes. Also, it is important to note that Teacher B reported their school operated on a block schedule. The block schedule was described as students switching between three different teachers daily. Students at school B had a teacher for math, reading/language arts, and science/social studies. Students in Tier III in school B's program was served during science/social studies block. Teacher A reported their school operated on a traditional schedule and students were served during science and social studies to limit loss of instruction time. Another important aspect to mention is teacher B reported some groups consisted of 10 to 11 students, teacher A did not report group size in the interview. The qualitative data revealed some important aspects to gain a better understanding of each Title I schools' RTI programs. Based on the interview data and the outcomes of the Easy CBM fluency checks it is evident that students on a traditional schedule perform better than students on a block schedule. Based on the evidence from the data it would appear that a closer examination of scheduling of RTI students is one element of their success.

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

School administrators and teachers are under pressure to make Adequate Yearly Progress (AYP) and provide proof that Title I funded programs are working. The current No Child Left Behind (NCLB; 2001) legislation requires educational institutions to utilize research-based reading programs. The law authorized funds to provide assistance to state educational agencies and local educational agencies in establishing reading programs for students in kindergarten through third grade are based on scientifically based reading research, to ensure that every student can read at grade level or above no later than the end of grade three.

There is limited research that shows a specific effective Response to Intervention (RTI) models. The purpose of this study was to examine the effectiveness and the implementation of two different RTI programs at two public elementary Title I schools. This study examined the effectiveness of Tier III RTI programs on 70 students. Response to Intervention students in Tier III were evaluated on reading fluency through the collection of two benchmark scores using Easy CBM. Student growth was measured to determine RTI program effectiveness by grade level, gender, and socioeconomic status. This study provided valuable data for the district and other school districts in selecting and implementing future RTI programs.

#### Findings

Response to Intervention programs at each Title I school showed effectiveness based on grade level, gender, and socioeconomic status. Indicating RTI has a positive impact on the growth of students' reading fluency. There was evidence that school A's population performed better than school B's population by evaluating the mean value of students' growth in reading

fluency. Student growth was measured by the words per minute students could read on assessments.

Response to Intervention services made a significant difference with students in grades kindergarten and first grade, but did not have a significant impact on second graders. Data indicated a significant difference in males, but there was not a significant difference when testing the female population. There was also a significant impact on the free and reduced lunch population.

It is important to note that each teacher serving students at school A and school B were highly qualified with over 15 years experience and both hold master's degrees. The qualitative data revealed some important aspects to gain a better understanding of each Title I schools' RTI programs. Teacher A served students for up to 60 minutes in some groups while Teacher B was limited to 30-minute sessions due to block scheduling. Another important aspect is that Teacher A had fewer students to serve than Teacher B and Teacher A served a higher free and reduced population. Each teacher appeared to be very organized and consistent with data collection and monitoring student progress based on the responses of each teacher and the organization of the data in easyCBM™

## **Recommendations**

Based on this study, it appears RTI has a positive impact on student reading fluency. The continuation of RTI services are recommended when implemented by highly qualified instructors. The easyCBM™ database is recommended to be used as an assessment tool and student monitoring system for the future.

The teacher interviews were used a qualitative component in this study, after reviewing, it is recommended to serve students in Tier III five times per week for at least 50 minutes each

day due to growth of reading fluency. The elementary population appears to perform better when using a traditional school schedule and not a block schedule.

### **Future Research**

There is a need for further research to evaluate the effectiveness of RTI programs. Two Title I schools were examined in this study and it would be of great importance to conduct a district-wide study for all Title I schools to measure RTI effectiveness. This school year, 2014-2015, Tennessee will be implementing Response to Instruction and Intervention (RtI<sup>2</sup>). It would be highly recommended to compare student growth after RtI<sup>2</sup> has been implemented to reveal RtI<sup>2</sup> effectiveness compared with RTI program effectiveness used during 2013-2014 school year.

### **Conclusion**

The purpose of this study was to examine the effectiveness and the implementation of two different RTI programs at two public elementary Title I schools. Response To Intervention students in Tier III were evaluated on reading fluency through the collection of two benchmark scores using Easy CBM. Student growth was measured to determine RTI program effectiveness by grade level, gender, and socioeconomic status. This research provides valuable data for the district and other school districts in selecting and implementing future RTI programs.

Based on this study, it appears RTI has a positive impact reading fluency growth based on significance by grade level, gender, and socioeconomic status. The continuation of RTI services is recommended when implemented by highly qualified instructors. The easyCBM™ database is recommended to be used as an assessment tool and student monitoring system for the future.

This research is important because schools and teachers are mandated to improve test scores and improve reading fluency in order for every child to be on grade level in the area of

reading. The findings within this study can help support RTI program implementation for the future. This study showed students improved their reading fluency based on grade level, gender, and socioeconomic status. This research supports that RTI has a positive impact on students' reading fluency and is beneficial to students. Future research on other RTI programs' effectiveness and statewide RTI program implementation is critical as to meet the needs of struggling learners.

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## Appendices

## **Interview Questions**

### **Appendix A:**

1. How many students do you serve?
2. What grade levels do you serve?
3. Describe your RTI program?
4. How many times per week do you serve students?
5. How consistent are you at serving each student?
6. What materials do you use?
7. What assessment measures do you use?
8. Do you use technology during RTI services?
9. Do student absences affect services?
10. Do you feel your RTI program is organized?
11. What are your general feelings about your RTI program?

## Appendix B:

### APSU IRB Approval Letter



**AUSTIN PEAY STATE UNIVERSITY  
INSTITUTIONAL REVIEW BOARD**

Date: 6/11/2014

RE: 14-034- A comparison of responses to intervention effectiveness based on program implementation

Dear Chassie Combs,

We appreciate your cooperation with the human research review process at Austin Peay State University.

This is to confirm that your research proposal has been reviewed and approved for exemption from further review. Exemption is granted under the Common Rule 45 CFR 46.101 (b) (4); the research involves only the study of existing data, and the data is recorded in such a manner that the subjects cannot be identified directly or through identifiers. Approval is for one calendar year and will expire 6/11/2015.

You may conduct your study as described in your application, effective immediately. Please note that any changes to the study have the potential for changing the exempt status of your study, and must be promptly reported and approved by APIRB before continuing. Some changes may be approved by expedited review; others require full board review. If you have any questions or require further information, you can contact me by phone (931-221-6106) or email ([shepherd0@apsu.edu](mailto:shepherd0@apsu.edu)).

Again, thank you for your cooperation with the APSU IRB and the human research review process.

Sincerely,

Omie Shepherd, Chair  
Austin Peay Institutional Review Board

Cc: Dr. Benita Bruster

## Appendix C

### CCSD Approval Letter

Dear Mr. [Name]:

I am writing to you regarding the bottom 15% of

the district's students based on gender

and the bottom 15% of the district's students

and the bottom 15% of the district's students

and the bottom 15% of the district's students



# CHEATHAM COUNTY

## Board of Education

102 Elizabeth Street  
Ashland City, Tennessee 37015

Director of Schools

**Stan Curtis, Ed.D.**

Phone: (615) 792-5664

Fax: (615) 792-2551

April 2, 2014

Chassie Combs  
1915 Greenwood Road  
Charlotte, Tennessee 37036

Dear Ms. Combs,

Congratulations! I am pleased that you are pursuing an Education Specialist Degree at Austin Peay State University. As part of your research process, you have my permission to conduct research using archival data and future data from East Cheatham Elementary and West Cheatham Elementary schools for the field study.

I understand that the data will be compared to answer the following research questions:

1. *Which RTI intervention program provided the most effective intervention for the bottom 15% of the K-2 students?*
2. *Which RTI intervention program provided to be the most effective intervention based on gender for grades K-2?*
3. *Which RTI intervention program provided most effective intervention between the bottom 15% of students based on socioeconomic status for grades K-2?*

I look forward to seeing the final report. Remember, children and learning are our lifelong priorities.

Sincerely,

Stan Curtis, Ed.D.  
Director of Schools

SC:cm

cc: Dr. Beth Batson  
Dr. Sherry Gibbs