WHAT ARE TEACHER ATTITUDES TOWARD
THE RESPONSE TO INTERVENTION MODEL
AS IMPLEMENTED IN MIDDLE GEORGIA SCHOOL SYSTEMS?

by

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF APPENDICES</td>
<td>x</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xi</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION TO THE STUDY</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>1</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>3</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>8</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>10</td>
</tr>
<tr>
<td>Research Questions</td>
<td>10</td>
</tr>
<tr>
<td>Rationale and Significance</td>
<td>11</td>
</tr>
<tr>
<td>Methodology</td>
<td>12</td>
</tr>
<tr>
<td>Limitations, Assumptions, and Design Controls</td>
<td>14</td>
</tr>
<tr>
<td>Definition of Key Terms</td>
<td>15</td>
</tr>
<tr>
<td>Summary</td>
<td>17</td>
</tr>
<tr>
<td>2. REVIEW OF RELATED LITERATURE</td>
<td>18</td>
</tr>
<tr>
<td>History and Legal Precedent</td>
<td>18</td>
</tr>
<tr>
<td>History of Special Education in the United States</td>
<td>18</td>
</tr>
<tr>
<td>Legislation leading to Response to Response to Intervention</td>
<td>24</td>
</tr>
<tr>
<td>Response to Intervention</td>
<td>29</td>
</tr>
<tr>
<td>Definitions</td>
<td>29</td>
</tr>
</tbody>
</table>
Early Examples of Response to Intervention .................................................. 36
  Tiers of Intervention ................................................................. 49
  Differentiation of Instruction ...................................................... 54
  Response to Intervention and Behavior ........................................... 55
  Use of Response to Intervention to Address Disproportionality .......... 59
  RTI as an Eligibility Model for Specific Learning Disabilities ............. 61
Comparison of Implementation .......................................................... 67
Effects of Personnel Attitudes on Fidelity of Implementation ................. 70
Summary ......................................................................................... 79

3. METHODOLOGY ........................................................................ 81

  Problems and Purpose Overview .................................................... 82
  Research Design ........................................................................... 83
  Population and Sample .................................................................. 85
  Data Collection and Instrumentation .............................................. 86
    Quantitative .............................................................................. 86
    Qualitative .............................................................................. 90
  Data Analysis .............................................................................. 93
    Quantitative .............................................................................. 93
    Qualitative .............................................................................. 95
  Summary ....................................................................................... 96

4. RESULTS .................................................................................. 97

  Quantitative Findings ..................................................................... 97
    Survey Administration .................................................................. 97
    Responses Compared by County ............................................... 104
    Responses Compared by School Level ........................................ 105
    Responses Compared by Years of Experience ............................ 106
  Qualitative Findings ...................................................................... 107
    Participants .............................................................................. 108
    Emerging Themes ....................................................................... 109
    Other Findings ......................................................................... 114
  Summary ....................................................................................... 121

5. DISCUSSION ............................................................................. 122

  Study Review ............................................................................... 122
  Discussion ..................................................................................... 125
    Research Questions .................................................................... 125
    Response to Intervention and Referrals to Special Education .......... 132
  Limitations .................................................................................... 135
  Implications ................................................................................... 137
  Further Research .......................................................................... 137
  Possible Reform ............................................................................ 138
APPENDICES .................................................................................................................. 140

A. RTI SURVEY QUESTIONS .................................................................................. 140

B. INFORMED CONSENT ....................................................................................... 141

C. INTERVIEW QUESTIONS .................................................................................... 144

D. RESPONSE TO INTERVENTION – COMMON THREADS .................................. 145

REFERENCES .......................................................................................................... 155
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.  Response Percentages by County</td>
<td>98</td>
</tr>
<tr>
<td>2.  Descriptive Statistics for Total Summed Scores</td>
<td>98</td>
</tr>
<tr>
<td>3.  Total Responses by Count and Percentage</td>
<td>100</td>
</tr>
<tr>
<td>4.  Collapsed Responses by Count and Percentage</td>
<td>103</td>
</tr>
<tr>
<td>5.  ANOVA of Summed Scores by County</td>
<td>105</td>
</tr>
<tr>
<td>6.  ANOVA of Summed Responses to Question 1 by County</td>
<td>106</td>
</tr>
<tr>
<td>7.  ANOVA of Summed Scores by School Level</td>
<td>107</td>
</tr>
<tr>
<td>8.  ANOVA of Summed Scores by Years of Experience</td>
<td>108</td>
</tr>
<tr>
<td>9.  Summary of Interview Participants</td>
<td>110</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SUMMED SCORE HISTOGRAM</td>
<td>99</td>
</tr>
</tbody>
</table>
# LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. RTI SURVEY QUESTIONS</td>
<td>140</td>
</tr>
<tr>
<td>B. INFORMED CONSENT</td>
<td>141</td>
</tr>
<tr>
<td>C. INTERVIEW QUESTIONS</td>
<td>144</td>
</tr>
<tr>
<td>D. RESPONSE TO INTERVENTION – COMMON THREADS</td>
<td>145</td>
</tr>
</tbody>
</table>
ABSTRACT

DEBORAH DANIEL RUSS
WHAT ARE TEACHER ATTITUDES TOWARD THE RESPONSE TO INTERVENTION MODEL AS IMPLEMENTED IN MIDDLE GEORGIA SCHOOL SYSTEMS?
Under the direction of AL STRAMIELLO, Ed.D.

Response to Intervention (RTI) is an initiative first outlined by the federal government in the No Child Left Behind Act (2001) and the Individuals with Disabilities Improvement Act (2004). The purpose of the model is twofold: to address the needs of struggling students with research-based interventions and regular progress monitoring and to provide an alternative to the severe discrepancy model for the special education eligibility of specific learning disability. Evidence in the literature suggests that RTI has been inconsistently implemented across states, systems, and schools. The problem addressed in this study is that teacher attitudes toward lack of training and support can affect the implementation of RTI with fidelity.

The purpose of this mixed method study was to determine teacher attitudes toward the Response to Intervention model in five Middle Georgia school systems. Teachers were sent a link to a 17 item electronic survey regarding their attitudes toward the intent and implementation of the Response to Intervention model. Nine volunteers
were recruited for a face-to-face interview to provide supplemental data to the survey. Responses were coded and a constant comparison analysis was used to identify themes. An ANOVA was used to determine significance between school levels (elementary, middle, and high) and years of teaching experience.

Results indicated that teachers have positive attitudes toward the intent and appropriateness of RTI, but negative attitudes toward implementation policies. Problems cited with the model were: lack of needed staff support; lack of time to implement interventions, progress monitor, and hold meetings; and lack of needed intervention materials and staff development. Additional findings suggest that the majority of teachers view RTI as a pathway to special education referral rather than a method of skills remediation for struggling students. Further study is needed to ascertain the affects of teacher attitudes on implementation of the model, as well as the model’s affect on student achievement.
CHAPTER 1

INTRODUCTION TO THE STUDY

Background

The 1954 Supreme Court decision, *Brown v. Board of Education*, set a legal precedent for any minority group to argue for full inclusion into the mainstream, previously segregated, public school system (Wright & Wright, 2010). Although several later landmark cases further opened the door to equal rights for students with disabilities, it was not until more than twenty years later that one of the first significant acts of educational legislation recognized the rights of the disabled. The Education for All Handicapped Children Act (PL 94-142) of 1975 was designed to insure that all children with disabilities received a free and appropriate public education (Urban & Wagoner, 2009). This law first utilized the term Individualized Education Plan as a means of indicating a student’s present level of performance as well as establishing goals and objectives based on identified areas of weakness. For many, PL 94-142 represented an advance in both the quality and quantity of special education programs (Urban & Wagoner, 2009).

At the end of the 20th century, there was also a call for general educational reform. Urban & Wagoner (2009) indicate that the beginning of the “excellence in education” movement started in 1983, with the U. S. Department of Education’s publication of the pamphlet, *A Nation at Risk*. The report suggested that the United States had lost its economic superiority in the world due to the decline of public education as indicated by
scores on international achievement tests. President George H. W. Bush held an educational summit with the nation’s governors in 1989. This led to the America 2000 program, which was a series of goals for the American school system which addressed perceived inadequacies and proposed an increased reliance on educational testing, making America 2000 as much a political event as a plan for school improvement. The plan was renamed Goals 2000 during the Clinton administration with only minor changes (Urban & Wagoner, 2009). In 2001, President George W. Bush sought to strengthen his educational policy with the passage of the No Child Left Behind Act (NCLB), which stated that all students, with the exception of a small number with significant cognitive disabilities, should receive grade-level curriculum instruction and be assessed in comparison to grade-level achievement standards. This legislation advanced the concept that all children (those with disabilities and those without) should be supported and educated by a team of teachers who were specialists in curriculum as well as in interventions. The children affected by this act were to be held to the same academic standards. Unfortunately, this act also stands in direct opposition to special education law which advocated for an individualized plan that allowed the child to receive specialized interventions based on identified weaknesses (Ratcliffe & Willard, 2006).

The original Education for All Handicapped Children Act, passed in 1975, was amended and renamed by Congress several times, most recently in 2004 with the Individuals with Disabilities Education Improvement Act (IDEA 2004). With this authorization, Congress “increased the focus on accountability and improved outcomes by emphasizing reading, early intervention, and research-based instruction by requiring that special education teachers be highly qualified” (Wright & Wright, 2010, p. 15).
While the proposals of NCLB loosely described academic interventions for the general education population, IDEA 2004 addressed the needs of children with academic discrepancies by more fully delineating the use of “scientifically-based reading research.” Although not specifically termed Response to Intervention (RTI) until IDEA 2004, this model insures the child receives appropriate instruction in the grade-level standards. If the child continues to exhibit weaknesses in performance or achievement according to law, he or she must receive scientific, researched-based interventions and instructional strategies. Student-centered data regarding progress toward the stated goals must be documented regularly (Wright & Wright, 2010).

Unfortunately, this is the extent to which Response to Intervention was defined at the federal level, leaving the states with a great deal of discretion in developing a model that satisfies the letter of the law (Gagnon, 2010). As states developed guidelines for the implementation of RTI, the school systems were then left to implement the model according to their interpretation. Ultimately, however, practice has shown that it is teachers who determine the level of implementation of the RTI model (Gerber, 2005).

Theoretical Framework

Levin (2001) outlines a stage theory of institutional change that contains four components: Origin (where the reform proposals originated), Adoption (how the adopted proposals differed from the original proposals), Implementation (models of implementation put into place); and Outcomes (evidence available to measure the effects of the reforms). The third component of Levin’s stage theory, Implementation, is the focus of this study. According to Levin (2001), many obstacles can stand in the way of successful policy implementation, including those inherent in the proposal itself as well
as those which may be found to exist in a particular school climate. Many government agencies employ a variety of means to promote policy implementation such as mandates (legislation), inducements (funds or recognition), capacity building (professional development), system changing (reorganization), or opinion mobilization (public pressure). These governmental incentives rarely utilize comprehensive strategies to promote “buy-in” (Levin, 2001). Levin (2001) describes the factors that affect implementation such as clarity of the change, difficulty of the procedure, degree of understanding, level of commitment, available resources, and competing demands. All of these must be in place for fidelity of implementation to occur. This paper will show that the experiences many teachers have had with the implementation of Response to Intervention bear out Levin’s theory.

There is some controversy as to the purpose behind the original inception of the Response to Intervention model. While some educators insist that the focus of RTI is not to reduce the number of referrals for special education services (Fuchs & Fuchs, 2009), there are others who suggest RTI implementation has indeed brought about a reduction in the number of students identified as eligible for special education services (Marston, 2005; Ratcliffe & Willard, 2006). If such a reduction existed, it could mean a significant financial savings for the U. S. government, as federal subsidies for students with disabilities are significantly higher than students in general education. Unfortunately, with the reduction of referrals, some students who truly need services based on existing disabilities do not receive the services they need in the process. There are other consequences in the classroom because of the RTI model. Some educators believe that the model blurs the lines between the responsibilities of the special educator and the
general classroom educator for the identification and intervention of struggling students (Mastropieri & Scruggs, 2005). There is still a great deal of dissension among educators as to the purpose of RTI. There are educators who feel RTI is designed as early intervention for struggling students, others feel its purpose is the identification of students with specific learning disabilities, and still others feel it is a combination of both (Fuchs & Deshler, 2007).

One of the most significant inadequacies of the NCLB and IDEA legislation is the lack of specific guidelines as to the implementation of RTI (Gagnon, 2010). The essential problem is that states and systems are left to determine the method of delivery of services according to loosely defined standards. There is little consensus on the procedural steps and delivery models necessary to insure compliance with the law. Frequently, different personnel in school systems are assigned to be responsible for identifying students at risk, collecting and interpreting data, and determining the success of an intervention or the need for further evaluation. There seems to be a lack of standardization of procedure in identification, intervention, and methods of progress monitoring even within the same state (Werts, Lambert & Carpenter, 2009).

Werts, Lambert and Carpenter (2009) sent surveys to directors of special education programs in every school district in North Carolina asking them for their impressions of Response to Intervention as implemented in their system. Forty-six persons completed the multiple choice questionnaire indicating a total usable rate of 41.8%. Responses indicated that policies regarding the roles of personnel, time relegated for intervention, choice of curricula, progress monitoring tools, use of RTI to determine LD eligibility, and level of RTI staff development varied significantly among the systems
in the state. For example, when asked how long intervention sessions in the testing phase should last, the responses varied from 30 minutes (47.5%) to 1 hour (20%) to “other” (32.5%).

Ultimately teachers, not program directors, are responsible for the identification and intervention of struggling students. Gerber (2005) states that teachers have a perceived level of “tolerance” which dictates whether they will accept a student’s academic and behavioral performance or seek additional resources for a student’s inability to comply with the teacher’s understanding of what is “acceptable.” This level of “tolerance” is unique to each individual teacher, and is socially and historically constructed rather than scientifically derived. Consequently, without standardization, the identification for intervention can be subjective. Gerber (2005) identifies a direct relationship between “teaching effort” (relevant knowledge and skill) and resources available for addressing an individual student’s needs with resulting student achievement. Unfortunately, even though the teacher is motivated to “close the gap” between low achieving students and their average ability peers; the task seems impossible without resources that are above and beyond what is generally available in the classroom (support personnel, technology for using existing and new resources, curricula, behavior management programs, etc.). Teachers are also pressured by system mandates, administrators, and parents to ensure student performance. Gerber (2005) likens these variations in teacher motivation and response to RTI to the use of a blueprint. While the blueprint guides instruction, the resulting model can differ from the design in numerous ways. This author acknowledges the RTI model has demonstrated success in raising levels of student achievement, but he also points out the costs of time, professional
development, and scientifically based interventions necessary for success are astronomical (Gerber, 2005).

Teachers’ attitudes are important to the implementation of any new mandated program. Avramidis and Norwich (2002) examined the importance of teacher attitudes toward the success of the inclusion of students with disabilities in the general education classroom. The authors note that in Greece beginning in 1985, most students with learning disabilities were educated in “special classes” similar to pull-out classes in the United States. With the Education for Persons with Special Education Needs Act, passed in Greece in 2000, students were required to be educated in the general education classroom for the majority of the day (limiting the renamed “integration unit” pull-out classes to no more than ten hours per week). Avramidis and Norwich (2002) reviewed the literature of several studies after this new legislation went into effect and interviewed 155 general education primary teachers as to their views on the inclusion of students with disabilities. They concluded that, while most teachers expressed positive attitudes toward inclusion, respondents also agreed that successful implementation of inclusive education was largely dependent on teachers’ previous experiences with exceptional students, the availability of relevant professional development, resources seen as necessary for student success, and adequate support from specialists. As expected, the teachers surveyed voiced serious concerns about including students with moderate to severe disabilities, while the majority of those surveyed were more open to students with mild disabilities. The authors concluded that teacher attitudes significantly impacted the success of the inclusion program in Greece (Avramidis & Norwich, 2002).
Studies outside of the arena of education have also shown that employee attitudes can impact the successful implementation of new programs. Lewis (2006) examined employee communications with implementers of policy changes and found that satisfactory employee communication experiences positively affected perceptions of success and a decreased tendency to resist such changes in the communications industry. Schaap (2006) described a strategy implementation process that used frequent communications across the organizational structure to enhance consensus among employees through fostering shared attitudes and values. Ponemon and Nagoda (1990) reported a longitudinal study of the perceptions of personnel from business organizations implementing a packaged accounting information system. The authors found an association between successful and failed implementations with low and high variations of perceptions among members of the same team. They noted that initial expectations were often pessimistic, but frequently rose over the course of the implementation. They concluded that expectations did affect the final outcomes of the implementation of the system (Ponemon & Nagoda, 1990).

Statement of the Problem

Although there are educators who believe that some aspects of the No Child Behind Legislation of 2001 and the Individuals with Disabilities Improvement Education Act of 2004 seem to be diametrically opposed (Ratcliffe & Willard, 2006), both include the use of “scientific, research-based interventions” to address the needs of struggling learners (Wright & Wright, 2010, p. 300). While these interventions have not been operationally defined and often vary between states and even systems (Fuchs & Deshler, 2007; Werts, Lambert, & Carpenter, 2009; Gerber, 2005), teachers are usually expected
to identify eligible students, provide interventions, progress monitor responses, and make resulting decisions regularly in the classroom (Gerber, 2005). The fidelity of the implementation of the RTI model can be directly dependent upon teacher attitudes and feelings of competence as well as support or lack thereof. When faced with perceived incompetence or lack of understanding, employees of any institution sometimes choose “discretionary insubordination” in order to cope with feelings of frustration. Spring (2005) identifies discretionary insubordination as ignoring the chain of command by disobeying or changing orders in order to adapt to human needs.

While a review of literature identified a study surveying the levels of implementation of the Response to Intervention model (Werts, Lambert, & Carpenter, 2009), few published articles have addressed the issue of teacher perceptions and attitudes toward RTI. In October of 2008, the Georgia Department of Education recommended that systems begin to implement a state RTI model and published a Response to Intervention guidebook for system administrators to use as they implemented the model. Since the development of this guidebook in 2008, Georgia school systems have begun to implement this model at varying levels. Some systems have provided a great deal of structure, resources, and support for the implementation of RTI to classroom teachers, while others continue to use the Student Support Team (SST) model. The Student Support Team was the model used in Georgia to identify students needing referrals for special education placement before the federal legislation leading to RTI. This inconsistency has caused frustration for teachers, administrators and parents. There has been a lack of understanding of the principles behind RTI, as well as procedures for implementation in the classroom. The resulting frustration continues to
prevent RTI from being implemented with fidelity, therefore raising student achievement as intended.

Purpose of the Study

The purpose of this study is to assess prevailing teacher understandings and attitudes toward the Response to Intervention model as outlined by the Georgia Department of Education and as implemented in seven middle-Georgia school systems. As previously cited, the attitudes of personnel administrating and/or supporting any program can significantly affect the program’s success. By assessing current attitudes toward the RTI model implemented at varying levels across school systems, inadequacies can be addressed and changes developed that will improve the effectiveness of Georgia’s model and positively impact student achievement with heightened awareness and better adherence to the law.

Research Questions

As previously cited, teachers are primarily responsible for the implementation of RTI. It is the assumption that if teachers feel they have inadequate resources and support for successful implementation, it is unlikely that the model will be implemented with fidelity. The following research questions will be addressed regarding teacher attitudes:

1. What are teacher attitudes toward the intention or appropriateness of RTI?
   a. Do teachers feel that they can address the needs of struggling students through RTI, or would they prefer to use other means?
   b. Do teachers feel that the previous Student Support Team model was more or less effective?

2. What are teacher attitudes toward the implementation of RTI?
a. What resources do teachers feel that they need in order to successfully implement RTI?

b. Do teachers feel that they are implementing RTI according to system guidelines?

c. Do teachers feel that RTI is being implemented successfully in their system?

3. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their school level (elementary, middle, high)?

4. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their years of teaching experience?

Rationale and Significance

Response to Intervention is an initiative originally introduced through federal legislation and left to the states to implement their own models (Wright & Wright, 2010). As states have begun to interpret and publish guidelines, the school systems are left to provide training for the classroom teacher. Research has shown that employee attitudes can greatly affect the implementation of any new program (Avramidis & Norwich, 2002; Lewis, 2006; Schaap, 2006; Ponemon and Nagoda, 1990). Teacher understanding and attitudes toward the Georgia model of RTI affect their willingness to implement it effectively. While there are articles addressing the successful implementation of RTI, there are few studies that address teacher perceptions. The purpose of this study is to fill a void in the research concerning this area.

The significance of the study is to determine if reform is needed regarding the implementation of Georgia’s model of RIT. If there is a lack of understanding or support,
then the results of this survey could be instrumental in bringing about needed change. Response to Intervention was originally designed to address the needs of struggling students. After three years of mandated statewide implementation, if teachers still do not believe it is effective in raising student achievement, then it probably will not be. The results of this study could initiate reform that is needed to insure implementation of the Georgia model with fidelity as originally intended in the law.

Methodology

Seven middle Georgia counties were contacted, asking for permission to send emails with a web-survey link to each certified teacher in the district. Data was obtained through an electronic survey utilizing an instrument with a Likert-type scale to rate responses. Lane, et al. (2009) developed the Primary Intervention Rating Scale to assess the social validity of school-wide positive behavior support plans. “Social validity refers to the extent to which consumers (e.g., teachers, parents, and students) view a given practice as addressing socially significant tools, socially acceptable treatment procedures, and socially important intervention outcomes” (Lane, et al., 2009). The authors tested the survey with 617 teachers to provide initial evidence for the reliability and validity scores from the Primary Intervention Rating Scale (PIRS). The PIRS was adapted from the IRP-15, a widely used measure of social validity used to measure treatment acceptability and perceived effectiveness using a 6-point Likert-type scale. The PIRS employs 17 items adapted for elementary, middle and high school and addresses such issues as appropriateness of the intervention for the setting and for students, suitability for the described purposes, teacher willingness to implement, feasibility of implementation, fulfillment of the intervention purposes, and the effectiveness of monitoring procedures.
The Pearson correlation coefficient suggested a significant positive correlation between social validity and treatment integrity ($r = .71$, $p = .005$). The Cronbach’s alpha values for the elementary and high school surveys were .97 and .98 for the middle school survey. These values are a strong indicator of exceptionally high reliability. Minor adaptations to this survey were made in order to address RTI specifically (see Appendix A).

The survey used for this study was adapted from the PIRS and made available electronically system-wide to teachers. Demographic information such as years of teaching experience and level of students taught (elementary, middle or high school) was also included. Teachers in the selected systems were contacted by email system-wide and asked to participate in the survey. Percentages and means were determined for each survey response and an analysis of variance (ANOVA) was used to test for significance between demographic groups.

Survey participants were also given the opportunity to indicate their willingness to participate in a follow up interview. At least two candidates from each participating county were chosen by random sample to participate in a face to face interview in order to obtain more detailed information regarding teacher attitudes toward RTI. Participants were asked 9 questions (see Appendix B). Interviews were recorded and transcribed into a Word document to be compared for themes and commonalities. A Constant Comparison analysis as described by Leech and Onwuegbuzie (2007) was used to draw conclusions from the data. Results of a pilot interview study will be addressed in Chapter Three.
Limitations, Assumptions, and Design Controls

The success of this study is based on several assumptions, the most obvious being that teacher attitudes toward an initiative or model significantly affect its implementation. While there is some literature supporting this, there are many other factors, such as staff development, resources, and administrative support, which can affect implementation of an initiative. There is also an assumption, based on the experiences of the principle investigator, that the RTI model as currently implemented in middle Georgia is ineffective due to lack of support, resources, and training.

Participants were limited to seven counties in the middle Georgia region, which vary in ethnicity and socio-economic status. The counties are mostly rural except for two mid-sized cities, affecting generalizability. Also, with any voluntary survey, the number of participants could significantly reflect the results. Baruch (1999) found the average response rate for academic surveys was 55.6% with a standard deviation of 19.7. Baruch and Holtum (2008) reported the average response rate for individuals completing an organizational survey study was 52.7% with a standard deviation of 20.4. For this study, a 50% response rate for the teacher population of the system was considered sufficient; however, the actual number was considerably smaller.

The present study was designed to specifically evaluate teacher attitudes toward the Georgia model of RTI as it is currently implemented in these systems. There were no plans to assess the effectiveness of RTI implementation in each system in order to show a correlation between attitudes and implementation. Further study will need to be completed to assess this area.
Data were analyzed at the system level rather than at the teacher level, which may mask individual teacher differences. All participants will be expected to answer truthfully, however some may be hesitant to admit their lack of understanding of the RTI process. As with any study using descriptive statistics, correlation does not indicate causality. While inferences can be drawn, it will not be possible to state conclusively that a negative view of RTI results in lack of fidelity of implementation.

Definition of Key Terms

The following definitions were obtained from the Georgia Department of Education document, Response to Intervention: The Georgia Student Achievement Pyramid of Interventions (2008). They represent the acceptable definitions as utilized by the participants in the current study.

Accommodation – changes in instruction that enable students to demonstrate their abilities in the classroom or assessment/test settings

Assessment – a collection of information about student performance in a particular area – can be formative or summative

At Risk – students who have not been adequately served by social service and educational systems and who are risk of educational failure due to lack of services, negative life events, or physical and mental challenges, among others

Content Standards – broad statements of what students should know and be able to do in a specific content area

Data based instruction – an instructional approach in which student performance data is used to predict the effectiveness of instruction and to make changes in the instruction
Differentiation – a broad term referring to the need of educators to tailor the curriculum, teaching environment, and practices to create appropriately different learning experiences for students

English Language Learner (ELL) – students whose first language is other than English and whose command of English is limited

Fidelity – the provision or delivery of instruction in the manner in which it was designed or prescribed

Georgia Performance Standards – GPS – clear expectations for assessment, instruction and student work for each grade level and subject area

Individualized Education Plan – a written document that outlines the special education and related services designed to meet the unique educational needs of a student with a disability

Modifications – alterations that change, lower, or reduce learning expectations

Pyramid of Interventions – conceptual framework developed by the Georgia Department of Education – a graphic organizer that illustrates layers of instructional efforts that can be provided to students according to their intellectual needs

Response to Intervention – practice of academic and behavioral interventions designed to provide early, effective assistance, to underperforming students – research-based interventions are implemented and frequent progress monitoring is conducted to assess student progress

Research-based Interventions – methods, content and materials developed in guidance from the collective research of the scientific community
Strategies – effective instructional/behavioral practices (rather than a set of required instructional procedures)

Student Support Team – a multi-disciplinary team which utilizes a problem-solving process to investigate the educational needs of students who are experiencing academic and behavioral difficulties

Tiered Instruction – levels of instructional intensity within a tiered delivery model

Universal Screening – a process of reviewing student performance through informal or formal assessment measures to determine progress in relation to student benchmarks

Summary

The purpose of this study was to survey the attitudes of teachers regarding the perceived effectiveness of Georgia’s RTI model as implemented in seven Middle Georgia school systems. Previously cited literature suggests that participant attitudes can effect successful implementation of any initiative. Participants will complete an online survey to indicate their attitudes concerning Georgia’s current RTI model. Responses will be analyzed to determine level of understanding and of satisfaction with the model as currently implemented in these school systems. This study will also address gaps in the current literature regarding teacher attitudes toward Georgia’s Response to Intervention model and could possibly lead to reform that will make the model more effective in raising student achievement.
CHAPTER 2

REVIEW OF RELATED LITERATURE

History and Legal Precedent

*History of Special Education in the United States*

When the United States Constitution was written, the founding fathers decided that the burden of responsibility of public education should belong to the state rather than the federal government (Yell, 1998). The reasoning behind this decision was that education should be a matter for local communities to decide based on their societal needs. According to Yell (1998), every state had passed a compulsory attendance law by 1918; however, students with disabilities (SWD) were often denied their legal right to a public education. Despite legal challenges (Beattie v. Board of Education, 1919; Watson v. City of Cambridge, 1893), in most cases the courts upheld the rights of the local boards of education to exclude certain students who were deemed disruptive to the classroom because of behaviors caused by their disability (Yell, 1998). Even as late as 1969, the state of North Carolina made it a crime for parents to seek legal means to force local boards of education to accept a student with a disability after having been denied acceptance. Those students with special needs who were admitted into public schools were often relegated to self-contained classrooms in poor condition. They were virtually isolated from the general population and received minimal, if any, academic instruction (Winzer, 1993).
One of the most significant cases to impact the education of students with disabilities (SWD) was not related to disability issues at all. Brown v. Board of Education nullified the concept of "separate, but equal" and guaranteed all students the right to an equal educational opportunity under the Fourteenth Amendment. While this ruling did not immediately affect opportunities for the disabled, many subsequent rulings were based on Brown as a legal precedent. Advocates argued that SWD had the same rights as their "normal" peers, and that not only were many denied an education where their non-disabled peers were not, but there was differential treatment of students with special needs (Yell, 1993). At least two cases further defined the rights of SWD: Pennsylvania ARC v. Pennsylvania (1972) and Mills v. Board of Education (1972).

In January of 1971 the Pennsylvania Association for Retarded Citizens brought a class action suit against the Commonwealth of Pennsylvania that claimed students with mental retardation were not receiving their legal, publically-supported education. They charged that students with mental retardation could benefit from a formal education; that education could not be defined only in academic terms; that students with mental retardation could not be denied access to a free public education; and that early intervention and instruction was most successful (Yell, 1993). The state ruled that all children with mental retardation must be provided a free, appropriate public education in a program most like one provided to their nondisabled peers. That same year, Mills sued the Board of Education of the District of Columbia, charging that a group of students with various disabilities had been denied access to a public education in Washington, D.C. In this case, the court ordered the school system to provide procedural safeguards for these students, such as: the right to a hearing with representation, an official record
and an impartial officer; the right to appeal and access to records; and the right to written notice at all stages of the process (Yell, 1993).

These legal precedents paved the way for the first legislation to directly address the rights of students with disabilities: the Education for All Handicapped Children Act (P.L. 94-142) of 1975 (Wright & Wright, 2010). This legislation mandated a free, appropriate, public education in the least restrictive environment. It also guaranteed that students be evaluated in a non-discriminatory, culturally-fair manner, and that parents were to be given the opportunity to participate in the eligibility procedure with rights of due process. Students determined to be eligible for these services were to have written an Individualized Education Plan (IEP) that outlines their educational placement and present level of performance, goals and objectives, and services to be provided (Winzer, 1993; Yell, 1993). This legislation was re-authorized and renamed several times since its enactment and is the basis for all special education law since its passage (Wright & Wright, 2010).

In spite of the magnitude of the original legislation, only the learning disability category was specifically assigned criteria for eligibility (Bradley, Danielson, & Doolittle, 2005). Fuchs et al., (2003) state that the concept of “learning disability” was developed based on research by Rutter and Yule in 1975. Rutter and Yule (1975) regressed children’s IQ scores with their reading scores and noticed a larger proportion of reading “underachievers” than was expected based on cognitive ability. The authors concluded that a “severe discrepancy” between IQ and achievement testing was the primary indicator of a learning disability. The Education for All Handicapped Children Act (1975) contained a general description of “children with specific learning
disabilities,” but did not define specific criteria for the eligibility (Ahearn, 2009). The law described specific learning disabilities (SLD) as a disorder of basic psychological processes involved in the use of spoken or written language that may result in a deficit in listening, thinking, speaking, reading, writing, spelling or math calculation (Lichtenstein & Klotz, 2007). It was specified, however, that regulations that established specific criteria, described diagnostic procedures, and established monitoring procedures would be developed within a year of the passage of PL 94-142. During the interim, most school psychologists were unsure as to how to approach this new category, and often used the low points of a cognitive test as a presumption of the cause of the deficit (Lichtenstein & Klotz, 2007). On December 29, 1977, federal regulations defining the criteria for specific learning disabilities (SLD) were finalized. These criteria specified that a child that had a severe discrepancy between achievement and ability or that did not achieve commensurate with age and ability levels of his or her peers in one of the following areas would be eligible for services under the label SLD: oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematics calculation, or mathematics reasoning. The regulations also specified that the discrepancy could not be the result of a visual, hearing, or motor handicap; mental retardation; emotional disturbance; or an environmental, cultural, or economic disadvantage (Ahearn, 2009). This definition became known as the ability-achievement discrepancy model, which, although was more clearly defined than the original legislation, still allowed for a great deal of variance in interpretation among states. With this model, a student was recognized as having a SLD if there was a significant discrepancy between intelligence (usually measured with IQ tests) and academic
achievement (Hollenbeck, 2007). However, not only did the individual psychologists choose the tests used to measure intelligence and achievement, but the definition of “discrepancy” varied between states. This definition “varied in terms of how it was computed (e.g., standard IQ score minus standard achievement score vs. the regression of IQ on achievement), its size (e.g., 1.0 standard deviation (SD) vs. 2.0 SDs), and which specific IQ and achievement tests were used” (Fuchs, Mock, Morgan, & Young, 2003, p. 158). This model endured for over 25 years in spite of evidence that many eligibility teams disregarded federal and state mandates in order to avoid or expedite student eligibilities (Lichtenstein & Klotz, 2007).

In 1982, the National Research Council published a report which proposed that the special education classification system could be evaluated by three criteria: 1) the quality of the general education program; 2) the success of the special education program in producing desired outcomes; and 3) the accuracy of the assessment process in the identification of a disability (Heller, Holtzman, & Messick, 1982). Vaughn and Fuchs (2003) suggest that this report was the original basis for the Response to Intervention model, because the first two criteria focus on the importance of quality instruction and the third criterion is concerned with the accuracy and meaningfulness of the assessment, “requiring judgments concerning the instructional environments and the student’s response to those environments” (p. 138). Fuchs (1995) “operationalized” the Heller, Holtzman and Messick (1982) model by identifying four assessment phases. In Phase I classroom assessments are used to track the growth of all students in order to evaluate the effectiveness of the instruction. Individuals whose rate of improvement and level of performance are significantly below that of their peers are identified through Phase II
assessments. Phase III uses systematic testing of classroom interventions to enhance the instruction of the identified students in order to determine if the needs of the at-risk student can be met in the general education environment. In Phase IV, the effectiveness of special education was determined for the student. If effectiveness could not be documented, then no justification existed for specific learning disability (SLD) eligibility. This last phase caused controversy and was later dropped from the model (Vaughn & Fuchs, 2003).

The other “operationalization” of the 1982 National Research Council report concerned the concept of the “dual discrepancy” model (Gresham, 2007). While previous definitions of discrepancy focused on the difference between the child’s cognitive ability and the current academic performance in a particular skill or subject, this model includes a second discrepancy that focuses on the rate of growth as compared to the child’s peers. If a student’s academic performance as well as his or her learning rate is significantly lower than his or her peers, only then is special education placement considered an option (Gresham, 2007; Hollenbeck, 2007).

In 1990, the Education for All Handicapped Children Act was re-authorized and renamed the Individuals with Disabilities Education Act (IDEA). Besides changing the terms “handicapped children” to “individuals with disabilities” the amendments also added autism and traumatic brain injury to the list of possible eligibilities as well as required a transition plan to be added to every IEP for students aged 16 or older (Yell, 1993). The IDEA was re-authorized again in 1997 and required that all students with disabilities (SWD) be included in state and local assessments. The act required that Individualized Education Plan (IEP) goals and objectives were to be measurable and
required states to offer mediation as an option to resolve a dispute between the parent and the system. In addition, this amendment clarified issues regarding students with behavioral problems, requiring positive behavioral interventions regardless of disability category. It also specified that a student could be placed in an alternative setting for up to 45 days with the approval of the IEP committee but could be suspended from school no more than 10 days (Yell, 1993).

During the 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA), the National Joint Committee on Learning Disabilities wrote a letter to the Office of Special Education Programs expressing concern regarding the discrepancy model of SLD eligibility, noting that it was neither accurate nor completed in a timely fashion (Bradley, Danielson, & Doolittle, 2005). In response, Office of Special Education Programs began the LD Initiative, a multiyear process that brought together stakeholders such as researchers, advocacy groups, and other professional organizations to meet in a series of roundtable discussions and work groups to develop improved procedures for specific learning disability (SLD) identification. The consensus of these proceedings was that: SLD is a disorder that is supported by strong evidence and affects a narrow range of academic outcomes; the IQ/achievement discrepancy is not sufficient for identifying individuals with SLD; and response to intervention was the most promising, problem-solving model to use as an alternate identification of SLD students (Bradley, Danielson, & Doolittle, 2005).

*Legislation Leading to Response to Intervention*

One of the earliest pieces of legislation that led to the development of Response to Intervention (RTI) was the No Child Left Behind Act (NCLB) of 2001. This act was a re-
authorization of the Elementary and Secondary Education Act, originally drafted in 1965. This legislation was an attempt by the George W. Bush administration to ensure that all children have an equal opportunity to receive a high-quality education and meet minimum proficiency on state assessments (Wright & Wright 2010). Key requirements included annual proficiency tests in grades 3-8, research-based instruction, highly qualified teachers, increased parental rights, school choice, and public reporting of school, system, and state progress. According to Wright (2010) No Child Left Behind (2001) was designed to close the documented achievement gap between children of majority race, middle to upper income families and children from low income families, racial minorities, students with disabilities, English language learners, and others. One of the primary focuses of NCLB (2001) was to ensure that all children will be proficient readers by the end of grade three (Wright & Wright, 2010). The law also provided funds for “scientifically based reading research” and outlines such as containing five essential components of reading instruction: phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension. “Scientifically based reading research” specifies that the reading program must be empirically based, involving rigorous data analyses, objective measurements or observations, and approved by a panel of independent experts or accepted by a peer-reviewed journal (Wright & Wright, 2010). The concept of “scientifically based reading research” led to several of the amendments that were a part of the 2004 re-authorization of the Individuals with Disabilities Education Act (IDEA). Another component of No Child Left Behind (NCLB, 2001) was the use of diagnostic reading assessments. This term refers to assessments that are “valid, reliable, and based on scientifically-based reading research” (20 U. S. C. § 6368 (7)) used
to identify a child's areas of strengths and weaknesses to determine difficulties that a child may have which would prevent him or her from learning to read proficiently by the end of the third grade.

Many of the changes in the 2004 re-authorization of the Individuals with Disabilities Education Improvement Act were instigated with the intent of bringing this legislation into better conformity with the No Child Left Behind Act of 2001 (NCLB) (Wright & Wright, 2010). One of the most important changes was to require school systems to use “research-based” methods of teaching as described in NCLB. Members of Congress had expressed concern that many students with disabilities (SWDs) were victims of “poor teaching” and had not received appropriate instruction in reading and math. The essential components of reading instruction are defined in IDEA 2004 as being identical to those listed in NCLB 2001 (phonemic awareness, phonics, vocabulary development, reading fluency (including oral reading skills), and reading comprehension) (Wright & Wright, 2010). Teachers of SWDs were accused of having “low expectations, and an insufficient focus on applying replicable research on proven methods of teaching and learning for children with disabilities” (20 U. S. C. §1400(c) (4)). Congress added new language to the law concerning “developmental goals” and “challenging expectations” for both disabled and non-disabled children (Wright & Wright, 2010).

Several other amendments included in IDEA 2004 defined expectations and clarified confusion from previous legislation. Once a child has been found to have a disability according to federal regulations, the child is not automatically eligible for special education services unless evidence exists that the disability adversely affects his or her academic achievement. One of the primary concerns addressed in the original
Education for all Handicapped Children Act of 1975 was the over-representation of minority children receiving special education services (Wright & Wright, 2010). It was believed that because minorities were identified as having disabilities at a percentage greater than their majority peers, a problem with mislabeling these students existed. This over-representation was believed to be connected with the high drop-out rate of minorities even in the 1970s (Wright & Wright, 2010). By requiring that a disability must also adversely affect academic achievement, the resulting referrals for educational services could theoretically be lowered. In IDEA 2004, Congress required states to develop policies that "prevent the inappropriate over-identification or disproportionate representation by race and ethnicity as children with disabilities" (20 U. S. C. §1412 (c) (24)).

Criteria for eligibility for Specific Learning Disabilities changed also under IDEA 2004. Congress no longer required states to consider the severe discrepancy between achievement and intellectual ability as necessary for eligibility as a student with a specific learning disability (SLD). A district was instead given the option of using scientific, research-based intervention as part of the evaluation process (Wright & Wright, 2010). Herein lay the initial parameters of the procedures that eventually came to be called Response to Intervention (RTI). In section 1414 (d), Additional Procedures for Identifying Children with Specific Learning Disabilities, IDEA 2004 combines elements from previous legislation as far back as the Education for All Handicapped Children Act of 1975 with new options for SLD eligibility. Ultimately, it is up to the individual states to adopt criteria for determining whether a child has a specific learning disability; however, the state cannot require the use of the severe discrepancy model and must allow
the use of a process based on the child's documented response to scientific, research-based interventions as well as other alternative research-based procedures (§300.307). Eligibility must be determined by a team consisting of the child's parents, the child's general education teacher (or one qualified to teach the child's appropriate level), and a person qualified to conduct diagnostic assessments (i.e. a school psychologist, speech pathologist, or remedial reading teacher).

In order to meet eligibility requirements for SLD under IDEA 2004, the child does not achieve adequately for his or her age or meet State required minimum standards in the same areas as indicated in the 1977 federal regulations: oral expression, listening comprehension, written expression, basic reading skill, reading fluency skills, reading comprehension, mathematics calculation, and mathematics problem solving. The same previous exclusionary factors are also listed in the newer law: visual, hearing, or motor disability; mental retardation; emotional disturbance; cultural factors; environmental or economic disadvantages; or limited English proficiency. The addition to the eligibility criteria established with IDEA 2004 is as follows: a lack of sufficient student progress when using a process based on "the child's response to scientific research-based intervention;" or "a pattern of strengths and weaknesses in performance, achievement, or both . . . determined by the group to be relevant to the identification of a specific learning disability, using appropriate assessments" (§300.309). The team must first determine that the underachievement is not due to a lack of appropriate instruction by insuring the child did receive adequate instruction delivered by qualified personnel and that "repeated assessments of achievement at reasonable intervals" (§300.309) were conducted and results provided to the parents. If this is the case, the referral team then requests consent
from the parents for an evaluation for eligibility. This evaluation should include an observation in the child’s learning environment in order to document performance and behavior in the areas of difficulty (§300.310).

After completion of the evaluation within the federally mandated 60 day time frame, the referral team reconvenes to determine eligibility. The documentation of determination of eligibility must contain a statement of whether the child has a specific learning disability and the basis for making this determination. The eligibility document must also include any descriptions of relevant behaviors noted during the observation, any educationally relevant medical findings, and whether the child did or did not make sufficient progress to meet age or State-approved goals or “exhibits a pattern of strengths and weaknesses in performance, achievement, or both” (§300.311). If the student participated in a response to intervention process that assessed his or her response to “scientific, research-based intervention” the instructional strategies used and student data collected must be included. Documentation must also indicate that the parents were notified of the State policy concerning the amount and nature of the data as well as the services provided. In addition, the parents must be notified that they have the right to request an evaluation. The final eligibility report must certify in writing whether the decision for eligibility represents each member’s conclusions (§300.311).

Response to Intervention

Definitions

Melody Musgrove, Director of the Office of Special Education Programs, U. S. Department of Education (U. S. DOE), stated in a 2011 memorandum to the State Directors of Special Education that although the U. S. DOE “does not subscribe to a
particular RTI framework” (p. 2) there are core characteristics of all RTI models. These four common characteristics are: high-quality, research-based general classroom instruction; regular monitoring of student performance; periodic screening of all students for behavioral and academic problems; and multiple tiers of instruction that are “progressively more intense, based on the student’s response to instruction” (personal communication, January 21, 2011, p. 2). Simply put, “RTI is based on the notion of determining whether an adequate or inadequate change in academic or behavioral performance has been achieved because of an intervention” (Gresham, 2007, p. 10).

Fuchs, et al. (2003) describe RTI as: a) effective classroom instruction in general education with regular progress monitoring; b) students who do not respond get something else or something more from their teacher or another staff member and their progress is monitored; and c) students who still do not respond are referred for an evaluation for special education services. In spite of the legal precedent leading up to the inception of RTI, many would agree that the purpose of the model is not only for the identification of students with disabilities, but more importantly is a way to improve achievement and outcomes for all students by ensuring they are provided with adequate instruction before deficits are evident as well as providing specific interventions to aid in closing the achievement gap for those with identified deficits (Barnes & Harlacher, 2008; Danielson, Doolittle, & Bradley, 2007; Fuchs & Fuchs, 2007; Fuchs et al., 2003; Gresham, 2007; Jimerson, Burns, & VanDerHeyden, 2007).

Barnes and Harlacher (2008) offer a set of guiding principles for use in the implementation of Response to Intervention. The authors differentiate between the features of RTI (what it looks like) and five basic principles (why RTI is needed) that do
not change, in spite of varying models and levels of implementation. After an extensive review of the literature,

Five clearly defined principles of RTI were identified: (1) a proactive and preventative approach to education, (2) ensuring an instructional match between student skills, curriculum, and instruction, (3) a problem-solving orientation and data-based decision making, (4) use of effective practices, and (5) a systems-level approach (Barnes & Harlacher, 2008, p. 419).

The authors go on to identify the common features of RTI as multiple tiers, an assessment system, specific protocols, and evidence-based instruction and interventions. Such a multi-tiered model of supports is in contrast to the previous “student-support team” or “pre-referral team” concept that may include an implemented intervention, but all students may not have an “equal access to a range of coordinated, school-wide supports” (Barnes & Harlacher, 2008, p. 421).

Barnes and Harlacher (2008) also identify four common features of RTI, the first being multiple tiers of interventions. While the number of tiers can vary, most states with a model of implementation in place have three or four tiers (Berkeley, Bender, Peaster, & Saunders, 2009). Multiple tiers represent a continuum of student support ranging from support for all students in a differentiated classroom to the most specialized instruction for students with disabilities (Barnes & Harlacher, 2008). The second feature identified by Barnes and Harlacher (2008) is a formal and organized assessment system for all students, often referred to as a universal screener. The primary focus of this assessment is to form instructional placements within the identified tiers. The third feature, protocol, “refers to the approach schools use when determining what resources and level of
intervention a student needs” (Barnes & Harlacher, 2008, p. 424). Two methods of protocol, the problem-solving and standard method, will be discussed later in this section. The fourth and final feature of RTI as defined by Barnes and Haracher (2008) is evidence-based instruction and intervention. Evidenced-based instruction implies that the intervention has “empirical evidence supporting its effectiveness” (p. 425).

Fuchs and Fuchs (2007) outline six essential components for RTI: tiers of intervention, targeting of students for preventative intervention (universal screener), the preventative intervention itself, classification of the response (progress monitoring), a multidisciplinary evaluation prior to special education referral, and the function of special education. Bradley et al. (2005) describe a successful model of RTI as one that is “based on structured, data-based problem solving, flexible service delivery, regular monitoring of student progress on socially valid outcome measures, and a focus on the natural classroom contexts” (p. 486.) The authors go on to identify the “core features” of RTI as “(a) high quality, research-based classroom instruction, (b), universal screening, (c) continuous progress monitoring, (d) research-based secondary or tertiary interventions, (e) progress monitoring during interventions, and (f) fidelity measures” (p. 486). There are obvious similarities between these published definitions in spite of subtle differences, and these can be seen through the development of the earliest models.

Models of RTI

Problem-Solving Model.

Two basic approaches to Response to Intervention have been identified in the literature, with a possible third approach existing as a combination of elements of the first two (Fuchs & Fuchs, 2007; Fuchs et al., 2003; Hollenbeck, 2007). The first is the
problem solving approach, "a systematic, data-driven process that is designed to use collaborative teaming to address the diverse needs of students" (Marston, Muyskens, Lau, & Canter, 2003, p. 197). This four step approach involves: 1) a specific description of the student’s problem including academic and behavioral strengths and weaknesses, 2) the generation and implementation of an instructional intervention designed to address the problem, 3) the monitoring of student progress and evaluation of the effectiveness of the intervention, and 4) the repetition of the cycle as needed (Marston et al., 2003). Fuchs et al. (2003) describe the process as problem identification, problem analysis, plan implementation and problem evaluation. Tilly (2008) summarizes the approach with four questions: "Is there a problem and what is it? Why is the problem happening? What can be done about the problem? Did the intervention work?" (p. 18).

One of the key aspects of the problem-solving model is the detailed analysis of the problem (Christ, Burns & Ysseldyke, 2005). Gresham (2007) emphasizes the importance of the cause of the problem and differentiates between "acquisition deficits" (what a student can’t do because of a lack of skills) and "performance deficits" (what a student won’t do because of a lack of opportunity or a lack of motivation) (p. 15). The author goes on to compare the process to the medical model: where the physician evaluates a problem based on physical data and interaction with a patient; makes a diagnosis and prescribes a treatment; and re-evaluates after a period of time based on the effectiveness of the treatment, changing it as needed (Gresham, 2007). Tilly (2008) describes the problem solving model as one which "brings science into the schools" (p. 23) in that a hypothesis and data analysis is used to determine the most effective intervention for an individual student.
Standard Treatment Protocol

The second common approach to RTI is the standard treatment protocol approach. In this model, validated, empirically-based treatment interventions are used for students with similar academic deficits in small groups for regular periods outside of the general education classroom (Gresham, 2007; Hollenbeck, 2007). These “standardized, small-group interventions” (Jimerson, et al., 2007, p. 4) allow for more intensive instruction than is possible in the general education classroom in a more economical manner than the individualized problem-solving model. One of the concerns about the problem solving approach is the high level of variability of implementation due to the individualized manner of the intervention (Fuchs et al., 2003; Hollenbeck, 2007). In the standard treatment protocol approach, the interventions are standardized and usually scripted to ensure fidelity of implementation. In some cases (such as for students who have not experienced adequate reading instruction) such an intervention can be an initial approach to remEDIATE deficit skills (Gresham, 2007).

One of the earliest studies of the standard protocol approach as identified by Fuchs et al. (2003) was a study of first grade reading students receiving a standardized reading intervention (Vellutino, Scanlon, Sipay, Small, et al., 1996). The authors selected 15% of 1,284 first graders as identified by their teachers as low readers. This group was given the Woodcock Reading Mastery Test – Revised (WRMT-R) to determine their level of reading proficiency. Those scoring in the lowest 15% on the Word Attack or Word Identification subtests were included in the study (after excluding students with hearing or vision problems, emotional or behavioral problems, students taking medication, English as second language students and students with IQs below 90). A total
of 118 first graders identified as “poor” readers received the tutorial intervention and 65 first graders identified as “normal” readers received no intervention as a control group. The poor readers received a 30-minute, individual intervention with a certified teacher 5 days a week for approximately 15 weeks (70 to 80 sessions). Tutoring sessions included reading connected texts, phonemic awareness and decoding strategies, sight word practice, and reading comprehension strategies. Students who were still below the 40% in the second grade according to the WRMT-R were given an extra 8 to 10 weeks of tutoring. Results obtained from a linear regression analysis of the WRMT-R data indicated two thirds of the students were reading on a level commensurate with their “average” peers. The remaining one third remained at or below the 30% on the WRMT-R and were considered “difficult to remediate” (p. 629). Vellutino et al. (1996) concluded that the students who had made significant gains were victims of inadequate instruction rather than having cognitive deficits.

*Mixed Model*

While both the problem solving and standard treatment protocols are distinct and the merits of each have been debated, it is possible to combine them into a unified approach (Vaughn & Fuchs, 2003). Hollenbeck (2007) describes this model as one which “maintains a problem solving emphasis in tiers one and two, with high accountability standards across general education, while at the same time utilizing standardized interventions, often selected based on assessment outcomes to meet the needs of particular types of learners” (p. 140). Called a “progressive intervention” approach by some (Christ et al., 2005), this model is more likely to employ the standard treatment protocol for the initial intervention phases in order to address less severe deficits before
they become disabling. The problem solving approach would then be "reserved for the
more persistent and atypical problems, which would typically correspond with the
problems that were not resolved by standard interventions" (Christ et al., 2005, p. 3).

Early Examples of Response to Intervention

Fuchs et al. (2003) note that there was a general assumption in the 1980s that too
many children were being referred for psychological testing with the possibility of
educational placement. Some interpreted this rise in referrals as a sign that classroom
teachers were either unwilling or unable to accommodate the needs of diverse learners in
the classroom. Motivated by the availability of federal dollars, states sought to develop
pre-referral intervention programs to address these perceived problems. Two types of
models emerged in the literature as a result: the problem solving model as previously
described and the collaborative consultation approach. Both models were seen as ways to
support classroom teachers in the identification and intervention of struggling students
before making a referral for special education testing. Many combined the two
approaches into a "collaborative problem-solving model" (Fuchs et al., 2003). The
models described below were four of the earliest documented efforts toward pre-referral
interventions.

Ohio's Intervention Based Assessment (IBA)

In 1992, the Ohio Department of Education recruited 35 schools to participate in a
problem solving initiative to change referral procedures for special education (Fuchs et
al., 2003, Telzrow, McNamara, & Hollinger, 2000; McNamara & Hollinger, 2003). The
state introduced an Intervention-Based Assessment (IBA) to replace the previous
Intervention Assistance Teams (IATs) which utilized a collaborative team employing a
behavioral problem-solving approach to address the needs of struggling students (Telzrow et al., 2000; McNamara & Hollinger, 2003). A multidisciplinary team consisting of the principal, school psychologist, special education teacher, and classroom teacher utilized problem solving components ("e.g. behavioral description of the problem, baseline, measurable goal, hypothesized reason for the problem, systematic intervention plan, evidence of treatment integrity, data indicating student response to intervention, comparison of student data with baseline," p. 447) in worksheet format to develop an intervention plan for a struggling student. The team also completed an Evaluation Team Report outlining the description and analysis of concerns regarding the student’s academic progress, a description of the intervention employed, and resulting progress monitoring data (Telzrow et al., 2000).

Four years after the implementation of the Intervention-Based Assessment (IBA) model, Telzrow et al. (2000) evaluated the “best case” documentation of the problem-solving model in 227 schools. A Likert-type survey was used to evaluate the fidelity of implementation of the model and the degree of student change. The authors found that the model implementation was “frequently inconsistent and below desired levels of fidelity” (p. 457). Several informal changes to the original model: inconsistency of staff development, variations in levels of staff skills required to implement the model; difficulties with documentation, and the combined effect of these factors were cited as reasons for the lack of fidelity of implementation on the part of the staff. Telzrow et al. (2000) also acknowledged that the moderate degree of implementation prevented the authors from drawing conclusions concerning the effects of the model on student achievement. The authors did conclude that the effects of problem-solving interventions
on student change were attributable to three critical factors: "the fidelity of problem solving implementation, the degree to which the selective interventions are empirically supported, and the integrity of intervention implementation" (p. 456).

McNamara & Hollinger (2003) compared the Intervention-Based Assessment (IBA) problem solving model with the previous Intervention Assistance Teams (IAT) model (that required standardized, norm-referenced evaluations) to determine if there was a difference in the number of referrals for special education placement. While the authors acknowledged there was no significant difference in the total number of referrals between the IAT year and the IBA year, their focus was on the rate of "inappropriate" evaluations (i.e. evaluations that did not result in eligibility for special education services). Findings indicated that while 53% of the IAT cases initially reported were referred for evaluation for special education services, only 26% of the IAB problem-solving cases were referred. The authors also reported that of those who were referred for an evaluation, 77% of the IBA students were found eligible for special education services vs. 63% eligible under the IAT model while 17% of the students under the IBA model were found ineligible vs. 36% found ineligible under IAT. All findings were at a significance level of p<0.01. The authors felt this was a strong indicator that the IBA problem-solving model did reduce the number of inappropriate referrals for special education evaluations. The only evidence of treatment fidelity, however, was the presence of the state required documentation worksheets as described above. The authors did admit that one explanation for the reduction in referrals using the IBA method might have been related to the increased level of documentation and amount of time required for implementation of the problem solving model (McNamara & Hollinger, 2003).
During the last two decades, Ohio’s model has evolved into the Ohio Integrated Systems Model. “The Ohio Integrated Systems Model is focused on improving student outcomes at all levels (district, school, classroom, and individual student) using research-based approaches and relying on data-based decision making at all tiers” (Graden, Stoller, & Poth, 2007, p. 294). Graden et al. (2007) emphasize the importance of integration of such an initiative across general and special education to promote broad, school-based ownership of the model. To accomplish this goal, a system level focus is necessary. Problem solving cannot be seen as an “add on” to the referral process for special education, but “collaborative strategic planning to identify, analyze, and address system-level barriers to improve student academic and behavior outcomes” (p. 295). Because Ohio went from voluntary participation in the problem solving model to full state implementation in compliance with change in federal legislation, challenges in maintaining implementation integrity across systems had to be overcome (Graden, Stoller, & Poth, 2007). The authors noted needed emphasis on parent participation in planning and implementation and the importance of in-service as well as pre-service training.

*Pennsylvania’s Instructional Support Teams (ISTs)*

The Instructional Support Team model (begun in 1990 by Jim Tucker, Director of the Bureau of Special Education in the Pennsylvania Department of Education) “is maybe the best-known state-wide pre-referral intervention program in the nation” (Fuchs et al., 2003, p. 162). While the Instructional Support Team (IST) model involves a collaborative team including the general education teacher, principal and specialists as needed (similar to Ohio’s model), Pennsylvania’s team includes a support teacher whose primary
responsibility is to assist the classroom teacher in the intervention process. Four primary functions of the ISTs were identified:

(a) to ensure the effective use of a continuum of services in each building; (b) to provide collegial support to teachers working with difficult-to-teach students; (c) to screen students who may be eligible for special education; and (d) to assist general educators to provide services in their classrooms to identified (special education) students if required in their Individualized Education Programs (IEPs) (Koveleski & Glew, 2006, p. 17).

The model emphasized staff training including five essential components: collaboration and team building, instructional assessments (including curriculum-based measurements to assess, inform, and monitor student progress), instructional adaptations, student discipline, and student assistance strategies (Koveleski, Tucker, & Stevens, 1996). The IST protocol begins with a curriculum-based assessment (for students struggling with academics) or a behavioral assessment (for students with behavior issues) leading to a description of the problem in measurable terms. A goal is set and intervention plan developed, and the teachers (classroom and support teacher) work together to support the student in the classroom, provide the appropriate intervention, and monitor his or her progress. After 50 days, the team reconvenes to determine instructional effectiveness, and students that have made insufficient progress are referred for an evaluation for special education placement (Fuchs et al., 2003). During the second year of implementation, a three person state evaluation team visits the school to determine whether additional support or training is needed (Koveleski et al., 1996).
Results of the Pennsylvania Instructional Support Team (IST) model were more positive than Ohio’s Intervention-Based Assessment (IBA) model. Hartman and Fay (1996) surveyed 1,074 schools from 1992 to 1994 and found that the use of ISTs led to a decrease in special education referrals, fewer special education placements, and a reduced rate of grade retention as compared with schools not utilizing the IST model. Kovaleski, Gickling, Morrow and Swank (1999) noted that these findings were “beneficial only if there is clear evidence that students not referred or retained are successful in general education programs” (p. 172). Kovaleski et al. (1999) measured the academic performance (measured as time-on-task, task completion, and task comprehension) of students referred to the IST as compared to students at risk without access to the model. The authors also compared schools utilizing the IST model by levels of implementation as defined by scores received during the second year evaluation by the state monitoring team. High implementation schools were designated as being in the top 30% of average state scores, while low implementation schools were in the lower 30%. Average student scores were also computed for each of the academic tasks in each group (IST and non IST). While there were no significant differences between groups on the time-on-task and task completion tests, there were significantly higher gains between the high implementation IST group and the low implementation and no IST groups on the task comprehension tests. The authors concluded that “half-hearted efforts” at implementation are no better than no intervention at all (Kovaleski et al., 1999).

Heartland Area Education Agency 11

The state of Iowa is divided into 15 regions called Area Education Agencies that provide support such as staff development, library, and other media services to school
districts. Heartland AEA 11 is the largest such region, serving 56 separate school districts involving over 200 individual schools. Since the mid-1980s, the Area Education Agencies joined with the Iowa Bureau of Special Education to address concerns regarding the process leading to special education placement (Ikeda, Tilly, Stumme, Volmer, & Allison, 1996). The Renewed Service Delivery System was developed to aid systems at the local level in the implementation of improved educational services. To accomplish this task, a set of “foundation principles” were developed:

(a) better integration of special- and general-education services for students with disabilities and at-risk characteristics, (b) reduced reliance on teaching children with special needs in separate settings, (c) greater emphasis on meaningful assessment procedures for educational decision making, (d) measuring student performance intervention and prevention of educational problems, (f) recognition of the need for continued staff development, (g) a renewed commitment to meaningful parent involvement in educational decision making, and (h) the creation of building plans that guided each individual school buildings’ unique reform efforts (Ikeda et al., 1996, p. 230).

Heartland Area Education Agency began working with staff in the area schools to incorporate three priorities related to this initiative: improving collaboration skills, developing Building Assistance Teams (BATs) and promoting systematic progress monitoring (Ikeda et al., 1996).

A problem solving approach was developed that involved four levels of intervention (Tilly, 2008). At each level, a similar process occurs: identifying the magnitude of the problem and its causes; designing and implementing a goal-directed
intervention; monitoring student progress and modifying the intervention based on the response; and evaluating effectiveness and planning future action (Fuchs et al., 2003). According to Tilly (2008), at Level I a consultation between the teacher and the student's parents is held to discuss the problem at hand and possible informal strategies. If student response does not improve, Level II is implemented and additional staff such as a guidance counselor or other support personnel meet with the parents and teacher. A specific intervention is planned and data is gathered. If student achievement or behavior does not improve, an Extended Problem-Solving Team is involved at Level III. This team of specialized service providers (including the school psychologist) reviews all of the information gathered during Levels I and II and develops an assessment plan as well as an "intervention plan with a high likelihood of success" by using a "structured thinking process" and "specialized tools" (p. 25). At Level III "specific professional standards of quality problem solving have been defined" involving the "integration of information from multiple sources with research derived knowledge and experience in the problem area" (p. 25). If the student does not make adequate progress toward the stated goals, a referral for a special education evaluation occurs at Level IV.

This model was originally intended to be an individualized approach, but challenges were noted over the course of the implementation, such as the difficulty of teachers implementing individualized interventions while trying to deliver instruction to the entire class, as well as the mind-set of many classroom teachers that the process was another "fast track" to special education referral. With the passing of legislation such as No Child Left Behind in 2001, accountability requirements changed significantly and several adjustments to the Heartland problems solving problem were subsequently made.
The districts began to focus on a problem-solving model for the entire student body by incorporating universal screenings and using formative assessments to evaluate the effectiveness of the general education curriculum. Heartland systems also began to utilize data-based, group level interventions for students that had similar skill deficits in order to improve efficiency (Tilly, 2008), thus moving from a purely problem-solving approach to one that combines standard protocol strategies.

Fuchs et al. (2003) notes that, although this model was originally implemented in the mid-1980s, there is little published empirical data reporting the model’s effectiveness. While Fuchs does cite a 2002 article by Ikeda and Gustafson, this article is only available from the authors at the Heartland Area Education Agency. Ikeda and Gustafson took data over the course of 2 years (1999-2001) and reported that the number of problems addressed without special education resources was about 75%. Fuchs et al., (2003) point out several problems that exist with Ikeda and Gustafson’s claims: the authors do not assess the levels of implementation of the models between schools or districts and no student outcome data were presented, only referral and placement data. The claim of 75% of the students not needing special education referral is also confusing as the numbers the authors cited do not add up to that percentage. Fuchs et al. (2008) also argue that a decrease in special education referrals is unimportant if those who did not receive a referral continue to perform poorly in the general education classroom.

Ikeda et al. (2007) reflected on the celebrations and unintended consequences of the model as implemented by Heartland. The authors list the positive aspects of the problem solving method as “use of local data to define problems, use of more direct measures of problems, engaging general educators in supporting students experiencing
difficulty, promoting access to the research base for developing interventions, and using
graphed data to make decisions about instructional progress” (p. 261). It was noted that
every student considered for special education placement had a wealth of data
accumulated from the problem-solving process to use as information in determining the
appropriateness of special education services. The authors also pointed out unintended
consequences in the implementation of the problem solving model. While some systems
integrated the required procedures, the teachers did not incorporate the belief system of
problem solving – that is to say their intention was to expedite referral to special
education rather than attempt to remediate the problem and promote success in general
education. Many general education teachers felt that the process delayed special
education referrals, in spite of the fact that the student was exceeding expectations or at
least making adequate progress with the interventions in the general education classroom.
Another unintended effect was that documentation of instructional interventions in the
general education classroom was more rigorous than that of the special education setting.
Part of the explanation for this discrepancy was the level of documentation required in
each setting (Ikeda et al, 2007).

Minneapolis Public Schools’ Problem-Solving Model

The Minneapolis Public School (MPS) system began the development of a
problem-solving model for determining eligibility for special education services in 1992,
when the Minnesota State Board of Education adopted an ability/achievement
discrepancy model of eligibility based on IQ test scores. The Minneapolis Public School
(MPS) system disagreed with the discrepancy model based on four premises: 1) that
intelligence testing for eligibility is often inappropriate because it was believed that they
do not measure reasoning skills, but rather language, memory, and fine motor skills; 2) that intelligence tests are culturally biased and the majority (74%) of students in the MPS at that time were students of color; 3) that a testing model would force psychologists to decrease the amount of time spent in consultation and intervention and increase the amount of time administrating assessments; and 4) that curriculum based measures were a more accurate way to measure student growth and achievement (Marston, et al., 2003). In 1993 the Minnesota State Board of Education granted MPS a waiver from the discrepancy model for three years in order to explore an alternative approach to determining eligibility. The MPS went on to develop a problem solving model based on principles similar to the Heartland model (Marston, et al., 2003).

The Minneapolis approach involves four steps: identify and specifically describe the problem, generate and implement strategies for intervention, monitor student progress and evaluate effectiveness, and repeat the cycle as necessary, adjusting the interventions as needed (Marston et al., 2003). These steps are utilized within the model’s three stages, which involve documentation on a standardized worksheet at each level. Stage 1 involves interventions in the general education classroom involving universal screenings and instructional modifications. If a student does not achieve at a satisfactory level as compared with his peers, then a multidisciplinary “Intervention Assistance Team” meets to assess student strengths and needs and develop a more individualized approach to intervention in Stage 2. If adequate progress is still not achieved, the student reaches Stage 3 and a referral for a special education evaluation is considered. The MPS eligibility evaluation consists of a review of the data documenting the student response to Stages 1 and 2; information (and assessments if needed) regarding the students adaptive
behaviors, observations of the student in all relevant environments; and a direct formal or informal assessment of the student’s problem-solving skills, learning rate, and ability to generalize material (Marston et al., 2003). The focus of this model is on differentiation of instruction in the general education classroom, a collaborative model of teaching utilizing both general and special education, and a team problem solving approach with an emphasis on staff development.

Marston et al. (2003) report several outcomes based on student count data charted between 1990 and 2001. The authors noted that, while the total number of students identified as special education eligible and the students involved in the problem-solving model remained consistent at about 7% of the total population, the number of students found eligible for special education placement decreased while the number of students referred to the problem solving model increased. It was concluded that “although this may be related to improved reporting, it is also likely reflective of the provision of interventions to an increasing number of students that were effective in preventing the need for a referral on to special education assessment” (p. 195). Marston et al. (2003) also reported the number of referrals to special education for children of color decreased by approximately 10% over the ten-year period. Fuchs et al. (2003) again points to a lack of empirical data to substantiate the effectiveness of this model concerning academic performance and student outcomes.

Marston, Lau and Muyskens (2007) later reflected on the “lessons learned” from implementing the Minneapolis problem solving model. The authors noted that one positive result was the establishment of an internet-based data warehouse, allowing teachers and other staff members to access student data for ease in planning such as
demographic and academic information; state, district and other curriculum based assessment results; and documented behavioral information. The authors also emphasized the need for continuous staff development to address roles and responsibilities as well as strategies and documentation for all teachers and support personnel involved in the problem solving model. As in the Heartland model, many teachers associated with the Minneapolis model see problem solving as another route to special education referral, rather than a method to remediate skill deficits in general education. The authors acknowledged that general education classroom teachers needed to take ownership of their responsibility for instructional interventions in regular education. Finally Marston et al., (2007) noted the importance of progress monitoring and formative assessment data to help teachers modify instruction in order to insure the adequate progress of all students.

Comparison of the Models

Fuchs et al. (2003) categorizes the Ohio and Pennsylvania models as collaborative problem-solving approaches to RTI that increase teacher support in the general classroom to provide interventions for struggling students. If the classroom interventions are unsuccessful, the student is referred to a multidisciplinary team for a more formal evaluation and interventions before a referral for a special education evaluation is recommended. The Heartland and Minneapolis models employ multiple levels of intervention, involving teams of increasing levels of expertise as the student moves through the stages. Fuchs et al. (2003) surmises that the focus of the Heartland and Minneapolis models are more on remediation than referral, and when a referral is warranted students tend to move directly into a special education eligibility without a formal evaluation. In addition, the Heartland and Minneapolis models of special
education do not categorize students into eligibilities such as Specific Learning Disability or Mildly Intellectually Disabled, but rather identifies the student as merely “eligible for special education services” (p. 166). The authors repeat their concern for a lack of empirical data regarding the effectiveness of any of these models (in spite of their longevity), but particularly note this fact for the Heartland and Minnesota models. They go on to note that the empirical data cited for the standard protocol approach as described by Vellutino et al. (1996) is far superior to that of the problem solving models described and gives credence to the claim that the standard protocol method is “scientifically based” (Fuchs et al., 2003, p. 167).

*Tiers of Intervention*

*Advantages of a Multi-Tiered Approach*

One of the key features of Response to Intervention (RTI) is the continuum of support ranging from differentiation for all students in the general education classroom to specialized instruction for those who need it most (Barnes & Harlacher, 2008). Gresham (2007) identifies several advantages to the use of a multi-tiered approach of RTI. The severe discrepancy model has been called a “wait to fail” approach because a student has to struggle long enough for a teacher to feel certain that a discrepancy between IQ and achievement exists. The multiple tier approach leads to early identification and intervention of academic and behavioral problems that can possibly be addressed effectively at this stage. Another advantage of multiple tiers is that a risk model is emphasized rather than a deficit model. Because all students are screened for academic and behavioral problems, those identified as being “at risk” are given supplemental instruction and support matching the intensity of the intervention to the severity of the
problem. This model can also aid in the efforts to reduce the disproportionality of minority students receiving referrals for special education services (Gresham, 2007). Teacher recommendation can have a significant impact on an interdisciplinary team’s decision to refer a child for special education evaluation or actual placement (VanDerHeyden, Witt, & Naquin, 2003). A data-based problem solving model can help alleviate teacher bias in special education referrals (Gresham, 2007). Finally, the focus of a multi-tiered intervention approach is on student outcomes: “RTI is concerned primarily with the assessment of measurable and changeable aspects of the instructional environment that are related to positive child outcomes” (Gresham, 2007, p. 17). The use of multiple tiers can help determine if a child is truly learning disabled or is merely the victim of inadequate instruction.

**Number of Tiers**

The most common model described in number of tiers is the three-tiered model (Barnes & Harlacher, 2008; Berkeley et al., 2009; Hoover & Love, 2011). Barnes and Harlacher (2008) describe the three tiers as: Tier 1 – all students receive at least 60 minutes daily of a general education core program; Tier 2 – at least 30 minutes daily of supplemental instruction for students who are unsuccessful; and Tier 3 – specialized instruction (often in special education). Vaughn (2003) outlines a three-tiered model in this way. Tier 1 is comprised of a research-based instructional program, benchmark testing of students at least 3 times a year, and professional development. Tier 2 is available for those students who are unsuccessful in Tier 1. This tier is “small-group supplemental instruction in addition to the time allotted for core instruction” including strategies and procedures designed to “supplement, enhance, and support Tier 2” (p. 3).
Interventions in this tier can last for 10 to 12 weeks, after which students are evaluated to determine the level of progress. According to Vaughn (2003), Tier 2 instruction should include explicit instruction with modeling, practice and feedback; individual pacing to match individual skill level, multiple opportunities to participate and respond; and constant corrective feedback. Tier 3 intervention is “intensive, strategic, supplemental, and often considerably longer in duration” than Tier 2 (p. 3). Tier 3 groups should be homogeneous small groups (1 to 3 students) meeting twice a day for 30 minute sessions each (in addition to core instruction) receiving intensive, scientifically based programs emphasizing critical elements (Vaughn, 2003). Because of the decreasing percentages of students involved as the tiers progress, many states have opted for a “pyramid” graphic to demonstrate this leveled approach (Georgia Department of Education, 2008; Kashima, Schleich, & Spradlin, 2009; Fletcher & Vaughn, 2009; Fox et al., 2010).

There are some exceptions to the three-tiered model, however. Fuchs et al. (2003) recommend a two-tiered model: the first of which would be the general education classroom in which differentiation is incorporated into research-validated instruction and the second tier being small groups of three to six students who continue to struggle receiving a standard treatment protocol approach. Berkeley et al. (2009) reviewed the implementation of Response to Intervention in all 50 U. S. states and found that (at that time) of the 15 states reporting full implementation of an RTI model, all but two had three tiers of intervention. Only North Carolina and Georgia had implemented a model that had four tiers. The authors noted several commonalities between tiers. Tier 1 included differentiated instruction in the general education classroom with interventions delivered to at risk students identified through a universal screener. Tier 2 involved more
intensive instruction in small groups with regular progress monitoring, and Tier 3 incorporates “highly intensive, specifically targeted individual instruction with even more frequent progress monitoring” (p. 91). This tier may or may not involve special education services. Berkeley et al. (2009) noted several differences between the thirteen three-tiered models, especially concerning Tiers 2 and 3. Some states use a pre-determined list of research-based interventions for certain skills while other states utilize a problem solving team in order to determine interventions. In some states, the intervention team specifically outlines what staff members are involved in the Tier 2 process, while in others any staff member can provide interventions under the direction of an intervention specialist. At the Tier 3 level, some states require individualized instruction, some allow small group instruction to continue, and still others use a combination of both. All of the identified three-tiered states considered referral to special education to be a separate process only considered when the interventions have proven ineffective. In most cases, referral is considered after Tier 3 interventions, but in some states special education evaluation and placement can be considered during Tier 3 or (in Ohio and Utah) at any point in the RTI process. Both states of Georgia and North Carolina consider the fourth tier to be placement in special education as a part of the RTI process rather than separate from the process.

The four-tier system in the state of Georgia has a unique background. According to the Georgia Department of Education (2008) handbook, *Response to Intervention: The Georgia Student Achievement Pyramid of Interventions*, Tier 3 interventions are based on the previous Student Support Team model, created in 1984 as the result of a class action suit. According to Reschly, Kicklighter, and McKee (1988), a class action suit was filed
(Marshall v. Georgia) in 1984 that charged Georgia with the use of achievement grouping that resulted in a disproportionate number of black students overrepresented in lower tracks and underrepresented in higher tracks. The plaintiffs argued that such ability grouping led to different educational experiences for black and white students, which in turn, caused differences in levels of achievement. The state countered that such grouping was actually beneficial to the students because it helped to overcome the prior effects of segregation. The defendants further claimed that students were grouped according to reading abilities as determined by their functional level in the reading basal series, that groupings were flexible and could change over time, and that groupings allowed for more individualized instruction (Reschly et al., 1988). In spite of the fact that the court ruled in favor of the defendant, the suit prompted the state of Georgia to instigate a reform effort to prevent inappropriate referrals to special education (Georgia Department of Education, 2008, section 6.1). As a result, a Student Support Team (SST) is required in every public school in Georgia, and the Department of Education incorporated this model into the third tier of interventions. Tier 3 (SST) interventions involve a specialized team participating in the problem solving process. This process “employs scientific analysis to discover the reason(s) for an individual student’s difficulties” which “guides the design of the individualized interventions that attempt to best fit the student” (p. 45). The Georgia Department of Education (2008) notes that information gathered in Tiers 1 and 2 are used to help the Student Support Team make these decisions, ensuring an even greater level of effectiveness as well as reducing the number of Tier 3 referrals because skills were remediated in the lower tiers.
Differentiation of Instruction

One of the key tenets of the first tier and the cornerstone of the Response to Intervention model is the idea of differentiated instruction. "Its primary goal is ensuring that teachers focus on processes and procedures that ensure effective learning for varied individuals." (Tomlinson & McTighe, 2006, p. 2). Tomlinson and McTighe (2006) go on to state it is the teacher's responsibility in differentiating instruction to attend to teacher-student relationships, the learning environment, student backgrounds and needs, student readiness, student interest, and student learning profiles. "Differentiated instruction stems from beliefs about differences among learners, how students learn, differences in learning preferences, and individual interests" (Anderson, 2007, p. 49). George (2005) offers several rationales for differentiation. First of all, humans are essentially diverse and deserve special attention from educators to fill their unique needs. Gifted learners are often able to earn good grades with little effort and need to be challenged, while learners with special needs require scaffolded support in order to overcome deficits. Teachers need to become facilitators of learning to help learners navigate the explosion of information available through technology, and students need to learn in a culture that encourages them to work collaboratively to make meaning for themselves, as they will be expected to do as adults in a democratic society (George, 2005).

Differentiation should occur in the critical elements of content, process, and product (Anderson, 2007; Levy, 2008; Lewis & Batts, 2005). Differentiation of content can include varied reading levels and flexible groupings (Anderson, 2007). Content is what is taught, and students must be allowed variation in content without losing sight of the curriculum to which they are entitled (Levy, 2008). Differentiation also needs to
occur in the process of learning: “Process includes how we teach and how students learn” (Levy, 2008, p. 162.) Teaching styles must be adapted to reflect the needs of students so that the learners can come to understand and internalize facts, concepts, or skills. The differentiation of products allows students to demonstrate their learning in such a way that reflects the students’ individual styles and abilities (Anderson, 2007; Levy, 2008). Lewis and Batts (2005) identify 8 methods of differentiated instruction: flexible grouping based on readiness, interests or learning styles; learning centers where students can explore topics or practice skills; independent contracts between the student and teacher to serve as a guide for what the student needs to do; adjustment of questions in class and on assessments based on readiness and interest; thematic units; compactment of material for students with prior knowledge so that more challenging material can be presented; independent study for individuals and small groups; and tiered assignments designed at different levels of complexity. Rock, Gregg, Ellis and Gable (2008) propose the REACH method as a blueprint for differentiation: “(a) reflect on will and skill, (b) evaluate the curriculum, (c) analyze the learners, (d) craft research-based lessons, and (e) hone in on the data” (p. 34). While there are many strategies for differentiation, the key to success is a willingness to embrace the attitude that all students can learn. “A truly inclusive school reflects a democratic philosophy whereby all students are valued, educators normalize difference through differentiated instruction, and the school culture reflects an ethic of caring and community” (Baglieri & Knopf, 2004).

Response to Intervention and Behavior

Many students with emotional disturbances (ED) or emotional/behavioral disturbances (EBD) are underserved because of the vague and sometimes self-
contradictory nature of the federal definition of the eligibility (Gresham, 2005). Because of this, there is also a large degree of variability in prevalence of the ED/EBD category of special education eligibility due to confusion and ambiguities surrounding the interpretation of the definition. One of the issues at hand is the concept of socially maladjusted behaviors versus internalizing behaviors. Internalizing behaviors such as anxiety, depression, etc. are considered “beyond the control” of the individual and therefore an eligible emotional disturbance. Socially maladjusted behaviors are also called “conduct” behaviors (i.e. defiance, disobedience, etc.) and are considered to be well within the control of the individual and therefore not eligible for services under the ED/EBD category in some states. Gresham (2005) highlights the subjective nature of all of these terms noting they describe behaviors that differ from students’ peers in “terms of degree rather than in kind” (p. 330). The Individuals with Education Improvement Act (2004) lists the definitions of emotionally disturbed (ED) categories as such:

a) An inability to learn that cannot be explained by intellectual, sensory, or health factors; b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; c) inappropriate types of behavior or feelings under normal circumstances; d) a general pervasive mood of unhappiness or depression; e) a tendency to develop physical symptoms of fears associated with personal or school problems (§300.8)

Gresham (2005) points out that the federal definition of “an inability to build or maintain satisfactory interpersonal relationships with peers and teachers” (§300.8) illustrates the concept of “socially maladjusted behavior,” but it is up to the subjective judgment of teachers and administrators to determine if the behavior is willful or beyond the student’s
control. Gresham (2005) also notes that most schools narrowly define “impact on educational performance” (§300.8) as strictly academic, without consideration of “social, affective and vocational domains” (p. 321). The author advocates the use of Response to Intervention as an alternative and more appropriate way to identify students with emotional and behavioral disabilities (Gresham, 2005).

The RTI model lends itself well to behavioral interventions (Pearce, 2009). Cheney, Flower, and Templeton (2008) suggest that early identification and intervention is imperative to addressing problem behaviors, especially in younger children. The authors go on to add that the use of “multilayered behavioral interventions” (p. 110) not only objectifies the process for identifying students with ED/EBD, but also can improve student outcomes without the need for referral for special education placement. Malecki and Demaray (2007) state that the key to implementation of RTI for behavior problems is identification and assessment of behaviors that are systematic and data based. The authors list several domains of behaviors that can be considered for intervention: affective problems such as anxiety or depression; externalization problems such as aggression and hyperactivity; social relationship problems such as peer relationships and social skills; and risky behaviors such as alcohol and drug use (p. 162). The focus of Tier 1 in a behavioral model is the prevention of social behavior problems through the use of a school-wide program focused on positive behavioral supports. This should successfully remediate the behaviors of 80 to 85% of the students in a given school (Melecki & Demaray, 2007). For students that continue to exhibit identified problem behaviors, Tier 2 interventions would involve close examination of behavioral data including
observations and a functional behavioral assessment that addresses the target behavior and an analysis of the antecedent, location, and consequences (including reinforcement) of the behavior. After an appropriate intervention has been developed and implemented, data is taken regularly to establish the effectiveness of the intervention. This can be done through rating scales, self-monitoring, daily behavior report cards, and direct observations (Melecki & Demaray, 2007).

Gresham (2005) suggests five different statistical matrices for evaluating the effectiveness of an intervention. Cheney et al. (2008) evaluated the progress of 127 students in Tier 2 interventions at risk of eligibility for emotional disturbances. The authors sought to validate and compare Gresham's (2005) five matrices to determine the most effective. The students participated in a Check, Connect, and Expect (CCE) behavioral intervention program that involved a daily report card documenting behaviors in the classroom throughout the day. A full time paraprofessional was utilized as a "coach" to distribute the cards and document the behaviors. Student expectations were to be responsible, respectful, prepared for class, and safe. Students were given positive feedback throughout the day and met with teachers at the end of each class to assess performance (on a scale of 1 to 4) and document the score on their card. Reinforcements were given on a daily, weekly and monthly basis when students met and maintained a goal of 75% (three of four points per expectation for each period). Data were recorded over the intervention period of 2 years and analyzed using the 5 matrices identified by Gresham (2005). Cheney et al. (2008) concluded that the percentage of change was the most appropriate method of assessing the effectiveness of the CCE intervention. While this method still involves the subjective rating of the teacher in the assessment of
behavioral compliance, documentation of individual behavioral instances on a daily basis objectifies the process above the general impressions of the teacher over time and allows for a more data based analysis of change. Other published articles using case study methods (Barnett et al., 2006; Fairbanks, Sugai, Guarding, & Lathrop, 2007; Pearce, 2009) indicated a tiered system of increasing interventions was successful in improving the behaviors of the majority of the students involved and provided the needed data for referral for special education services for students whose behaviors did not improve.

Use of RTI to Address disproportionality

Motivated by a national survey by the Office of Civil Rights (US Department of Education) that indicated years of disproportionate representation of minorities in special education, the National Research Council commissioned an investigation to corroborate these findings. The National Research Council reported that discrimination occurs when a child has:

1) Received poor instruction in the regular education environment or missed a significant amount of instruction due to absences or disciplinary actions; 2) undergone an invalid referral or assessment process and/or 3) received inadequate instruction or programming in special education (Newell & Kratochwill, 2007, p.66).

Fuchs, Fuchs and Speece (2002) describe a model of RTI that was developed in response to the NRC’s recommendations to reduce or alleviate this disproportionality. The authors proposed a dual discrepancy model that considers the student’s performance at a fixed point in time (relative to their peers) but also demonstrations a substantially slower learning rate compared with that of their peers. The authors go on to outline a
treatment validity model as an alternate model of learning disability identification that would alleviate some of the inherent discriminatory practices of the traditional model. Phase I Assessment is used to determine if the overall class learning rate is sufficient when compared with district, state or national norms. If not, the instructional practices in that classroom should be changed. Phase II assessment is used to identify students with dual discrepancies as described above. Phase III "generates the database for enhancing instruction in the general education classroom and determining whether that regular education setting can, with adaptations, produce better growth and thus be transformed into an acceptable learning situation" (Fuchs et al., 2002, p. 35). During this phase, the teacher implements at least two evidenced based interventions targeted at the specific deficit skill area (Newell & Kratochwill, 2007). Phase IV assessment evaluates the effectiveness of special education services for a student (Fuchs et al., 2002). In a treatment validity model, documentation must indicate that the regular classroom is producing acceptable growth for the majority of the students; that dual discrepancies of performance and growth rate exist for certain struggling individuals; that inadequate learning occurs even with targeted interventions; and that improved growth can be derived through special education services. When these procedures and assessments are in place, bias and discrimination can be reduced (Newell & Kratochwill, 2007).

Hosp and Madyun (2007) state that the disproportionality of minority students in special education is concerning because perceptions of teachers and other adults are lower, the students have a diminished self-concept, and performance in secondary education is significantly diminished. The authors recommend a model that focuses on three general principles: "1) reliable, valid data are collected and used to make
educationally relevant decisions, 2) the focus of the instruction and assessment is on socially valid or important outcomes, and 3) effectiveness of intervention is demonstrated through improved performance outcomes” (p. 173). The RTI team should seek to meet the needs of the individual, no matter the student’s race, ethnicity, gender, or socioeconomic status. These needs are met through the following policies: make no assumptions regarding an individual’s race, ethnicity, or any other characteristic; determine the student’s needs and preferences; include the parents in the decision-making; and enhance cultural sensitivity in instruction and assessment (Hosp & Madyun, 2007). Schools and systems should also regularly assess disproportionality through a composition index (percentage of students in special education from a specific group), risk index (percentage of a group in special education), odds ratios (comparing odds of placement in one group with odds of placement in any group), relative risk (comparing risk index of two groups), comparing differences of denominators (comparing group of students with all others), or a multiple gating procedure (a combination of these).

Ultimately, a multi-tiered, problem solving model should address the issue of bias and discrimination and subsequently reduce the number of referrals of minority students referred for special education (Hosp & Madyun, 2007).

*RTI as an Eligibility Model for Specific Learning Disabilities*

While the concept of an interventions based, problem solving model as an alternative for special education referral has existed since the 1980s (Fuchs et al., 2003), Response to Intervention continues to remain a controversial approach to this problem. As legislation was passed that required a scientific, research-based intervention model to address low achieving students (IDEIA, 2004; NCLB, 2001), many educators lauded a
new, improved way to identify students with specific learning disabilities (Barnes & Harlacher, 2008; Bradley et al., 2005; Fletcher & Vaughn, 2009; Fuchs & Fuchs, 2007; Hollenbeck, 2007; Hoover & Love, 2011; Marston, 2005). As states proceeded to develop and roll out models for implementation developed on weak federal guidelines, critics began to decry the problems inherent in legislation that requires all children to achieve and be accountable (NCLB, 2001) while demanding that instruction be individualized and personalized to each child’s needs (IDEA, 2004) (Ratcliffe & Willard, 2006). Literature describing the problems with the RTI model abounds (Danielson, Doolittle, & Bradley, 2007; Gerber, 2005; Johnson, Mellard, & Byrd, 2005; Kavale, Holdnack, & Mostert, 2005; Mastropieri & Scruggs, 2005; McKenzie, 2009). Other authors seek a compromise, taking the best ideas from described RTI models and suggesting improvements (Fuchs & Deshler, 2007; Mellard, Deshler, & Barth, 2004; Vaughn & Fuchs, 2003).

Gresham (2007) acknowledges the inadequacies of the severe discrepancy model used for over 30 years as the path to eligibility for specific learning disabilities (SLD) as initiated with the Education for All Handicapped Children Act (1975). This model often involved the identification of a struggling student, a team meeting to address his or her needs, a strategy or intervention which was often not evidence-based and not implemented with fidelity, and a referral for testing when the student continued to fail. If testing results showed a significant discrepancy between the student’s IQ and academic achievement scores, then he or she was considered eligible for special education services under the SLD label. Unfortunately, this approach often delayed needed services as the team waited for the student to fail in order to recommend testing (Gresham, 2007). Shinn
(2007) noted that with this model, teachers tended to begin the special education referral process by identifying the lowest achievers in the classroom regardless of the reason. Schools would then collect data related to the eligibility requirements (only to discard that data if it indicated the student was a low achiever rather than SLD) and recommend SLD eligibility in spite of the evidence (Shinn, 2007). With the development of a responsiveness to intervention approach, students’ needs were addressed sooner and were sometimes remediated without the need for a special education referral through the use of universal screeners for all students’ academic and behavioral problems, the monitoring of progress for students identified with deficits, and the implementation of increasing interventions based on the students’ response (Vaughn & Fuchs, 2003). With a focus on instructional outcomes, discrepancies related to age-based expectations, and the comparison of achievement to that of peers in the classroom, deficits can be addressed more quickly and effectively and can reduce the number of students needing a referral to the most intense interventions (Vaughn & Fuchs, 2003). While referrals under the previous discrepancy model were often solely based on severe educational need, with response to intervention a dual discrepancy model based on the educational need combined with a lack of response to high-quality interventions is necessary for a referral for special education eligibility (Shinn, 2007). This appears to be a more accurate assessment of the student’s true abilities and deficits, assuming that evidence-based interventions were implemented with fidelity.

While many authors agree that the theory behind the Response to Intervention (RTI) model is valid (Danielson et al., 2007; Reynolds & Shaywitz, 2009b) they also express concern over many of the inherent problems with the approach. There is little
specific federal documentation regarding the implementation of RTI; therefore, “this lack of procedural guidance creates a guarantee that RTI will lack fidelity of implementation, suffer from inconsistent measurement models, and see enhanced levels of subjectivity in both diagnosis and in treatments” (Reynolds & Shaywitz, 2009b).

McKenzie (2009) argues that RTI can actually blur the lines of what it means to have a specific learning disability. Discerning between underachievers (SLD) and low achievers is extremely difficult using this model. Without establishing an ability level (often by IQ testing), how can one determine what is reasonable achievement for a student? If a student’s IQ is one standard deviation below the mean, then the same achievement level would not be discrepant; however, under the RTI model, a multi-disciplinary team could determine that the student was eligible for SLD referral based on the dual discrepancy model (McKenzie, 2009). For example, about 14% of the school population falls under the category of “slow learner” (indicating a student with an IQ of 70 to 85) (Kavale et al., 2005). These students would reasonably be expected to achieve at that level, but without some form of cognitive assessment this would be impossible to determine. Kavale et al. (2005) agree that the lack of a universal definition of specific learning disabilities is one of the key problems with any of the operational models. The authors note, however, that a key aspect of the federal description of SLD is “a disorder in one or more of the basic psychological processes,” and that with the RTI model such a disorder can only be inferred without a direct assessment (Kavale et al., 2005, p. 5). This lack of consistency has led to two alternative models that have strayed from the original concept of SLD: a relative discrepancy model where student progress is compared with other students in the same school and an absolute low-achievement model where all
below average students can lead to an SLD eligibility, regardless of ability indicated by IQ (Kavale et al., 2005). Both of these alternative models of SLD are supported by the Response to Intervention approach.

Kovaleski (2007) identifies the challenges of RTI at each tier level. At the first phase or Tier 1, some questions remain as to the definition of “scientifically-based instruction,” “effective instructional strategies,” and “universal screener.” The inconsistent understandings of these terms across school, system, and state levels are one of the reasons RTI is difficult to implement. At the targeted phase, or Tier 2, school-wide teams struggle with choosing an appropriate intervention and finding time for implementation during an already overscheduled school day. The need for qualified personnel and funds for instructional resources, as well as determining the procedure for progress monitoring and deciding who and when it should be documented are also a challenge at this stage. Finally, at the ongoing support phase, or Tier 3, decisions regarding eligibility must be made, including the determination of what constitutes a learning disability (Kovaleski, 2007).

Other key concerns are prevalent in the Response to Intervention literature. One glaring fact is there is little empirical research regarding the effectiveness of the RTI model based on student outcomes (Danielson et al., 2007; Reynolds & Shaywitz, 2009). The issue of research-based interventions has also been a difficulty since the model’s inception. What constitutes “research-based”? Does this require the purchase of a commercially scripted curriculum that has empirical evidence regarding its effectiveness? Vaughn and Fuchs (2003) admit that while some reading tools are available, other areas such as math, spelling, and written expression are lacking. Kavale et al., (2005) also note
that many reading interventions commonly used are based on phonological processing, while other approaches such as general language processes and comprehension strategies are sometimes neglected. "The use of narrowly focused interventions in the RTI model cannot account for the fact that these programs work for some students but not necessarily all students" (Kavale et al., 2005, p. 9).

One of the most critical aspects of the Response to Intervention model is the implementation of interventions with integrity (Danielson et al., 2007). One of the many factors that affect implementation is teacher attitude. According to Gerber (2005), teacher tolerance is the subjective decision of an educator as to what is acceptable achievement and behavior and what is not. Obviously teacher tolerance levels can vary greatly from classroom to classroom. While RTI is theoretically evidenced-based, teacher subjectivity certainly plays a role in the intervention process as well as subsequent decisions based on the response to those interventions. Teacher decisions, made in the classroom on a daily basis, are influenced by many outside factors: bias and prejudice, parent involvement, perceptions of administrative policies, etc. It is impossible to standardize the level of implementation based on the individualities of staff delivery (Gerber, 2005). Teacher perceptions regarding support are also crucial. Professional development can influence classroom practice and should be high quality and ongoing (Danielson et al., 2007; Vaughn & Fuchs, 2003). Additional resources (such as instructional materials, support staff, and planning time) also can improve the fidelity of implementation (Kovaleski, 2007). Accurate assessment and progress monitoring is also of critical importance in determining the success of an intervention (Stecker, Fuchs, & Fuchs, 2008).
Comparison of Implementation

In 2006, regulations regarding the implementation of IDEA 2004 were made available to the states (Ahearn, 2009). These regulations required states to adopt criteria for determining if a child has a specific learning disability. These criteria could not require the use of a severe discrepancy model solely, and states were required to permit the use of other research-based procedures. (20 U. S. C. 1221e-3; 1401(30); 1414 (b)(6)). According to the RTI State Database (U. S. DOE, 2010) six states did not have a State RTI Framework in place in 2010: Massachusetts, Minnesota, Nevada, New Jersey, Oklahoma, and Vermont. Only Maine and New Mexico did not have RTI components in their State Performance Plans. While the majority of states allowed for an RTI model in combination with a discrepancy model to determine eligibility for SLD, four states specified RTI as the only means of eligibility (Colorado, Connecticut, Florida and Illinois) and six states utilized RTI or another research based intervention (Delaware, Idaho, Indiana, Kansas, Louisiana, and Michigan). According to Berkeley et al, (2009) 15 states had fully adopted an RTI model in 2009, and of those all had three tiers of intervention except for two. Both Georgia and North Carolina had four tiers of intervention, the fourth tier being special education placement.

Mellard, McKnight, and Woods (2009) surveyed 41 local schools regarding universal screening, progress monitoring tools, and schedules during the 2003-2004 school year. While the authors expected most schools would conduct broad screening measures one to three times per year, the schools “tended to use multiple instruments with greater frequency and a variety of methods and levels for the cut points demarcating students academically at risk” (p. 193). While one explanation for multiple screening
instruments could be to improve the accuracy of predictions, the authors state “a school clearly sacrifices efficiency when more time than is necessary to make a valid prediction of risk is spent screening students” (p. 193). Most of the schools chose to use published reading inventories, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) (Good & Kaminski, 2002), or district/state assessments to identify at-risk students in reading. Most of the schools used the same assessments as progress monitoring tools, a practice the authors state “may create measurement validity issues due to test familiarity/practice effects” (Mellard et al., 2009, p. 193). Mellard et al. (2009) add, Does a measure that is designed to predict a future outcome (e.g., reading achievement) have the same psychometric utility in assessing a learner’s current status for rate of learning or level of performance? Generally the answer is no (p. 193).

Many of the schools surveyed reported universal screening as often as weekly, while progress monitoring the effectiveness of interventions annually to quarterly, indicating a lack of understanding of the definitions and purposes of the terms. The majority (two-thirds) of the schools also used nonstandard “cut points” (scores used to determine which students were academically at risk) such as percentages of the local population, while the rest (one-third) used the arbitrary norms set by the assessment tool being used (Mellard et al., 2009).

Sansosti, Noltemeyer, and Goss (2010) surveyed 2,000 members of the National Association of Secondary School Principals via email. Only 1,049 of the emails were deliverable, and 482 (46%) members responded to the survey. The principals were asked to rate the following critical components of RTI as to their perceived importance and
actual availability in their schools: knowledge of stakeholders, beliefs of stakeholders, scheduling and structural factors, availability of intervention, district policy factors, accountability procedures, existence of collaborative teams, and communication. Results indicated that the secondary principals perceived a discrepancy between importance and implementation of many of the components. All eight of the identified components, "were reported to be more important than they were available" (p. 292). While intervention and accountability were identified as two of the most important components, they were also two of the most unavailable. The authors cited a lack of evidenced-based interventions, as well as a lack of systematic data collection in secondary schools as reasons for this finding. Scheduling and structural factors (availability of facilities) were identified as major obstacles to the successful implementation of RTI in secondary schools. In addition, a lack of standardized, content-specific assessment tools was noted as important, but unavailable in the secondary setting (Sansosti et al., 2010).

Werts, Lambert, and Carpenter (2009) sent open-ended email surveys to 119 district special education administrators in North Carolina, with 46 (50.9%) persons participating. Multiple answer choices were allowed and responses were reported as percentages. While the directors generally agreed that school psychologists (87.5%), general education teachers (85%), and special education teachers (80%) should collect instructional data and that general education and special education teachers (92.5%) should determine students' non-responsiveness or responsiveness, there was a great deal of variance in the answers regarding other areas of RTI. While 81% felt any intervention curriculum should be validated in the educational literature, a large group (61%) believed that teacher evaluations were also important. A majority (67.4%) felt the "fit" of an
instructional intervention could only be determined by students performance as charted by progress monitoring data. There was significant disagreement over whether the discrepancy model should be totally abandoned in favor of RTI. Forty-five percent stated yes, while 35% said no, and 22.5% were in favor of a combination of approaches. Only 77% of the special education directors stated they had received formal or informal training regarding the Response to Intervention model. A “lack of specificity in assessment, intervention implementation, selection of research-based practices, and fidelity raises concern about how consistently the eligibility process will be implemented both within and between states” (Berkeley, et al., 2009, p. 94).

Effects of Personnel Attitudes on Fidelity of Implementation

Levin (2001) describes the Implementation phase as the third stage in the Analysis of Institutional Change. The author goes on to describe three factors or categories that can affect the success of any new policy implementation. The first factor involves the clarity of the change and the difficulty involved in the prescribed procedures. The second factor includes the degree of understanding of the proposal by those expected to implement the change, their level of commitment, and the available resources to support the change. Attitudes of the change agents are affected by their views regarding the practicality of the proposal as well as how it will fit into the current school climate and structure (Levin, 2001). The third factor “includes the other pressures either supporting or inhibiting implementation, such as competing demands and community support or opposition” (p. 10). The author points out that when too many reforms are implemented in a brief period of time, many educators become cynical and resistant to
comply. He also states that the availability (or lack of) resources and support for the change can affect the willingness to implement change (Levin, 2001).

Larsen (2009) describes the importance of a “bottom-up” approach to studying policy implementation. The author notes that early policy implementation studies utilized a “top-down” approach that focused on the policy makers and the rationales behind the changed. Larsen (2009) states “this top-down approach was limited in assuming that policy makers and implementers act in rational ways, that the policy process is hierarchical and linear, and that success in policy implementation would derive from the articulation of clear goals” (p. 5). The bottom-up or street level approach, however, involves the study of the actions of those most involved in and affected by the policy implementation. Larsen (2009) surveyed 125 teachers and interviewed an additional 25 to discover attitudes regarding the implementation of the Ontario teacher performance appraisal system. Results were reported as percentages and no level of significance was determined. The author reported that the majority of respondents felt that the process was inconsistent and unfair due to the subjective nature of the observations.

Some studies measure teacher attitudes and implementation by surveying teacher efficacy beliefs. Nunn and Jantz (2009) surveyed 429 kindergarten through 12th grade teachers and support staff trained to implement RTI after a five day training experience and on site follow up over the course of a year. “Teacher efficacy essentially is the belief that there is a substantive link between what the teacher does and what positive outcomes accrue as a function of those actions,” (Nunn & Jantz, 2009, p. 605). Participants rated themselves on two scales: RTI Involvement (High, Moderate, and Low) and RTI Implementation (Preparation stage, Mechanical stage, Routine stage,
Refined stage). Participants then completed the Teacher Efficacy Beliefs and Behaviors Scale (TEBBS) regarding Intervention Skills Efficacy, Motivational Skills Efficacy, and External Control Efficacy. Results indicated that teachers rating themselves in the higher categories of RTI Involvement and Implementation also had significantly higher efficacy beliefs about their Intervention and Motivational Skills.

Some studies comparing teacher attitudes with levels of implementation rely on self-reports of both. Wozney, Venkatesh, and Abrami (2006) surveyed teacher perceptions and practices regarding implementation of computer technologies in Canada. The authors surveyed 764 teachers and reported that the expectancy of success and perceived value were the critical issues in comparing levels of computer use among teachers. They noted, however, that use of computer technology was primarily for informational purposes. Hwang and Evans (2011) surveyed the attitudes of 33 Korean general education teachers regarding their attitudes toward inclusion and found that while 41.37% had positive attitudes toward inclusion, 55.16% were unwilling to actually participate in the model. Perceived problems included a reported lack of knowledge and skills as well as an uncertainty regarding roles in a collaborative team setting. Ransford, et al. (2009) conducted a quantitative study with 133 kindergarten through 5th grade teachers comparing perceptions and implementations of a social learning curriculum (Promoting Alternative Thinking Strategies). The teachers completed the Maslach Burnout Inventory as well as a teacher efficacy inventory to rate their implementation of the components of the curriculum. The authors found significant between-group effects in the following areas: teachers with high burnout and low administrative support reported lower quality and frequency of implementation; teachers with high burnout and low
perceived curriculum support reported lower rates of implementation; and teachers with high burnout and low training support reported lower quality of implementation (Ransford, et al., 2009). All of these studies relied on self-reported data regarding the implementation of the models that calls into question their accuracy.

Some studies have compared self-reported teacher attitudes with implementation as measured by other sources. Monsen and Frederickson (2004) found that the attitude of 63 primary school teachers in New Zealand towards mainstreaming of special needs students significantly impacted the classroom learning environment. The teachers completed a questionnaire that indicated attitudes toward mainstreaming students with special needs into the general education environment as measured by a 5 point Likert-type scale. The student sample ranged from age 7 to 13. The 1,729 students participating completed an inventory of 38 items indicating their agreement or disagreement with statements in five areas: cohesiveness, friction, difficulty, satisfaction and competitiveness. Teachers were grouped into high (above 75%), medium (between 25% and 75%), and low (below 25%) categories depending on their responses to mainstreaming as indicated by the inventory. Student responses in each of the corresponding teacher groups were compared to determine the students’ perceptions of the classroom learning environment and acceptance of included students. Levels of significance and effect sizes were calculated. Results indicated that “children taught by teachers who espoused highly positive attitudes towards mainstreaming were found to have significantly higher levels of classroom satisfaction and marginally lower levels of classroom friction than children taught by teachers with less positive attitudes” (p. 129).
Bain (2010) completed a four-year study of 78 teachers regarding their attitudes and implementation of a Self Organizing School Reform. Bain (2010) differentiates between practice fidelity (at the micro-level) and implementation fidelity (at the macro-level). The author considers implementation fidelity as the level that the overall reform matches the intent of the program, while practice fidelity is the level that the specific components of the program are demonstrated on a daily basis. Bain (2010) used teacher, peer and administrator ratings to determine if the pedagogical approaches of peer assisted learning, cooperative learning and explicit teaching were implemented with fidelity as determined by the school reform initiative. Results were reported using descriptive statistics, analysis of variance and regression analysis. At the descriptive level, teacher ratings regarding implementation were consistent with classroom observations, however statistically significant differences existed across individual groups. Peers generally reported higher implementation ratings, followed by teacher self-reports and administrators during the first year of implementation; however, during the fourth year, administrator ratings had a poorer predictive validity. Overall, the author concluded that, unlike previous studies, implementation of teaching practice exhibited high levels of practice fidelity over time. Bain (2010) noted that teacher tend to be more focused on the personal impact of change on their lives, and that as teachers take time to build “comfort, understanding and capacity” (pp. 119-120) with change initiatives, their perceptions improve as well.

Several qualitative studies have also compared teacher attitudes with implementation. Greenfield, Rinaldis, Proctor, and Cardarelli (2010) interviewed eight elementary teachers regarding their views of Response to Intervention after the first year
of implementation. Generally, the teachers reported their experiences with RTI as “positively affecting their instructional practices in distinct and integrated ways” (p. 58). Challenges were noted, however, in “determining the quantity and quality of other appropriate, evidenced-based instructional practices within tiers and across time of implementation” (p. 57). Participants also agreed that the model was a “work-in-progress” and that improvements were needed in the areas of communication, professional development, and time management (Greenfield et al., 2010).

Lees (2007) interviewed eight Reception (first grade) teachers regarding the School Entry Assessment policy in South Australia. This tool is used to assess young learners and aid in planning educational activities for students in pre-school to Year 3. The author found that positive attitudes toward the policy did not necessarily reflect implementation due to the limited understandings of some teachers regarding the purpose of the program. Lees (2007) concluded that new policies “might be enhanced through inclusive policy-development and decision-making processes which involve stakeholders from the very beginning of the policy-design process so that their needs and expectations are reflected in the final policy and documentation” (p. 151). Lees (2007) also concluded that a larger budget for initial training and support, as well as a more universal and flexible policy would engender more positive attitudes and commitment to the program.

Haney, Lumpe, and Czerniak (2002) questioned 6 teachers regarding their context beliefs about teaching science before participation in a two-week summer institute to help improve their science content knowledge and pedagogy. Analysis of responses enabled the authors to place two teachers into the “vulnerable” category, two in the “tenacious” category and two in the “robust” category. Teachers were then observed using the
Horizons instrument as developed for classroom observations by the National Science Foundation. The authors found that as a rule, teachers that reported positive context and capability beliefs scored high on the effective science teaching domain as measured by Horizons, while teachers with lower self-efficacy ratings scored lower on the Horizons assessment.

O’Rourke and Houghton (2009) interviewed three teachers and six students regarding attitudes about an inclusive program for students with mild disabilities. The TICC Intervention Program employs the strategies of team teaching, interesting and enjoyable content, clear instructions and collaborative learning opportunities to enhance both the academic and social engagement of students with mild disabilities. Classroom observations were also utilized to ascertain fidelity of implementation. The classroom teachers were positive about inclusion and the strategies of the TICC program; however this attitude was not always evident in practice during the observations as strategies were often not implemented with fidelity. While the authors noted that in some cases this was due to a rejection of recommended practice, they also acknowledged that time constraints for activity planning were also a cause (O’Rourke & Houghton, 2009). The authors also interviewed six students: three with mild disabilities (focus group) and three in the general education program (comparison group) to determine their views of inclusive education. Students in the focus group felt the support they received through collaborative learning was the most successful; however, both groups of students pointed out difficulties with the collaborative model due to the differences in their ability levels. Although both groups saw the addition of a co-teacher as beneficial, they viewed it as similar to having a teacher’s aide in the classroom. The focus students did not note
significant changes in the teaching model from previous experience and stated they often needed additional explanations in spite of the fact the teachers had expressed confidence that the content had been broken into manageable sections (O’Rourke & Houghton, 2009).

Research in areas outside of education indicates that employee perspectives regarding the implementation of initiatives are critical to the success of the program. Lewis (2006) solicited opinions through a survey of 135 employees who had recently experienced implementation of new technology in the workplace. The author found that communication of the importance of any change is a key to the acceptance by employees. Staff members need access to high quality information regarding the change, but they also must feel that their concerns have been heard and recognized. Clarity of vision on the part of leadership is also important, and employees are more accepting if they share the vision and feel they have been involved in the process of its development. Forced implementation is almost certain to provoke resistance. “Employees who receive little quality information about the change, have no clear idea of the vision of the change, and don’t feel that their opinions are wanted or valued may simply ignore the change rather than actively resist it” (Lewis, 2006, p. 43). Spring (2005) describes this phenomenon as discretionary insubordination: ignoring the chain of command by disobeying or changing orders in order to adapt to human needs. Schaap (2006) confirmed these findings by surveying 890 senior level leaders in casinos in the Nevada gaming industry and concluded that “employees who understand and agree with the company’s strategic plan will most likely have a higher commitment to the firm’s success than employees who do not know or agree with it” (p. 24).
One of the key aspects of the Response to Intervention model is the concept of differentiated instruction. Wormeli (2005) lists five common misconceptions about differentiation that can affect teacher attitudes toward implementation: (a) students will be ill prepared for standardized tests; (b) if teachers differentiate instruction, they create unequal workloads among students; (c) it is not fair to give students credit for learning if they have not demonstrated the same knowledge as other students; (d) students will not be able to compete in the real world; and (e) there is only one way to differentiate instruction. While there is no empirical support for these assumptions, teachers that believe them can be less likely to implement strategies effectively (Rock et al., 2008). “Half of differentiation is the teacher’s mindset: ‘Am I teaching so students best learn?’ The rest of it is expertise in course content, cognitive theory, the developmental level of the students, and differentiated practices” (Wormeli, 2005, p. 33). Hawkins (2009) cites three barriers to implementing differentiation: lack of confidence, lack of efficacy, and lack of perseverance. Lack of confidence can stem from a lack of tools for success.

Teacher efficacy (or certainty in the ability to promote student learning) is closely related to lack of confidence. Novice teachers often have greater enthusiasm and optimism, but experienced teachers can exhibit a greater willingness to employ higher level techniques (Affholder, 2003). As teachers encounter frustrations with a perceived lack of support, lack of perseverance can ensue. All of these areas can be addressed through high quality, ongoing professional development, which is a key component to successful implementation of a response to intervention program (Hawkins, 2009; Walker-Dalhouse et al., 2009). Ultimately, however, teachers must examine their beliefs about teaching and learning and recognize the value of collaboration, differentiation and other principles of
response to intervention in order to ensure that all of their students are successful (Friend & Pope, 2005).

Summary

Response to Intervention is a model designed to address the needs of students struggling in one or more key areas of academics through differentiation, problem solving, interventions, and progress monitoring (Barnes & Harlacher, 2008; Danielson, Doolittle, & Bradley, 2007; Fuchs & Fuchs, 2007; Fuchs et al., 2003; Gresham, 2007; Jimerson, Burns, & VanDerHeyden, 2007). While the theory behind the model is sound (Danielson et al., 2007; Reynolds & Shaywitz, 2009), there are barriers to successful implementation that must be addressed. Some of these issues are a lack of clear federal guidelines regarding models and strategies as well as the definition of key terms (Kovaleski, 2007; Reynolds & Shaywitz, 2009b), a lack of a consistent definition of the eligibility “specific learning disability” (Kavale et al., 2005), teacher perceptions regarding adequate resources and support (Danielson et al., 2007; Kovaleski, 2007), adequate staff development (Hawkins, 2009; Walker-Dalhouse et al., 2009), and accurate assessment and progress monitoring (Stecker, Fuchs, & Fuchs, 2008). There is also a lack of consistency of design and implementation across states, systems and even schools (Mellard, McKnight, & Woods, 2009).

The purpose of this study is to assess prevailing teacher understandings and attitudes toward the Response to Intervention model as outlined by the Georgia Department of Education and as implemented in seven Middle Georgia school systems. As previously cited, the attitudes of personnel administering and/or supporting any program can significantly affect the program’s success. By assessing current attitudes
toward the RTI model, inadequacies can be addressed and changes implemented that will improve the effectiveness of the model and significantly impact student achievement positively.
CHAPTER 3

METHODOLOGY

Problems and Purpose Overview

Response to Intervention (RTI) is a vague term coined from brief outlines in both the No Child Left Behind Act of 2001 and the re-authorization of the Individuals with Disabilities Act in 2004. States have struggled to interpret the law and develop guidelines that comply with this interpretation ever since (Gagnon, 2010). Consequently, there has been a great deal of discrepancy between states, districts and systems in the interpretation and implementation of this policy. There is a lack of standardization of procedure in identification, intervention, and methods of monitoring progress even within the same state (Werts, Lambert & Carpenter, 2009). Ultimately, teachers determine the level of implementation as well as degree of success of this model (Gagnon, 2005). Studies in the field of education (Avramidis & Norwich, 2002; Nunn & Jantz, 2009) as well as those in the business world (Lewis, 2006; Schaap, 2006; Ponemon & Nagoda, 1990) suggest that employee attitudes can significantly impact the successful implementation of new programs. The problem is that teachers often feel frustrated by a perceived lack of standardization and support for the RTI model and therefore fail to implement it according to guidelines.

In October 2008, the Georgia State Department of Education published a Response to Intervention handbook for systems to use as a guide for the implementation
of an RTI model. Implementation of this model has been inconsistent among systems as well as between them. The lack of understanding of the theories behind the model, as well as inconsistent implementation and support has been a source of frustration among certified personnel, which could affect fidelity of implementation (Gerber, 2005). The purpose of this study is to assess prevailing teacher understandings and attitudes toward the Response to Intervention model as outlined by the Georgia Department of Education and as implemented in seven Middle Georgia school systems. By assessing current attitudes toward the RTI model, inadequacies can be addressed and changes implemented that may improve the effectiveness of the model and hopefully impact student achievement positively.

Research Questions

The following research questions were addressed regarding teacher attitudes:

1. What are teacher attitudes toward the intention or appropriateness of RTI?
   a. Do teachers feel that they can address the needs of struggling students through RTI, or would they prefer to use other means?
   b. Do teachers feel that the previous Student Support Team model was more or less effective than RTI?

2. What are teacher attitudes toward the implementation of RTI?
   a. What resources do teachers feel that they need in order to successfully implement RTI?
   b. Do teachers feel that they are implementing RTI according to system guidelines?
c. Do teachers feel that RTI is being implemented successfully in their system?

3. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their school level (elementary, middle, high)?

4. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their years of teaching experience?

Research Design

Mixed methods research is a design that combines elements of both quantitative and qualitative research forms. Information gathered from the two approaches is combined to strengthen the data from each, enabling the researcher to ascertain a clearer picture of the results than could be obtained from a single methodology (Creswell, 2009). Creswell states that many researchers often “use one approach to better understand, explain, or build on the results from the other approach” (2009, p. 205). The sequential explanatory strategy is used when a principle investigator collects and analyzes quantitative data in the first phase of the project, followed by qualitative data collected in the second phase to build on the results of the quantitative information. Thus, the data gathered in the quantitative phase is more heavily weighted and informs the secondary qualitative data (Creswell, 2009). Phase I of this project consisted of a web-based, Likert-type survey. Phase II was a follow-up, face-to-face, qualitative interview with teachers randomly selected from those indicating on the survey their willingness to participate.

The quantitative and qualitative methods described were used to address the research questions in the following way. Question 1a (Do teachers feel they can address
the needs of struggling students through RTI, or would they prefer to use other means?)
was addressed with data from both the quantitative and qualitative phases. Question 1b
(Do teachers feel that the previous Student Support Team model was more or less
effective than RTI) was addressed primarily with data from the qualitative interviews, as
was Question 2a (What resources do teachers feel that they need in order to successfully
implement RTI?). Question 2b (Do teachers feel that they are implementing RTI
according to system guidelines?) and Question 2c (Do teachers feel that RTI is being
implemented successfully in their system?) were addressed with both quantitative and
qualitative data. Is there a significant difference in teacher attitudes toward the
implementation of RTI based on their school level (Question 3) or years of teaching
experience (Question 4) were addressed primarily through data gathered in the
quantitative survey.

Survey research is one of the oldest and most widely used research methods in the
social sciences, dating back to records describing social conditions in 18th century
England and even to ancient Egypt (Hackett, 1981). Surveys are generally used to gather
opinions and attitudes to describe, explain, and explore phenomenon. Hackett (1981)
identifies descriptive surveys as those that gather demographic information as well as
opinions on identified topics. The author also describes explanatory surveys that include
reasons for the existence of certain facts or attitudes, and exploratory surveys that are
conducted when little is known about a group or population or when further information
is needed.

Most early surveys were open-ended interviews or questionnaires. These surveys
were often poorly designed with no checks for validity and reliability and little scientific
basis for data analysis (Hackett, 1981). During the late 1930s, however, the survey
instrument changed dramatically. Rensis Likert, a young researcher and statistician,
developed a rating scale as part of his dissertation at Columbia University. After
receiving his PhD, he became head of the Bureau of Agricultural Economics at the
United States Department of Agriculture (Mahoney & Baker, 2007). His mission was to
collect information from farmers to determine where problems and failures in agriculture
existed. Until his tenure, USDA surveys had consisted mostly of informal conversations
with farmers that were subjectively coded. Unlike his contemporary, George Gallup,
Likert favored a more scientific approach to surveys utilizing probability sampling, a
fixed question-free answer method, employing an indirect approach, and the use of a
series of interrelated questions (Mahoney & Baker, 2007). The Likert-type scale is
currently one of the most widely used methods of survey research in the social sciences
today (Lozano, Garcia-Cueto, & Muniz, 2008).

Population and Sample

Seven counties were contacted for permission to survey in the geographic area
known as Middle Georgia. After permission was received, emails were sent to all
certified teachers in each county asking for voluntary participation in the survey.
According to the 2009-2010 Georgia Department of Education Report Card, County B is
in the center of the area and is the second largest, with a countywide public school system
serving over 24,000 students. The demographic makeup of the county is approximately
73% Black, 21% White, and 6% other. Seventy-seven percent of the students in County
B are eligible for free or reduced lunch and 11% are identified as students with
disabilities. County C has a student population of just under 1,800 students,
with a demographic makeup of 70% White, 26% Black, and 4% other. Seventy-five percent of the students in County C are eligible for free or reduced lunch with 17% of the students identified as having a disability. County J serves over 5,300 students: 70% White, 28% Black, and 2% other, with free and reduced lunch service to 42% and 11% of the students receiving services for disabilities. County H is the largest with a student population of over 25,000 students. Fifty percent of the population receives free and reduced lunch and 11% are identified as having a disability. The demographic makeup of County H is 52% White, 35% Black, 7% Hispanic, and 6% other. County M serves over 3,800 students with a demographic makeup of 65% White, 30% Black and 5% other. County M has 56% of its students receiving free or reduced lunch and serves 12% of the population labeled as having a disability. County P has a student population of just under 4,000 students, with 70% of the population receiving free or reduced lunch and 12% of the population identified as having a disability. The demographic makeup of County P is 49% Black, 35% White, 12% Hispanic, and 4% other. County T is the smallest county with under 1,000 students. Eighty-seven percent of the students in County T receive free and reduced lunch and 15% receive services as students with disabilities. The demographic makeup of County T is 67% Black, 30% White, and 3% other. County B is considered to be at the center of the state, and the other six counties surround it. This region makes up a portion of the state commonly identified as "Middle Georgia."

Data Collection and Instrumentation

Quantitative

The Primary Intervention Rating Scale (PIRS) was developed by Lane, Kalberg, Bruhm, Driscoll, Wehby and Elliot (2009) at Vanderbilt University as a measure of social
validity. Lane et al. (2009) identify social validity as a “core quality indicator” to determine the scientific rigor of experimental, quasi-experimental, and single case methodologies in education. The authors define social validity as “the extent to which consumers view a given practice as addressing socially significant goals, socially acceptable treatment procedures, and socially important intervention outcomes” (p. 136). The authors recommend assessing social validity before and after the intervention in question takes place - the rationale being that persons who do not view the intervention as meaningful or realistic will be unlikely to implement it with fidelity. Consequently, assessing social validity may be crucial in predicting the implementation and effectiveness of a particular intervention. Lane et al. (2009) points out that many published studies measuring social validity constructs utilize informal instruments that have not been tested and validated.

Lane et al. published a study in 2009 to provide initial evidence for the reliability and validity of scores from the Primary Intervention Rating Scale (PIRS). The PIRS was adapted from the Intervention Rating Profile-15 (IRP-15), originally used to assess social validity from the teacher’s perspective. The PIRS uses a 6-point Likert-type scale to assess 17 items addressing treatment acceptability and perceived effectiveness. The authors surveyed 617 teachers representing 11 elementary, 3 middle and 5 high schools in middle Tennessee. The subjects participated in a yearlong training series to develop a model of positive behavioral support (PBS) utilizing three tiers. Participating schools established a positive behavioral support team that contributed to the behavioral model’s design. The team then presented an overview of the proposed plan at the school’s faculty meeting. At the close of the meeting, each teacher completed the PIRS anonymously as a
measure of their perception of the proposed plan. Separate versions were developed for elementary, middle and high schools (Lane et al., 2009).

In order to measure treatment integrity of the positive behavior support plan, teachers participating in the PBS model completed a brief treatment integrity scale monthly or quarterly to evaluate the degree of implementation of each of the components of the plan using a 3 point Likert-type scale (Lane et al., 2009). A composite score was tabulated for each teacher, which was averaged to obtain a mean score for the entire school. Predictive validity of the PIRS was measured by examining the extent to which initial scores predicted the reported treatment fidelity during the year at the school level. Pearson correlation coefficients between a school’s mean PIRS scores and mean treatment integrity scores were computed. Fourteen of the nineteen schools involved in the training program went on to implement the PBS plan and participate in a program evaluation study during the next year. School sites’ mean PIRS values ranged from 68.13 (SD=15.32) to 96.83 (SD=6.27). School sites’ mean treatment integrity scores ranged from 67.45 (SD=15.16) to 96.62 (SD=4.24). The Pearson correlation coefficient between the schools’ mean in a program evaluation study was $r=.71$, $p=.005$, “suggesting a strong association and significant positive correlation between social validity and treatment integrity” (Lane et al., 2009, p. 141).

Alpha coefficients for each administration were computed to estimate internal consistency. Lane et al. (2009) developed three versions of the survey appropriate to elementary, middle and high school teachers. The Cronbach’s alpha value for the elementary survey was .97. Cronbach’s coefficient alphas with deleted variables were also .97 for all items, except for Item 8, which was .98. The Cronbach’s alpha value was
.98 for the middle school survey. Cronbach's coefficient alphas with deleted variables ranged from .97 to .98 for all items. The Cronbach's alpha value for the high school survey was .97. Cronbach's coefficient alphas with deleted variables were also .97 for all items, except for Items 8 and 10, which were .98. All three versions were significant at p<.001. This is an indication of high reliability across all three adaptations (Lane et al., 2009).

Lane et al. (2009) did note some limitations to the study: the middle school sample size was only 86 compared to the elementary and high school samples of over 100 each; the PIRS was only administered before the intervention, not during or after; and only teachers completed the surveys. The authors also cautioned that data were analyzed school-wide, which may have masked teacher differences, and treatment integrity data were collected using self reports rather than observations by an impartial researcher. In spite of these limitations, the study provides strong evidence for the reliability and validity of the PIRS as a measure of social validity as described above (Lane et al, 2009).

Teachers in the seven described middle Georgia counties were given the opportunity to participate in a web-based survey using the PIRS. The PIRS was adapted for this study by substituting the term Response to Intervention (RTI) for "intervention" in the original instrument and defining the intervention's purpose as "raising student achievement." Question 9 was adapted as follows: the original question reads, "This intervention would be appropriate for a variety of students." It was changed to read "RTI would be appropriate for any students struggling academically or behaviorally" (see Appendix A). These adaptations were made to help participants more closely identify the
survey with RTI. This adaptation also more closely allies with the stated purpose of Response to Intervention. Permission to use the PIRS was obtained from the primary author. The following demographic information will also be included: grade level taught (elementary, middle, or high school) and years teaching experience (0-5, 6-10, 11-15, 16-20, 21-25, 26-30, 30+).

Qualitative

The first two research questions were primarily addressed using information gathered during the qualitative interviews. At the end of the electronic survey, participants were asked to submit contact information in the form of an email address if they were willing to participate in a follow-up, face to face interview. Two volunteers from each system surveyed were drawn from the pool of willing participants. Sampling was originally intended to be random; however, due to the small pool of volunteers this was not the case. The four volunteers from County B were the only ones from the original group that agreed to meet for an interview. One of the participants from County P and the participant from County J were approached through a mutual acquaintance. These participants were chosen purposefully because they taught in a particular county and school level. Purposeful selection allows for a representative sample of the population not possible from the small pool of volunteers (Maxwell, 2005). These volunteers were contacted by the principal investigator and a face to face meeting was arranged. Consent was obtained (see Appendix B) and participants were given the option to refuse to continue with the interview. The participants were asked a series of eight open-ended questions (see Appendix C) in a semi-structured interview and responses
were audio-recorded and transcribed professionally. Participants were given a small gift certificate to a local department store in appreciation for their participation.

Interview participants were asked to choose a location for the interview for their convenience and comfort. The interviews were conducted in a variety of locations, from restaurants and other places of business to teacher classrooms. It is important for the participant to feel comfortable in order to establish rapport and gain trust (Fontana & Frey, 2005). The interview questions were open-ended, and the participants were given encouraging comments to express their views freely throughout the session. This unstructured approach “... trades generalizability and comparability for internal validity and contextual understanding” (Maxwell, 2005, p. 80).

*Pilot Study.* The interview questions were piloted with five teachers in an elementary school in County B. Permission was obtained from the principal to conduct the interviews, and an email calling for volunteers was sent to every certified staff member in the building. Eight staff members responded as interested in participating, with six responding a second time when asked to schedule a specific meeting time. One of the teachers cancelled her interview because of a family emergency. The remaining five teachers were interviewed, and their results were included in the pilot study. The five participating teachers were all highly qualified as defined by the state of Georgia and had at least five years of classroom experience. Three of the teachers currently teach third grade and the remaining two teach first grade.

Maxwell (2005) identifies the importance of pilot studies to develop an initial understanding and interpretation of the concepts held regarding the phenomenon to be studied. The purpose of this pilot study was to test the interview questions to be used for
the main study. The interviews were conducted in the teachers' classrooms before and after regular school hours. All of the participants requested to be interviewed in their classrooms, as this was a convenient, comfortable location and did not require them to schedule additional time for travel. Teachers were asked to sign a consent form and given the opportunity to decline to participate. All five teachers agreed to participate and be audio recorded. The teachers were asked eight questions regarding their experiences with Response to Intervention. Question 2 specifically addressed teacher attitudes toward the universal screener selected by the county in compliance with state directives. All interviews were digitally recorded and transcribed word for word by the principle investigator into a document to be compared for themes and commonalities. A matrix comparing the responses was developed in order to determine themes. Key words and phrases from the responses of each teacher were listed by the corresponding questions. These words were coded and a constant comparison analysis (Leech & Onwuegbuzie, 2007) was employed to identify resulting themes. The themes arose inductively, therefore they were identified from the words of the teachers themselves (Leech & Onwuegbuzie, 2007). To address researcher bias, care was taken to formulate interview questions that would not lead teachers or convey the researcher’s preconceptions. By recognizing personal subjectivity, the researcher sought to examine and analyze the data through an objective lens.

Several common themes emerged from the responses of the pilot study participants. Four of the five indicated they would use individual or small group instruction as well as solicitation of parent support as initial strategies in working with struggling students. Four of five also indicated they would recommend a move from Tier
1 to Tier 2 if the strategies were ineffective. Four of the five identified a lack of confidence in the accuracy of the county’s chosen universal screener. While four of the five stated they believed the theory behind of the Response to Intervention model is sound and was helpful in identifying struggling students and tracking their progress, all five stated the process involved more time than was available during the regular school day. Only one teacher felt she was successfully implementing RTI according to system guidelines, and none of the teachers believed that most other teachers in the system were doing so. All five teachers expressed feelings of frustration and inadequacy regarding the process. Data from the pilot study will not be included in the final study.

Pilot participants indicated that the interview questions were easily understood and allowed them to express their views freely. No teacher felt that additional questions were needed to address the issue thoroughly. The pilot questions were then considered suitable for use in the final project.

Data Analysis

Quantitative

The Primary Intervention Rating Scale utilizes a 6 point Likert-type scale for responses, ranging from strongly disagree to strongly agree (1 indicating strongly agree and 6 indicating strongly disagree). There is some controversy surrounding the data analysis of Likert-type scales. Jamieson (2004) insists that these measures fall strictly within the ordinal level of measurement and statistical tests involving the assumption of interval or ratio data are inappropriate. The author goes on to state that ordinal data is best described using frequencies or percentages of response in each category as well as non-parametric tests such as Chi square. Jamieson (2004) charges that the use of
ANOVA and other parametric tests have become commonplace in empirical literature in spite of traditional practice that would not allow Likert-type scales to be labeled interval. Carifio and Perla (2007) argue, however, that "Likert scales (as opposed to single Likert response format items) produce interval data and that the F-test is very robust to violations of the interval data assumption" (p. 106). The authors point out that it is the misuse of the terms "scale" and "response format" that have caused "urban legends and myths" to arise regarding the analysis of Likert-type scales. Carifio & Perla (2007) insist that a group of questions that have nominal response formats can be considered an interval or even ratio scale if the number of questions in the group is large enough and has the necessary logical and empirical qualities. They go on to assert that any line with 2 to 7 anchor points as the response format produces data that is both empirically linear and interval in character.

Several recent dissertations have utilized ANOVA and t test statistics to analyze survey response data regarding school personnel attitudes toward Response to Intervention (Brendle, 2008; Dupuis, 2010; Thompson, 2010; Zahedi, 2010). Sansosti, Noltemeyer, and Goss (2010) used descriptive as well as parametric statistical tests when surveying principals' perceptions of RTI, but Werts, Lambert, and Carpenter limited their analyses to descriptive statistics and percentages in their survey study with special education directors. In this study, the data were treated as parametric. Response percentages as well as descriptive statistics were reported, and a factorial ANOVA was used to determine significance levels between the demographic groups of school (elementary, middle and high) and years of experience. These two groups represented the
independent variables. The dependent variable was an outcome variable that has measurements on every subject of the survey instrument.

**Qualitative**

Recorded responses during the interviews were transcribed professionally in a “word for word” format to a Word document. A matrix was developed for each question and a constant comparison analysis (Leech & Onwuegbuzie, 2007) was used to analyze the responses of all nine interviewees. The following a priori codes were identified from the pilot study and used to determine themes: satisfaction with universal screener, adequate understanding of the model, adequate staff development, adequate support for interventions, adequate time for interventions, interventions currently used, level of county implementation, and comparison to SST. New themes were also identified that were not evident from the pilot study: RTI and gifted referral, RTI and Early Intervention Programs, the “hidden agenda” of RTI, and overemphasis on data. The constant comparison analysis (Leech & Onwuegbuzie, 2007) involves reading the entire set of data and “chunking” the data into smaller, meaningful parts. Each chunk is then labeled with a descriptive title or code. These codes are eventually grouped by similarities and a theme is identified and documented based on these groupings. A matrix was developed by question and participant. Key words and phrases were identified from the transcripts and recorded on the matrix for easy comparison (Leech & Onwuegbuzie, 2007).

Results of the quantitative surveys and qualitative interviews were triangulated in order to reduce the effects of researcher bias and improve validity. Maxwell (2005) acknowledges that, while such triangulation does not always increase validity, it “allows a better assessment of the generality of the explanations that one develops” (p. 112).
Summary

This study utilized both quantitative and qualitative elements in order to determine teacher attitudes toward the Response to Intervention model. A sequential explanatory strategy (Creswell, 2009) was used to collect and analyze the quantitative data from the survey in Phase I. Phase II involved qualitative, face-to-face interviews to build upon and add meaning to the survey results. The quantitative section utilized the PIRS, a 6-item Likert-type survey, to gather data that can be analyzed statistically to determine significance of response. The qualitative section was conducted through follow-up, face-to-face interviews regarding RTI (two interview candidates randomly selected from willing candidates from each participating county.) Answers were coded and themes analyzed to provide additional qualitative data to supplement the quantitative survey. Data between the quantitative surveys and qualitative interviews were triangulated to identify themes.
CHAPTER 4

RESULTS

Quantitative Findings

*Survey Administration*

Seven counties were contacted for permission to send all certified teachers a link to the electronic survey instrument Zoomerang. The superintendent of County H denied permission based on the county’s existing policy requiring all research to be completed by county employees only. County T administrators also denied permission, saying the county model of RTI was in the early stages of development, and that the data gathered through the survey would not be useful. The superintendents of Counties C, M, and P agreed to allow an email to be sent to all certified staff and forwarded the link through the county electronic mail server. County J gave permission for the link to be sent, but would not allow the electronic mail server to be used for distribution. The principal investigator contacted each certified teacher via email through the school websites. County B sent an initial link from the central office to building principals, asking the administrators to forward the link to certified staff. Initially, less than 50 teachers from County B responded. A second email link was sent to all certified staff via the lead special education teacher in each school, resulting in an additional 70 participants. A total of 206 participants started the survey. Four did not complete the survey and exited the link. Of the 206, 202 participants completed the survey. Response percentages by county are shown in Table 1.
Table 1

*Response Percentages by County*

<table>
<thead>
<tr>
<th>County</th>
<th>Total Teachers</th>
<th>Number Responding</th>
<th>Response Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>County B</td>
<td>1,648</td>
<td>126</td>
<td>7.6%</td>
</tr>
<tr>
<td>County C</td>
<td>124</td>
<td>3</td>
<td>2.4%</td>
</tr>
<tr>
<td>County J</td>
<td>370</td>
<td>28</td>
<td>7.5%</td>
</tr>
<tr>
<td>County M</td>
<td>272</td>
<td>18</td>
<td>6.6%</td>
</tr>
<tr>
<td>County P</td>
<td>285</td>
<td>25</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Each participant’s responses were recorded on a Microsoft Excel spreadsheet and added to create a summed score. A statistical analysis of these summed scores is shown in Table 2.

Table 2

*Descriptive Statistics for Total Summed Scores*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>54.11386</td>
</tr>
<tr>
<td>Standard Error</td>
<td>1.417974</td>
</tr>
<tr>
<td>Median</td>
<td>53</td>
</tr>
<tr>
<td>Mode</td>
<td>39</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>20.15319</td>
</tr>
<tr>
<td>Range</td>
<td>86</td>
</tr>
<tr>
<td>Minimum</td>
<td>16</td>
</tr>
<tr>
<td>Maximum</td>
<td>102</td>
</tr>
<tr>
<td>Sum</td>
<td>10931</td>
</tr>
<tr>
<td>Count</td>
<td>202</td>
</tr>
</tbody>
</table>

Mean scores reported for the Primary Intervention Rating Survey (PIRS) were as follows: School sites’ mean PIRS values ranged from 68.13 ($SD=15.32$) to 96.83 ($SD=6.27$). School sites’ mean treatment integrity scores ranged from 67.45 ($SD=15.16$) to 96.62 ($SD=4.24$). The authors were unclear if these means were from summed scores; however,
it was the goal of this study to provide reliability and validity scores for the instrument, not compare responses between groups. For this project, the mean summed score was 54 and the standard deviation was 20. The lowest possible response of a 1 (strongly agree) for each of the 17 questions would result in a summed score of 17 (assuming all questions were answered). The highest possible response of a 6 (strongly disagree) for all questions would result in a summed score of 102. Based on these data, it would appear that the summed scores fell along a normal bell curve but were widely distributed. The distribution of the data was slightly skewed toward the left, or positive response side, but not enough to draw definite conclusions (see Figure 1).
The intent of this survey was to examine general attitudes toward RTI by analyzing the total scores for the combined survey for each participant. An analysis of responses to each individual question was also performed comparing districts, school level, and years of experience to gain a better understanding of the attitudes toward specific aspects of RTI.

Responses from the entire population were reported for each question in Table 3 by actual count as well as by percentage. The top number is the count of respondents selecting the option. The bottom percentage is the percent of the total respondents selecting the option. It should be noted that some respondents did not answer every question, so some totals are missing a response number, which affects the summed data.

Table 3

Total Responses by Count and Percentage

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTI is an acceptable means of student intervention.</td>
<td>20 10%</td>
<td>47 23%</td>
<td>70 35%</td>
<td>28 14%</td>
<td>27 13%</td>
<td>10 5%</td>
</tr>
<tr>
<td>Most teachers would find RTI appropriate.</td>
<td>13 6%</td>
<td>40 20%</td>
<td>65 32%</td>
<td>37 18%</td>
<td>39 19%</td>
<td>7 3%</td>
</tr>
<tr>
<td>RTI should prove effective in raising student achievement.</td>
<td>26 13%</td>
<td>53 26%</td>
<td>56 26%</td>
<td>33 16%</td>
<td>24 12%</td>
<td>9 4%</td>
</tr>
<tr>
<td>I would suggest the use of RTI to other teachers.</td>
<td>27 13%</td>
<td>38 19%</td>
<td>58 29%</td>
<td>40 20%</td>
<td>18 9%</td>
<td>21 10%</td>
</tr>
<tr>
<td>RTI is appropriate to meet the school's needs and mission.</td>
<td>23 12%</td>
<td>48 24%</td>
<td>58 29%</td>
<td>33 16%</td>
<td>26 13%</td>
<td>12 6%</td>
</tr>
<tr>
<td>Most teachers would find RTI suitable for the described purposes and mission.</td>
<td>13 6%</td>
<td>45 22%</td>
<td>61 30%</td>
<td>43 21%</td>
<td>24 12%</td>
<td>15 7%</td>
</tr>
</tbody>
</table>
Table 3 continued

<table>
<thead>
<tr>
<th>Response</th>
<th>15%</th>
<th>31%</th>
<th>11%</th>
<th>11%</th>
<th>9%</th>
<th>7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be willing to use RTI in the school setting.</td>
<td>30</td>
<td>63</td>
<td>47</td>
<td>23</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>RTI would not result in negative side-effects for the students.</td>
<td>40</td>
<td>56</td>
<td>48</td>
<td>24</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>RTI would be appropriate for any students struggling academically or behaviorally</td>
<td>32</td>
<td>50</td>
<td>42</td>
<td>36</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>RTI is consistent with other interventions I have used in school settings</td>
<td>21</td>
<td>58</td>
<td>48</td>
<td>39</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>RTI is a reasonable plan to meet the stated purpose of raising student achievement</td>
<td>25</td>
<td>49</td>
<td>49</td>
<td>38</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>I like the procedures used in RTI.</td>
<td>18</td>
<td>34</td>
<td>49</td>
<td>35</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td>RTI is a good way to meet the specified purpose of raising student achievement.</td>
<td>23</td>
<td>46</td>
<td>48</td>
<td>41</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td>RTI monitoring procedures are manageable.</td>
<td>22</td>
<td>23</td>
<td>41</td>
<td>45</td>
<td>29</td>
<td>40</td>
</tr>
<tr>
<td>RTI monitoring procedures will give the necessary information to evaluate the plan.</td>
<td>19</td>
<td>40</td>
<td>57</td>
<td>45</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Overall, RTI would be beneficial for struggling students.</td>
<td>24</td>
<td>48</td>
<td>55</td>
<td>33</td>
<td>24</td>
<td>18</td>
</tr>
</tbody>
</table>

Responses to Question 1 (RTI is an acceptable means of student intervention),
Question 3 (RTI should prove effective in raising student achievement), Question 7 (I would be willing to use RTI in the school setting), and Question 8 (RTI would not result in negative side-effects for the students) scored in the positive category by more than a 2:1 ratio over negative responses. Responses to Question 4 (I would suggest the use of
RTI to other teachers), Question 5 (RTI is appropriate to meet the school’s needs and mission), Question 9 (RTI would be appropriate for any students struggling academically or behaviorally), Question 10 (RTI is consistent with other interventions I have used in school settings), Question 11 (RTI is a fair way to fulfill the purpose of raising student achievement), Question 12 (RTI is a reasonable plan to meet the stated purpose of raising student achievement), and Question 17 (Overall, RTI would be beneficial for struggling students) were positive at greater than a 3:2 ratio. Responses to Question 2 (Most teachers would find RTI appropriate), Question 6 (Most teachers would find RTI suitable for the described purposes and mission), Question 14 (RTI is a good way to meet the specified purpose of raising student achievement, and Question 16 (RTI monitoring procedures will give the necessary information to evaluate the plan) were positive at close to a 3:2 ratio. These responses were strongly positive, indicating the answer to Research Question 1: Teacher attitudes toward the intention or appropriateness of RTI are positive based on results from the electronic survey. These data are only descriptive, however. There was no evidence of statistical significance.

In order to determine general attitudes, the three “agree” choices were combined to create a total score for each question, as were the three “disagree” choices. When collapsed to a positive or negative choice, the participants responded positively to all questions except for one (see Table 4). Survey Question 15 (RTI monitoring procedures are manageable) resulted in an overall negative of 56%. It is also worthy to note that Survey Question 13 (I like the procedures used in RTI) was more evenly split than the other questions with 51% responding positively and 49% responding negatively. These data would indicate that teachers in these systems have an overall positive attitude toward
the intent and appropriateness of the Response to Intervention model (Research Question 1); however, as indicated by responses to Survey Questions 13 and 15, some teachers have a negative attitude toward the implementation of RTI (Research Question 2). When mean response rates were calculated for each question, Survey Questions 13 and 15 had means of 4, indicating a “disagree” response. All other questions had means of 3, indicating an “agree” response.

Table 4

Collapsed Responses by Count and Percentage

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Agree</th>
<th>Total Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTI is an acceptable means of student intervention.</td>
<td>137</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>Most teachers would find RTI appropriate.</td>
<td>118</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>40%</td>
</tr>
<tr>
<td>RTI should prove effective in raising student achievement.</td>
<td>135</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>67%</td>
<td>32%</td>
</tr>
<tr>
<td>I would suggest the use of RTI to other teachers.</td>
<td>123</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>RTI is appropriate to meet the school’s needs and mission.</td>
<td>129</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Most teachers would find RTI suitable for the described purposes and mission.</td>
<td>119</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>58%</td>
<td>40%</td>
</tr>
<tr>
<td>I would be willing to use RTI in the school setting.</td>
<td>140</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>69%</td>
<td>29%</td>
</tr>
<tr>
<td>RTI would not result in negative side-effects for the students.</td>
<td>144</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>RTI would be appropriate for any students struggling academically or behaviorally.</td>
<td>124</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>62%</td>
<td>38%</td>
</tr>
</tbody>
</table>
### Table 4 continued

<table>
<thead>
<tr>
<th>RTI is consistent with other interventions I have used in school settings.</th>
<th>127</th>
<th>64%</th>
<th>71</th>
<th>37%</th>
</tr>
</thead>
<tbody>
<tr>
<td>RTI is a fair way to fulfill the purpose of raising student achievement.</td>
<td>123</td>
<td>63%</td>
<td>73</td>
<td>37%</td>
</tr>
<tr>
<td>RTI is a reasonable plan to meet the stated purpose of raising student achievement.</td>
<td>123</td>
<td>60%</td>
<td>78</td>
<td>39%</td>
</tr>
<tr>
<td>I like the procedures used in RTI.</td>
<td>101</td>
<td>51%</td>
<td>96</td>
<td>49%</td>
</tr>
<tr>
<td>RTI is a good way to meet the specified purpose of raising student achievement.</td>
<td>117</td>
<td>58%</td>
<td>85</td>
<td>41%</td>
</tr>
<tr>
<td>RTI monitoring procedures are manageable.</td>
<td>86</td>
<td>43%</td>
<td>114</td>
<td>56%</td>
</tr>
<tr>
<td>RTI monitoring procedures will give the necessary information to evaluate the plan.</td>
<td>116</td>
<td>57%</td>
<td>86</td>
<td>42%</td>
</tr>
<tr>
<td>Overall, RTI would be beneficial for struggling students.</td>
<td>127</td>
<td>63%</td>
<td>75</td>
<td>37%</td>
</tr>
</tbody>
</table>

### Responses Compared by County

Responses from each participant were summed to produce a total score, and then compared by county. County C was not included in this analysis due to the small number of respondents. Table 5 indicates the ANOVA of the summed scores by county. Results of this analysis were not at the significance level of p<.05.
Table 5

ANOVA of Summed Scores by County

<table>
<thead>
<tr>
<th>Groups</th>
<th>Count</th>
<th>Sum</th>
<th>Average</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>County M</td>
<td>18</td>
<td>831</td>
<td>46.16667</td>
<td>409.2059</td>
</tr>
<tr>
<td>County J</td>
<td>28</td>
<td>1415</td>
<td>50.53571</td>
<td>317.8135</td>
</tr>
<tr>
<td>County B</td>
<td>126</td>
<td>6982</td>
<td>55.4127</td>
<td>425.5243</td>
</tr>
<tr>
<td>County P</td>
<td>25</td>
<td>1401</td>
<td>56.04</td>
<td>327.04</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1795.625</td>
<td>3</td>
<td>598.5416</td>
<td>1.508529</td>
<td>0.213643</td>
<td>2.651396</td>
</tr>
<tr>
<td>Within Groups</td>
<td>76576.96</td>
<td>193</td>
<td>396.7718</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78372.59</td>
<td>196</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

An additional ANOVA was calculated to compare responses to each question by participant’s county (Table 6). Only one question was significant at the p<.05 level. Answers to Question 1 (Response to Intervention is an acceptable means of student intervention) by county indicated a significant difference in responses. These data indicate that at least one county’s total responses were significantly different than the others.
Table 6

ANOVA of Summed Responses to Question 1 by County

<table>
<thead>
<tr>
<th>Groups</th>
<th>Count</th>
<th>Sum</th>
<th>Average</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>County M</td>
<td>18</td>
<td>47</td>
<td>2.611111</td>
<td>0.957516</td>
</tr>
<tr>
<td>County J</td>
<td>28</td>
<td>72</td>
<td>2.571429</td>
<td>0.846561</td>
</tr>
<tr>
<td>County B</td>
<td>126</td>
<td>404</td>
<td>3.206349</td>
<td>1.861079</td>
</tr>
<tr>
<td>County P</td>
<td>25</td>
<td>85</td>
<td>3.4</td>
<td>1.75</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>15.76315</td>
<td>3</td>
<td>5.254385</td>
<td>3.231975</td>
<td>0.023496</td>
<td>2.651396</td>
</tr>
<tr>
<td>Within Groups</td>
<td>313.7698</td>
<td>193</td>
<td>1.62575</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>329.533</td>
<td>196</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Responses Compared by School Level

Research Questions 3 was: Is there a significant difference in teacher attitudes toward the implementation of RTI based on their school level (elementary, middle, high)? This question was answered with data from the quantitative survey. A one way ANOVA was used to analyze each question by level. There was no significant difference noted between groups for the summed scores or for any individual question. Thus, the answer to Question 3 is: There is no significant difference in teacher attitudes toward RTI based on their school level (See Table 7). Participants indicated years of experience in each level on the survey. For analysis purposes, the highest years in a given grade level (elementary, middle, high) were determined and coded 1, 2, or 3.
Table 7

ANOVA of Summed Scores by School Level

<table>
<thead>
<tr>
<th>Groups</th>
<th>Count</th>
<th>Sum</th>
<th>Average</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>124</td>
<td>6866</td>
<td>55.37097</td>
<td>400.5442</td>
</tr>
<tr>
<td>Middle</td>
<td>36</td>
<td>1887</td>
<td>52.41667</td>
<td>488.8214</td>
</tr>
<tr>
<td>High</td>
<td>40</td>
<td>2098</td>
<td>52.45</td>
<td>350.0487</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>406.4095</td>
<td>2</td>
<td>203.2048</td>
<td>0.500219</td>
<td>0.607166</td>
<td>3.041753</td>
</tr>
<tr>
<td>Within Groups</td>
<td>80027.59</td>
<td>197</td>
<td>406.2314</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80434</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Responses Compared by Years of Experience

Research Question 4 was: Is there a significant difference in teacher attitudes toward the implementation of RTI based on their years of teaching experience? Groups were formed by years of experience as follows: 0-5 years, 6-10 years, 11-15 years, 16-20 years, 21-25 years, and 26+ years. Participants indicated the number of years taught at each level (elementary, middle and high). For analysis purposes, the years were totaled and coded according to the assigned group. A one way ANOVA was calculated for the total summed scores for each group. There was no statistical significance found between any of the groups by years of experience (see Table 8). Thus the answer to Question 4 was: There was no significant difference found between groups based on years of
experience. Additional ANOVAS were run for each question comparing these six groups. No questions were significant at the p<.05 level.

Table 8

ANOVA of Summed Scores Based on Years of Experience

<table>
<thead>
<tr>
<th>Groups</th>
<th>Count</th>
<th>Sum</th>
<th>Average</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>44</td>
<td>2352</td>
<td>53.45455</td>
<td>335.3235</td>
</tr>
<tr>
<td>6-10 years</td>
<td>44</td>
<td>2592</td>
<td>58.90909</td>
<td>439.2939</td>
</tr>
<tr>
<td>11-15 years</td>
<td>30</td>
<td>1597</td>
<td>53.23333</td>
<td>292.323</td>
</tr>
<tr>
<td>16-20 years</td>
<td>32</td>
<td>1540</td>
<td>48.125</td>
<td>570.3065</td>
</tr>
<tr>
<td>21-25 years</td>
<td>23</td>
<td>1245</td>
<td>54.13043</td>
<td>310.0277</td>
</tr>
<tr>
<td>26+ years</td>
<td>27</td>
<td>1525</td>
<td>56.48148</td>
<td>453.7977</td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>2349.233</td>
<td>5</td>
<td>469.8467</td>
<td>1.167325</td>
<td>0.326704</td>
<td>2.260647</td>
</tr>
<tr>
<td>Within Groups</td>
<td>78084.76</td>
<td>194</td>
<td>402.4988</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>80434</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Qualitative Findings

Leech and Onwuegbuzie (2007) describe Constant Comparison Analysis as a method of analyzing qualitative data. In this model, the research can use one of three methods to identify underlying themes presented in the data. An inductive comparison was utilized that allowed codes to emerge from the data.
Participants

Teachers completing the online survey were asked to indicate whether they would be willing to participate in a face to face interview, and if so to provide contact information. Twenty participants indicated they would be willing to participate. Originally, two representatives from each county were to be randomly selected to be interviewed. County C was excluded from the qualitative portion because of low participation in the quantitative survey and lack of volunteers for the interview. Of the candidates volunteering, seven were from County M, two were from county J, ten were from County B and one was from County P. Participants were randomly selected from Counties M and B using a six sided die. The two volunteers from Counties J and P were contacted individually. Another candidate from County P was contacted through an acquaintance.

Ultimately, all but one of the candidates from County M declined or did not respond to contact by email. A second County M participant was contacted through an acquaintance. Because County B had a larger number of respondents to the survey due to its size and available pool of teachers, it was decided that four participants from this district would be selected. All four participants were original volunteers from the survey, and were chosen as others declined or did not respond. Only one teacher participated from County J after numerous attempts to contact others. No high school teachers indicated willingness to volunteer on the survey. Several high school teachers were approached, but all said they did not know enough about Response to Intervention to participate. All of the participants were female. One participant was African American, and the other eight were Caucasian.
The participants’ demographics were as follows:

<table>
<thead>
<tr>
<th>Participant</th>
<th>District</th>
<th>Level</th>
<th>Years of Experience</th>
<th>Grade/Area Currently Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>County B</td>
<td>Middle School</td>
<td>17 years</td>
<td>Special Education</td>
</tr>
<tr>
<td>Participant 2</td>
<td>County B</td>
<td>Elementary</td>
<td>7 years</td>
<td>Fourth grade</td>
</tr>
<tr>
<td>Participant 3</td>
<td>County B</td>
<td>Elementary</td>
<td>29 years</td>
<td>Second grade</td>
</tr>
<tr>
<td>Participant 4</td>
<td>County B</td>
<td>Elementary</td>
<td>27 years</td>
<td>Kindergarten</td>
</tr>
<tr>
<td>Participant 5</td>
<td>County P</td>
<td>Middle School</td>
<td>30 years</td>
<td>Gifted math</td>
</tr>
<tr>
<td>Participant 6</td>
<td>County J</td>
<td>Elementary</td>
<td>13 years</td>
<td>Fifth grade</td>
</tr>
<tr>
<td>Participant 7</td>
<td>County M</td>
<td>Middle School</td>
<td>25 years</td>
<td>Science and Social Studies</td>
</tr>
<tr>
<td>Participant 8</td>
<td>County P</td>
<td>Elementary</td>
<td>25 years</td>
<td>First grade</td>
</tr>
<tr>
<td>Participant 9</td>
<td>County M</td>
<td>Elementary</td>
<td>13 years</td>
<td>Second grade, inclusion</td>
</tr>
</tbody>
</table>

All interviews were conducted at a location chosen by the participant. The interview was digitally recorded and professionally transcribed. A matrix was developed identifying key statements by each participant (See Appendix D). The matrix was then analyzed for common themes.

_Emerging Themes_

Positives regarding RTI

There were more positive comments regarding RTI than expected, which was also supported by the survey data. Four of the respondents felt that the model was a systematic process that focused attention on struggling students. Participant 5 said RTI “causes us to
evaluate the things that we are trying and are they working.” Participant 9 said RTI keeps teachers from “jumping to conclusions” and referring students for special education testing when they may not qualify. Participant 6 felt it was a “great model in a fairy-tale world,” implying that the intent is good, but not always feasible.

When comparing RTI with the previous Student Support Team (SST) model of intervention, most teachers agreed that RTI was the more effective if implemented properly. “RTI is more focused on instruction and strategies,” “It’s the teacher and the student working together,” and “It forces teachers to make sure they are following the steps” are among the comments made. Participant 9 stated, “RTI makes us think more clearly about why they (the students) are there.” This comment was made in reference to the tendency of teachers to use RTI and SST as a referral tool for special education services rather than a method of identifying and addressing skills deficits. Participant 3 said, “It has been suggested that SST primarily looked to who should be placed in special education. RTI was designed to do the very opposite: to hold children back to Tier 1 or Tier 2.” She went on to say,” I enjoyed SST because back then it wasn’t as complicated. We seemed to be able to really try strategies and then they weren’t difficult and time consuming, and the children got the help they needed (referral for testing) before the end of the year.”

Most of the interviewees felt RTI was more “rigid,” “systematic,” “specific,” “focused,” and consequently more effective than the previous SST process. Five of the participants said that the SST process was more “relaxed,” “uncomplicated,” and “less time consuming.” Participant 4 noted, “There was no proof we really did the interventions (under SST) – we knew they would be tested (for special education
services).” Others stated that SST was just a discussion among teachers of what can be done with a child – a checklist of strategies to “help” the child. “It seemed they (administrators and parents) took our words as professionals that we had done all we could,” was a comment from Participant 8. Participant 9 stated that SST was “fire insurance” that covered a teacher when a student failed (e.g. documentation that steps were taken to help the student). Interestingly, Participant 7 had an opposing point of view. She felt that currently, SST was a much more formal documentation of student achievement (or lack thereof), and that RTI was very loosely constructed: “just a folder of collected stuff.” This participant is a middle school teacher who stated her district used the SST process primarily to document absences and academic progress to use during legal proceedings regarding truancy. Overall, the group agreed that RTI (at least in theory) was the more effective means of addressing the needs of struggling students, answering Research Question 1b (Do teachers feel that the previous Student Support Team model was more or less effective that RTI?).

*Stumbling Blocks to Successful Implementation of RTI*

Survey data from Question 15 suggested that some teachers felt that RTI procedures are not always manageable. This was reinforced by data from the qualitative interviews. One of the overarching themes identified was the lack of available time to implement the model with fidelity. First of all, five teachers stated that there is not enough time in the day for regular interventions with students on Tiers 2 and 3. Participant 4 mentioned “not enough time” on three separate occasions. Participant 2 noted that time spent in RTI meetings and small group interventions was time away from her other students: “And I’ve spent so much time out of the classroom in these meetings
that I really feel like I’m neglecting the rest of my kids.” Another time related issue mentioned was the length of time it took to move through the tiers in order to be recommended for a special education referral. Five of the participants specifically mentioned that the RTI process took too long to lead to a referral for special education testing. Participant 7, a middle school teacher, mentioned this on several occasions. She said that by the time most struggling students reached middle school, they had already been identified through the RTI process and had usually been referred for special education testing. Her concern was for transfer students that came into the system from private school, home school, or another district that were immediately identified by the teacher as having a deficit: “And that’s why I say that the timing is an issue because these are kids that have already spent six or seven years in school, and we can’t waste a whole half a year taking data.”

A second notable theme was the lack of support in the classroom, primarily regarding additional personnel. Seven of the nine participants specifically stated that they needed another adult in the classroom, for a variety of purposes: to help deliver interventions, to help with progress monitoring and documentation, and to help monitor the rest of the class during small group interventions. Participants 1 and 5 stated they needed an administrative person “well versed in the process” to coordinate the RTI program at the school level. Participant 9, one of the two teachers that did not mention extra staff support as a need, later admitted that she was an inclusion teacher and already had the support of an extra adult (and sometime two adults) for all interventions.

Another identified roadblock was the lack of resources for intervention materials. When comparing the transcripts, it became obvious there were discrepancies between the
ideas of "strategies" and "research-based interventions." In the initial No Child Left
Behind Act of 2001, funds were provided to districts to use "in establishing reading
programs for students in kindergarten through grade 3 that are based on scientifically
based reading research" (20 U. S. C. § 6361). According to the law, this research involves
data analysis, valid measurements, and observational methods, and has been accepted by
a peer-reviewed journal or approved by a panel of independent experts. According to the
Georgia Response to Intervention handbook, *Response to Intervention: The Georgia
student achievement pyramid of interventions* (2008), research-based interventions are
defined as "methods, content and materials developed in guidance from the collective
research of the scientific community" (p. 13). Strategies, on the other hand, are defined
as "effective instructional/behavioral practices (rather than a set of required instructional
procedures)" (p. 14). When asked how the district defined "research-based
interventions," seven of the respondents said they were not sure that a definition existed.
Six of them said they had been provided with a list of best practice strategies and
interventions from their school RTI coordinator to use as interventions. After being asked
Interview Question 6 (How does your system define "research-based interventions"? ),
Participant 2 commented, "The first thing that popped into my head was the little Price is
Right wheel, and I feel like there's a wheel and we just spin it and we just pick the thing
that our school happens to have." Participants 1, 2, and 5 said they did not believe the
interventions suggested by the district were research based, and the majority of the actual
intervention programs mentioned were computer-based skills programs. Participant 8 said
she used the Frye sight words, STAR (which is a diagnostic reading assessment),
Accelerated Reader, and Saxon Phonics (the only research based reading program
mentioned). However, in the use of Saxon Phonics, the entire class received whole group instruction through the program, and only portions of it selected by the teacher were used as interventions.

Two additional difficulties with RTI implementation specifically mentioned are worth noting. Participant 2 expressed frustration over conflicts with the school psychologist. She stated she had provided increasing interventions and progress monitoring on multiple skill deficits for a particular student since the beginning of the school year. She said every time she would report the student’s lack of progress to the RTI team, the school psychologist would suggest another strategy and another round of data collection: “Then all of a sudden, she (the psychologist) didn’t think that was an appropriate tool to measure comprehension . . . for the longest time we were just kind of caught in semantic spirals of going nowhere and I literally felt like I was drowning.” Participant 8 complained that she had students that were not succeeding on Tier 1 with interventions, but could not be moved to Tier 2 because she was unable to schedule the mandatory meeting between the committee members due to the fact that a required RTI team member was always unavailable: “If I can get the EIP teacher, the administrator has some conflict. . . I’m here, like I said, until 5:30 or 6:00, and they won’t meet with me after school.” These data answer Research Question 2b: Some teachers feel they are unable to implement RTI according to system guidelines for a variety of reasons.

Other Findings

Addressing the Needs of Struggling Students

When asked how teachers addressed the needs of struggling students, six of the participants indicated one of their first responses would be to observe the student and
other data such as assessments and student history. Participant 3 said, “I would look at
the level of the struggling and I would definitely start intervention on every student that
needed my help.” Participant 6 stated, “I would look at what assessment I had given
them, problems that they had missed, and try to pinpoint where exactly they’re going
wrong.” The other common theme (also identified by 6 of the participants) was to
conference with the parent and/or the student themselves as well as previous teachers to
see if there is a history of problems in a particular area. Participant 6 further defined the
student conference by having the students verbalize their thinking in order to identify
faulty reasoning: “I try to pull those students over to the side first and address what’s
going on and having a discussion with them to see where they derive their answers from
– why they chose the problems that they chose and then go from there in correcting what
they did wrong.” Participant 4, a kindergarten teacher, noted that she was hesitant to
approach a parent with a problem too early, sometimes even waiting for the parent to
express concern: “I first kind of wait and watch and see. If a parent comes to me with a
concern I address it. I don’t want a parent to think that I’m jumping the gun.” Five of the
nine indicated that they would begin some type of intervention, using strategies such as
small group instruction.

According to the Response to Intervention model as outlined by the state of
Georgia handbook (2008), a universal screener should be used regularly to identify
struggling students. When asked about their county’s universal screener, six of the
participants could identify the instrument by name and could describe its administration
and function. One of the middle school participants was not sure what a universal
tscreener was and asked for a description. She then said she thought there was one, and
that it was administered to students on the computer, but was not sure of the name. Both of the teachers from County P stated that their county did not have a universal screener, and that the annual state criterion-referenced competency test and accompanying benchmarks were used as data for decisions regarding student deficits. Responses as to strategies for students identified “at risk” were varied. Four of the teachers stated they would identify the weak area from the data and begin strategies to address that deficit and progress monitor responses. Participant 9 said, “I look at the weak points, and I go from there. If it was in fluency or something like that I would embed that into my instructional practices with small group. We do guided reading small group, and we also do math-guided groups.” These data indicate that some teachers are unsure of system guidelines regarding universal screeners, indicating an answer to Research Question 2c (Do teachers feel that RTI is being implemented successfully in their system?)

* Differences in Tier Interventions *

Another inconsistency among interviewed teachers was the definitions and descriptions of Tiers 2 and 3. The descriptions of Tier 2 varied from computer programs (2 responses), small group strategies and pullout instruction during non-academics or before and after school (4 responses), or the Early Intervention Program (EIP) funded by the state (2 responses). One middle school teacher stated that Accelerated Reader and Accelerated Math were used during enrichment time for Tier 2. At least 4 teachers were unsure about the interventions used for Tier 3 in their district or did not have a student on Tier 3. Both participants from County M stated that Tier 3 involved Student Support Team interventions (SST), which is in accordance with the Georgia RTI manual. According to Participant 7, this involved a higher level of documentation primarily for
behavior and attendance issues. Two other teachers stated Tier 3 was essentially “more of the same,” and Participant 5 stated that certain products had to be in place in Tier 3 for a gifted referral.

RTI and SST

Another interesting find was the difference in district approaches to the Student Support Team (SST) model. The Georgia RTI handbook defines Tier 3 as the SST model, which was a result of the 1984 class-action suit, Marshall vs. Georgia. At the SST level, districts are required to provide “intensive, formalized problem-solving,” “targeted research-based interventions,” and “frequent progress monitoring and analysis” (Georgia Department of Education, 2008, p. 45). Both participants from County M specifically identified SST as Tier 3. Participant 7 felt the level of documentation required for SST was more rigorous than Tiers 1 and 2 of RTI. No other respondents mentioned SST as a component of RTI. Most participants seemed to imply that RTI was a replacement for the older SST model, and that the SST process had been more informal and less data driven: “relaxed,” “uncomplicated,” “no real proof we did the interventions,” “took our words as professionals – didn’t feel like I was being cross-examined,” and “just a teacher discussion of what can be done with a child.”

RTI and Gifted

Several unexpected findings were revealed during individual interviews. Participant 5 was a middle school gifted teacher from County P. Her primary experience with Response to Intervention was through the gifted program. The Georgia RTI handbook does identify gifted and talented as part of Tier 4 of the Response to Intervention Pyramid (Georgia Department of Education, 2008). Participant 5 stated that
the tier system was used to identify students in her district for referral to the gifted and talented program. She stated, “

I think we implement the ‘CYA’ of RTI and I really hate that. When we do our gifted referrals, we send out an RTI thing and at one time of the year we tell them this is what you need to put for tier one, this is what you need to put for tier two, this is what you need to put for tier three. So that is our gifted screening.

Accelerated reader scores are used for Tier 2 placement and an enrichment “project” is assigned as part of Tier 3. While these would be most likely considered assessments rather than interventions, it was interesting to note that the RTI model was used for another purpose other than addressing skills deficits or referral for special education testing. Only the middle school teacher from County M (Participant 7) briefly mentioned RTI and gifted testing: “The only thing they’re tested for (in middle school) is gifted, because in our county – all you have to do is say, “I think they’re gifted – test them,’ and they’ll do it.” These responses also indicate confusion regarding system guidelines for RTI (Research Question 2b and 2c).

RTI and EIP

The Early Intervention Program (EIP) was initially developed in Georgia in the late 1990s to serve students who are “at-risk” or are not achieving at their academic grade level. The program was based on the philosophy that not all children enter public school with the same experience base. With the development of the Georgia Response to Intervention model guidelines in 2008, EIP was identified as a Tier 2 intervention (Georgia Department of Education, 2008). There were some differences identified in the level of involvement of EIP in Response to Intervention during the interview process.
Participant 6 (County J) and Participant 9 (County M) mentioned the involvement of EIP teachers in the RTI process on several occasions throughout the interviews. Participant 9 stated that the EIP teachers were the primary interventionists for Tier 2 - providing not only instructional interventions, but also data collection and progress monitoring. Obviously the involvement of the EIP teachers can be an enormous support to the general education teachers. Participant 6 said that EIP teachers were primarily responsible for Tier 3 interventions. She went on to explain that, “They (EIP teachers) know the ins and outs of it. They kind of help guide us through it whenever we have questions on moving from Tier 1 to Tier 2.” Although these counties seem to rely heavily on the EIP teachers to assist with RTI, Participant 6 noted a problem with this arrangement. She explained that sometimes there was a discrepancy between progress monitoring scores during RTI sessions with the EIP teacher and actual classroom performance. She believed that the EIP progress monitoring data tended to be higher, because the probes used for data were directly linked to the interventions given during instruction. She also felt that the EIP teachers would prompt the students during assessments, which gave an inflated score on probes.

When the students are with the EIP teacher doing the interventions, their probes could be 100% accurate but that could be just after they’ve taught them the strategy and they’re applying it in their classroom, but when they come back to the regular classroom they may not be applying the strategy, and then when I give them an assessment - they bomb it.

She believes there is a discrepancy between intervention progress monitoring and classroom performance, and that this gives a false sense of success to both the student
and parent. She believes the interventions learned in the EIP setting should be more closely aligned with classroom expectations and assessments in order to address this gap.

The "Hidden Agenda" of RTI

At least two participants mentioned the "hidden agenda" of the Response to Intervention model. Participant 2 stated, "I think the idea behind it (is) to prevent a huge load of students being thrown into Special Ed that didn't really need to be Special Ed." Participant 4 also said, "Maybe there was a hidden agenda they thought with the other system thinking that too many of a certain portion of children were going to be referred or going to Special Ed or whatever." Participant 9 concurred: "I think a lot of teachers jump to conclusions quickly. You know this child needs testing, and a child gets tested and they're just a slow learner perhaps (and not eligible for special ed services) or not identified per se special ed. So I like it (RTI) because it prevents the immediate response as far as 'This child's got to be tested.' It helps rule out some of that other." One of the motivations behind the Response to Intervention model outlined in IDEA 2004 was to provide an alternate means of eligibility for Specific Learning Disabilities Model (SLD) other than the previous discrepancy model (20 points between ability and achievement test scores) (Wright & Wright, 2010). This could be a "hidden agenda" to some, but one of the theories behind RTI is to identify areas of deficit and to intervene to help close the achievement gap.

Overemphasis on data

Participant 6 expressed concerns regarding what she considered to be a growing lack of professional respect for classroom teachers. She said,
Why can’t our professional judgment of what we’re seeing everyday be enough of a measurement to request testing for students? Why is it that we have to take a 12 week process or more before we identify students who need to be tested for (Special Ed) services?

Participant 8 stated,

(With SST), teachers were trusted as professionals that they didn’t have to have all the documentation, and I feel like sometimes in a tier meeting (I’m) being cross examined - ‘Can you prove what you’re saying?’ And I work with the kid every day. I ought to know whether he can do it or not.

This sentiment echoes the feelings of many teachers in this age of accountability: teachers now have to produce measurable results in order to prove their worth. Education is no longer a position of respect in its own right.

Summary

Statistical analyses showed no significant differences between teacher attitudes toward Response to Intervention according to county of employment, level of school taught, or years of experience. Overall quantitative data did show that, while most teachers had a generally positive attitude toward the intention or appropriateness of RTI, more teachers had a negative attitude regarding the implementation, or manageability of the procedures as outlined by their particular system. These findings were supported by the qualitative data. At least half of the interview participants had positive things to say about the intent and appropriateness of the RTI model in addressing the needs of struggling students. Many of the negative reports from the interview participants, however, echoed the same themes regarding the implementation of RTI: lack of time (for
interventions, meetings and paperwork), lack of support (usually regarding personnel),
and lack of resources (mainly intervention materials). Most agreed that the intent and
design of RTI are beneficial to students, but that the inconsistent, vague, or unreasonable
guidelines make it difficult to implement.
CHAPTER FIVE

DISCUSSION

Study Review

The purpose of this study was to assess prevailing teacher understandings and attitudes toward the Response to Intervention model as outlined by the Georgia Department of Education and as implemented in five Middle Georgia school systems. A review of the literature has shown the attitudes of personnel administrating and/or supporting any program can significantly affect its successful implementation (Avramidis & Norwich, 2002; Bain, 2010; Lewis, 2006; Monsen & Frederickson, 2004; Ponemon & Nagoda, 1990; Ransford, et al., 2009; Schaap, 2006; Wozney, Venkatesh, & Abrami, 2006). By assessing current attitudes toward the RTI model implemented at varying levels across school systems, inadequacies can be addressed and changes developed that will improve the effectiveness of local models to significantly impact student achievement.

The Response to Intervention (RTI) model was initially introduced within the 2001 No Child Left Behind Act and further defined in the reauthorization of the Individuals with Disabilities Education Improvement Act of 2004. These federal laws brought about significant change in the way academically struggling students' needs were addressed. Levin’s (2001) stage theory of institutional change identifies the components of origin, adoption, implementation, and outcomes. The focus of this study was on the implementation phase of this change. Using mixed methods, attitudes of teachers in five
Middle Georgia public school districts were assessed using a Likert-type survey, and nine volunteer participants were interviewed regarding their perceptions of RTI. This study sought to answer the following research questions:

1. What are teacher attitudes toward the intention or appropriateness of RTI?
   a. Do teachers feel that they can address the needs of struggling students through RTI, or would they prefer to use other means?
   b. Do teachers feel that the previous Student Support Team model was more or less effective than RTI?

2. What are teacher attitudes toward the implementation of RTI?
   a. What resources do teachers feel that they need in order to successfully implement RTI?
   b. Do teachers feel that they are implementing RTI according to system guidelines?
   c. Do teachers feel that RTI is being implemented successfully in their system?

3. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their school level (elementary, middle, high)?

4. Is there a significant difference in teacher attitudes toward the implementation of RTI based on their years of teaching experience?

Two methods of ascertaining teacher attitudes were used in this study. In the quantitative method, a seventeen-question survey was delivered electronically to certified staff in five systems. Questions were slightly modified from the Primary Intervention Rating Scale (PIRS) (Lane et al., 2009). This survey was found to be a reliable and valid
measure of social validity, defined as "the extent to which consumers view a given practice as addressing socially significant goals, socially acceptable treatment procedures, and socially important intervention outcomes" (Lane et al., 2009, p. 136). Validity measures of the PIRS were significant. The Pearson correlation coefficient between the schools' mean in a follow-up program evaluation study was $r = .71$, $p < .005$, suggesting a positive correlation between teacher attitude and fidelity of implementation of the intervention. Cronbach's alpha values for each of the three surveys (elementary, middle, and high) were .97 or higher and were significant at $p < .001$, indicating high reliability of the PIRS as well (Lane et al., 2009).

A constant comparison analysis as described by Leech and Onwuegbuzie (2007) was used in the qualitative data analysis. Transcriptions of each of the nine interviews were reviewed and major ideas or "chunks" for each question were recorded on a matrix by respondent (see Appendix C). Similar chunks were coded and emergent themes were noted inductively (e.g. the codes emerged from the data).

Discussion

Research Questions

Research Question 1 addressed teacher attitudes toward the intent or appropriateness of Response to Intervention. Summed scores and percentages from the total survey responses indicate that most teachers have a positive attitude toward the intent and appropriateness of the model. These findings were also supported in the qualitative interviews. Five of the nine participants had positive comments indicating that they believed the model was an effective means of identifying students with academic deficits and addressing them systematically. Research Question 1a (Do teachers
feel that they can address the needs of struggling students through RTI, or would they prefer to use other means?) was answered strongly in the affirmative through Survey Questions 1, 6, 9, and 14. The majority of the interview participants, however, cited difficulties with the implementation of the RTI model which will be specifically outlined in the discussion of Research Question 2. Research Question 1b further defines attitudes toward the intent of RTI as compared to the previous Student Support Team (SST) model. There were, however, some dissenting opinions regarding the two models. All of the participants had experience with the SST model, and all but one seemed to agree that SST was more informal, not as rigid, and easier to implement than RTI. Five of the teachers felt RTI was the more successful model of the two in terms of raising student achievement, but proponents of the SST model felt it was more realistic and focused on those that needed referral for special education testing. Thus the group answer as to which model (RTI or SST) was more effective seemed to be Response to Intervention.

While teachers seemed to agree on the appropriateness of the intent of RTI, they were somewhat more negative regarding their attitudes toward implementation of the model (Research Question 2). Several common themes were identified during the qualitative interviews in answer to Research Question 2a (What resources do teachers feel that they need in order to successfully implement RTI?). Seven of the nine stated they needed another person in the classroom to assist with interventions or to help monitor the rest of the class while the teacher was providing interventions. Five of the respondents indicated that lack of time is the primary factor making implementation of the model difficult. Similar reports have been noted in the literature: principals surveyed
regarding RTI noted scheduling intervention time as a serious problem area concerning RTI (Sansosti, et al, 2010).

Other needed resources were noted as well. One of the issues raised regarding small groups was that it was difficult to group students for intervention because many of them had different skill deficits and needed individual instruction. Two of the participants felt they needed staff development and resources for strategies and interventions. Sansosti et al., (2010) noted corresponding concerns among high school principals regarding needed resources, even though intervention materials were rated as most important for successful implementation. When questioned how their districts defined “research-based” interventions (Interview Question 6), significant differences arose. The majority of the participants (7out of 9) stated that either their county had not provided research-based interventions or they had only been provided with a list of strategies and interventions. No one stated their systems had provided them with a purchased, research-based intervention. Other evidence regarding discrepancies defining “research-based interventions” appear in the literature. District Directors of Special Education in North Carolina varied greatly in their perceptions of instructional interventions (Werts, Lambert, & Carpenter, 2009). Obviously, none of the systems ascribed to the Georgia Department of Education (2008) definition describing methods and materials developed from the collective research of the scientific community. This corresponds to evidence in the literature suggesting inconsistent definitions and guidelines of RTI between systems (Gagnon, 2010; Werts, Lambert & Carpenter, 2009).

Research Question 2b (Do teachers feel that they are implementing RTI according to system guidelines?) was answered negatively by six of the nine participants. Three
participants responded no, it was not possible as currently mandated. Three more stated they were trying, but it was very difficult. One of the difficulties regarding small groups was cited again by a different teacher. She stated it was difficult to find five students with the same problems, and that she was often forced to provide interventions individually during her planning period and the student’s nonacademic courses (such as physical education.)

When asked if they believed RTI was being implemented successfully in their system (Research Question 2c), seven of the nine participants stated that most general education teachers are unable to implement the model effectively or were struggling to do so. Only two of the teachers felt their counties were able to implement effectively, citing the Early Intervention Program (EIP) teachers as being instrumental in the process. All of the participants except one cited various difficulties that impeded the successful implementation of RTI. The quantitative data bears out the noted concerns with RTI implementation as well. Question 13 responses (I like the procedures used in RTI) were still at a majority in the positive category, but at a much closer margin than the other questions (51% positive to 49% negative). Question 15 (RTI monitoring procedures are manageable) was the only survey question where the responses were in the negative majority (43% positive to 56% negative). Both of these questions are more focused on the practical implementation of RTI procedures (Research Question 2) than the intent or appropriateness of the model (Research Question 1). Thus one could conclude from both the quantitative and qualitative data that the answer to Research Question 2 (What are teacher attitudes toward the implementation of RTI?) is generally negative.
It seems inconsistent that teachers would voice support for the intent and appropriateness of RTI, while at the same time indicating that the model is either very difficult or impossible to implement effectively. Evidence in the literature, however, supports this apparent incongruity. Hwang and Evans (2011) found that, while 41% of teachers had positive attitudes toward inclusion, more that 55% stated they were unwilling to actually participate in an inclusion model classroom. Lees (2007) found that positive attitudes toward an assessment policy did not necessarily reflect actual implementation due to the limited understandings of teachers regarding its purpose. While teachers in an urban elementary school agreed that Response to Intervention had a positive impact on instructional practice as well as school culture, challenges were noted regarding communication, staff development, time, and appropriate interventions which needed to be overcome before the model could be implemented with fidelity (Greenfield et al., 2010). These findings support the data gathered from the current study. When teachers understand the intent and philosophy of a model is sound and can benefit students, they are generally in favor of that model; however, if the model is difficult to implement, they are less likely to support it. Teachers ultimately tend to be more focused on the personal impact of change, and need to build understanding and increase their comfort levels before perceptions are improved (Bain, 2010).

To answer Research Questions 3 (Is there a significant difference in teacher attitudes toward the implementation of RTI based on their school level?), a one way ANOVA was used to determine if there was a significant difference in responses between teachers at different school levels (elementary, middle and high). To answer Research Question 4, a one way ANOVA was used to determine if there was a significant
difference in responses between teachers at varying levels of experience. An additional ANOVA was used to compare teachers by district. No significance was found in any of these analyses. This would indicate that, in general, teachers have similar attitudes toward Response to Intervention across these group lines. This could be partly explained by the general nature of the survey. The Primary Intervention Rating Scale (PIRS) was originally tested to be a reliable tool to measure teacher attitudes toward an intervention and predict the level of implementation based on those attitudes. Consequently, the questions were more general in nature and did not provide details regarding the intervention itself. The interview questions, which were open-ended and more specific to Response to Intervention, provided more data indicating differences in individual attitudes toward the positives and negatives of the model. During the interview phase, some differences were found to exist between the perceptions of middle school teachers and elementary school teachers.

Only middle school and elementary school teachers participated in the interview study, as previously noted. There were some differences in the responses of two of the middle school teachers as compared to the elementary teachers. Participant 5 was only able to discuss her impressions of RTI as an avenue of referral to the gifted program. She felt RTI used in this way was not a true intervention, but a guideline of documentation needed for a referral for gifted testing. Participant 7 also expressed a frustration and lack of understanding of the RTI process. She saw RTI as a process leading to referral for special education testing, but as a middle school teacher, she felt the model was too slow. She also noted that most students that needed testing were generally referred and placed before they arrived at middle school. She felt that students eligible for RTI interventions
had either been home-schooled or had been transferred from another school, and that referral for special education testing was delayed because of the RTI process. Neither of these two participants were exactly sure what a universal screener was nor could they identify one their county was using. In contrast, Participant 1 had very positive comments concerning Response to Intervention. She was a middle school special education teacher whose primary job was to provide interventions for Tier 4 students during non-academic classes. The varied responses of the middle school participants could be explained by several factors. Most middle school schedules include non-academic classes daily, which allows administrators to schedule interventions for Tier 2 and Tier 3 students. Also, if RTI is implemented with fidelity, most students have been identified and placed in the model during their elementary years. Usually they have either had their deficits addressed and have closed the gap, or they have been referred for special education testing, thus middle school teacher are generally unfamiliar with initiating the RTI process.

There was some expectation that veteran teachers would be less favorable toward the RTI model due to the change in previous procedure, but no differences were noted in the interviews based on years of experience. This could be attributed to several factors. First, all of the participants had been teaching before the official rollout of the state RTI model, therefore they had been exposed to it for approximately the same length of time. Consequently, there were no participants that experienced RTI as pre-service teachers and had not experienced the roll-out. Secondly, because of the identified common themes regarding lack of resources (i.e., time, additional staff, materials), it would seem that teachers are having problems implementing the model no matter what their level of
experience. Therefore we can conclude that teachers have a generally negative attitude toward the implementation of RTI (Research Question 3).

*Response to Intervention and Referrals to Special Education*

There was one recurring theme throughout all nine interviews which sheds some light on teacher perceptions regarding RTI. All of the participants indicated their understanding that the ultimate goal of Response to Intervention was to refer students for special education testing. Many of the complaints regarding time concerned that fact that both Tier 2 and Tier 3 required at least six weeks of data collections – usually resulting in a semester or more of interventions before referral could be considered. Only Participant 9 felt that RTI helped to prevent unnecessary special education testing. Some of this attitude may stem from the previous Student Support Team model in Georgia, which many believed was the only pathway to a special education referral. Two teachers noted that they believed RTI was conceived from a “hidden agenda” of reducing the number of students (especially minorities) referred to special education. This idea is born out in the literature. The National Research Council reported discrimination against minorities in special education due to poor instruction or a lack of instruction due to absences, invalid referrals or assessments, or inadequate instruction in special education (Newell & Kratochwill, 2007). A disproportional number of minority students in special education is a concern because perceptions of teachers and other adults are lower and the student has a diminished self concept (Hosp & Madyun, 2007). This is especially true in Georgia where the lawsuit Marshal v. Georgia (1984) raised questions regarding the disproportionate number of black students overrepresented in lower tracks and underrepresented in higher tracks (Reschly et al., 1988). Although these teachers may
have been unaware of this history, their apparent impression of the purpose of RTI was to address skills deficits through interventions before initiating the referral process in order to avoid this disproportionality.

A historical trace of the events leading to the inception of RTI suggests there was a two-fold purpose. Response to Intervention as addressed in the Individuals with Disabilities Education Improvement Act (IDEIA 2004) was intended to be an alternate route for determining eligibility for Specific Learning Disabilities. Before 2004, the discrepancy model (a twenty point difference between scores of cognitive ability and achievement tests) was the standard method of determining a specific learning disability. Response to Intervention was developed as a problem solving model that allowed for instruction and progress monitoring that showed a student could or could not remediate deficits with intensive interventions (Bradley, Danielson, & Doolittle, 2005). One of the earliest mentions of research-based interventions, however, was included in the No Child Left Behind Act of 2001. This legislation identified a process by which students at risk or students who were struggling academically could be identified and remediated in order to close the achievement gap. The goal here was that all children would be proficient readers by the end of the third grade (Wright & Wright, 2010). Unfortunately, these two pieces of legislation send mixed messages to those implementing the RTI model. It became apparent during the interview, that most of the teachers believed RTI’s primary purpose was to lead to a referral for testing for special education eligibility. Only Participants 1 and 9 expressed the view that RTI was a way to address skills deficits in order to help students “catch up” with their peers and succeed in the general education classroom.
If most teachers see RTI as an avenue towards special education, then it is logical that they should feel frustrated with the process and see it merely as a series of hurdles to be overcome. Participant 6 felt the emphasis on data collection was an affront to her opinion as a professional. "Why can’t our professional judgment of what we’re seeing everyday be enough of a measurement to request testing for students." Again, the emphasis here is on intervention as a pathway to a referral for special education services. Historically a teacher’s opinion was sufficient for such a referral, but with RTI this is no longer the case. During a discussion comparing RTI with SST, Participant 6 reiterated, "I still think that a good classroom teacher would be able to help a student or determine whether a student needs to be tested for a learning disability based on his or her professional judgment." She admitted that a novice teacher may struggle with this, but a veteran teacher does not. "Once you’ve been in it for awhile you kind of see the trends and the notations of what students do that are really struggling." It is interesting to note that the two teachers that did not view RTI’s primary purpose to be special education referral had the most positive views regarding the model. Both felt that Response to Intervention was a systematic, data driven method of addressing student needs that was an effective means of raising achievement. Unless teachers adopt this attitude, it is unlikely that RTI will be viewed positively and consequently implemented with fidelity.

Levin (2001) describes change factors such as clarity of the change, difficulty of the procedure, degree of understanding, level of commitment, available resources, and competing demands as necessary for fidelity of implementation to occur. Teachers will continue to experience frustration and disillusionment until systems recognize the need to
provide these supports. Response to Intervention is a proactive, positive, data driven model that can affect student achievement if the right conditions are in place.

Limitations

Several obvious limitations present themselves in this study. First of all, the low participant rate of the survey calls into question the generalizability of the findings. With less than 10% of certified personnel participating across the board in the 5 counties participating, it is difficult to draw strong conclusions. Similar limitations can be noted in the qualitative interview portion of the study. Of the 20 volunteers indicating willingness to be interviewed, only six actually replied to follow up contact efforts and agreed to sit for the interview. The original intent of the qualitative study was to interview at least two representatives from each participating district. When it became apparent that there were not enough willing volunteers in the survey pool to accomplish this goal, other recruitment methods were employed. The remaining participants were suggested by acquaintances and asked to participate if they taught in a particular under-represented district. There are several possible reasons for the low participation rate in both the survey and interview portions of the study. Many teacher acquaintances stated they were too busy or forgot the deadline when the link became “buried” in other emails. Others may have questioned the anonymity of the survey and were afraid of possible repercussions when giving a negative response. In spite of the publicized efforts to further educational knowledge, some teachers do not see the value of survey data and simply delete such emails without even reading them.
There were also discrepancies regarding the way the survey was sent to participating counties. In three of the districts, the email link was sent to certified personnel directly from a county level administrator. While all three counties did have some level of participation (indicating the link was sent), County C only had three participants respond – calling to question the wording of the email the staff received. The principle investigator had to manually locate addresses and individually send emails to participants in County J, therefore not all of the certified staff were necessarily notified. The link was sent twice in County B. A county level administrator sent the email to building level administrators and asked them to forward the link to their staff. After nearly two weeks, less than 5% had responded, prompting the principle investigator to send a second email link through the lead special education teachers. The differences in contact between counties call into question the reliability of the survey. There is a possible explanation for the apparent reticence of some county administrators in promoting participation in this survey. County T administrators denied permission to send the survey link, explaining that the county model was not fully developed and that any information collected would not be useful. Data from the qualitative interviews showed discrepancies in the models and implementation levels between counties. Many district administrators may have been keenly aware of deficits in their current model and did not want those identified and possibly published.

As with any study utilizing surveys or interviews regarding opinions, the assumption is that the participant will be truthful and forthcoming regarding their opinions. This may not always be the case, again affecting generalizability.
As previously mentioned, some teachers are not convinced their anonymity would be protected and are hesitant to give information that may put their school or district in a negative light. Others feel it is their duty as “good” teacher to report a positive attitude about all district initiatives. Such attitudes color any resulting data.

Implications

Further Research

The results of this project affirm the existing body of literature. While there were only a few peer-reviewed articles found specifically addressing attitudes toward the intent or implementation of Response to Intervention, the general implications are similar. Most feel that the philosophy and intent of RTI is positive and has the potential for raising student achievement, but current resources and training are insufficient to help those responsible implement the model with fidelity (Greenfield et al., 2010; Nunn & Jantz, 2009; Sansosti, Noltemeyer, & Goss, 2010; Werts, Lambert, & Carpenter, 2009). A review of the literature showed that teacher attitudes toward an initiative are crucial to effective implementation (Bain, 2010; Haney, Lumpe, & Czerniak, 2002; Hwang & Evans, 2011; Monsen & Frederickson, 2004; Ransford, et al., 2009; Wozney, Venkatesh, & Abrami, 2006). Therefore, in order to improve the level of implementation of RTI, teacher attitudes need to be raised through needed supports such as additional staff, resources, and training.

This study only addressed teacher attitudes, limiting the usefulness of these findings. Additional research regarding the actual affects of RTI models on student achievement is the better means of assessing its worth. A quantitative study looking at student achievement scores after receiving RTI interventions would be useful in
determining the effectiveness of the model. Studies that further define actual models of implementation within geographic regions are warranted. This study only looked at general aspects of implementation. Additional research is needed to identify specific differences in definitions of terms, resources for interventions, delivery models, and policies and procedures between and within districts. Research regarding the attitudes of parents and students would also be helpful, as they are primary stakeholders in the process.

Possible Reform

While the data show that many teachers believe the intent and philosophy behind the Response to Intervention model is sound, there were also identified problems with implementation across and within districts. State and district level administrators would benefit from examining the findings of this study to ascertain reform. Funding should be sought to provide teachers with needed personnel and resources. One of the recurring themes documented during the interviews was the need for additional personnel in the classroom, especially when delivering Tier 2 and Tier 3 interventions. While addressing the needs of struggling students is a priority, the instruction of those who are achieving and exceeding the standards should not be neglected while the sole adult in the classroom focuses on those needing remediation. Students needing academic interventions should receive this instruction outside of the regular classroom whenever possible.

Policies should be examined and revised so that procedures and documentation can be made more consistent. One participant expressed frustration that the forms used to document student progress were not standardized. This is a relatively easy problem to address, and all districts that have not should immediately develop consistent policies and
procedures for implementing RTI. Scheduling should be adjusted to build in time for teachers to provide interventions. The middle school teachers participating in the interviews indicated that this is easily addressed in that setting, due to departmentalized scheduling. Elementary teachers, however, stated on several occasions that finding time to deliver instructional interventions was one of the biggest obstacles to implementation. Administrators must look carefully at the schedule to provide building level time for teachers to provide small group instruction. Response to Intervention can be a successful model in raising student achievement if the tools are made available to those involved.
APPENDIX A

RTI SURVEY QUESTIONNAIRE

Adapted from the Primary Intervention Rating Scale
(Lane et al., 2009)

1. Response to Intervention (RTI) is an acceptable means of student intervention.

2. Most teachers would find RTI appropriate.

3. RTI should prove effective in raising student achievement.

4. I would suggest the use of RTI to other teachers.

5. RTI is appropriate to meet the school’s needs and mission.

6. Most teachers would find RTI suitable for the described purposes and mission.

7. I would be willing to use RTI in the school setting.

8. RTI would not result in negative side effects for the students.

9. RTI would be appropriate for any students struggling academically or behaviorally.

10. RTI is consistent with other interventions I have used in school settings.

11. RTI is a fair way to fulfill the purpose of raising student achievement.

12. RTI is a reasonable plan to meet the stated purpose of raising student achievement.

13. I like the procedures used in RTI.

14. RTI is a good way to meet the specified purpose of raising student achievement.

15. RTI monitoring procedures are manageable.

16. RTI monitoring procedures will give the necessary information to evaluate the plan.

17. Overall, RTI would be beneficial for struggling students.
APPENDIX B

Informed Consent

What Are Teacher Attitudes toward the Response to Intervention Model as Implemented in Middle Georgia School Systems?

You are being asked to participate in a research study. Before you give your consent to volunteer, it is important that you read the following information and ask as many questions as necessary to be sure you understand what you will be asked to do.

**Investigator**

The principal investigator is Deborah D. Russ, a PhD candidate in Curriculum and Instruction at the Tift College of Education at Mercer University. Ms. Russ’s faculty advisor is Al Stramiello, EdD, Director of the Doctoral Program. You may contact Ms. Russ at deborah.russ@live.mercer.edu, or by calling 478-471-1255.

**Purpose of Research**

The purpose of this study is to survey attitudes toward the Response to Intervention model as implemented in the public school systems in the middle Georgia region. The investigator is attempting to ascertain opinions regarding the understanding and effectiveness of the model. It is hoped that by completing this study we will be better able to determine and better understand the positive and negative aspects of this model as implemented in your school and system. Completion of this project is also in partial fulfillment of the requirements for PhD in Curriculum and Instruction.

**Procedures**
If you volunteer to participate in the face to face interview, you will be asked to meet the principal investigator at a neutral location to answer more detailed questions regarding your opinion of Response to Intervention. The session should take no more than approximately one hour. With your permission, the session will be audio recorded. Only the principal investigator will know your name. Any other identifiers (except demographic data,) will be excluded from the final paper.

**Potential Risks or Discomforts**

There are not expected risks or discomforts from participating in this study. While you may not receive any personal benefit, we hope that the information provided will make local systems aware of the feelings of teachers regarding Response to Intervention to possibly drive reform if needed.

**Confidentiality and Data Storage**

Survey data will be anonymous. The online survey will be submitted to the researchers in aggregate without any personal identification. Only demographic data will be used to categorize participants. The survey does not ask for any identification, unless you are willing to participate in a face to face interview. If an individual agrees to participate in the interview, a pseudonym will be used in the transcripts and qualitative analysis to protect the identity of the participant. Digital recordings of the interview will be stored on the principle investigator’s portable hard drive and locked in a safe in her home when not in use. All recordings will be erased after the defense of the dissertation.

**Participation and Withdrawal**

Your participation in this research study is voluntary. Refusal to participate in this study will have no personal or professional effect. Anyone who agrees to participate in this study is free to withdraw from the study at any time. To withdraw from the study please contact Deborah D. Russ at deborah.russ@live.mercer.edu.

**Questions about the Research**
If you have any questions about the research, please speak with Deborah D. Russ at deborah.russ@live.mercer.edu or call 478-471-1255. You may also contact the faculty advisor, Dr. Al Stramiello at stramiello_a@mercer.edu or call 478-301-2688.

This project has been reviewed and approved by Mercer University’s IRB. If you believe there is any infringement upon your rights as a research subject, you may contact the Chair, at (478) 301-4101.

Incentive

As a thank you gift for giving of your time to participate in this interview, a $10 WalMart gift card will be given.

This project has been reviewed and approved by Mercer University’s IRB. If you believe there is any infringement upon your rights as a research subject, you may contact the IRB Chair, at (478) 301-4101.

You have been given the opportunity to ask questions and these have been answered to your satisfaction. Your signature below indicates your voluntary agreement to participate in this research study.

KEEP SIGNATURES

__________________________________________________________  __________
Signature of Research Participant  Date

__________________________________________________________  __________
Participant Name (Please Print)  Date

__________________________________________________________  __________
Signature of Person Obtaining Consent  Date
APPENDIX C

INTERVIEW QUESTIONS

1. If a student in your classroom was struggling academically, how would you address the problem?

2. If a student in your classroom was identified as “at risk” by the (county universal screener), how would you address the problem?

3. What are your general impressions of the Response to Intervention model?

4. Are you able to successfully implement the Response to Intervention model as outlined in our system?

5. What resources or support do you feel you need in order to successfully implement the Response to Intervention model?

6. How does your system define “research-based interventions?” What do you use for Tier 2 and Tier 3 interventions?

7. Do you feel most of the teachers in this system implement this model effectively? Why or why not?

8. What do you see as the differences between Response to Intervention (RTI) and the Student Support Team (SST)? Which model do you see as the more effective?

9. Is there anything else you would like to add about RTI?
### APPENDIX D

RESPONSE TO INTERVENTION INTERVIEWS – COMMON THREADS

<table>
<thead>
<tr>
<th>Question</th>
<th>Participant 1</th>
<th>Participant 2</th>
<th>Participant 3</th>
<th>Participant 4</th>
<th>Participant 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies for struggling students</td>
<td>Observe Progress monitor Create goal based on weaknesses Research based strategies</td>
<td>Document Conference with parent and student Basic strategies (1-1, small group outside of class) Document progress</td>
<td>Look at level of struggling Start interventions Meet with RTI coord. to set up a meeting</td>
<td>Watch and wait Wait until parent expresses a concern Set clear expectations for next grade Use para for extra instruction</td>
<td>Parent conference Work with them intensely and separately Use RTI mostly for gifted ID</td>
</tr>
<tr>
<td>Strategies for students “at risk” according to universal screener</td>
<td>AIMSweb Monitor weak areas and create a goal Research strategies</td>
<td>AIMSweb – also look at CRCT – start Skills Tutor (computer program) usually wait till after Christmas to start Tier 2 Talk with child</td>
<td>AIMSweb Compare norms and look at progress or lack of (by scores) If no progress made, ask for a meeting</td>
<td>AIMSweb but not in kindergarten – use GKIDS</td>
<td>No universal screener Use CRCT and benchmark scores</td>
</tr>
<tr>
<td>General impression of RTI</td>
<td>Like the process – research based strategies, tiers – meet all the needs - systematic Colleagues do not like it – do not identify students</td>
<td>Believes the idea was to prevent students from being put into SpEd that did not need to be there Unrealistic regarding time and 1-1 attention Takes away</td>
<td>Doesn’t flow as easily as SST did Bogged down with time Difficult to work with small groups – have to find students that are alike (deficits) Don’t have</td>
<td>Hidden agenda – too many referrals to special ed So many children on RTI and there is no time during the day – one teacher cannot do it Need extra person on staff</td>
<td>Seems like an IEP Focuses attention on students who need it and causes us to evaluate the things that we are trying and are they working Encourages collegial</td>
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<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Can you successfully implement?</strong></td>
<td>It is being implemented in Tier 4. Intervene during connections. No – was asked to take data on different skills for an entire year – never enough to satisfy the psychologist. Trying to do strategies and group children, but they really need individualized instruction – not all need same strategies. No – so many children on RTI and not enough time during the day. Have 2 on speech RTI, but do not feel qualified to intervene. Cannot do it all. CYA of RTI. Use for gifted screening - given guidelines for each tier to use for referrals. Teachers mostly looking to document they have done everything.</td>
</tr>
<tr>
<td><strong>What resources and supports do you need?</strong></td>
<td>Would be willing to do only reading interventions – wish didn’t have another class. Every school should have an RTI coordinator. Another person in the room to help during the day to day hours. Don’t need any more books – need someone to help because there is not enough time in the day. Support person in the classroom. Another staff member – help with interventions. Not doable with one teacher and 27 children inconsistent. Teachers who are willing. A person well versed in process – administrator who understand how process works. Staff development re: strategies.</td>
</tr>
<tr>
<td><strong>What are “research based interventions?” Tier 2 and 3?</strong></td>
<td>Do not believe the county has defined it except in Tier 4 where. Just spin the wheel and pick the thing our school happens to have – never. Best practices basically – given a list of strategies and interventions and then. Don’t know – don’t keep up with the research – given a list of research based. Don’t think the current model for differentiation is actually research based.</td>
</tr>
<tr>
<td>Are teachers in the system implementing effectively?</td>
<td>intervention is provided Tier 2 Math 180 – basically tutoring for the CRCT Not sure about Tiers</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td>No – too many students failing that would not be if intervention were implemented - data proves we are failing</td>
<td>Blind leading the blind Have no idea if it is successful We talk about it but it doesn’t get the attention it really needs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Difference between RTI and SST</th>
<th>Knew SST was there – saw the folders, but no research based strategies RTI more systematic – process to it versus SST – SST missed a lot of pieces – RTI is more effective if it is</th>
<th>RTI is more concentrated – SST was more relaxed but more realistic – RTI is more rigid but not as realistic to implement – SST a checklist we tried to help a child – RTI more complex and overwhelming</th>
<th>SST primarily looked at who should be placed in special ed RTI was designed to do the opposite – to hold children back to tier 1 or tier 2. Takes more time to implement the strategies</th>
<th>IF SST was done right maybe you could catch something earlier – RTI – you know there is a problem so you tell the parent to get your child tested because if they’re going to wait on RTI to help the child</th>
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<tbody>
<tr>
<td>RTI more specific – SST not as specific – only people on SST were ones you wanted tested – SST not for gifted RTI more focused on instruction and strategies that makes it stronger than SST</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Final thoughts</td>
<td>We need to train teachers – too many say “that’s too much, I’m not going to do it” but it will help us academically</td>
<td>Need somebody to report down to us from the higher ups – is it working? What are schools doing to make it work – would like to know more about the law Forms are different even within the county – lack of standardization of interventions – who is RTI coordinator</td>
<td>Need to take a serious look at RTI – there are some models out there that are working – we have children falling through the cracks</td>
<td>Inclusion – my heart hurts for the 9 inclusion children – we have a great inclusion teacher</td>
</tr>
</tbody>
</table>
**RESPONSE TO INTERVENTION – COMMON THREADS**

<table>
<thead>
<tr>
<th>Question</th>
<th>Participant 6</th>
<th>Participant 7</th>
<th>Participant 8</th>
<th>Participant 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies for struggling students</td>
<td>Look at assessment and pinpoint where they are going wrong</td>
<td>Look at student history (test scores from last 5 years)</td>
<td>Monitor Individual and small group interventions during centers</td>
<td>Start documenting and making notes</td>
</tr>
<tr>
<td></td>
<td>Address those problems</td>
<td>Look for patterns</td>
<td>Talk with last year’s teachers if we notice a problem</td>
<td>Take a look at need for EIP</td>
</tr>
<tr>
<td></td>
<td>Talk with students about their answers</td>
<td>Talk to parents and other teachers</td>
<td>Begin to make decisions</td>
<td>Start with data points</td>
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<tr>
<td></td>
<td></td>
<td>Collect data</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Try to discover root of problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Begin to make decisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strategies for students “at risk” according</td>
<td>AIMSweb Monitor in classroom on level one (use 1-1 and centers to address</td>
<td>Have a screener but do not know name Computer based</td>
<td>No countywide universal screener</td>
<td>GRASP test 3x year</td>
</tr>
<tr>
<td>to universal screener</td>
<td>problems – manipulatives)</td>
<td>Don’t use much – mostly rely on day to day observations and assessments</td>
<td></td>
<td>Use to mean base for EIP</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Look at weak points and imbed into small group instruct and track (PM)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>according to weakness</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Guided groups in reading and math</td>
</tr>
<tr>
<td>General impressions of RTI</td>
<td>Great model in a fairy tale world</td>
<td>Length of time is a major issue</td>
<td>Good assessment or record of student progress esp. if they’re having problems</td>
<td>Love the RTI pyramid – helps to identify/cover bases</td>
</tr>
<tr>
<td></td>
<td>Takes too long to address concerns (to identify a student as PEC)</td>
<td>Unusual to start an RTI in middle school (usually transfers from private or</td>
<td>Intent is good</td>
<td>Gives a protocol</td>
</tr>
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<td></td>
<td></td>
<td>home school)</td>
<td></td>
<td>County has rigid policies – prevents teachers from jumping to conclusions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(for referral)</td>
</tr>
<tr>
<td>Can you successfully implement?</td>
<td>No – no teacher capable of doing all probe, PM and documentation – just use common sense and professional knowledge</td>
<td>Changes from year to year – doesn’t seem to be a common understanding on what it should look like – everyone says something different Had a set of forms to start testing process RTI everyone everyday – child should not wait half a year to be tested</td>
<td>Very difficult – time consuming – hard to group when you may not have 5 kids with the same problem – Often have to pull a child during planning when they are in PE Sometimes work with small groups during centers</td>
<td>Yes – have a lot of professional learning (PLC) meet once a month – well trained Teachers meet at grade level to communicate and discuss possible strategies and interventions</td>
</tr>
</tbody>
</table>

<p>| What resources and supports do you need? | A secretary – it takes 2 people Should be able to use class assessments as PM Need to be able to use professional judgment County has list of research based interventions Use EIP – intervene during reading and math block | Centralized forms/documentation – administrators still use the term SST - required for behavior problems and attendance-county not on the same page – SST more official – RTI is a “folder of collected stuff” Often used for gifted – parents often refuse testing for PEC or move away Use connections classes-before/after school | Another person in the classroom – need an extra pair of eyes and set of hands – too hard to monitor rest of the class | Need support for special needs students in gen ed classes (teachers not trained in best practices for SWD) Resources for teachers on site (available at central office) for interventions Teacher has to determine what is research based – teacher finds interventions County provides some Tier 2 is EIP Tier 3 starts referral SST, small group interventions, parent conferencing |
| What are “research based interventions?” Tier 2 and 3? | Have a list - more strategies than programs Web based Tier 2 Reading A to Z small group during center time EIP mostly does Tier 3 more targeted Gen ed teacher is RTI coordinator with instructional coach | Computer based math and reading Tier 2 pull out for instruction during connections – have before and after school programs more of the same of Tier 1 Tier 3 SST | Have a list of accepted interventions Saxon Phonics (whole group but parts for interventions) Frye sight words, STAR, AR Tier 2 individual instruction on specific skill deficit 2Xweekly Have one on Tier 3 – shorter assessment period (20 days) – more of the same | Teacher usually finds (What Works Clearinghouse) county does provide some (Exemplars – Assessment for Learning) Tier 2 – EIP Tier 3 – SST – small group, guided intervention, parent conferencing – 12 weeks of data |
| Are teachers in the system implementing effectively? | EIP teachers definitely – they know the ins and outs and guide the rest of us through Classroom teachers are still struggling with it Constant procedural changes | Huge gap between RTI and testing – 8 weeks worth of data is too long for a child - the teacher is doing everything possible to work with the child – in middle school you can tell immediately if there is a problem | As well as they can – a lot of people say “forget this – I just don’t have anybody that’s . . .” until we were called on the carpet so now we just put somebody in there | Yes – we have support personnel – emphasis on data – data is accessible to all online in a folder – have tools in place Meetings seem to roll Do have some cases where teachers don’t want to collect data or want to push referral through Counselor and AP share responsibility for RTI |</p>
<table>
<thead>
<tr>
<th>Differences between RTI and SST</th>
<th>RTI is more effective – it helps kids learn strategies because it’s the teacher and the student working together – teaching strategies SST was just a teacher discussion of what can be done with a child – whether the teacher went back and did what was discussed is not known – less documentation – structure RTI more effective - but still should consider professional judgment of teacher – too much paperwork</th>
<th>SST is more formal, RTI is very loosely constructed – SST we meet 3x a year, document, parents sign – RTI is more local teachers talking – a lot depends on the county RTI is more effective for the child – SST is for bigwigs to have something to back them up in court RTI is what we do everyday – here and now</th>
<th>SST – seemed they took our words as professionals that we had done all we could RTI – if your paper work is not in line you have to go back and start over SST didn’t take so long – feel like I am being cross-examined in RTI meetings</th>
<th>SST requires 12 weeks of data(after Tier 2) – considered 2 separate programs RTI is more effective – forces teachers to make sure they are following steps SST used as a crutch (fire insurance) covers teacher if student fails – had too many kids on SST in past RTI makes us think more clearly about why they are there Bigger fan of RTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final thoughts</td>
<td>Long process – lost of documentation – teachers not being paid for the extra time</td>
<td>Everyone needs to have the same documents and the same format</td>
<td>If you don’t identify a child in the first month of school you don’t have a chance of getting them referred that year A child’s</td>
<td>Progress monitoring part is huge – teachers need training to organize and be accountable - data is there Has inclusion support for guided math and reading – as well</td>
</tr>
</tbody>
</table>
| grades override his tier
If a child is not on tier 2 by the end of the year, you have to start all over
Very difficult to schedule meetings | as an additional teacher for guided math |
REFERENCES


Georgia Department of Education. (2008, October 23). Response to Intervention: Georgia's Student Achievement Pyramid of Interventions. Georgia Department of


