

Assessing Teacher Concerns Regarding Response to Instruction and Intervention

by

Darlene Elizabeth McKinney

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctorate of Assessment, Learning and School Improvement

Middle Tennessee State University
August 2016

Dissertation Committee:

Dr. Donald Snead, Chair

Dr. Marcia Melton

Dr. Joseph Phillips

I dedicate this research to Ruth Fauss-Bland, my mother, and John E. McKinney Sr., my husband; both have always supported and encouraged my efforts. Love to both of you!

ACKNOWLEDGMENTS

I would like to thank my family, John, Hannah, Rachel, and Johnny for loving me, supporting me, and not giving up on me while I traveled down this long doctoral road. During these five years of continuous graduate studies and working full-time, I know all of you sacrificed much due to my absence in mind, body, and spirit in daily activities and family events. Thank you for that sacrifice and supporting me during this journey. I love you all!

I would also like to thank my sister, Kelly Chaves, who supported me in all my technology woes. Thank you for being patient and walking me through each “crisis” with gentleness.

I also want to give special thanks to my committee members for their investment in and influence on me. Dr. Joe Phillips, you have been one of my biggest cheerleaders for almost ten years now. You have inspired me, challenged me, and cultivated a self-confidence in me that I did not know I had. Dr. Marcia Melton, you inspired me as well, by sharing your personal doctoral journey with me before I even entertained the idea of pursuing a doctorate. Your testimony about your doctoral experience prompted me to “think” maybe I could continue on and become Dr. Darlene McKinney. Dr. Donald Snead, just thinking about what to write to you has brought a smile across my face. From our first meeting I knew you were someone special. I thank you for your guidance, your patience, your gentleness, your availability, and sharing your knowledge. You have encouraged me, questioned me, and understood me when I needed it. You have made this long process bearable. I feel so fortunate to have learned from all three of you—Dr. Snead, Dr. Melton, and Dr. Phillips—during this process.

ABSTRACT

All individuals go through a process of change when implementing a new innovation. This descriptive study determines there is a difference in the stages of concern regarding Response to Instruction and Intervention (RTI²), Tennessee's design model for Response to Intervention, (RTI) for 87 teachers from 8 different schools in a county in Middle Tennessee. The Concerns Based Adoption Model (CBAM) and the Stages of Concern Questionnaire (SoCQ) were used to gather results for this study. These differences in the stages of concern are described between faculty position sub-groups, teachers receiving Teacher Effect Data and those teachers not receiving Teacher Effect Data from the Tennessee Department of Education, and between teacher effectiveness levels, levels 1, 2, 3, 4, and 5 as reported by the Tennessee Value Added Assessment System.

TABLE OF CONTENTS

LIST OF TABLES	vii
CHAPTER ONE: INTRODUCTION.....	1
Response to Intervention (RTI)	3
Statement of Purpose	7
Significance of the Study	8
Theoretical Framework.....	9
Description of the Study	10
Definition of Terms	11
Limitations	13
Summary	14
CHAPTER TWO: LITERATURE REVIEW.....	15
Introduction.....	15
RTI ² , Response to Instruction and Intervention – What Is It?.....	15
Effectiveness of Response to Intervention.....	19
Stages of Concern Questionnaire (SoCQ)	32
Summary	40
CHAPTER THREE: METHODOLOGY	42
Problem.....	42
Population	43
Data Collection	44
Instrument	44
Procedure	46
Data Analysis	48

Summary.....	48
CHAPTER FOUR: RESULTS	49
Introduction.....	49
Results.....	51
Summary.....	55
CHAPTER FIVE: SUMMARY OF THE STUDY	57
Introduction.....	57
Findings	58
Discussion and Implication.....	63
Limitations	71
Conclusions.....	72
Recommendations.....	73
Summary.....	75
REFERENCES	76
APPENDICES	83
APPENDIX A STAGES OF CONCERN QUESTIONNAIRE	84

LIST OF TABLES

Table 1. The Stages of Concern about an Innovation.....	46
Table 2. Faculty Position of Stages of Concern Questionnaire Participants	50
Table 3. Highest Intensity Stages of Concern by Faculty Subgroups.....	51
Table 4. Highest Intensity Stages of Concern by Teacher Effectiveness Levels.....	53
Table 5. Highest Intensity Stages of Concern by Teachers with No Effectiveness Levels.....	53
Table 6. Highest Intensity Stages of Concern by TVAAS Teacher Effectiveness Levels for All Participants with TVAAS Teacher Effectiveness Data	55

CHAPTER ONE

INTRODUCTION

The National Joint Committee on Learning Disabilities was concerned with the identification of students with specific learning disabilities (1997) and issued a statement that set forth how these students were assessed. As a result of their work, a group of educators, researchers, professional organizations and student advocacy groups got together to provide leadership in creating a process of identifying students with learning disabilities (Bradley, Danielson, & Doolittle, 2007).

The President's Commission on Excellence in Special Education (2002) stated a need to revise special education program because of the increase in the number of students being identified with specific learning disabilities (SLD). By 1997 the number of students labeled as SLD had tripled since 1976. According to the report there were six million children in special education, half of whom were labeled as having SLD. The likelihood of an African-American child being labeled as SLD or mentally retarded was double that of white and American Indian/Alaskan native children. Black students were half as likely as white children to be labeled as emotionally disturbed. The report stated that this was especially true for black males. At the time of the report students were identified as having SLD through identification of a discrepancy between IQ and achievement scores (Fuchs & Fuchs, 2006). One possible reason for the increase in students being labeled with SLD is the lack of early interventions for students at the onset of academic struggles. Another reason may be the fact that states have different formulas for identifying students with SLD. States received federal dollars for every student with SLD, which gave them an incentive to identify students with SLD. Furthermore, a

disproportionate number of students were misidentified with SLD due to ethnicity and lower socioeconomic status. The commission was additionally burdened by the fact that students with SLD rarely exited the special education program.

The findings in the President's Commission on Excellence in Special Education (2002) indicate that the process of identifying special education needs based on IQ combined with the model of waiting for a student to fail before implementing academic interventions resulted in the over-identification of students with SLD. According to the commission, lack of teacher training and enhanced curriculum with rigor magnified the learning shortcomings of students at risk academically, which added to the misidentification of students with SLD.

The commission concluded that these findings failed our students. The failure entailed not having a results-focused model that concentrated on the learning needs of each child, allowing students to exit the special education program and enter into the general education program once learning goals were met.

At the same time the commission's findings were released, more and more research data supporting education reform was also being released. Research reported that identifying students with SLD through a discrepancy between IQ and achievements was irrelevant, resulting in much criticism towards the practice. While these concerns were prompting change within the special education program, Response to Intervention (RTI) was being conceived through the collective efforts of educators, researchers, professional organizations, and student advocate teams (Bradley, Danielson, & Doolittle, 2007). RTI was embraced as the new avenue for identifying students with SLD and a program design for delivering early intervention to any student at risk (Johnson, Mellard,

Fuchs, & McKnight, 2006; Gresham & Vellutino, 2010; Restori, Gresham, & Cook, 2008).

Response to Intervention (RTI)

What is RTI?

RTI is an intervention rooted in research-based best practices involving direct instruction, curriculum based measurement, and precision teaching at the school level that results in learning for all students (Tilly, n.d.). RTI is implemented by a team of educators through a systematic problem solving method that involves universal screening, progress monitoring, and tiered service delivery models. It is designed to address specific skills needed by a student and provide exiting of the intervention program for the student if adequate response to a given intervention is measured (Buffman, Mattos, & Weber, 2009; DuFour, DuFour, & Eaker, 2008; Fuchs & Fuchs, 2006; Marston, Muyskens, Lau, & Canter, 2003).

The benefits of RTI are numerous. RTI is intervention-focused, supporting struggling students before they fail. Once students demonstrate that they are struggling or falling behind their peers, an intervention is designed to support them academically, whether it is a grade level standards based skill intervention or a deficit skill intervention. RTI interventions use high quality research-based programs, delivered by highly trained staff and teachers. Progress monitoring of student performance takes place systematically. To determine whether interventions are successful or if more intense interventions are needed, teams of professionals collaborate and review progress monitoring and universal screening data to ensure that students receive the most appropriate instruction and interventions. When a student fails to make progress with

intense interventions, the student may be referred for SLD evaluation. This practice has replaced the traditional model of waiting for a student to fail before referral for SLD evaluation can be made (Buffman, Mattos, & Weber, 2009; DuFour, DuFour, & Eaker, 2008).

RTI presents challenges as well as benefits. Mastropieri and Scruggs (2005) argue that even though RTI is to be delivered to students by highly trained staff and teachers, it is not. Mastropieri et al. (2005) report that the demands of RTI have changed the role of general education teachers, special education teachers, and diagnosticians. They report that these teachers have not been properly trained to implement RTI as it has been designed. Additionally, concerns exist as to who ensures the fidelity of interventions and instruction by general education teachers, special education teachers, and interventionists. Questions have surfaced regarding who will pay for RTI—special education funds or general education funds (Mastropieri and Scruggs, 2005).

Components of Response to Intervention (RTI)

RTI models differ depending on local and school resources and the specific tools utilized in implementing RTI. However, the National Research Center on Learning Disabilities (2006) defines the components of RTI as universal screening, progress monitoring, and a tiered service-delivery model instructed with scientific research-based curriculum (National Research Center).

Universal Screener

A universal screener is an assessment given three times yearly to all students at a given grade level to determine which students are at risk academically. The purpose of the universal screener is to identify students who score in the lower 25th percentile on

basic skills at a particular grade level and are targeted for instructional intervention (Johnson et al., 2006).

Progress Monitoring

Progress monitoring involves assessing students on a specific academic skill during the intervention. Fuchs and Deshler (2007) refer to this process as determining whether the student is responsive or nonresponsive to the deficiency skills intervention. Decision-making regarding student placement and instructional grouping is determined by the data gathered from the progress monitoring (Fuchs & Deshler, 2007; Johnson et al., 2006).

Tiered Service-Delivery Model

Tiered Service-Delivery Model is a three-tiered model consisting of Tiers I, II, and III. Tier I is instructional only and is delivered in the general education class to all students. Data on basic grade level skills is collected from Tier I, and students who fall at or below the 25th percentile are targeted for Tier II intervention. Students who test above the 25th percentile are moved on a traditional instructional track without specific interventions.

Tiers II and III are both instructional intervention levels targeting specific deficiency skills in reading and math. Students who score in the 5th percentile are placed in Tier III from the onset. Tier II instruction goes beyond the general classroom and focuses intensely on specific deficit skills in small groups. Data is collected from Tier II at selected intervals and decisions are made regarding whether students exit the intervention phase, remain in Tier II for further intervention, or are placed in Tier III. Tier III involves more intense intervention that could include a special education referral

or the delivery of special education services. A collaborative special educational team and various other team members develop an intervention plan to address the specific learning needs of students receiving Tier III instruction.

Although the Tier Model has common components, no set design exists for a three-tiered model. The details of implementation have been modified and presented in many different educational designs by different states, school districts, and schools, but all have the universal screeners, progress monitoring, and tiered service-delivery (Buffman et al., 2009; Canter, 2004; Johnson et al., 2006).

All of the instructional tiers are required to use scientifically research-based curricula. No Child Left Behind (U.S. Government, 2001) stated that scientifically based research must be rigorous, systematic, and objective in order to maintain reliable and valid educational data. Fuchs et al. (2007) explain that for curriculum to be validated as scientifically research-based, experimental testing should have been conducted on the curriculum involving a control group with numerous trials (Fuchs et al., 2007).

Early identification and early intervention for academically at-risk students and the special education process that regulated the procedures used to identify students with SLD has failed students. The President's Commission on Excellence in Special Education (2002) painted a clear picture of the need for educational reform, supporting early identification and intervention for at-risk students.

The state of Tennessee's response to the call for educational reform was the creation of Response to Intervention and Instruction (RTI²). RTI² provides early identification of students at risk coupled with academic intervention and instruction on student-specific deficient skills. Students who receive the most intense intervention with

RTI² score one-and-a-half to two grade levels behind their peers. Interventions address deficit skills in math, reading, or both subjects with research-based curricula. When at-risk students do not respond to the interventions provided through RTI², they may go through an evaluation of SLD using data collected through the RTI² process. Besides providing early identification and intervention for at risk students, the RTI² program targets closing the achievement gap among student groups as intended by the No Child Left Behind Act of 2001 (NCLB).

Statement of Purpose

The purpose of the study was to determine whether differences exist in the stages of concern among educators regarding Tennessee's Response to Instruction and Intervention (RTI²). The classification of each group was determined by the faculty position and direct accountability for student learning. Teachers in grades 3 through 5 were classified by teacher level as determined by the Tennessee Value Added Assessment System (TVAAS), as indicated by the teacher on the questionnaire, to determine whether a difference exists in the level of concern regarding RTI² by teacher level.

Response to instruction and intervention is an intervention program designed to enhance the quality of instruction provided for all students, with a focus on students with SLD or at risk of failing school-wide. Determining RTI²'s effects on educators may clarify some important aspects of the level of RTI² implementation. To the interest of the researcher, the following research questions were raised to pursue understanding about how educators transition to the implementation of a new innovation RTI².

1. Does the stage of concern regarding RTI² differ among educators depending on their faculty position at the school?
2. Does the stage of concern regarding RTI² differ among educators depending on whether or not they are held directly accountable for student learning by the Tennessee Value Added Assessment System?
3. Does the stage of concern regarding RTI² differ among third through fifth grade teachers, those held directly accountable for student learning growth, depending on the teacher effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System?

Descriptive data was collected and analyzed through the Stages of Concern Questionnaire (SoCQ) to determine what influence various components of interest had on the use of this instructional program, RTI².

Significance of the Study

This study is of importance because RTI² is a recent mandate initiated by federal guidelines and implemented at the local level throughout the state of Tennessee. RTI² is an intervention rooted in research-based best practices involving direct instruction, curriculum based measurement, and precision teaching at the school level that results in learning for all students (Tilly, n.d.). A team of educators implements RTI through a systematic problem solving method that involves universal screening, progress monitoring, and tiered service delivery models. RTI is designed to address specific skills needed by a student and allows for exiting the intervention if adequate response to a given intervention is measured (Buffman, Mattos, & Weber, 2009; DuFour, DuFour, & Eaker, 2008; Fuchs & Fuchs, 2006; Marston, Muyskens, Lau, & Canter, 2003). With the

framework of RTI² addressing the deficit skills of approximately 15% to 20% of the student population and the other 80% to 85% of the student population receiving instruction or enrichment on grade level standards, educational leaders and policy makers should become aware of the stages of concern of teachers implementing RTI². With this knowledge school leaders can offer professional developments, which support teachers along their pathway of change in a professional manner.

Theoretical Framework

The theoretical framework directing this study was Hall and Hord's (2001) Concerns-Based Adoption Model (CBAM) and was modeled from LaRocco and Murdica (2009). CBAM describes, explains, and predicts behaviors of individuals and groups of individuals going through the change process while implementing a new innovation (George, Hall, & Stiegelbauer, 2013).

CBAM operates on the premise that embracing a new innovation begins with individuals' varied and unique responses to change, yet suggests that individuals experiencing a new innovation follow a predictable path of concerns coupled with questions (Hall & Hord, 2001). Hord (1987) states that change is a predictable process and not a one-time event. Because an innovation is something new to an individual, the process will involve a diverse set of beliefs, understandings, behaviors, and feelings of preoccupation and consideration. According to Hall and Hord (2001) the concerns in the CBAM model are not necessarily based on fears, anxiety, or worries.

CBAM uses several models to describe the dynamics of the change process in individuals and groups. The Stages of Concern Questionnaire (SoCQ) was the model used in this study. SoCQ describes the stages of concern for individuals in three broad

categories: self, task, and impact. It describes concerns for individuals just prior to the onset of a new innovation as focusing on self. These concerns target personal feelings associated with a new innovation. Most likely at this stage the individual is not concerned with issues related to implementing the innovation but rather focused on feelings of inadequacy or self-doubt. During the next stage of concern individuals or groups are task focused. These individuals are usually at the beginning stages of the implementation of a new innovation. Their concerns often focus on areas such as logistics, preparations, and scheduling. The last stage of concern generally describes the concerns of an individual or group experienced in the implementation of the innovation. The concerns are labeled as impact and are focused on the intended impact produced by the innovation (Hall & Hord, 2001; George et al., 2013).

School leadership responsible for the innovation's implementation are the change facilitators (Hall & Hord, 2001). CBAM's SoCQ is a diagnostic tool used by the change facilitators to identify the concerns of individuals or groups implementing the innovation. CBAM suggests that change facilitators evaluate data from the questionnaire to provide professional developments to support individuals and groups throughout the change process (Hall & Hord, 2001).

Description of the Study

This study describes teachers' concerns regarding the implementation of Response to Instruction and Intervention (RTI²). RTI² is Tennessee's RTI program designed to meet the academic needs of students through grade level instruction and intervention. It provides early identification of students at risk, coupled with academic intervention and instruction on student-specific deficient skills. When at-risk students do

not respond to the interventions provided through RTI², they may be evaluated for a specific learning disability (SLD) using data collected through the RTI² process. In addition to providing early identification and intervention for at-risk students, the RTI² program targets closing the achievement gap among student groups as intended by the No Child Left Behind Act of 2001 (NCLB).

To describe teacher concerns regarding the implementation of RTI², the Stages of Concern Questionnaire (SoCQ) from the Concerns-Based Adoption Model (CBAM) was used to gather results from 87 elementary teachers in eight schools in a county in Middle Tennessee regarding the stages of concern for the innovation of RTI². The SoCQ uses a Likert scale to measure the 35-item questionnaire, revealing the relative intensity for each stage of concern using percentile scores for each participant and subgroup. The participants were given a 30-day window to take the questionnaire online. Once the questionnaires were completed, results were automatically analyzed by Southwest Educational Development Laboratories (SEDL) and used to develop profiles for teacher groups.

Definition of Terms

Accountable—The Tennessee Department of Education defines accountability through TVAAS as teachers who receive an individual growth score for their measured impact on their students' academic progress.

Concern—George (2013, p. 7) defined concern as “Whenever something heightens our feelings or thoughts.”

Faculty Position—The researcher defines faculty position as any certified teacher employed at a given school. For this study, grade level teachers, special education

teachers, interventions, academic coaches, and related arts teachers (gym, library, music, and art) are included.

Innovation—Hord, Stigelbauer, Hall, and George (2006, p. 5) define innovation as “Whatever term was selected to represent whatever change or reform is being implemented. An innovation may be new to the user, or it may be something that has been used for sometime.”

Rigor—Edglossary (2014) defines rigor as lessons that encourage students to question their assumptions and think deeply, rather than lessons that merely demand memorization and information recall.

Scaffolding—Edglossary (2014) defines scaffolding as instructional techniques used to move students progressively toward stronger understanding and, ultimately, greater independence in the learning process.

Special Education—Gresham (2010) defines special education as education of students with mental, physical, emotional, and/or social delays when compared to their peers.

Specific Learning Disability (SLD)—The Individuals with Disabilities Education Act (2004) defines Specific Learning Disability as disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. SLD includes conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

Stages of Concern—Hall and Hord (2001) explain the stages of concern as a pattern of concerns found in people experiencing the process of change involving a new innovation.

Tennessee Value Added Assessment System (TVAAS)—The Tennessee Department of Education defines TVAAS as a statistical system for educational outcome assessment that uses measures of student learning to enable the estimation of teacher, school, and school district statistical distributions.

Limitations

One significant limitation of the study was the accuracy of the participants filling out the questionnaire and the demographics associated with the questionnaire. Even though the questionnaire was completely anonymous the participant may have answered a question as though a superior might discover the answers. In addition, the demographics of the questionnaire may not be accurately completed. Some teachers might not know their teacher effectiveness level as reported by TVAAS and might attempt to answer to the best of their ability, but with inaccuracies. With Teacher Effect Data being restricted data that only the individual teacher can view, there was no way to know with certainty that demographic information was given correctly. Any of these limitations could affect the validity of the study. In addition, participants filled out the survey electronically and in a private location. No one was available to answer participants' questions; therefore misinterpretation of a question could affect the way the question was answered, thus affecting the validity of this study.

Summary

In this chapter the researcher introduced how Response to Intervention (RTI) was the result of a failed special education program due to increased identification of students with specific learning disabilities. The program also lacked instructional support for struggling students prior to failure. The RTI components of universal screening, progress monitoring, and instructional Tiers I, II, and III were discussed. The CBAM and the instrumental tool SoCQ were introduced, along with the researcher's plan to describe teacher concerns regarding Response to Instruction and Intervention (RTI²).

In chapter two, the researcher reviews relevant literature on the components of RTI² and stages of concern using the SoCQ. Chapter three describes the research procedures and materials, and provides a list of the research questions. Chapter four includes the results necessary to answer the research questions. A summary of the investigation and a discussion of the findings and conclusions of the study appear in chapter five.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Response to Intervention or RTI is an intervention tool with many different designs but the same basic components that work together interdependently to address the specific learning needs of academically at-risk students. Hughes and Dexter (2011) define RTI as “an instructional framework through which schools can provide early intervention for students experiencing academic and behavioral difficulties. It is also promoted as an alternative to the IQ-discrepancy model for identifying students with learning disabilities.” The National Research Center for Learning Disabilities defines RTI as “an assessment and intervention process for systematically monitoring student progress and making decisions about the need for instructional modifications or increasingly intensified services using progress monitoring data (Johnson, Mellard, Fuch, & McKnight, 2006). Canter (2007) explains RTI as a problem solving method addressing the academic problems students face through problem identification, problem analysis, instruction/intervention, and evaluation.

RTI², Response to Instruction and Intervention – What Is It?

What Is RTI²?

RTI² is Tennessee’s RTI program designed to meet the academic needs of students through grade level instruction and intervention. The program provides early identification of students at risk coupled with academic intervention and instruction on student-specific deficient skills. When at-risk students do not respond to the interventions provided through RTI², students may be evaluated for SLD using data

collected through the RTI² process. In addition to providing early identification and intervention for at-risk students, the RTI² program targets closing the achievement gap among student groups as intended by the No Child Left Behind Act of 2001 (NCLB).

Students receiving deficit specific intervention are identified as academically at-risk students compared to their grade level peers. Identification results from a score below the 25th percentile on a universal screener and one-and-a-half to two grade levels behind their peers in the state of Tennessee. A universal screener is an assessment that targets specific skills and generally takes a short time to finish. Examples of some of the most commonly used universal screeners include Curriculum-Based Measurement (Fuchs & Fuchs, 2005; Salvia, Ysseldyke, & Bolt, 2007), Dynamic Indicators of Basic Early Literacy Skills (Good, Simmons, & Kame'enui, 2001; Salvia et al., 2007), subtests of the Woodcock Reading Mastery Test–Revised (Woodcock, 1987), and the Woodcock-Johnson–Revised (Woodcock & Johnson, 1989). Universal screeners are given to students three times per year to identify academically at-risk students.

Interventions for at-risk students address deficit skills in math, reading, or both subjects using research-based curriculum. These interventions are known as Tier II and Tier III instruction.

Tier II instruction is small group individualized intervention for students scoring between the eleventh and twenty-fifth percentile on the universal screener and one-and-a-half to two grade levels behind their peers in the state of Tennessee. The instruction targets the deficit skills identified on the universal screener. Highly trained interventionists deliver the instruction during scheduled intervention, instruction, and

enrichment periods that all students in a grade level must attend (Tennessee Department of Education, 2014).

Tier III intervention is small group individualized intervention for students scoring at the tenth percentile or lower on the universal screener and one-and-a-half to two grade levels behind their peers in the state of Tennessee. A highly trained interventionist delivers Tier III instruction targeting student deficit skills during a scheduled intervention, instruction, and enrichment period that all students in a grade level must attend (Tennessee Department of Education, 2014).

Tier I instruction is large group, grade level instruction provided by a highly qualified teacher. The instruction is for all students in the class, including students who receive Tier II and Tier III instruction and students receiving special education services during intervention. Students falling below the twenty-fifth percentile receive all of the Tier I instruction plus Tier II or Tier III instruction (Tennessee Department of Education, 2014).

This is the RTI framework set by the Tennessee Department of Education (TDOE) for RTI². The TDOE understands that the resources available are different within each school and each school district; thus schools' RTI² plans might not be identical in organization and delivery, even though all schools should strive to work within the RTI² framework (Tennessee Department of Education, 2014).

Trained RTI² interventionists implement the Tier II and Tier III instruction for intervention sessions. Tier II and Tier III intervention involves small groups of students receiving increased instructional time on deficient skills. *Highly trained* refers to an interventionist's level of expertise and training in a particular subject, with a particular

skill, or in a research-based intervention program. While Tier II and Tier III interventions are taking place, the general education students (those not receiving any intervention or instruction beyond Tier I instruction, core curriculum all students receive in a particular grade level) receive additional instruction or enrichment on previously taught standards. They may also receive frontloading of new standards for pre-learning opportunities by a highly qualified teacher in that grade level or by support staff. Support staff might include other certified teachers in the building, including music, gym, art, library, and computer teachers and both certified and noncertified educational assistants. This intervention time is protected for Tier II and Tier III intervention on deficient skills and Tier I enrichment, review, or frontloading of grade level standards can last from 45 to 90 minutes per day. The duration of interventions for each grade level is dependent upon the academic needs of the Tier II and Tier III students in that particular grade level, the school schedule, and the availability of personnel to implement intervention.

Intervention time is embedded into the time allocated by the state for core curriculum instruction with no additional instructional time added to instruction day for any of these interventions. All academic standards taught during Tier I intervention time are grade level standards that have been taught or will be taught by the general education teacher for each student receiving Tier I instruction during that grade level's Tier II and Tier III intervention time. Students receiving Tier II or Tier III instruction do not miss Tier I instruction on grade level standards when receiving intervention outside of the general education classroom. Students not receiving Tier II or Tier III instruction do not receive any new instruction beyond the grade level standards that is not presented to all students

during regular classroom instructional time, when all students are present and grade level intervention is not taking place (Tennessee Department of Education, 2014).

Effectiveness of Response to Intervention

Research studies on the full implementation of RTI² are limited; however, five studies on the components of RTI² plus one meta-analysis will be used to support the program's positive effects on student learning. Among the studies presented, all support early identification of at-risk students coupled with various interventions. One of the studies focuses on the effectiveness of instruction support teams IST an RTI model. The meta-analysis compares the effectiveness of RTI models currently in use with models designed for research.

O'Connor, Harty, and Fulmer (2005) conducted a 4-year study to determine the effects of Tier II and Tier III small group interventions, kindergarten students through third grade. The participants were 22 students who qualified as being at-risk and received Tier II and Tier III interventions in two different schools. Throughout the course of the 4-year study, twenty general, special, and remedial education teachers were involved along with approximately 100 students in each grade level K-3.

This study focused on Tier II and Tier III interventions, but before student assessment data was gathered to identify at-risk students, professional development (PD) was initiated for teachers by the research team. The PDs occurred several times in the course of the year, and the topics were based on findings from the National Reading Panel (2000) and data interpretation. The latter of the PD topics was to support instructional activities supporting student learning. The researchers reasoned that PDs would increase the likelihood of improved reading instruction on targeted skills in the

general education classroom. Professional development was considered the first line of intervention in this study.

The researchers began their assessment of students 3 months into the kindergarten year for this cohort of students. The assessments measured rapid letter naming, oral reading fluency, and segmentation. They included subtests of the Woodcock Reading Mastery Tests–Revised–Normative Update. Student selection for tiered interventions included students who were behind their peers in the general education classroom and demonstrated poor phoneme awareness and letter knowledge. This group of at-risk students represented the lower third of each kindergarten class.

Research personnel in small groups of two to three students presented the instruction to the student intervention groups for 10 to 15 minutes three times a week. In kindergarten and first grade the intervention group’s primary skill focus was the same that presented by the general education teacher in the core curriculum. The benefit of these intervention groups compared to the general education classroom was the small size, which allowed the researcher to control the pacing and provide specific instruction focusing on the individual student. In the second and third grade the intervention groups differentiated their instruction, making it more individualized for each student. Some skill focuses included fluency, decoding, and multi-skill groups.

Progress monitoring occurred frequently in the intervention groups, allowing students to exit the intervention when they demonstrated grade level success. Students in the classroom who demonstrated a gap in their progress compared to the class could be placed in an intervention group. These groups were considered to be fluid. Students

could enter and exit with the support of the researcher depending on their classroom performance and the cumulative assessment data gathered through progress monitoring.

Students who were not responsive to the second tier of intervention, Tier II were moved to a more intensive intervention, Tier III. Research team personnel instructed this intervention consisting of one-on-one instruction or groups of two students. The instruction lasted 30 minutes a day, five days a week. The first Tier III group did not assemble until January of the first grade year.

Twenty-two students received Tier II or Tier III instruction during this study. Thirty-one participants entered the study, but nine exited early in kindergarten. The data for those nine participants was not included in the results due to speculation that the data represented a false positive. Seven of the 22 students who participated in the tiered interventions were identified as having a reading disability. The researchers gathered data to create a historical control group to determine the effectiveness of the interventions.

The results support a moderate to large effect size (Cohen's d) for the students eventually identified as having a reading disability compared to the control group at the end of third grade ($ES = 0.4, 1.8, 1.0, \text{ and } 1.4$ respectively for Word Identification, Word Attach, Passage Comprehension, and Fluency). The researchers would like to speculate that students not identified with a reading disability experienced strong outcomes from the intervention, but determined that the sample size was much too small to speculate and such a conclusion would be premature (O'Connor, 2005).

The study presents data only for tiered participants. Assessment data for participants who received only general education core curriculum compared to data for

participants who received any tiered interventions but were not identified with a reading disability would be of interest. The researchers selected students for the tiers representing the lower third of each of the kindergarten classrooms. It would be of interest to know whether the classes were grouped to bring about the best possible situation by making the classes as equal as possible both demographically and by academic level. Research personnel conducted interventions. It is unknown whether schools have the resources to implement tiered interventions at the same level as the research team. It would also be of interest to use a control group of teachers who did not receive the PDs for reading instruction and data interpretation in order to compare their student data with the student data of the teachers who did receive the PDs for reading instruction and data interpretation. The PD component could be a significant part of the student's learning success, and was considered the first intervention.

Vellunto, Scanlon, Zhang, and Schatschneider (2007) conducted a study to determine the effectiveness of early identification of at-risk learners and early interventions at the onset of school entry. Students participating in this study came from 27 half-day kindergarten and one full-day kindergarten lower-middle class classrooms in five different school districts in northern New York state. The study initially involved 462 entry-level kindergarten students identified as academically at risk from among 1,373 screened kindergarteners.

The participants in the study were screened upon entry to kindergarten for letter identification, sensitivity to rhyme, sensitivity to alliteration, counting by ones, number identification, and rapid naming of objects.

The 462 at-risk participants were placed equally randomly in a project-based intervention group receiving experimental interventions and a school based comparison group receiving the common interventions in their home school setting. Tracking was implemented throughout the study for both groups from kindergarten to third grade to measure the effects of the intervention and to evaluate the study.

The students in the project-based intervention group received additional reading interventions outside the classroom, conducted by trained certified teachers and monitored by research staff to ensure fidelity. The intervention groups had two or three students and were conducted two days a week for 30 minutes. At the end of the year each student in the intervention group had received a total of 50 to 60 intervention sessions comprising an additional 25 to 30 hours of instruction likened to the comparison group. The interventions included activities that promoted the development of phonological awareness, knowledge of print concepts, letter identification, knowledge of letter sounds, letter–sound decoding, and sight word identification. Each lesson was designed to meet the child’s individual needs while supporting the instructional program in the grade level classroom.

Upon entering first grade all project-based participants, with the exception of those who left the study through attrition, were screened to determine which were at continued risk academically and which were no longer at risk. The screening focused on knowledge of letter sounds, decoding, and word identification. Learners identified as being at continued risk were 50% of the participants in the project-based intervention group. The other 50% of the participants were considered no longer at risk, and interventions were discontinued.

The students at continued risk were randomly assigned to three different groups at the beginning of first grade. The participants in these two groups continued with 30 minute, one-on-one interventions with a trained project teacher, but focused on different intervention skills. These two groups became the focus of the study. Interventions for one of the groups targeted phonological skills such as phoneme awareness and letter sound decoding. The other group's target consisted of comprehension skills and word meaning. Both groups utilized the same amount of time on sight word learning and writing activities. These interventions continued from the end of October until mid-May of the first grade year before ceasing. The third group received home school interventions and exited this portion of the research-based study.

To determine the effectiveness of early intervention, all participants at onset of the study who were not lost through attrition were tracked through the third grade with the same initial screening instruments used at the onset of the study. The test means and standard deviations were used for measure and comparison. The results of the study support early identification of at-risk learners and the implementation of early interventions. Participants in the project-based groups who received interventions in kindergarten and first grade demonstrated that 84% of the students were reading at grade level by the end of third grade; 16% were not. Of the 84%, 73% received intervention in kindergarten only. The researchers suggest that some of the 16% not reading at grade level may be identified later as reading disabled (Velluinto, 2007).

This study strongly supports the benefits of early identification of at-risk learners and of early interventions. The project-based interventions were conducted by research trained and monitored certified teachers who were not the classroom teacher. School

resources are limited. In all, 117 participants continued through the end of the study. Although the benefits are significant, it is questionable in today's school structure and teacher certified resources whether schools and school districts have the manpower to conduct such intensive interventions. For early interventions such as those presented in this study to take place in our schools, schools will need more resources to hire certified teachers. In addition, reform will be needed in the structure of schools and the way in which interventions are scheduled.

Vaughn, Wanzek, Murray, Scammacca, and Linan-Thompson (2009) conducted a two-year study examining the effects of an intensive reading intervention for students who responded minimally to a less intensive reading intervention conducted under the same study. Participants were 274 first grade students at the onset of the study, selected after assessment with universal screeners in the fall of first grade. The universal screeners identified them as low responders to word fluency, phonemic segmentation fluency, and oral reading fluency.

Participants were randomly selected and placed in one of two groups—treatment or comparison. The treatment group had 153 randomly assigned participants and the comparison group had 121 randomly assigned participants. The first phase of the intervention program for the treatment group consisted of additional reading instruction for 30 minutes a day in small intervention groups of four to six students, progress monitoring, and universal screening three times yearly. These students received either 13 or 26 weeks of intervention depending upon their level of response. A research team provided the instruction. The students were also given the core-reading curriculum in the general education classroom. The general education teacher presented the core

curriculum after receiving professional development. The comparison group was given typical reading instruction in the general education classroom throughout the course of the first grade with no additional interventions provided.

The second phase of the intervention took place in the second grade and was designed for students in the treatment group still identified as low responders based on scores less than 27 in oral fluency on the Dynamic Indicators of Basic Early Literacy Skills. This group included 14 students (five females and nine males) who continued in the reading intervention with a more intense 26-week intervention during throughout second grade. In this phase the intense reading intervention was given to smaller groups of three or four students for 50 minutes each day compared to the phase one groups of four to six students and 30 minutes of intervention. Both phases included progress monitoring and universal screening three times a year. A trained tutor supervised by a research team conducted the interventions (Vaughn et al., 2009).

The effectiveness of the intervention was analyzed over time by a regression discontinuity. The results demonstrated relative benefits of additional reading instruction in small groups including word attack, word identification, reading comprehension, fluency, and teachers' perceptions of academic competence. The students who received the additional reading instruction in small groups were determined to be responsive to the reading of words and text comprehension (Vaughn et al., 2009).

This study supports early intervention and continued intensive intervention for improving student reading outcomes. Research teams were used to conduct the interventions in the treatment groups, which raises questions about effectiveness when the classroom teacher or other educators deliver the interventions in a common school

setting. To support this study, future researchers could conduct a study in a common school setting to evaluate its effectiveness without the use of research teams to conduct the intervention groups.

Only the low responders continued in the study after the first grade. The high responders exited the program with no further data collected. Future studies like this one might opt to collect data on the high responders who exit the interventions after first grade for comparison to the low responders when evaluating the effectiveness of the reading outcomes.

Kovaleski, Gickling, Morrow, and Swank (1999) conducted a study to investigate whether or not students receiving interventions known as instructional support teams (ISTs) display greater gains in time-on-task, task completion, and task comprehension measures compared to students not receiving instructional support. The degree of the students' progress on these measures was connected with their school's level of implementation of the IST program.

The study involved three groups of students from 54 randomly sampled schools across the state of Pennsylvania during the 1991-1992 and 1992-1993 school years. The IST group contained 492 students identified as at risk. Students in the IST group attended schools where IST implementations were already in place. The Non-IST group consisted of 237 students who were recommended for the study as academically at risk according to teachers and pupil service staff. Students who were already being served in special education were not eligible for this study group, but students who were being evaluated for special education could participate in the study.

The average group (control group) in this study consisted of 1,189 comparison students from the same class as each participant for the IST group and the Non-IST group for 1991-1992 portion of the study. During the 1992-1993 portion of the study only one comparison student was selected from the same classroom as each participant in the IST group and the Non-IST group. Data collected from these students were used as a standard to measure the performance of students in both the IST group and the Non-IST group.

Data collected was gathered before (pretest) and after (posttest, approximately 45 days after pretest) the reading and math skills interventions with a follow-up observation after the pretest. The interventionist addressed the specific learning needs of each child. The reading intervention involved components that are necessary to develop reading skills including word identification, word study, comprehension, fluency, and self-monitoring strategies with direct instruction. In math the focus interventions were implemented on the student's instructional level and included numeration, computation, problem solving, and work efficiency. The strategy of choice was a "talk-aloud." Math interventions involved modeling math problems by talking through the process of computation for completion. Once the teacher completed the process the student mimicked the process on another problem, "talking-aloud."

The students' performances were measured to determine how long they took to successfully perform an academic task of appropriate difficulty. The variables included, time on task, task completion, and task comprehension. Time on task represented the amount of time a student was engaged in completing the academic task. Scores were measured in 10-second increments, with students noted as being on task if they attended

to the assignment fully during a given 10 seconds. Task completion represented the portion of work completed and not whether the work was completed correctly. Task comprehension was determined by questioning the students immediately after the completion of the task. A trained academic learning time (ALT) member measured the performance tasks.

Each school's level of implementation of the IST was measured by the state mandated regulations using a validation instrument with 103 items. Each school was reviewed by the number of featured items in place in that school. The categories of implementation involved organization and management, student assessment, design and implementation of classroom interventions, teamwork, screening and referral to multidisciplinary education, and training and outcome. Each school was rated on a 4-point scale (0 = feature not in place, 1 = basic feature in place, 2 = feature in place at effective level, 3 = feature in place at model level). The score measures for levels of implementation were not conducted by this study but were scored and reported by the state of Pennsylvania. The results of this study used Pennsylvania's scored levels of implementation for schools as criteria to report the results of student measured gains.

The results of time on task were calculated in percentage means. The pretest and posttest assessments showed very little difference between the average group and the IST and Non-IST groups, with the exception that the IST group scored as having low levels of IST implementation schools. That group demonstrated less time on task than the Non-IST group. The results for task completion were calculated in percentage means. Both treatment groups and the average group showed gains in task completion with no significant difference between the groups.

The results for task comprehension were calculated in percentage means. The data indicated significant gain for the IST and Non-IST groups compared to the average group, with little difference in gains between the IST and Non-IST groups. Between the two treatment groups implementing IST, the schools with a high level of implementation had significantly larger student measured gains compared to schools with the lower levels of ITS implementation (Kovaleski, 1999).

This study supports the concept that IST intervention increases task comprehension for students in schools with high state-reported scores in IST implementation compared to schools with low state-reported scores in IST implementation and the Non-IST group. Data supports little difference in gains between the Non-IST group and the IST groups in schools scoring low in IST implementation. This study does not report whether the intervention was conducted in small groups or individually, how long the interventions took place and when, nor the faculty position or profession of the interventionist. Without this information it is difficult to conclude whether components in this intervention used for this study are feasible for the limited resources and restricted schedules in today's schools.

Burns, Appleton, and Stehouwer (2005) conducted a meta-analysis examining the effectiveness of field based RTI models to research implemented RTI models. Four large-scale field based RTI models—Heartland model, Minneapolis problem-solving model, instructional support teams, and intervention based assessment—were compared with other RTI models designed for research.

Journal articles collected for this meta-analysis were selected through a database search using several scholarly search engines and the same search terms. Once articles

were selected for consideration, reference lists were evaluated along with other criteria, leaving 21 articles to be included in the meta-analysis. The articles were grouped as descriptive research for one of the major existing RTI models or as descriptive research for a research model of RTI. Eleven articles were field based RTI models and 10 were research RTI models. The data in both groups was synthesized. The effect size for the mean, median, and unbiased estimates of effect (UEE) were computed, and compared existing RTI models to research RTI models and student outcomes to systematic outcomes.

The results indicated a larger UEE for existing RTI models compared to RTI models designed for research. The UEE for existing RTI models and research RTI models were both strong; reporting data for both was greater than 1.0. The UEE for systemic outcomes was reported to be about one third larger than student outcomes. The UEE for systemic outcomes among existing RTI models was almost double that of student outcomes (Burns, 2005).

This meta-analysis indicates that the four RTI models most implemented in the field today have data to support their models, indicating that the models are strong and support learning growth in students.

Teachers are on the front lines in education. The concerns of teachers can support or diminish an innovation; thus the concerns of teachers with regard to innovations such as RTI are important to educational leaders. This portion of the literature review will focus on studies related to teacher concerns regarding innovations.

Stages of Concern Questionnaire (SoCQ)

Southwest Development Educational Laboratories' Concerns-Based Adoption Model (CBAM) has three diagnostic dimensions that measure implementation of a new innovation to help facilitate change within a school. The Stages of Concern Questionnaire (SoCQ) is one of the diagnostic dimensions that assess teachers' concerns about a new innovation. Once researchers, program evaluators, administrators, and/or change facilitators begin to understand teachers' concerns through the assessed questionnaire, they can address the teachers' concerns to aid in the process of transitioning to the new innovation (George et al., 2013).

The CBAM evolved from studies that observed new innovations presented for implementation to educators who failed. These researchers at the Research and Development Center for Teacher Education and the University of Texas sought to develop an understanding of what an individual experiences when asked to go through a change process, such as implementing a new innovation.

For this study only one dimension of the CBAM will be used—the SoCQ. The CBAM operates on the premise that change begins with the individual. This questionnaire, the SoCQ, focuses on the participant's personal side of the change process when a new innovation is presented.

The CBAM is a tool commonly used by schools, organizations, and universities. It has been used for dissertations and evaluation research, and by the federal government for federally sponsored research products (George et al., 2013).

The SoCQ has been proven to be reliable and valid. The reliability of the questionnaire started with 544 potential statements that corresponded to definitions of the

stages of concern. Six judges performed a Q-sort on the questionnaire, which left 400 statements for the SoCQ. The 400 statements were then edited for redundancy and reworded to reduce the total number of statements to 195. In the mid-1970s the pilot questionnaire of 195 statements was sent to two groups of participants who were subjected to two different new innovations. One innovation and participants were associated with an elementary school and the other with a college. The participants were both users and non-users of the innovation. Once 363 questionnaires were returned, subscales were constructed, which indicated that more than 60% of the item correlations had a common variance. Over the next several years the questions were reduced from 195 to 35 questions, and the questionnaire was used in 11 cross-sectional and longitudinal studies involving educational innovations. Once the data from the questionnaires was gathered respondents were interviewed on videotape about their concerns. The tapes were viewed and the participants' concerns rated, then the ratings were contrasted and analyzed and comparisons were made for interpretations and predications. This study concluded that the SoCQ is a reliable questionnaire for identifying concern regarding a new innovation (George et al., 2013).

The SoCQ has been determined to be valid. Respondents answered the 195-statement questionnaire using a scale of 1 to 6, with 6 meaning this is very true of me now. Scale scores were calculated by adding the responses for each item. Then the scale scores were computed to obtain a total score for the questionnaire. Analysis of the data indicated that 83% of the items correlated with the stage they had been assigned to rather than with the total score of the questionnaire, and 72% of the items correlated more

highly with their assigned stage than with any other stage. This correlation matrix and factor analysis confirmed the validity of the questionnaire (George et al., 2013).

As educators move forward in this new systematic process, change in their practice must take place. Are they ready for change? Are they willing to change? Do they have enough information about the innovation to know how to change? The Stages of Concern Questionnaire allows the voice of the educator's concerns to be heard when a new innovation is being implemented. George et al. (2013) explained that when a new innovation is being implemented, a natural progression or pathway of concern levels is generally followed by all participants.

Crichton (2014) was concerned about educators and their need to be willing to change their pedagogy when necessary to bring about student learning. Crichton conducted a five-year study using the SoCQ with a group of educators in the newly created Innovative Learning Centers to help bring about a practice of embracing innovative change in education. The results of the study demonstrated that successful change stems from educators solving problems collectively to explore ways to make an innovation successful, with business and industrial partners supporting their efforts.

LaRocco and Murdica (2009) used the Stages of Concern Questionnaire created by Southwest Educational Development Laboratories to determine level of concern among teachers in two urban schools as they began the implementation of RTI. The study's design called for teachers complete the same SoCQ in the fall and the spring of the first year of implementation. The results showed that teachers at both schools were at the same stages of concern, and both groups indicated that their concern was personal.

Personal concerns are customary when a new innovation brings about change (LaRocco & Murdica, 2009).

Mok (2005) conducted a study that explored the concerns of Hong Kong teachers. Sixteen secondary schools in Hong Kong were randomly selected and all of the teachers were invited to complete a three-part questionnaire. Participants in the questionnaire listing 33 items of concern were asked to give the number of years for which they experienced each stage. Of the 856 questionnaires sent out, only 206 were returned, for a return rate of 24.1%.

The results of the questionnaire were grouped and reported in demographic clusters. The findings indicate that teachers with the most experience exhibit the deepest concern regarding how their teaching impacts their students. They are conscientious about their teaching performance, teaching style, and efficacy. These experienced teachers are also deeply concerned about their relationships with colleagues and are troubled by conflict (Mok, 2005).

These findings are not surprising. Teachers with the most experience are the ones who stay in the profession even with tough challenges to face each day. Teachers with the least amount of passion and reflection to better their performance and student impact have already left the teaching profession and were not asked to complete a questionnaire.

Kimpston and Anderson (1988) conducted a study over several years to investigate principals' and teachers' level of concern regarding district-created benchmark testing designed to measure student grade level achievement throughout the district. The investigation focused on the participants' concerns pertaining to degree of

involvement, knowledge of district benchmark testing, engagement of professional developments, and grade level taught or administered.

The participants in the study were selected randomly from a school district in the Midwest. The first phase of the random sample included a third of elementary, junior high, and high school teachers totaling 526, with a response rate of 46% participating. All 64 principals in the district participated, with a response rate of 81%. During the second phase of the study all of the first phase participants who were still employed by the district continued as participants in the study. The second phase participants included 392 teachers with a 64% response rate and 49 principals with a 76% response rate. The instrument used to record the participants' concerns during both phases was the 35-item Stages of Concern Questionnaire (SoQC).

The results of the study indicated that elementary teachers demonstrate more concern regarding tasks and impact. Secondary teachers' concerns were reported as being unrelated and personal. Teachers generally had more concerns than principals related to their personal role in the implementation of the district benchmarks, while principals' concerns were related to coordination and cooperation in implementing the district benchmark (Kimpston, 1988).

The results of the study are predictable. Elementary teachers tend to be more student-focused, which supports teacher concerns in relationship to student learning. Teachers in general are likely to be more focused on the implementation of an innovation because they are on the front line of implementation. Principals see the big picture in the implementation of a new innovation, so their concerns embrace the cooperation of those

implementing the innovation and the coordination of all the components of the implementation.

Shoulders and Meyers (2011) conducted a study of the stages of concern regarding inquiry-based instruction from National Agriscience Teacher Ambassadors and whether their level of involvement in the professional developments from the National Agriscience Teacher Ambassador Academy (NATAA) influenced their level of concern. An electronic version of the Stages of Concern Questionnaire was sent to 71 NATAA participants. Fifty-seven participants (80%) completed the questionnaire. The participants recorded their years of participation in the professional developments (1 or 2) and their total years of teaching experience.

The results indicated that participants in 2 years of NATAA professional development were more concerned about collaboration, while those with just 1 year of professional development were more concerned with implementation tasks. These findings demonstrate that the teachers with 2 years of professional development are farther along on the pathway of embracing the innovation of inquiry-based instruction than teachers with just 1 year of professional development (Shoulders & Meyers, 2011).

The findings of this study support the pathway of accepting change. The more knowledge an educator has about an innovation and the expectations and procedures for implementation associated with it, the more easily the teacher can move beyond the basics of the innovation and promote deeper concerns about it.

Dunn, Airola, and Lo (2013) conducted a study that explored teachers' sense of efficacy related to the adoption of data-driven decision making (DDDM) at the classroom level. The participants were 537 kindergarten through 12th grade teachers who attended

an intense seminar and job-embedded professional development on DDDM. The data collection instrument used was structural equation modeling that analyzed participants' responses via two online questionnaires: 3D-ME inventory and the Stages of Concern Questionnaire (SoCQ). The 3D-ME consisted of four subscales: 1) efficacy for data and access; 2) efficacy for data technology use; 3) efficacy for data interpretation, evaluation, and application; and 4) anxiety related to DDDM. The researchers used only two impact concerns on the SoCQ—collaboration and refocusing.

The results from both questionnaires of the study were calculated in mean and standard deviation. Following a descriptive analysis, the initial hypothesized model was fit in a covariance matrix using robust maximum likelihood in EQS. The results indicated the teachers' DDDM efficacy, influenced their collaboration and refocusing concerns thus supporting the hypothesis of the researchers (Dunn et al., 2013).

This study focused on the teacher as the change agent. With most new innovations in education the teachers are the main implementers of change. It is encouraging to read a study that understands the value of the classroom teacher and the importance of the teacher's efficacy regarding any new innovation.

Christow, Eliophotou-Menon, and Philippou (2004) conducted a study to identify and examine the concerns described by primary teachers regarding a newly implemented math curriculum in Cyprus. The study included 655 participants (155 male and 500 female) from 100 schools. The variables in the study were the teachers' total teaching experience and their years of involvement in the new math curriculum. The teachers were categorized into four groups for teaching experience (1-5 years, 6-10 years, 11-20 years, and >20 years) and three groups for years of experience with the new math

curriculum (0-1 year, 3-4 years, and 4-6 years). The stage of concern questionnaire (SoCQ) was used as the data gathering instrument (Christow, 2004).

The results of the questionnaire indicated that the teachers accepted the new math curriculum and were not concerned about their ability to implement the new math curriculum. The data showed no difference in the concerns among teachers depending on years of experience with the innovation as new math curriculum was adopted. However the data did indicate a difference in the concerns about the innovation depending on years of teaching experience. Novice teachers indicated that they were self- and task-oriented regarding the innovation. Experienced teachers had ideas about the innovation and had concerns about the consequences of the math curriculum for their students.

Response to Intervention and Instruction is considered a new innovation across the state of Tennessee. State-wide implementation of RTI² was mandated for elementary schools in the 2014-2015 school year and was piloted by some schools during the 2013-2014 school year. Even though RTI is not a new innovation, RTI² is a new innovation to the teachers of state of Tennessee. Studies specifically focusing on RTI² are scarce.

Response to Intervention and Instruction (RTI²) in Tennessee is an innovation of intervention that requires the involvement of a multitude of faculty in varying positions for successful implementation. Because the success of RTI² involves practitioners school-wide, this study will determine whether a teacher's faculty position (general education; academic coach; or related arts such as music, art, physical education, and library) produces varying stages of concern among teachers regarding RTI². In addition this study will determine whether direct teacher accountability along with the teacher's level according to TVAAS exhibits a difference in the stage of concern regarding RTI².

It is understandable that beginning teachers describe self- and task-oriented concerns regarding a new innovation. These teachers are still in the learning stages of their profession and are consumed with the day-to-day tasks of their jobs. Likewise, experienced teachers are more concerned about consequences for students and have their own ideas to share. They feel more comfortable with their position and the value of their own voice in their educational setting. Furthermore, past student experiences create a database from which they can retrieve information to support their concerns and ideas about the innovation.

Response to instruction and intervention and the SoCQ both are tools used in education for the purpose of improving student learning. Studies support the effective use of RTI, RTI², and their components to impact student learning, especially when students are identified early. RTI and Tennessee's design for RTI, RTI², focuses on identifying at-risk students early and intervening in small group instruction targeting deficient skills. The SoCQ has been used for decades to identify teacher concerns regarding a newly implemented innovation to enable the innovation's change agent to provide support for the teachers regarding their concerns about implementation. The researcher intends to use the SoCQ to describe the concerns teachers may have regarding RTI² to bring about a better understanding of the implementation and its impact on teachers and ultimately students.

Summary

Response to Instruction and Intervention (RTI²) is Tennessee's model for identifying and supporting academically at-risk students. This model has been modified from other Response to Intervention models to uniquely meet the needs of students in

Tennessee's public schools. This chapter provided a description of RTI². Details about how students are identified for the most intense interventions and how those interventions are delivered were explained.

Findings from studies that support the effectiveness of RTI² components were discussed, and studies that used the SoCQ to determine teacher concerns regarding new innovations were reviewed.

Chapter three contains the description of the research procedures and materials, and a list of the research questions. Chapter four includes the results necessary to answer the research questions. A summary of the investigation and a discussion of study findings and conclusions appear in chapter five.

CHAPTER THREE

METHODOLOGY

Problem

The purpose of this study was to determine differences in educators' stages of concern regarding Tennessee's Response to Instruction and Intervention design (RTI²). Each group was classified according to faculty position (related arts, coaches, interventionist, and grade level and special education teachers). Teachers in grades 3 through 5 were further classified by teacher level, as determined by Tennessee Value Added Assessment (TVAAS) and self-reported on the questionnaire

The independent variables in this descriptive study were the teacher's faculty position and whether the teacher is held directly accountable for student learning growth by the Tennessee Department of Education with TVAAS data and leveled Teacher Effect Data. The faculty positions included in this study were (Grades K-5), related arts teachers (gym, music, computer, library and art), and support teachers (special education teachers, interventionists and academic coaches). For this study, only teachers of grades 3 through 5 were held directly accountable, because they receive Teacher Effect Data from TVAAS. This descriptive study used the Stages of Concern Questionnaire (SoCQ) to assess the stages of concern among elementary teachers in a Middle Tennessee school district using the theoretical framework of the Concerns Based Adoption Model (CBAM). The CBAM describes, explains, and predicts the change process and behaviors that an individual goes through when experiencing a new innovation (George et. al, 2013).

Population

The target population was approximately 950 educators from 25 elementary schools in a suburban school district approximately 30 miles from a metropolitan area in Middle Tennessee. Of the 25 elementary schools targeted only eight volunteered to take part in the study. Approximately 331 teachers were invited to participate in taking the questionnaire. A total of 87 teachers completed the questionnaire: 10 kindergarten teachers, 10 first grade teachers, six second grade teachers, 16 third grade teachers, eight fourth grade teachers, seven fifth grade teachers, three related arts teachers, and 27 special education teachers, academic coaches, and interventionists.

Because the questionnaire was anonymous, the data does not reveal the school of each participant. Even though all schools are different even within the same school district, the researcher presents the eight schools in generalities. One school was located on the fringe of a rural community, while the others were located in suburban communities. Three of the schools were Title I schools with a large percentage of students who receive free or reduced cost lunches. Student populations ranged from about 350 to 950; most were between 450 and 650 students. Five schools had predominantly white student populations and two were about 20% Hispanic or black. The school with the largest student population was almost balanced in terms of white, black, and Hispanic students. The student–teacher ratio was about 12 to 15 teachers per student in all schools, with smaller schools having lower ratios and larger schools having higher ratios.

Data Collection

Data collection took place in a Middle Tennessee school district located near a major metropolitan area at the end of the 2015 school year. The collected data sought to determine whether teachers experienced different stages of concern regarding RTI² implementation.

Although various intervention programs had been implemented for at-risk students in some of the county's schools for several years, the implementation of RTI² was considered a new innovation for instruction and intervention in the state of Tennessee. Title I schools in this county were completing their second year of RTI² implementation and non-Title I schools were completing their first year of implementation when teachers were invited to participate in the SoCQ.

The participating teachers were contacted via email to explain the nature of the study, and were invited to complete the electronic questionnaire regarding RTI² in the spring of 2015.

Instrument

The SoCQ uses a Likert scale to measure the 35-item questionnaire results, using percentile scores to reveal the relative intensity of each stage of concern for each participant and subgroup. When the percentile score is higher in one stage, it indicates a greater concern in that particular stage for that particular individual or subgroup compared to stages of concern with lower percentile scores. Likewise when a percentile score is lower in one stage compared to other stages, less concern exists in that stage compared to the other stages. George et al. (2013) state, "The percentile score indicates the relative intensity of concern at each stage. The higher the score, the more intense the

concerns are at that stage. The lower the score, the less intense the concerns are at that stage” (George et al., 2013).

The stages of concern were labeled 0-6. Stages 0-2 are related to concerns impacting the individual. Stage 0 indicates no concern about the innovation. Stage 1 is informational and reveals that the individual is gathering information about the innovation. Stage 2 is personal and reveals that the individual has some form of personal conflict with the innovation. Stage 3 is management and indicates concerns related to the task of the innovation. Stages 4-6 are considered impacting stages; they show the individual or subgroup’s concerns are centered on how the innovation can positively impact students and others. Stage 4 is consequences and reveals concern for how the innovation impacts students. Stage 5 is collaboration and demonstrates concern with collaborative conversations about the innovation. Stage 6 is refocusing and indicates realization of the benefits of the innovation as well as concern for how the innovation can be improved (see Table 1 below).

Southwest Educational Development Laboratories (SEDL) developed the Stages of Concern Questionnaire (SoCQ) through extensive research to ensure its validity and reliability (George et al., 2013).

The test is designed to allow researchers to customize the questionnaire by adding the innovation of interest. In this study, the customized innovation of interest was RTI². The researcher inserted additional questions to identify faculty position and Teacher Effect level subgroups.

Table 1. The Stages of Concern about an Innovation

Stage of Concern		Expression of Concern
Impact	Refocusing	Individuals at this stage are beginning to understand the universal benefits of the change. They now understand that the change was needed and why it was needed. Individuals at this level may begin to make changes to the innovation to achieve better outcomes.
Impact	Collaboration	Individuals at this stage have begun to work with others and discuss their opinions of the innovation. They are beginning to wonder how their colleagues are implementing the innovation and begin to seek this information.
Impact	Consequences	Individuals at this stage have their attention focused on the impact that the innovation will have on their students.
Task	Management	Individuals at this stage are focusing on the process and the tasks involved for the innovation. They are also trying to understand the best way to use the resources and information to implement the innovation.
Self	Personal	Individuals at this stage are aware of the change initiative but are unaware of their role in the process. They may be considering personal conflicts (values, morals, beliefs) or may feel as though they are lacking the ability to implement the change initiative.
Self	Informational	Individuals who are in this stage are aware of the change initiative and are beginning to seek information about the change.
Self	Unconcerned	Individuals are not concerned about the change initiative because they have other things on their mind.

Note: *From Measuring Implementation in Schools: The Stages of Concern Questionnaire* by Archie A. George, Gene E. Hall, and Suzanne M. Stiegelbauer, 2013, p. 8. Copyright 2013 by the Southwest Educational Development Laboratory.

Procedure

The student [researcher?] requested consent from the school district to conduct the study and discussed the nature of the study with administrators. After consent was given, all 25 elementary school principals in the targeted district were contacted by email to explain the study and request consent to invite teachers to participate in the study.

After consent was granted, the teachers were contacted by email to explain the study and invite their participation. An electronic link to the Stages of Concern Questionnaire (SoCQ) and a password for access were included in the email. A paragraph at the beginning of the questionnaire stated that taking the survey implied the participant's consent to the study. The anonymous participants completing the questionnaires were assigned a number, which aligned with the participants' identifying demographic information and responses to the questionnaire. Thirty days were allowed for completion of all questionnaires, after which the researcher was able to retrieve the questionnaires.

Data was automatically analyzed by Southwest Educational Development Laboratories (SEDL) and was used to develop profiles for groups and not individuals. The group results were reported in percentiles for each stage of concern. The individual percentiles for each stage were not considered absolute, but relative to the individual's scores for the other stages. Higher individual or group scores show higher concern, while lower individual or group scores show lower concerns at that stage. According to the SEDL website, the questionnaire "consists of and describes seven categories of possible concerns related to an innovation. People who are in the earlier stages of a change process will likely have more self-focused concerns, such as worries about whether they can learn a new program or how it will affect their job performance. As individuals become more comfortable with and skilled in using an innovation, their concerns shift to focus on broader impacts, such as how the initiative will affect their students or their working relationships with colleagues" (George et al., 2013).

Data Analysis

The data for this study was analyzed by SEDL and the results were used to answer the following research questions. The results will be reported in chapter five.

1. Does the stage of concern regarding RTI² differ among educators depending on their faculty position in the school?
2. Does the stage of concern regarding RTI² differ among educators depending on whether they are held directly accountable for student learning by the Tennessee Value Added Assessment System?
3. Does the stage of concern regarding RTI² differ among third through fifth grade teachers, those held directly accountable for student learning growth, depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System?

Summary

The introduction and background for the problem was presented in chapter one. The problem was stated and the need for the study, definitions, procedures, theoretical framework, and limitations were discussed. Chapter two analyzes the relevant literature.

Chapter three includes the description of the research procedures and materials, and a list of the research questions. Chapter four presents the results necessary for answering the research questions. A summary of the investigation and a discussion of the findings and conclusions of the study appear in chapter five.

CHAPTER FOUR

RESULTS

Introduction

The purpose of the study is to determine differences in the stages of concern among educators regarding Tennessee's Response to Instruction and Intervention design (RTI²). The classification of each group was determined by faculty position and direct accountability for student learning by TVAAS. Additionally, teachers in grades 3 through 5 were classified by teacher level as indicated by Teacher Effect Data from TVAAS.

This descriptive study used the Stages of Concern Questionnaire (SoCQ) to assess the stages of concern among elementary teachers in a Middle Tennessee school district using the theoretical framework of the Concerns Based Adoption Method (CBAM) and defining Response to Instruction and Intervention (RTI²) as the innovation on the questionnaire.

Three main questions guided this study:

1. Does the stage of concern regarding RTI² differ among educators depending on their faculty position in the school?
2. Does the stage of concern regarding RTI² differ among educators depending on whether they are held directly accountable for student learning by the Tennessee Value Added Assessment System?
3. Does the stage of concern regarding RTI² differ among third through fifth grade teachers, those held directly accountable for student learning growth,

depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System?

Eighty-seven teachers completed the questionnaire: 10 kindergarten teachers, 10 first grade teachers, six second grade teachers, 16 third grade teachers, eight fourth grade teachers, seven fifth grade teachers, three related arts teachers, and 27 special education teachers, academic coaches, and interventionists. The data were analyzed to answer the research questions. See Table 2 for faculty positions.

Table 2. Faculty Position of Stages of Concern Questionnaire Participants

TOTAL QUESTIONNAIRE PARTICIPANTS	FACULTY POSITIONS							
	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Related Arts Teachers	Special Education, Academic Coaches, Interventionists
87 Teachers	10 Teachers	10 Teachers	6 Teachers	16 Teachers	8 Teachers	7 Teachers	3 Teachers	27 Teachers

Thirty-one of the 87 teachers were held directly accountable for student learning as reported by TVAAS, while 56 were not. TVAAS measures teacher accountability among elementary teachers for grade levels that take the Tennessee Comprehensive Assessment Program (TCAP). In this study those grade levels taking TCAP were grades 3 through 5. Teachers in grades 3 through 5 were further classified by Teacher Effect Data rankings of levels 1 through 5. Levels 1 and 2 are considered ineffective and below average, with level 1 the most ineffective. Teachers classified as level 3 are considered average teachers. Teachers classified as level 4 or 5 are considered effective and above

average teachers, with level 5 teachers being the most effective. See Table 4 and 5 for Teacher Effect Data.

This chapter presents results from data collected using the SoCQ and analyzed by Southwest Educational Development Laboratories (SEDL).

Results

Data were collected using the SoCQ to measure the relative intensity of each stage of concern regarding RTI² for each participant and each faculty subgroup as reported by SEDL. Three major research questions were addressed in this study.

1. Does the stage of concern regarding RTI² differ among educators depending on their faculty position in the school?

The data indicated a difference in the stages of concern regarding RTI² among the 87 educators depending on their faculty position. See Table 3 for faculty subgroups.

Table 3. Highest Intensity Stages of Concern by Faculty Subgroups

Faculty Sub Groups Stage of Concern	0	1	2	3	4	5	6
Kindergarten Teachers	48%	57%	63%	60%	16%	28%	38%
First Grade Teachers	55%	43%	57%	60%	19%	31%	34%
Second Grade Teachers	75%	57%	57%	56%	19%	31%	65%
Third Grade Teachers	69%	54%	70%	73%	24%	36%	52%
Fourth Grade Teachers	69%	60%	67%	73%	33%	28%	34%
Fifth Grade Teachers	55%	57%	70%	69%	27%	48%	52%
Related Arts -Gym, Music, Library, Computer, Art, Etc	99%	45%	48%	18%	5%	10%	6%
Special Education, Interventionists, Academic Coaches	31%	37%	41%	39%	21%	48%	26%

Table data is reported in percentiles.

Analysis revealed that the kindergarten teachers scored highest in stage 2 (personal) and in stage 4 (consequences). First and third grade teachers scored highest in stage 3 (management) and lowest in stage 4 (consequences).

Second grade teachers scored highest in stage 0 (unconcerned) and lowest in stage 4 (consequences). Fourth grade teachers scored highest in stage 3 (consequences) and lowest in stage 5 (collaboration). Fifth grade teachers scored highest in stage 3 (personal) and lowest in stage 4 (consequences). Related arts teachers scored highest in stage 0 (unconcerned) and lowest in stage 4 (consequences). Special education teachers, academic coaches, and interventionists scored highest in stage 5 (collaborative) and lowest in stage 4 (consequences).

2. Does the stage of concern regarding RTI² differ among educators depending on whether they are held directly accountable for student learning by the Tennessee Value Added Assessment System?

Analysis of data reveals a difference in the stages of concern regarding RTI² among the 31 TVAAS educators in grades 3 through 5 with Teacher Effect Data and the 56 Non-TVAAS educators in grades K through 2, related arts teachers, and special education teachers, academic coaches, and interventionist without Teacher Effect Data. See Table 4 and Table 5 for Teacher Effect Data.

Among teachers with Teacher Effect Data, most (38.7%) showed their highest intensity of concern in stage 0 (unconcerned). The fewest teachers (0.0%) showed their lowest intensity of concern at stage 4 (consequences).

Table 4. Highest Intensity Stages of Concern by Teacher Effectiveness Levels

Teacher Effect Data Stage of Concern	0	1	2	3	4	5	6	Total
# of SoCQ Participants	12	2	8	4	0	2	3	31
% of SoCQ Participants	38.7%	6.5%	25.8%	12.9%	0.0%	6.5%	9.7%	100.0%

Among teachers without Teacher Effect Data, most (42.8%) showed the highest intensity of concern at two stages: stage 0 (unconcerned) and stage 3 (management). The fewest teachers (1.8%) showed their lowest intensity of concern at stage 4 (consequences).

Table 5. Highest Intensity Stages of Concern by Teachers with No Effectiveness Levels

No Teacher Effect Data Stage of Concern	0	1	2	3	4	5	6	Total
# of SoCQ Participants	12	9	8	12	1	11	3	56
% of SoCQ Participants	21.4%	16.1%	14.3%	21.4%	1.8%	19.6%	5.4%	100.0%

- Does the stage of concern regarding RTI² differ among third through fifth grade teachers, those held directly accountable for student learning growth, depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System?

The findings determined a difference in the stage of concern regarding RTI² among third through fifth grade teachers, depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System.

Twenty-nine third through fifth grade teachers self-reported TVAAS Teacher Effectiveness Data, while two third through fifth grade teachers self-reported TVAAS School Level Data. Teachers who self-reported School Level Data are not included in these results, but will be discussed in chapter five. Two teachers who reported Teacher

Effect Data had results indicating two different stages as their highest stage of concern. The researcher divided their reported highest intensity rate between those two stages.

One teacher self-reported as being a level 1 teacher. This teacher scored highest in stage 0 (unconcerned) and stage 1 (informational), indicating these as the highest stages of concern. Six teachers self-reported as being level 3 teachers. Three of the level 3 teachers scored highest in stage 0 (unconcerned), two scored highest in stage 2 (personal), and one scored highest in stage 6 (refocusing), indicating these as their highest stages of concern. Nine teachers self-reported as being level 4 teachers. Four of the level 4 teachers scored highest in stage 0 (unconcerned), one scored highest in stage 1 (informational), two scored highest in stage 2 (personal), and two scored highest in stage 3 (consequences), indicating these as their highest stages of concern. Thirteen teachers self-reported as being level 5 teachers. Two-and-a-half teachers scored highest in stage 0 (unconcerned), four scored highest in stage 2 (personal), two-and-a-half scored highest in stage 3 (consequences), two scored highest in stage 5 (collaboration), and two scored highest in stage 6 (refocusing), indicating these as their highest stages of concern. See Table 6 for teacher effectiveness levels.

Table 6. Highest Intensity Stages of Concern by TVAAS Teacher Effectiveness Levels for All Participants with TVAAS Teacher Effectiveness Data

		STAGES OF CONCERN						
		0	1	2	3	4	5	
TEACHER EFFECTIVENESS RANK IN LEVELS	Level 1	0.5	0.5					
	Level 2							
	Level 3	3		2				1
	Level 4	4	1	2	2			
	Level 5	2.5		4	2.5		2	2
	LEVEL DATA		1	1				

Scores ending in .5 reflect two high intensity stages for one participant. The scores were divided between the stages.

Summary

Evidence from the data supports differences in the stages of concern regarding RTI² among all teacher subgroups. Differences in the stages of concern regarding RTI² depend upon faculty position, whether a teacher is held accountable for student learning by TVAAS, and teacher effectiveness level.

The researcher recognizes that the sampling of 87 teachers is small and that if the sample had been larger then the results may have been different. There is concern with the stages of concern results for the related arts teachers, as only three participated. Second, fourth, and fifth grade teachers comprised fewer than nine participants each, so that is a concern as well. The researcher was surprised to discover that 91% of the faculty subgroups experienced their lowest intensity of concern in stage 4, consequences, which indicates that these participants have little or no concern with how RTI² impacts

students. The researcher had assumed that effective teachers who were passionate about student learning would not have ranked stage 4, consequences, so low in the stages of concern. Additionally, the researcher was surprised and concerned that 38% of teachers with teacher effect data indicated stage 0, unconcerned, as the highest stage of concern. The researcher supposed that teachers who were directly accountable for student learning (to the extent that their TVAAS teacher effect data could determine whether or not they had a job) would have demonstrated their highest intensity stage in the categories focused on task and impact (stages 3-6). Another finding that the researcher did not expect was that 81% of the teachers who reported as being level 4 or 5 teachers scored in the self and task stages of concern (stages 0-3). The researcher believed that teachers with a high teacher effectiveness rank of level 4 or 5 would have had more intensity of concerns in the impact stages of concern (stages 4-6).

RTI² is a new innovation in Tennessee. No empirical studies could be found on the innovation. A more detailed summary of the investigation and a discussion of the findings and conclusions of the study appear in chapter five.

CHAPTER FIVE

SUMMARY OF THE STUDY

Introduction

The purpose of the study was to determine whether differences exist in the stages of concern regarding Tennessee's Response to Instruction and Intervention design (RTI²) among educators. The classification for each group was determined by faculty position (grade level or specialized area), Teacher Effect Data from TVAAS, and TVAAS teacher effectiveness data by levels for teachers in grades 3 through 5. Each teacher self-reported teacher effectiveness level on the questionnaire that was used for the study.

Response to instruction and intervention is an intervention program designed to enhance the quality of instruction provided for all students, with a focus on students with specific learning disabilities (SLD) or at risk of failing. The targeted district implemented a pilot study of RTI² with Title I elementary schools during the 2013-2014 school year. The RTI² program was then implemented in all 25 elementary schools in the targeted district during the 2014-2015 school year. Determining RTI²'s effects on educators during the change process may clarify some important issues regarding the level of implementation of RTI². To the interest of the researcher, the following research questions were raised to pursue an understanding of how educators' concerns differ as they transition through the implementation of RTI².

1. Does the stage of concern regarding RTI² differ among educators depending on their faculty position in the school?

2. Does the stage of concern regarding RTI² differ among educators depending on whether they are held directly accountable for student learning by the Tennessee Value Added Assessment System?
3. Does the stage of concern regarding RTI² differ among third through fifth grade teachers, those held directly accountable for student learning growth, depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by the Tennessee Value Added Assessment System?

Descriptive data was collected and analyzed through the Stages of Concern Questionnaire (SoCQ) to determine the differences in stages of concern teachers may have as they begin implementing the new instructional program RTI².

Findings

Question 1 asks whether the stage of concern regarding RTI² differs among educators depending on their faculty position in the school. These faculty positions included classroom teachers for grades K through 5, related arts teachers, interventionists, academic coaches, and special education teachers. The data indicated differences in the stages of concern regarding RTI² among the 87 educators depending on their faculty position.

Further analysis (see Table 1 and Table 3) revealed that kindergarten teachers scored highest in stage 2 (personal) and lowest in stage 4 (consequences). First and third grade teachers scored highest in stage 3 (management) and lowest in stage 4 (consequences). Second grade teachers scored highest in stage 0 (unconcerned) and lowest in stage 4 (consequences). Fourth grade teachers scored highest in stage 3 (consequences) and lowest in stage 5 (collaboration). Fifth grade teachers scored highest

in stage 2 (personal) and lowest in stage 4 (consequences). Related arts teachers scored highest in stage 0 (unconcerned) and lowest in stage 4 (consequences). Special education teachers, academic coaches, and interventionists scored highest in stage 5 (collaborative) and lowest in stage 4 (consequences).

What interested the researcher about this data is that all faculty subgroups except fourth grade indicated stage 4 (consequences) as their stage of least concern. Stage 4 reveals teachers' level of concern regarding how RTI² influences student learning. This indicates that teachers in grades 1, 2, 3, and 5 and related arts and all specialized teachers did not reflect concern about how RTI² affects student learning. The researcher expected that grade level teachers who focus on teaching the core academics such as math and reading would be more concerned about the impact of RTI² instruction and intervention on their students. Although no literature exists showing similar results, the researcher speculates that these results may be due to teachers' lack of attention towards how this innovation (RTI²) actually enhances student learning.

The researcher did not find the differences in the subgroups' highest intensity stages unusual. This is expected due to each faculty group's different level of involvement with RTI².

Question 2 asks whether the stage of concern regarding RTI² differs among educators depending on whether teachers are held accountable by TVAAS. Analysis of data revealed that differences in the stages of concern regarding RTI² among the 31 TVAAS educators and the 56 Non-TVAAS.

The findings revealed that in stage 0 (unconcerned) 38.7% of teachers with effect data reported this stage of concern as their most intense, while 42.8% of teachers with no

effect data reported stage 0 (unconcerned) and stage 3 (management) as their stages of most intense concern. In stage 1 (informational) 6.5% of teachers with effect data reported this stage of concern as their most intense, while 16.1% of teachers with no effect data reported stage 1 (informational) as their most intense stage of concern. In stage 2 (personal) 25.8% of teachers with effect data reported this stage of concern as their most intense, while 14.3% of teachers with no effect data reported stage 2 (personal) as their stage of most intense concern. In stage 3 (management) 12.9% of teachers with effect data reported this stage of concern as their most intense, while 21.4% of teachers with no effect data reported stage 3 (management) as their stage of most intense concern. In stage 4 (consequences) 0.0% of teachers with effect data reported this stage of concern as their most intense, while 1.8% of teachers with no effect data reported stage 4 (consequences) as their stage of most intense concern. In stage 5 (collaboration) 6.5% of teachers with effect data reported this stage of concern as their most intense, while 19.6% of teachers with no effect data reported stage 5 (collaboration) as their stage of most intense concern. In stage 6 (refocusing) 9.7% of teachers with effect data reported this stage of concern as their most intense, while 5.4% of teachers with no effect data reported stage 6 (refocusing) as their stage of most intense concern. See Table 4 and Table 5 for Teacher Effect Data.

According to the study findings 38.7% of teachers with Teacher Effect Data identified stage 0 (unconcerned) as their highest intensity stage of concern. Teachers without Teacher Effect Data identified two stages as their highest intensity of concern: stage 0 (unconcerned) and stage 3 (management). Both stages were the highest intensity stage of concern for 21.4% of teachers. For both subgroups (teachers with and without

Teacher Effect Data), stage 4 (consequences) was identified as the stage of least concern. See Table 4 and Table 5 for Teacher Effect Data.

Question 3 asks whether the stage of concern regarding RTI² differs among third through fifth grade teachers depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5 as reported by TVAAS. The findings revealed differences in the stage of concern regarding RTI² among third through fifth grade teachers depending on the teacher's effectiveness rank of level 1, 2, 3, 4, or 5. Thirty-one teachers in third through fifth grades self-reported Teacher Effect Data from TVAAS (see Table 7). One teacher self-reported as being level 1 for teacher effectiveness data as reported by TVAAS. This teacher's stage of highest intensity was reported as both stage 0 (unconcerned) and stage 1 (informational). No teacher self-reported as being level 2 in Teacher Effect Data. Six teachers self-reported as being level 3 in Teacher Effect Data. Three of these teachers reported stage 0 (unconcerned) as their stage of highest intensity concern, while two teachers reported stage 2 (personal) and one teacher reported stage 6 (refocusing) as their stage of highest intensity concern. Nine teachers self-reported as being level 4 in Teacher Effect Data. Four of these teachers reported stage 0 (unconcerned) as their stage of highest intensity concern, one reported stage 1 (informational) as their stage of highest intensity concern, two reported stage 2 (personal) as their stage of highest intensity concern, and two reported stage 3 (management) as their stage of highest intensity concern. Thirteen teachers self-reported as being level 5 in Teacher Effect Data. Of the 13, two teachers reported stage 0 (unconcerned) as their stage of highest intensity concern, four reported stage 2 (personal) as their stage of highest intensity concern, two reported stage 3 (management) as their stage of highest intensity concern, two reported

stage 5 (collaboration) as their stage of highest intensity concern, and two reported stage 6 (refocusing) as their stage of highest intensity concern. One teacher self-reported as being level 5 in Teacher Effect Data, and reported two stages reported as their highest intensity of concern: stage 0 (unconcerned) and stage 3 (management).

The study findings were not what the researcher anticipated. The researcher expected that teachers with above average Teacher Effect Data (levels 4 and 5) would report their stage of highest intensity concern as one that focuses on task and impact: stages 3 through 6. Even though some teachers self-reported as being level 4 or 5 and reported their highest intensity scores in stages 3 through 6, more than half of level 4 and 5 teachers reported their highest intensity scores in stages 1 and 2. See Table 6 for teacher effectiveness levels.

The findings for all three research questions are similar to findings by Mok (2005), Kimpston and Anderson (1988), Shoulders and Meyers (2011), and Christou, Eliophotou-Menon, and Philippou (2004). These researchers reported differences in levels of concern among educators when implementing a new innovation. Mok (2005) and Christou et al. (2004) found the differences in level of concern to be centered on years of experience among teachers. Mok concluded that some differences related to teachers' relationships with students and personal teaching styles (Mok, 2005). Christou et al. (2004) concluded that some groups might have reported high relative intensity scores in the stages that focus on self (stages 0 through 3) because the subgroup of teachers was confident in their ability to meet the demands of the new innovation. With these teachers possibly feeling confident about the innovation, Christou concluded that these teachers would indicate a high level of concern in a stage that focused on self even

though they were involved and not unconcerned (Christou et al., 2004). Kimpston et al. (1988) found the differences in level of concern among teachers to be centered on the teacher's degree of involvement, knowledge of district benchmark testing, engagement in professional developments, and grade level taught or administered. Kimpston concluded that an innovation's success depends on adequate training and involvement on the part of those implementing the program (Kimpston et al., 1988). Shoulders et al. (2011) found the differences in the stage of concern to be centered on the amount of professional development teachers were given for on the new innovation. Shoulders (2011) found that teacher subgroups with the most professional development reported their highest intensity scores in the impact stages of concern: stages 4 through 6. He concluded that the more professional development teachers are given for a new innovation, the more likely their greatest intensity score will fall within impact stages of concern (stages 4 through 6) compared to educators given less professional development (Shoulders et al., 2011).

Discussion and Implication

The data clearly indicates that among educators the stages of concern regarding RTI² differ depending on faculty position, Teacher Effect Data, and teacher effectiveness rank. George et al. (2013) support these findings, identifying a concern as something that is highly thought about and evokes feelings that affect one's perception of an innovation. These concerns vary in level of intensity regarding an innovation depending on how one is personally involved or affected by the innovation, and on the knowledge and experience one has with the innovation. The stages of concern are a pathway that one encounters with a new innovation. Everyone encountering a new innovation will progress along a pathway of concern regarding an innovation. But not everyone takes the

same pathway, nor do they have the same intensity in the stages of concern. As the change process for a new innovation takes place, the pathway should progress through the stages with the first category of stages focused on self, the second category of stages focused on task, and the last category of stages focused on impact (George et al., 2013). Hall et al. (2001) indicate that the change process varies among individuals, even when a new innovation is introduced to multiple people at the same time. This is because individuals have varying levels of competency in understanding of the new innovation as well as experience with the innovation. Additionally, some individuals just need more time to embrace a new innovation, which also affect one's pathway and the relative intensity of stages of concern regarding a new innovation (Hall et al., 2001).

The researcher's first question explored the differences, if any, in the stages of concern regarding RTI² among educators depending on their faculty status in the school. One finding indicated that related arts teachers such as gym, music, library, computer, and art teachers experienced their highest level of concern regarding RTI² at stage 0, which indicates no concern at all or little involvement in RTI² (George et al., 2013). The relative intensity was at the highest ranking of 99% for this stage. This may be because these teachers are not as involved in RTI² as the grade level teachers, interventionists, academic coaches, and special education teachers. Related arts teachers generally are not responsible for core academic instruction nor do they plan, collect data, or evaluate student progress for RTI², thus they are not significantly impacted by the innovation of RTI². However this subgroup of educators does implement RTI² instruction for small groups of students selected by the grade level teachers. The standards taught by the related arts teachers and how they are taught are determined by the grade level teachers,

as are monitoring student progress, evaluation of student progress, and any other decisions regarding their grade level students. Therefore it is the researcher's impression that the only involvement of related arts teachers with RTI² is to implement the intervention during intervention time and do as they are instructed. Their lack of involvement in the implementation of RTI² makes their score of 99% in stage 0 (unconcerned) understandable.

Another finding for question one indicated that all faculty subgroups with the exception of fourth grade teachers reported stage 4 (consequences) as the lowest stage of concern. Stage 4 (consequences) evaluates teachers' concern about how RTI² will impact their students (George et al, 2013). This finding, which revealed that 91% of the participants' subgroups reported their lowest intensity of concern related to how RTI² impacted students was disheartening to the researcher. The researcher is aware that RTI² is a new innovation and that those who implement a new innovation go through a change process, but to have the lowest intensity score reported for the stage of concern that focuses on students in all subgroups but one was not what the researcher expected, nor what the researcher would hope to discover. The researcher had the assumption that effective teachers who were passionate about student learning would not have ranked stage 4 (consequences) so low in concern.

Additionally, faculty subgroups representing 39% percent of the participant teachers indicated stage 3 (management) as their most intense stage of concern. This stage of concern received the greatest relative intensity of concern among all grade level teacher subgroups except kindergarten. The management stage of concern focuses on the implementation of RTI² and the issues and tasks related to the management phase of

implementation (George et al., 2013). This finding is not surprising to the researcher, because when RTI² implementation was mandated by the state and by directive from the school system, grade level teachers were the ones assigned the additional tasks of planning, data collecting, implementing, and evaluating RTI² for their grade level students. In addition grade level teachers lost anywhere from 45 minutes to 1.5 hours per day of whole class Tier 1 (grade level standards) instructional time without any change to the academic standards. This faculty subgroup (grade level) had to focus on how to continue instructing the same amount of academic standards material with the same degree of intensity during lost Tier 1 classroom instructional time while implementing the intervention design of RTI² for their grade level students. The researcher agrees with the results indicating that grade level teachers were intently concerned with the management of RTI², because the implementation of the instruction and intervention program was their job responsibility. They were assigned additional tasks with little professional development and were not given adequate time and support to implement those tasks to maximize student learning.

A fourth finding for question one indicated that stage 5 (collaboration) was the stage of most intense concern for the faculty subgroup of special education teachers, academic coaches, and interventionists. The collaboration stage of concern focuses on coordinating and cooperating with others (George et al., 2013). This finding is not surprising because this faculty subgroup's job description focuses on the implementation of RTI² for tier 2 and tier 3 students. This faculty subgroup also coordinates the schoolwide scheduling of intervention for each grade level. It seems appropriate that this

stage of concern should be the most intense, because collaboration regarding tier 2 and tier 3 intervention is a priority in the job function of this subgroup.

The researcher's second question explored the difference, if any, in the stages of concern between teachers with TVAAS Teacher Effect Data and teachers without TVAAS Teacher Effect Data.

The findings for question two were surprising. The researcher felt that teachers with Teacher Effect Data would have more concerns related to student learning than teachers without Teacher Effect Data, but the data does not support this. For teachers with Teacher Effect Data, the stage of concern with the highest intensity was stage 0 (unconcerned), which indicates no concern or little involvement (George et al., 2013). Thirty-eight percent of the teachers with Teacher Effect Data reported that stage 0 (unconcerned) was their most intense concern (see Table 5 and Table 6). This was very surprising to the researcher. The researcher supposed that teachers who were directly accountable for student learning (to the extent that their TVAAS Teacher Effect Data could determine whether they had a job or not) would have demonstrated their highest intensity of concern in the stages focused on task and impact (stages 3 through 6) not the stages focused on self (stages 0 through 2). Stage 4 (consequences) reveals a teacher's concern about how a new innovation impacts the students in the teacher's sphere of influence (George et al., 2013). The researcher expected that stage 4 (consequences) would be the stage of highest concern for teachers with Teacher Effect Data, as they are held accountable for student learning by TVAAS and stage 4 (consequences) focuses on the impact of RTI² on student learning. But none of the teachers in this subgroup (0.0%) reported stage 4 (consequences) as their most intense concern.

Teachers with no Teacher Effect Data indicated two stages with identical percentages as the highest intensity of concern for their subgroup: stage 0 (unconcerned) and stage 3 (management). This particular subgroup is highly diverse, ranging from related arts teachers to grade level teachers, special education teachers, academic coaches, and interventionists. It is difficult for the researcher to make implications due to this subgroup's diversity with their involvement in RTI². The researcher believes that related arts teachers would have their highest level of intensity in stages 0 through 2 (self) because they have the least amount of involvement in RTI²; their instructional focus is not reading and math standards, and they do not create their own instructional plans for their RTI² group. The researcher also believes that grade level teachers, interventionists, special education teachers, and academic coaches would have their highest level of intensity in stages 4 through 6 (impact) because this group of teachers works directly with the planning and implementation of the instruction for RTI². It seems reasonable that this group would be concerned with RTI²'s impact on students and others.

The researcher's third question explored the differences, if any, in the stages of concern among third through fifth grade teachers depending on the teacher's self-reported teacher effectiveness rank of level 1, 2, 3, 4, or 5 according to the TVAAS.

The researcher believed that teachers with a lower teacher effectiveness ranking (level 1 or 2) would experience their most intense concerns in self-focused stages of concern (stages 0 through 2). Because these teachers demonstrated a below average teacher effectiveness ranking, the researcher surmised that they considered their profession as more of a job than a passion, allowing them to focus on how their job affects them. Additionally, the researcher supposed that teachers with a teacher

effectiveness rank of level 4 or 5 would experience more intensity of concerns in the impact stages of concern (stages 4 through 6) because their teacher effectiveness ranking was above average according to TVAAS. The researcher expected that teachers with an effectiveness level of 4 or 5 would be more vested in their profession and passionate about students and learning. The profile the researcher envisioned for these level 4 and 5 teachers was one of educators who thought about their work often, and about how they could improve their own teaching practices to further improve student learning. However the findings did not support the researcher's beliefs (see Table 6 for teacher effectiveness level).

Twenty-nine teachers reported teacher effectiveness data; of these, approximately 67% reported they were focused on self, indicating their highest intensity of concern in stages 0 through 2. Approximately 34% of these teachers scored in the unconcerned stage (stage 0), indicating no concern or little involvement in RTI², while 5% scored in stage 1 (informational), indicating that they had a general awareness of RTI².

Approximately 17% percent of the 29 teachers reporting teacher effectiveness data reported their highest level of concern in the stages focused on impact. Approximately 0.7% of these scored highest in stage 5 (collaboration), which indicates focus on collaboration and cooperation with others regarding RTI², while approximately 10% scored in stage 6 (refocusing), indicating focus on making changes that could improve or replace RTI².

Only one teacher self-reported as being a level 1 teacher. This teacher's highest intensity score was divided equally between stage 0 (unconcerned) and stage 1

(informational), supporting the researcher's hypothesis that level 1 and level 2 teachers would have their highest intensity scores in the self-focused stages of concern.

Twenty-two teachers, approximately 76%, reported as being level 4 or level 5 teachers. Of these, approximately 18% reported their highest intensity scores in the impact stages (stages 4 through 6). Two teachers reported their highest intensity scores in stage 5 (collaboration) and two reported their highest intensity scores in stage 6 (refocusing). This finding did not support the researcher's hypothesis that teachers with above average teacher effect data would score highest in the impact stages of concern. On reflection, the researcher wonders whether the 18 above average teachers (approximately 81%) who scored highest in the self and task stages of concern (stages 0 through 3) were not impacted by the RTI² innovation because education is constantly changing and these teachers are familiar with the cycle of implementing new innovations. The researcher wonders whether these teachers just do as they are told, due to the ever-changing cycle of new innovation implementation. If this were so, the teachers would lack ownership of RTI², which would stifle critical professional thinking about RTI². Another possible explanation is that these teachers are confident about the process and implementation of RTI², and thus scored highest in the self- and task-focused stages of concern (stages 0 through 3). This same idea was presented by Christou et al. (2004).

Even though the findings do not support the researcher's initial hypothesis, they do demonstrate that an individual progresses at their own pace during the change process depending on their personal experiences and their own understanding of a newly implemented innovation (George et al., 2013; Hall et al., 2001).

Limitations

This study had several limitations. First it involved educators voluntarily taking the Stages of Concern Questionnaire (SoCQ). This limitation did not promote the collection of an equal and balanced representation of teacher participants across the school district and within faculty positions for the sample size. In addition, it limited the sample to only those who were motivated to participate and did not allow the researcher to control the sample size. Out of the 25 elementary schools invited to participate in the questionnaire, only eight schools participated. Approximately 331 teachers were invited to participate and 87 of those teachers (26%) voluntarily completed the questionnaire.

A second limitation of the study involved the questionnaire being completed in isolation by the participant, which did not allow for monitoring or assistance if needed. This isolation did not give participants an opportunity for questions in the event clarification was needed regarding procedures or question items. This limitation may have affected the accuracy of the data gathered from the SoCQ. Additionally, because participants were not monitored while completing the questionnaire, participants could have worked together to answer the SoCQ questions, thus influencing the answers of other participants.

A third limitation of the study involved the participants' comprehension of the vocabulary and terms used in gathering data from the participants. This includes the data regarding faculty positions, Teacher Effect Data, and teacher effectiveness rank in levels as reported by TVAAS. It is conceivable that participants could have been confused about the term Teacher Effect Data as used in participant data question number 4. The term Teacher Effect Data may have been unfamiliar to some participants. In addition,

some participants may have been unfamiliar with how Teacher Effect Data results are reported. Two fifth grade teacher participants reported not having any Teacher Effect Data but reported having School Level Effect data. The only way this could be possible is if these teachers began teaching in grades 3 through 5 in Tennessee during the 2014-2015 school year. To report having School Level Effect data these teachers must have been teaching in other faculty position in Tennessee that did not claim students for the Tennessee Comprehensive Assessment Program, (TCAP) the previous year.

A fourth limitation involved teachers self-reporting their Teacher Effect Data level ranking. With Teacher Effect Data indicating whether teachers are average, below average, or above average in effectiveness according to their ranked level, it is conceivable that some teachers may have reported their data inaccurately due to feelings of shame or inadequacy if their effectiveness was below average and maybe even average. Out of the 29 teachers who reported Teacher Effect Data, only one reported as below average, six reported as average, and 22 reported as above average according to TVAAS Teacher Effect Data. Some of the teachers might not have known what their teacher effectiveness level was, or might have confused it with the teacher evaluation rankings each teacher receives from their building administrator. Teacher evaluation rankings also identify teachers as levels 1 through 5.

Conclusions

Within the limitations established, the following conclusions seem justified:

1. Teachers implementing RTI² differ in their stage of concern regarding RTI².
This is most likely due to teachers' past experience with and level of knowledge and understanding of RTI² (George et al., 2013; Hall et al., 2001).

2. Teachers with more involvement in RTI²—grade level teachers, interventionists, coaches, and special education teachers—have greater levels of concern regarding RTI²'s impact on students and the school than teachers with little involvement (such as related arts teachers).
3. Classroom teachers are concerned with the management of RTI². This involves the scheduling, organizing, and management of the implementation of the RTI² intervention program.
4. Whether or not a teacher received Teacher Effect Data and the level of teacher effectiveness reported on the Teacher Effect Data by Tennessee Value Added Assessment System does not play a significant role in a teacher's most intense concern on the Stages of Concern Questionnaire.

Recommendations

As a result of this study's findings the following recommendation are offered to district and school leadership as they support teachers during the implementation stages of the new innovation, RTI²:

1. Because the change process regarding any new innovation is a personal pathway for each individual based on past experiences and on knowledge and understanding about the new innovation, it would serve the district and school leadership well to be patient and supportive of their teachers as they journey through the process of change in implementing RTI² at the school level.
2. Because RTI² is a state mandate, which is creating much change in the instructional day of teachers and students, teachers need continual

professional developments regarding RTI² to acquire knowledge and deepen understanding about RTI².

3. Because related arts teachers reported their highest percentile as the 99th percentile in stage 0 (unconcerned), and because they are embedded into the RTI² intervention program working directly with students, this faculty subgroup needs intense professional development on RTI² as well as some action that will involve this subgroup in the intervention program and allow them to feel a sense of ownership and accountability.
4. Because 92% of the teacher participants reported their lowest stage of concern as stage 4 (consequences), which focuses on the impact of RTI² on students, the researcher recommends that the district and school leadership explore why teachers appear to be unconcerned about the impact of RTI² on the students.
5. Because so many classroom teacher subgroups are concerned with management phase of RTI², it would serve the district and school leadership well to provide logistical, organizational, and management support to classroom teachers as they work on managing RTI². The researcher recommends that some of this support be additional time for collaborative work regarding the management of RTI².
6. In future studies, researchers should follow a sampling of teachers through the change process of RTI² over several years to learn more about the change process and how it impacts teachers and student learning, from the onset of implementation to a full and confident implementation of RTI².

Summary

This chapter presented a discussion of the study findings. The researcher concluded that differences exist in the stages of concern among faculty position subgroups, between teachers with Teacher Effect Data and without Teacher Effect Data, and among teachers in grades 3 through 5 depending on their teacher effectiveness level. These findings are supported by George et al., (2013). Everyone who encounters a new innovation will progress along a pathway of concern regarding the innovation, but not everyone takes the same pathway, nor do they experience the same intensity in the stages of concern (George et al., 2013).

REFERENCES

- Bradley, R., Danielson, L., & Doolittle, J. (2007). Responsiveness to intervention: 1997 to 2007. *Teaching Exceptional Children, 39*(5), 8-12.
- Buffman, A., Mattos, M., & Weber, C. (2009). *Pyramid response to intervention: RTI, professional learning communities, and how to respond when kids don't learn*. Bloomington, IN: Solution Tree Press.
- Burns, M. K., Appleton, J. J., & Stehouwer J. D. (2005). Meta-analytic review of responsiveness-to-intervention research: Examining field-based and research-implemented models. *Journal of Psychoeducational Assessment, 23*(4), 381-394.
- Canter, A. (2004). A problem-solving model for improving student achievement. *Principal Leadership: High School Edition, 5*(4), 11-15.
- Carr, J., & Bertrando, S. (2012). Top 10 instructional strategies for struggling students. *Leadership, 42*(1), 24-26.
- Castillo, J. M., & Batsche, G. M. (2012). Scaling up response to intervention: The influence of policy and research and the role of program evaluation. *Communique, 40*(8), 14.
- Christou, C., Eliophotou-Menon, M., & Philippou, G. (2004). Teachers' concerns regarding the adoption of a new mathematics curriculum: An application of CBAM. *Educational Studies in Mathematics, 57*(2), 157-176.
doi:10.1023/B:EDUC.0000049271.01649.dd
- Coats, D. (2003). Education production functions using instructional time as an input. *Education Economics, 11*(3), 273-292. doi:10.1080/0964529032000148809

- Connor, C., Alberto, P., Compton, D., O'Connor, R., & National Center for Special Education Research. (2014). Improving reading outcomes for students with or at risk for reading disabilities: A synthesis of the contributions from the Institute of Education Sciences Research Centers. *National Center for Special Education Research*, 2014-3000.
- Crichton, S. (2014). Leapfrogging pedagogy: A design approach to making change in challenging contexts. *Electronic Journal of E-Learning*, 12(1), 3-13.
- Dexter, D. D., Hughes, C. A., & Farmer, T. W. (2008). Responsiveness to intervention: A review of field studies and implications for rural special education. *Rural Special Education Quarterly*, 27(4), 3-9.
- Dobbie, W., & Fyer, R. G. (2011). *Getting beneath the veil of effective schools: Evidence from New York City*. NBER Working Paper No. 17632, December 2011.
- DuFour, R., DuFour, R., & Eaker, R. (2008). *Revisiting professional learning communities at work*. Bloomington, IN: Solution Tree Press.
- Dunn, K. E., Airola, D. T., Lo, W., & Garrison, M. (2013). Becoming data driven: The influence of teachers' sense of efficacy on concerns related to data-driven decision making. *Journal of Experimental Education*, 81(2), 222-241.
doi:10.1080/00220973.2012.699899
- Fuchs, D., & Deshler, D. D. (2007). What we need to know about responsiveness to intervention (and shouldn't be afraid to ask). *Learning Disabilities Research & Practice (Wiley-Blackwell)*, 22(2), 129-136. doi:10.1111/j.1540-5826.2007.00237.x

- Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly, 41*(1), 93-99.
- Fuchs, D., & Fuchs, L. S. (2005). Responsiveness-to-intervention: A blueprint for practitioners, policymakers, and parents. *Teaching Exceptional Children, 38*(1), 57-61.
- Fuchs, L. S., & Fuchs, D. (2006). A framework for building capacity for responsiveness to intervention. *School Psychology Review, 35*(4), 621-626.
- Fuchs, L. S., & Fuchs, D. (2007). A model for implementing responsiveness to intervention. *Teaching Exceptional Children, 39*(5), 14-20.
- George, A. A., Hall, G. E., & Stiegelbauer, S. M. (2013). *Measuring implementation in schools: The stages of concern questionnaire*. Austin, TX: Southwest Educational Development Laboratory.
- Glover, T. A., & Vaughn, S. (Eds.). (2010). *The promise of response to intervention: Evaluating current science and practice*. New York, NY: Guilford Press, 61.
- Good, R. H., III, Simmons, D. C., & Kame'enui, E. J. (2001). The importance of decision making utility of a continuum of fluency-based indicators of foundational reading skills for third grade high stakes outcomes. *Scientific Studies of Reading, 5*, 257-288.
- Great Schools Partnership. (2014). Rigor. In *The glossary of education reform*. Retrieved from <http://edglossary.org/rigor/>
- Great Schools Partnership. (2014). Scaffolding. In *The glossary of education reform*. Retrieved from <http://edglossary.org/scaffolding/>

- Gresham, F. M., & Vellutino, F. R. (2010). What is the role of intelligence in the identification of specific learning disabilities? Issues and clarifications. *Learning Disabilities Research & Practice, 25*(4), 194-206.
- Hall, G. E., & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes*. Boston, MA: Allyn and Bacon.
- Hord, S. M. (1987). *Taking charge of change*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Hord, S. M., Stigelbauer, S. M., Hall, G. E., & George, A. A. (2006). *Measuring implementation in school: Innovation configurations*. Austin, TX: Southwest Educational Development Laboratory.
- Hughes, C. A., & Dexter, D. D. (2011). Response to intervention: A research-based summary. *Theory into Practice, 50*(1), 4-11.
- Johnson, E., Mellard, D. F., Fuchs, D., & McKnight, M. A. (2006). Responsiveness to intervention (RTI): How to do it. [RTI Manual]. *National Research Center on Learning Disabilities*.
- Kimpston, R. D., & Anderson, D. H. (1988). Factors affecting teachers' and principals' stages of concern over carrying out benchmark testing. *Journal of Curriculum & Supervision, 3*(4), 321-334.
- Kovaleski, J. F., Gickling, E. E., & Morrow, H. (1999). High versus low implementation of instructional support teams: A case for maintaining program fidelity. *Remedial & Special Education, 20*(3), 170-183. doi:10.1177/074193259902000308
- LaRocco, D. J., & Murdica, P. (2009, October). *Understanding teachers' concerns about implementing response to intervention (RTI): Practical implications for*

educational leaders. Paper presented at the 40th Annual Northeast Educational Research Association Conference, Rocky Hill, CT.

Marston, D., Muyskens, P., Lau, M., & Canter, A. (2003). Problem-solving model for decision making with high-incidence disabilities: The Minneapolis experience. *Learning Disabilities: Research & Practice, 18*(3), 187-200.

Mastropieri, M., & Scruggs, T. (2005). Feasibility and consequences of response to intervention: Examination of the issues and scientific evidence as a model for the identification of individuals with learning disabilities. *Journal of Learning Disabilities, 38*(6), 525-531.

Mok, Y. F. (2005). Teacher concerns and teacher life stages. *Research in Education, 73*, 53-72.

O'Connor, R. E., Harty, K. R., & Fulmer, D. (2005). Tiers of intervention in kindergarten through third grade. *Journal of Learning Disabilities, 38*(6), 532-538.
doi:10.1177/00222194050380060901

President's Commission on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Retrieved from: <https://education.ucf.edu/mirc/Research/President's%20Commission%20on%20Excellence%20in%20Special%20Education.pdf>

Salvia, J., Ysseldyke, J. E., & Bolt, S. (2007). *Assessment in special and inclusive education* (10th ed.). New York: Houghton Mifflin.

Shoulders, C. W., & Myers, B. E. (2011). An analysis of National Agriscience Teacher Ambassadors' stages of concern regarding inquiry-based instruction. *Journal of Agricultural Education, 52*(2), 58-70. Retrieved from

https://ezproxy.mtsu.edu/login?url=http://go.galegroup.com.ezproxy.mtsu.edu/ps/i.do?id=GALE%7CA276808960&v=2.1&u=tel_middleten&it=r&p=AONE&sw=w&asid=98e1fb7501bbb3751cceb3d56b9811f

Southwest Educational Development Laboratories. (2015). *Stages of concern*. Retrieved from: http://www.sedl.org/cbam/stages_of_concern.html

Tennessee Department of Education. (2013). *Guidance on overall level of effectiveness calculations*. Retrieved from <http://team-tn.cloudapp.net/wp-content/uploads/2013/10/Guidance-on-Overall-Level-of-Effectiveness-Calculations.pdf>

Tennessee Department of Education. (2014). *Response to instruction and intervention framework*. Retrieved from http://tn.gov/education/instruction/docs/RTI2_Manual.pdf

Tennessee Department of Education. (n.d.). *Tennessee value added assessment system*. Retrieved from <http://tn.gov/education/data/TVAAS.shtml>

Tilly, W. D. (n.d.). Re: RTI [Online forum response]. Retrieved from <http://www.rtinetwork.org/connect/discussion/topic?id=255>

Vaughn, S., Wanzek, J., Murray, C. S., Scammacca, N., Linan-Thompson, S., & Woodruff, A. L. (2009). Response to early reading intervention: Examining higher and lower responders. *Exceptional Children*, 75(2), 165-183.

Vellutino, F. R., Scanlon, D. M., Zhang, H., & Schatschneider, C. (2008). Using response to kindergarten and first grade intervention to identify children at-risk for long-term reading difficulties. *Reading & Writing*, 21(4), 437-480.

doi:10.1007/s11145-007-9098-2

Woodcock, R. W. (1987). *Woodcock reading mastery test—revised*. Circle Pines, MN: American Guidance Service.

Woodcock, R. W., & Johnson, M. B. (1989). *Woodcock-Johnson psychoeducational battery—revised*. Allen, TX: DLM.

U. S. Department of Education. (2002). *To Assure the Free Appropriate Public Education of All Children with Disabilities (Individuals with Disabilities Education Act, Section 618): Twenty-Third Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2001*.

U.S. Government. (2004). *The individuals with disabilities education act*. Retrieved from <http://idea.ed.gov>

U.S. Government. (2002). *No child left behind act*. Retrieved from <https://www2.ed.gov/admins/lead/account/nclbreference/reference.pdf>

APPENDICES

APPENDIX A

STAGES OF CONCERN QUESTIONNAIRE

✖
ADVANCING RESEARCH, IMPROVING EDUCATION

Stages of Concern Questionnaire

Please answer the following 16 items:

Highest Degree:

- Bachelors
- Masters
- Education Specialist
- Doctorate

Primary grade taught or position:

- K
- 1
- 2
- 3
- 4
- 5
- Related Arts, such as gym, music, library, computer, art etc...
- Special Education, Academic Coaches and Interventionist

Years of teaching experience:

- 1-2
- 3-4
- 5-10
- 11-20
- 21-30

Teacher Effect Data- The Tennessee Department of Education recognizes my teacher effect data as a _____.

- Level 1
- Level 2
- Level 3
- Level 4
- Level 5
- I only have school level effect data.

How much time do you average each week planning instruction, collaboratively analyzing student data, and organizing logistical changes for student intervention groups?

- 0-15 minutes
- 16-30 minutes
- 31-45 minutes
- 46 minutes to one hour
- more than one hour
- These tasks are not part of my intervention responsibilities.

How much time do you average each week reviewing standards, planning instruction, assessing student work and communicating to parents for Tier 1 instruction?

- 0 hours
- 1-2 hours
- 3-4 hours
- 5-6 hours
- 7-8 hours
- 9-10 hours
- 11-12 hours
- More than 12 hours

Which intervention tier do you believe benefits the most from RTI2 interventions?

- Students served in Tier I intervention
- Students served in Tier II intervention
- Students served in Tier III intervention
- All students in Tier I, II and III benefit the same during grade level intervention time.

How would you describe your immediate supervisors reception of new ideas regarding the the implementation of RTI2 intervention?

- Poorly received
- Moderately received
- Significantly received

How would you describe how your professional opinion is embraced by the school wide RTI team when decisions are being made regarding the students you instruction during Tier I general education classes or intervention groups?

- Not embraced
- Moderately embraced
- Significantly embraced
- My role does not directly teach students during intervention or for Tier 1 instruction.

How would you describe the professional development you have received regarding obtaining a diverse set of instructional strategies for RTI implementation?

- Minimal training
- Adequate training
- Substantial training
- Extensive training

How would you describe the level of resources you have received which allow you to confidently implement your intervention with fidelity?

- No resources provided
- Adequate resources provided
- Substantial resources provided
- Abundant resources provided
- Self provided resources

How would you describe the faculty and staff at your school who implement RTI2 interventions in regards to embracing the redefined roles RTI2 has initiated in relationship to their jobs?

- Minimally embraced new roles
- Adequately embraced new roles
- Significantly embraced new roles

How much time were you given to embrace the practices of RTI2 prior to implementing RTI2 interventions?

- No time - immediate implementation
- Less than a month
- 1-3 months
- 4-6 months
- 6-9 months
- Over 9 months

How would you describe the answers given to practitioners regarding questions about RTI2 intervention?

- Clear and concise
- Inconsistent
- Vague and left up to interpretation
- Not answered
- No answer, but indication was given that the answer would be determined and given at a later date
- Avoided

Which group would you describe as having the most influence in the onset of implementing RTI2 Interventions state wide?

- Teachers and principals (bottom-up)
- Central Office and government (top down)

Select one response for each question below.

Please respond to the items in terms of **your present concerns**, or how you feel about your involvement with **Response to Intervention Squared**. We do not hold to any one definition of the innovation so please think of it in terms of your own perception of what it involves. Phrases such as "this approach" and "the new system" all refer to the same innovation. Remember to respond to each item in terms of your present concerns about your involvement or potential involvement with the innovation.

19.	I am concerned about evaluating my impact on students (in relation to Response to Intervention Squared).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20.	I would like to revise the Response to Intervention Squared approach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21.	I am completely occupied with things other than Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
		Irrel- evant	Not true of me now	Somewhat true of me now			Very true of me now		
#		0	1	2	3	4	5	6	7
22.	I would like to modify our use of Response to Intervention Squared based on the experiences of our students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23.	I spend little time thinking about Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24.	I would like to excite my students about their part in this approach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25.	I am concerned about time spent working with nonacademic problems related to Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26.	I would like to know what the use of Response to Intervention Squared will require in the immediate future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27.	I would like to coordinate my efforts with others to maximize the effects of Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28.	I would like to have more information on time and energy commitments required by Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

		Irrel- evant	Not true of me now	Somewhat true of me now			Very true of me now		
#		0	1	2	3	4	5	6	7
29.	I would like to know what other faculty are doing in this area.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30.	Currently, other priorities prevent me from focusing my time on Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31.	I would like to determine how to supplement, enhance, or replace Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32.	I would like to use feedback from students to change the program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33.	I would like to know how my role will change when I am using Response to Intervention Squared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34.	Coordination of tasks and people (in relation to Response to Intervention Squared) is taking too much of my time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35.	I would like to know how Response to Intervention Squared is better than what we have now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Submit Survey Responses