ABSTRACT

Shannon Marie Cecil, CREATING A COMPREHENSIVE SYSTEM OF IDENTIFICATION, PLACEMENT, AND MONITORING OF TIERED INTERVENTIONS IN PITT COUNTY (Under the direction of Dr. Jim McDowelle). Department of Educational Leadership, August 2017.

The issue of over identification of students as Specific Learning Disabled is a nationwide problem and Pitt County Schools is no exception. The purpose of this Problem of Practice study was to focus on the implementation and monitoring of a tiered intervention system at the school level. This study looked specifically at improving the *strike rate* at Pactolus School when referring students for special education testing and identification. At the study school, the strike rate prior to implementation of the system was only 40%; this means that only 40% of the students who were referred for special education actually met the North Carolina criteria for special education identification. As part of this study, the researcher implemented a tiered system of intervention, a uniform process and paperwork, monthly data monitoring, and a teacher resource room with *grab-and-go* intervention materials. The results of this study indicated that not only was the *strike rate* dramatically improved as a result of this procedure but the number of special education referrals was reduced and the number of students performing on grade level was also significantly improved.

CREATING A COMPREHENSIVE SYSTEM OF IDENTIFICATION, PLACEMENT, AND MONITORING OF TIERED INTERVENTIONS IN PITT COUNTY

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CREATING A COMPREHENSIVE SYSTEM OF IDENTIFICATION, PLACEMENT, AND MONITORING OF TIERED INTERVENTIONS IN PITT COUNTY

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DEDICATION

As I reflect upon this journey, I know that I would not have been able to complete this process without the support and love from my family and friends. You have made this accomplishment possible.

To my son Cameron: You are my reason for living and the light in my life. Being your mom helped me to become a better teacher and person. Over the years we have been through many difficult patches, but you are and will always be the most important person in my life. I am so proud of the amazing man and father that you have become and I love you more than you will ever know.

To my brother Bryan: You have been such an inspiration to me. You have overcome so many obstacles and challenges and never let being visually impaired be a “handicap”. You chase your dreams and never let anyone or anything stand in your way.

To my mom: Thank you for always encouraging me and believing in me, even when I didn’t believe in myself. You are an amazing and selfless woman who always puts others first. Words cannot express how much I love you.

To my dad: Though you have been gone for 24 years, I find peace in knowing that you are always watching over me. The path I chose, was not the one we originally planned; however, I hope you are proud of the choices I have made and the woman I have become.

To Michael, Jenny, and Jeff: Thank you for being such supportive siblings. We may not always agree on things, but I love you all.

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CHAPTER 1: INTRODUCTION

Background Information

Response to Intervention (RTI) is a general term to describe the implementation of a systematic method of tiered intervention, progress monitoring, and data analysis in our schools today. The purpose of RTI is to provide focused, differentiated instruction to students in the regular education classroom to help them obtain grade level content and material. The RTI model is designed to more effectively identify and resolve academic or behavioral struggles in students (Brown-Chidsey & Steege, 2010). In the RTI model, universal screening identifies students who are not performing on grade level. The classroom teacher and a problem-solving team will then work together to develop a plan to help close gaps in student learning. The RTI model was developed as an approach to addressing the following two major concerns. The first concern is that there had developed a *wait to fail* model which required that students have a specific gap between academic achievement and intellectual ability before they were able to receive special education services (Division for Early Childhood of the Council for Exceptional Children, National Association for the Education of Young Children, and National Head Start Association, 2013). The discrepancy model has two major shortfalls. First, this model does not help to identify students who would benefit from remediation and does not provide appropriate information regarding the most appropriate interventions (Walker, Emanuel, Grove, Brawan, & McGahee, 2012). Secondly, this model often fails to identify children in early primary grades who often do not exhibit a significant discrepancy between their intellectual and academic abilities (Walker et al., 2012). The average age for identification of a reading disability and thus the ability to receive special education services was ten (Al Otaiba, Wagner, & Miller, 2014).

The second concern is that, it had been a common practice to identify students as exceptional children without first considering the quality of instruction they received in a general education classroom. The two factors led to changes in federal, state, and district policies with regard to special education and the implementation of RTI. RTI is based on the following five core beliefs:

1. All children can learn
2. Quality assessment informs instructional practices
3. Quality teaching makes a difference
4. Positive relationships within the classroom maximize learning
5. Educators must work as a team (Whitten, Esteves, & Woodrow, 2009, pp. 18–19).

The RTI process has traditionally been viewed as a K-12 initiative but now many states are applying the RTI principles to the exceptional children's program. This has occurred because many of the core principles of RTI also align well with the recommended goals of exceptional children's programs. The traditional RTI model has primarily been used to determine academic interventions needed to support core instruction.

The Division of Early Childhood, The National Head Start, and the National Association for the Education of Young Children released a paper in 2013 that indicated the following core principles of RTI align with best practices recommended for exceptional children.

- Specification of a multi-tiered system of supports
- Early provision of support or intentional teaching/caregiving with sufficient intensity to promote positive outcomes and prevent later problems
- Use of child data to inform teaching and responsive caregiving practices

- Use of research-based, scientifically validated practices to the maximum extent possible (p. 109)

Studies have shown that almost one out of five children have a mental health disorder (Cook, Lyon, Kubergovic, Wright, & Zhang, 2015, p. 49). In addition, there are even more children that have some instance of emotional, social or behavior disorders that can impede academic achievement even if they are more mild in nature. This has led to an increased need for school psychologists and mental health professionals to be more involved in the educational setting and becoming active members of RTI teams (Cook et al., 2015). This increase in the need for school psychologists and mental health professionals to play a more active role in the intervention process has led to the Multi-Tiered Support System (MTSS). MTSS is a tiered system of interventions, like RTI, but also encompasses behavior concerns in addition to academic concerns. MTSS incorporates the tiered academic process of RTI with the tiered behavior components of Positive Behavior Intervention Support (PBIS). Terri Metcalf, a technical assistance partner for Michigan's response to intervention grant funded by the Michigan Department of Public Instruction, shares that MTSS is a complex process that involves (a) gathering accurate and reliable data, (b) correctly interpreting and validating data, (c) using data to make meaningful instructional changes for students, (d) establishing and managing increasingly intensive tiers of support, and (e) evaluating the process at all tiers to ensure the system is working (retrieved online). According to Cook (2015), an Associate Professor at the University of Washington, MTSS is a "proactive, prevention-oriented service delivery framework that aims to meet all students' needs through the implementation of a continuum of evidence-based practices via data-driven decision making" (pp. 49–50). The supports provided to students follow the traditional three-tiered model also used in RTI. One vitally important feature

of RTI is that the intensity and type of intervention are specifically matched to children's specific needs; thus students may receive different levels of support for various instructional needs (Division for Early Childhood of the Council for Exceptional Children et al., 2013).

The purpose of RTI, then, is to provide additional support to all students who are experiencing difficulty in the classroom. When RTI is implemented with fidelity it offers the hope that there will be a more accurate model for referring students for special education services (Shapiro & Clemens, 2009). In the two years after the reauthorization of the Individuals with Disabilities Education Act (IDEA), the implementation of RTI was not widespread nor did it lead to a reduction in the number of students identified as exceptional children (Printy & Williams, 2014). The Federal Government, thus, added clarifications to IDEA 2006 with regards to the purpose of RTI implementation. As a result of this, by 2011 forty-three states were using either RTI or the discrepancy model to determine eligibility for special education services An additional seven states were using the RTI model exclusively for the identification of students under the exceptional children's program (Printy & Williams, 2014). Despite these promising results, RTI implementation is still uneven across the nation.

In Pitt County, there are approximately 2,605 students identified as exceptional children and receiving direct special education services. In the traditional elementary schools (K-5) there are approximately 995 special education students, in traditional middle schools (6-8) there are approximately 456 special education students, in K-8 schools there are approximately 400 special education students and in traditional high schools (9-12) there are approximately 754 special education students. When considering the identification of specific learning disabled, 20.6% of special education students are identified under this category in grades K–5. In grades 6–8 about 36.4% of identified students fall in the specific learning disability category. In K-8

schools, approximately 34.8% of students are identified as specific learning disabled and 39.1% of special education students in grades 9–12 are identified under this category. It is important to note that an additional 20.4% of students in grades K–5 and 13.3% of students in the K-8 schools are identified under the developmentally delayed category. Appendix A contains data retrieved from the Comprehensive Exceptional Children Accountability System (CECAS) on February 16, 2016 depicting this data. According to the North Carolina Public Schools Policies Governing Services for Children With Disabilities, developmentally delayed is an appropriate identification for children between the ages of three and seven; therefore before a student turns 8 they must be re-evaluated and a new identification must be provided. This small-scale improvement project will be focused on one of Pitt County's K-8 schools, Pactolus. At Pactolus School, there are approximately 57 students identified as exceptional children and receiving direct special education services. At Pactolus School, 12% of special education students are identified under the Developmental Delay category, 33% are identified under the Specific Learning Disabled Category, 9% are identified under the Other Health Impaired Category, and the remaining 46% are identified in other areas such as Speech Impaired, Intellectually Disabled, or Autistic. Appendix B contains data retrieved from the Comprehensive Exceptional Children Accountability System (CECAS) on March 25, 2016 depicting this data.

Local, state and national data related to the Exceptional Children's data was also reviewed. Appendix C and D contains state data retrieved from the Public Schools of North Carolina website on September 9, 2016 and includes data for students aged 3-21. Appendix C reviews three-year trends in Pitt County while Appendix D reviews three-year trends at North Carolina's state level. Appendix E contains national exceptional children's data for students aged 3-21 over a three-year span. During the 2011-2012 school year, approximately 30% of students

in Pitt County were identified as specific learning disabled. In this same category during the same year, approximately 36% of students in North Carolina and 36% of students at the national level were also identified under this category. When looking at the 2012-2013 school year in the category of specific learning disabled, Pitt County was approximately 27%, North Carolina was approximately 36%, and nationally there were about 35%. In the 2013-2014 school year, national data showed 35% of students identified under the specific learning disabled category, while North Carolina was approximately 37%, and Pitt County was 27%. Over this three-year span, the percent of students identified at the local, state, and national levels as specific learning disabled were very similar. When comparing local, state and national data in the categories of developmentally delayed and other health impaired, there were similar trends in the percentages at all three levels. The data continues to support that when examining exceptional children's data, the largest subgroup are students identified under the category of specific learning disabled.

Current Procedures in Pitt County

Pitt County's current method of providing support involves the use of a teacher assistance team (TAT). The TAT is composed of the school counselor, an administrator, a special education teacher, and grade level or grade span teacher representatives. The team is typically comprised of a total of about four to eight people. Pitt County Schools does not currently implement a universal screener to determine which students need additional support. Teachers use their professional judgment as well as information gained from beginning of the year assessments or the previous year's testing data. Teachers identify students who are not performing at grade level and create a personal education plan (PEP) for these students. Teachers then begin interventions. If a student makes progress, they continue with the interventions and the TAT team is not involved in the process. If a student does not make progress, the teacher will schedule a meeting

with the TAT team. The TAT team will review the data regarding interventions that have been implemented and add an additional intervention. The classroom teacher will administer this intervention for six to eight weeks and then schedule another meeting with the TAT. At this point, the team will determine if the student is making progress or is continuing to struggle. If a student is making progress, the teacher will continue with interventions. If the student is not making progress, the team will schedule a meeting with the parent and school psychologist. The team will determine if it is felt that the student may need to be referred for special education testing. If a student is referred for testing, the teacher will continue interventions until testing is complete.

Identification of the Problem of Practice

North Carolina is currently moving toward the model of Multi-Tiered Support Systems (MTSS) for intervention and identification of special education students. North Carolina House bill 1503-3.1 presents the criteria for the new method of identification of students with specific learning disabilities that will go into effect for all schools and LEA's beginning July 1, 2020. This new policy requires the use of "systematic, problem-solving process based on the scientific, research-based interventions (RTI/MTSS) and the evaluation of data (i.e. progress monitoring data), documenting the child's response to instruction and scientific research-based intervention". This policy will eliminate the existence of a 15-point discrepancy between a student's full scale IQ and academic testing results as the primary means of identification of a specific learning disability. With this new change, the question may arise why I have chosen to focus exclusively on RTI versus the entire MTSS process. The difference between RTI and MTSS is that MTSS focuses on using a tiered intervention system for both addressing concerns with both behavior and academics while RTI focuses primarily on academics. Pitt County began

the implementation of Positive Behavior Intervention Support (PBIS) more than eight years ago. The district has seen a tremendous decline in referrals for special education due to behaviors as a result of this system. With this system firmly in place across most schools in the district, the focus at this time is on the academic piece that is RTI.

Currently, Pitt County Schools does not have a systematic method of determining which students need interventions and in which specific areas. In most cases, this is left to the professional judgment of the teacher. Additionally, Pitt County does not have a systematic method of tracking interventions, a list of recommended research-based classroom interventions, a uniform process, or uniform paperwork. Lastly, once a student is referred for testing, if they do not qualify for special education services there is currently no process for providing additional support for these students.

The Pitt County School (PCS) district is composed of sixteen traditional elementary schools, seven traditional middle schools, six K-8 schools, and seven traditional high schools. During the 2014–2015 school year, at the elementary school level there were a total of 398 referrals for special education testing which resulted in 315 students qualifying for special education services. This means that based on testing, approximately 79% of the students exhibited the criteria for special education guidelines under our current state criteria. At the middle school level, there were a total of 70 referrals and 32 students qualified for special education services. Therefore, based on testing, 46% of these students met the criteria for special education. Finally, at the K-8 levels, 113 students were referred for testing and 71 students were determined eligible. This means that 63% of the students met the criteria for identification under the guidelines for special education services. It is also important to note that the 21% of elementary students, the 54% of middle school students, and the 37% of K-8 students who did

not meet the criteria under our current guidelines are simply left with no support. Schools were therefore left with 163 students who are not performing at grade level, but have no support because our district does not have a system in place to support these students. It is also important to note that this data reflects only students who were in Tier 4 in our district, which was the referral tier. This data does not include the number of students who were left in Tiers 1–3 at the end of the school year. Students who were in Tier 1 need minimal extra support, students in Tier 2 need more strategic support, and students in Tier 3 need more intensive support. All students should receive a minimum of 90 minutes of instruction in reading per day. Students in Tier 1 may receive up to an additional 15 minutes of support per day. Students in Tier 2 would receive up to an additional 30 minutes of support per day and students in Tier 3 would receive up to 45 minutes of additional support per day. Students in Tiers 1 and 2 typically receive interventions in a small group setting while students in Tier 3 may be individual or in pairs. Each school counselor provided this data to the district lead counselor who compiled all the data, see Appendix F.

The problem that exists in PCS is that there does not currently exist a comprehensive process to identify students who are not performing at or above grade level expectations academically in the classroom. PCS does not have a structured process for all teachers to follow to help determine appropriate interventions for our students, and finally the system does not have a process in place to support those students who are simply *slow learners*. Implementation of Comprehensive RTI Identification and Placement process would enable teachers to have a systematic approach to identifying students who are at risk, and also (a) create a problem solving team to help target specific skill deficits, and (b) create a resource intervention room for teachers to utilize in assisting with interventions, and support all students. The goal of teachers is to help

fill gaps in skills while ensuring that all students are able to successfully access the general education curriculum, not to test children for special education. In PCS the goal is for all children to be successful in the general education curriculum by helping teachers to reflect on core instruction and plan appropriately to ensure that 80% of students are able to learn with just core classroom instruction.

CHAPTER 2: REVIEW OF LITERATURE

History of RTI

The origin of RTI can be derived from many different literatures and historical events. One specific entity heavily influenced the modern emergence of RTI. "The University of Minnesota's Institute for Research on Learning Disabilities (IRLD) in the late 1970s" is one such entity (VanDerHeyden & Burns, 2010, p. 12). This institute conducted influential studies in the areas of service delivery and the diagnosis as specific learning disabled (VanDerHeyden & Burns, 2010). While RTI has been implemented most recently since the reauthorization of Individuals with Disabilities Education Improvement Act (IDEIA) in 2004, Fuchs, Mock, Morgan, and Young discusses four models providing the foundation for our current RTI model. The first of these models is Ohio's Intervention Based Assessment (IBA). The IBA was a voluntary initiative as part of a special education waiver that began in the 1992–1993 school year. The goal of this plan was to create treatment plans for students who were not identified as exceptional children but suffered from academic or behavior difficulties. In the IBA, teams consisting of an administrator, a regular education teacher, a special education teacher, and a school psychologist would meet to define the problem, review baseline data, set goals, create an intervention plan, and monitor intervention data. This model did not have specific tiers and students that did not demonstrate a positive response to interventions could be referred for testing at any point.

The second model discussed by Fuchs et al. (2003) was Pennsylvania's Instructional Support Teams (ISTs). This model, which was begun by Jim Tucker in 1990, is one of the most note-worthy pre-referral models in the nation. In this model, a behavioral assessment or a curriculum assessment is administered to accurately identify the specific area in which a student

is not performing at or above grade level expectations. A goal is set and interventions begin immediately. The team reconvenes after 50 days to determine if the student is making adequate progress or is a special education referral is required. The team may be composed of the classroom teacher, the school counselor, school psychologist, an administrator, special education teacher, and other teachers or school personnel.

The third model discussed by Fuchs et al. (2003) is the Heartland model. The Heartland model is a four-tiered model in which the interventions in the first two tiers are administered by school-based staff. If interventions in these two tiers are not successful, meaning that students are not making adequate progress towards being on grade level, then school psychologists and special education teachers begin working with the students. If a student reaches level four and interventions have not been successful, a special education referral is considered by the problem-solving team.

The final model is the Minneapolis Public Schools' Problem-Solving Model (PSM). This model is a three-tiered approach that was created in 1993. In the first tier, classroom teachers use a universal screening tool to determine which students need additional academic assistance. Classroom teachers provide interventions to students and monitor their progress. If a student does not make sufficient progress, they are referred to tier two. In tier two a problem-solving team, composed of a variety of school staff, creates and implements more targeted interventions. Finally, students who do not demonstrate significant academic progress may be placed in tier three where a referral to special education may be initiated. A combination of these four models provides the foundations of the current models of RTI in public school systems today.

The reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) in 2004 also sparked an increase in the promotion of RTI to encourage more

intervention strategies with the ultimate goal of decreasing the number of students being identified as exceptional children (Printy & Williams, 2014). The 2004 changes to IDEIA were made using the discrepancy formula for identifying children as learning disabled optional (Howell, Patton, & Deiotte, 2008). Prior to the reauthorization of IDEIA in 2004, this was the sole means of determination that could be used to decide if a student qualified for special education under the category of learning disabled. When utilizing the discrepancy formula, a student had to have a specific number of points difference between their intelligence quotients (IQ) and their performance on academically based assessments (Howell et al., 2008). This is significant because prior to the reauthorization of IDEA, if a student did not meet this discrepancy requirement then they frequently did not receive any additional supports in school; thus, perpetuating the cycle of low performance in school. This led to the establishment of the phrase *waiting for students to fail* (Howell et al., 2008). This phrase, in essence, means that school districts did not take proactive approaches to identifying students who were performing below grade level and instead waited to provide interventions only after students' demonstrated failure.

The increased sense of urgency to create a process to help identify students who are at risk has developed largely out of the introduction in 2002 of No Child Left Behind (NCLB) legislation. The primary goal of NCLB is to ensure that by the end of the 2013–2014 school year, all students are, at minimum, proficient in both mathematics and reading. This mandate forced school districts to formulate a systematic approach to identifying and helping students meet basic proficiency requirements.

The National Center for Education Evaluation and Regional Assistance published a report in 2011 that included research data on the RTI process and implementation in school

districts across the nation. In this study the National Center for Education Evaluation and Regional Assistance begin by explaining that the overarching goal of RTI is to create a universal screening process whose goal is to determine students that are at risk of academic failure (Bradley et al., 2011). This study indicated that approximately 71% of school districts across the nation are currently utilizing the RTI process (Bradley et al., 2011). When focusing on public schools, the National Center for Education Evaluation and Regional Assistance estimate that during the 2008 - 2009 school year "…61% of elementary schools, 45% of middle schools, and 29% of high schools" indicated that they were implementing the RTI process (Bradley et al., 2011, p. 52).

RTI is a multifaceted approach that can be used to provide interventions in behaviors or any academic course; however, it is most commonly currently used in reading (Fuchs & Vaughn, 2012). Bradley et al.'s (2011) study supports this concept by indicating that, "70% of districts reported using RTI in reading/language arts, 47% reported using RTI in math, 36% reported using RTI in behavior and 27% reported using RTI in writing (p. 52)." It is evident based on this data that RTI is being utilized to address deficits in basic reading skills. In a 2015 publication by Cuticelli, Coyne, Ware, Oldham, and Rattan, they noted that students who are typically most at risk for reading difficulties have had considerably fewer experiences with vocabulary development prior to entering school. When RTI is implemented at the kindergarten level, students are more likely to receive increased support with targeted vocabulary instruction to help close the initial gap in vocabulary (Cuticelli et al., 2015). This data indicates that while a large percentage of school districts have implemented the RTI process, many districts are yet to fully expand implementation to all subject areas.

RTI is a structured, dynamic process that requires baseline assessments and the implementation of a tiered approach to intervention. This process has proven to be effective in helping to isolate specific skills in reading that struggling students are missing. While, as previously stated, RTI is not just for reading, it has a proven history of being effective for students in the elementary grades struggling in reading (Hall, 2008). When school districts decide to implement RTI, it is very important to remember that not all regular education teachers have the training to effectively implement strategic interventions. These new requirements for teachers can best be met by the implementation of targeted professional development as well as collaboration with special education teachers who often have a greater efficacy or the implementation of interventions (Printy & Williams, 2014).

RTI is a continuous cycle that involves consistently assessing, applying interventions, monitoring, and reassessing students (Robins & Antrim, 2013). For many years, teachers misunderstood the RTI process and simply viewed it as a method of identifying students with disabilities. While RTI can be used to help identify students with learning disabilities, it is vital to remember that not all students who are not performing at or above grade level expectations have a learning disability (Reeves, Bishop, & Filce, 2010). The process of effectively implementing RTI in schools can take anywhere from three to five years (Robins & Antrim, 2013). During this time period there must be strategic planning, collaborative planning between all members in the school community (Robins & Antrim, 2013). While there does not exist any one perfect model for RTI, many researchers would agree that the basic structures of a tiered intervention system, (a) a consistent assessment system, (b) data analysis,(c) support from regular teachers and exceptional children's teachers, and (d) shared decision making are all key elements in creating and managing an effective model of RTI. In Pitt County Schools, these are

elements that are lacking in our current process that this small-scale improvement project will address.

Structure of RTI

As previously noted, RTI is an example of a multi-tiered system of interventions for students who are not performing at or above grade level. Most current models of RTI are either three or four tiered models. I will focus on the three-tiered model of intervention as this is the model currently utilized by our school district. The goal of the tiered system of interventions is that students who demonstrate expected growth will move down through the tiers thus requiring less specialized interventions while students who are not progressing will move up through the tiers to receive additional targeted academic support. Expected growth means that students will close skill gaps and move towards the ability to successfully complete grade-level material. The movement of students between tiers is a decision that is made by a school-based RTI team that meets on a consistent basis to analyze data for each student. Tier one is typically characterized by providing support for all students in the general curriculum, tier two by providing support for some students through small group intervention of basic skills, and tier three provides intensive support for a few students in small group or individual settings. (Hall, 2008)

RTI Tier 1

The first tier in the process is typically referred to as the universal tier (Howell et al., 2008). In this tier, 80 to 90% of all students should achieve success in the classroom. Tier one interventions are delivered in a whole class format, limited small-group format and should be differentiated to meet the majority of learning needs within the classroom environment. The primary facilitator for Tier 1 instruction is the general education classroom teacher. In effective models of intervention, students are assessed at least three times per year, the beginning of the

year, middle of the year, and end of the year. The beginning of the year assessment is often used for early identification of potentially at risk students. Research has shown that if 80 to 90% of students are not successful at the tier one stage, then the other tiers will become overloaded (Howell et al., 2008). It is therefore important for teachers to incorporate a variety of research-based instructional strategies, differentiation, and adequate amounts of time for students to learn material into their core lessons to ensure that this minimum is attained.

If the problem-solving team determines at least 80% of students are successful; then it is evident that the core instruction is working and that the remaining 20% of the students need supplemental instruction. After a review of the data, if less than 80% of students are successful the team must first determine if core instruction is adequate before considering supplemental interventions. Jason E. Harlacher, a former RTI consultant for the Colorado Department of Education and a senior researcher at Marzano Research, and colleagues indicate that if 80% of students are not successful with core instruction it does not automatically mean there is bad instruction but rather explains that the instruction being provided does not best meet the needs of the students. Harlacher, Potter, and Weber (2015) further explain "Instruction itself may be strong, but the mismatch between student needs and the focus of instruction may lead to poor student outcomes" (p. 211). This is important to note because without strong core Reading and Math instruction and reflective teachers, students will continue to fail to meet grade level expectations. Grade level teams should meet after each assessment period to review their data and determine what, if any, changes are needed in the core curriculum.

Elizabeth Whitten, a former special education and regular education teacher, now a professor in Special Education and Literacy Studies at Western Michigan University states that Tier I instruction should include the following eight essential elements:

1. Research-based curricula
2. Research-based instructional methods
3. Assessment of student learning strengths, interests, and academic performance
4. Teaching strategies targeted toward individual academic needs, interests, and learning strengths
5. Differentiated instruction within the classroom
6. Flexible grouping
7. Screening of student achievement
8. Ongoing professional development (Whitten, Esteves, & Woodrow, 2009, pp. 14–15).

Whitten et al. (2009) tells us when looking at research-based curricula, it is vital that students are able to receive high quality instructional programs (p. 14). Research based curricula must be implemented with fidelity and taught in the manner in which they were designed. When exploring research-based instructional methods, teachers should use a variety of instructional strategies to meet the needs of all learners. Examples of some instructional strategies that can be used include the use of visual representations, graphic organizers, collaborative grouping, problem-based learning, and integration of higher-level thinking questioning. Whitten et al. (2009) shares that the third essential element is the assessment of student learning strengths, interests, and academic potential (p. 14). One of the important facets of RTI is that it focuses on the individual needs of each and every child. Teachers are expected to obtain comprehensive data on their students. This data represents each student's unique strengths and weaknesses as well as information related to topics that are of particular interest to each student. Examples of types of non-academic assessments that teachers may give students include thinking and learning

styles inventories, student interest inventories, or multi-intelligences inventories. These types of non-academic assessments provide teachers with information regarding how student's best learn academic material. These types of assessments go hand in hand with the idea that strategies for teaching need to be geared towards each student's individual needs. There is no one strategy or teaching method that is going to be effective for all students; instead, teachers must utilize a variety of instructional strategies to meet the unique learning needs of each student. This also supports the need for differentiated instruction in every classroom. Teachers have to scaffold their instruction to ensure they meet the needs of all students in the classroom. It is no longer appropriate or acceptable to "teach to the middle". Historically, many teachers would gear their instruction to the average student in the classroom thus not challenging their higher achieving students while not breaking down material low enough for students who are not performing on grade level. The next essential element that Whitten discusses is the need for flexible grouping in the classroom. Flexible grouping refers to the idea that groups within the classroom are not based solely on ability level, but rather that it takes into account learning styles, interests, and academic strengths and/or weaknesses (Whitten et al., 2009, p. 14). Screening of student achievement is the basis for the concept of the universal screener which is a key component in the RTI process. Whitten et al. (2009) suggests that all students should be screened at least three times a year to determine student progress (pp. 14-15). This data is then used to determine appropriate interventions or targeted skills areas that teachers will focus on with each student. The last of the eight essential elements is ongoing professional development. Whitten et al. (2009) tells us that this is a pivotal factor in the successful implementation of Tier I interventions in RTI (p. 15). She shares that staff members must have numerous opportunities to learn new instructional strategies, assessment practices, and innovative methods of providing instruction.

These key elements should be used with all students in conjunction with 90 minutes or more per day for literacy instruction and 60 minutes or more per day for mathematics instruction (Whitten et al., 2009). When these key components are effectively implemented in Tier I general education classroom instruction they will promote learning and reduce the number of students experiencing academic difficulties. In RTI Tier I, the interventions are provided by the regular classroom teacher in the general education classroom setting.

In tier one, as in all the other tiers, for students to be successful it is essential that the teacher implement effective behavior management strategies. Some methods of differentiation that teachers may utilize in their classroom include proximity, appropriate wait time, posted classroom expectations, planned ignoring, word walls, and a system of positive reinforcement (Hoover, 2011). John J. Hoover (2011), a professor at the University of Colorado, School of Education has identified four elements of curriculum that should be associated with differentiated learning. These four elements are content/skills, evidence-based interventions, instructional setting, and class/instructional management (Hoover, 2001, pp. 85-86). Some examples of content specific skills would include student's having background knowledge about the topic being studied, the ability to think at higher levels, knowledge of prerequisite skills, and the motivation to learn the skills that are being taught (Hoover, 2011). When considering evidence-based interventions it is important the teachers consider the following items: are students actively engaged in the lesson, is the learning style of the student being met, is the student actively participating in the lesson, and does the student remain on task for the duration of the lesson (Hoover, 2011). These are all important aspects to consider when teaching a lesson to students at the tier one level. The teacher must also pay close attention to the instruction setting in his or her classroom. Teachers should incorporate a variety of whole-group, small

group, cooperative learning groups, and independent learning time in their instructional setting (Hoover, 2011). Finally, in terms of classroom management, the teacher should promote a positive learning environment, the consistent enforcement of routines, procedures, and rules in the classroom in addition to encouraging students to take responsibility for their own learning (Hoover, 2011). The suggestions listed above are by no means a comprehensive list, but merely a sampling of differentiation strategies that should be used in every teacher's classroom. After the initial testing and implementation of these tier one strategies, teachers will then identify students who have still not been successful and refer them for tier two interventions.

RTI Tier II

Tier two interventions, also known as targeted interventions, are designed to reach 10 to 15% of students who were not able to meet academic standards with just tier one interventions. These targeted interventions are designed to address skill deficits that emerge as a result of screenings or diagnostic evaluations. One key aspect of tier two is that students continue to receive tier one instruction and they receive additional intervention specifically focused on areas of concern for each individual student.

Whitten et al. (2009) states that RTI Tier II interventions should include the following seven essential components. The first of these components is an assessment to determine the academic needs and strengths of the student (Whitten et al., 2009, p. 15). It is important to understand the specific academic deficits of each student in Tier II as well as their areas of academic strength as these will be a foundation on which teachers can build. The second component is a collaborative, team approach to problem solving by a school based team (Whitten et al., 2009, p. 15). Each school needs to identify a core support team which meets to review data, interventions, and instructional strategies to help make decisions about interventions

for each student at the Tier II level. This team should include a variety of school personnel who each bring a different and unique perspective to the team. A third essential element that occurs in Tier II is that parents are invited to be a part of the problem-solving discussion (Whitten et al., 2009, p. 16). This step is important because parents often have more information about how their child learns as well as the ability to share their academic concerns with the team. The fourth element is the need to identify research-based interventions that will supplement the instruction already being provided in the general education classroom (Whitten et al., 2009, p. 16). The supplemental strategies that are implemented at Tier II should focus on increasing student achievement by utilizing the student's unique learning style and interests.

The next essential element in RTI Tier II instruction is the incorporation of small group instruction (Whitten et al., 2009, p. 16). Small group instruction is in addition to any whole group or small group instruction received as part of the general education curriculum in which the student participates. When a student reaches Tier II, the regular classroom teacher often receives intervention support from special education teachers, teacher assistants, or other school personnel who have been trained in the implementation of the specific interventions. The sixth element involves the monitoring of interventions (Whitten et al., 2009, p. 16). This element is extremely important because interventions must be implemented and tracked with fidelity. The staff member that is implementing the intervention must be trained in not only how to administer the intervention but also how to correctly track and monitor the intervention. Whitten et al. (2009) state that peer observations are one of the most common ways to monitor the implementation of the intervention. The last key element is effective progress monitoring (Whitten et al., 2009, p. 17). In Tier II, progress monitoring should be performed at a minimum of two times per month. The progress monitoring data provides the information related to student

performance that is used by the problem-solving team to determine the next steps in the intervention process.

Students in Tier two should be served in small groups three to four times per week and receive interventions for a minimum of 30 minutes per day. Hoover (2011) indicates that a key component in tier two instruction is the inclusion of small group instruction where typically there are between four and six students per group. These small groups would receive the same direct instruction as all other students, but then would be pulled for a more intense session. Students needing Tier II interventions could receive them from the regular classroom teacher, a special education teacher, or a remediation teacher (Hoover, 2011). Progress monitoring for these students should occur weekly or biweekly to ensure that adequate progress is being made toward specific skill deficits (Whitten et al., 2009). Tier II interventions can be administered either in a pull-out setting or in the general education classroom.

In Tier two, data must be examined to determine missing prerequisite skills (VanDerHeyden & Burns, 2010). Examples of prerequisite skills might include phonemic awareness, decoding, reading fluency, fact fluency, or basic fast fact knowledge. Students in tier two should be monitored for at least six weeks, but can remain in this stage for longer periods of time. Typically after 12 weeks of continuous intervention the RTI team will meet to determine if the interventions at this level have been successful or if a student requires more intense intervention. If a student has not been successful in tier two they are then moved to a higher level of intervention.

RTI Tier III

The third tier of intervention in RTI is often referred to as the intensive tier. This tier is designed for 1 to 5% of all students. Similar to the previous tier, it is important that students in

this level continue to receive both tier one and tier two interventions. Tier three is considered to be the most individualized and rigorous level of interventions. Like tiers I and II, instruction can be provided by either special education teachers or regular education teachers. When a student enters tier three, they will need more frequent implementation of the interventions and for longer durations (Reeves et al., 2010). Whitten et al. (2009) suggests that students at Tier three require the following elements.

The first of these elements is the implementation of more intensive interventions (Whitten et al., 2009, p. 17). Students in this tier receive three layers of interventions based on their unique academic or behavioral needs. The interventions are implemented with a greater intensity and frequency. The second element is an increase in small group or one-on-one interventions (Whitten et al., 2009, p. 17). When Tier II interventions do not provide an adequate level of support to help a student demonstrate proficiency, a more individualized approach to interventions is required. As in Tier II, it is important that the person administering the intervention is trained in both the implementation of the intervention as well as the proper method of progress monitoring and tracking the data. At the Tier III level, progress monitoring frequency increases to once per week as opposed to twice per month at the Tier II level (Whitten et al., 2009, p. 17).

In Tier three instruction it is vital that teachers build upon information learned from the implementation of Tier two interventions with respect to instructional strategies (Whitten et al., 2009). As Whitten et al. (2009) stated, when students reach tier three they are primarily provided with individual instruction; however, they can participate in a small group with no more than three students (Hoover, 2011). Students in this tier tend to have multiple skill deficits and therefore require more repetition of skills with more prompting provided by the teacher (Hall,

2008). Students in tier three receive the most frequent monitoring, often as much as once a week (Hall, 2008). Unlike tier two, students may spend several days or even weeks working on the same basic skill before moving on to another skill. Students at this level will often receive a minimum of 12 weeks of one or more interventions. At the end of the twelve-week time period, in many districts, if a student has still not been able to demonstrate growth or proficiency of the skill being taught then a referral to special education is made.

While RTI is presented as a three-tiered process for implementation of interventions, it is very important to note that this should be a fluid process (Wixson & Valencia, 2011). Students ideally would move between tiers as needed to best meet their instructional needs. Additionally, students may not be in the same tier in all academic areas. For instance, a student may only require tier one interventions in mathematics, but require tier two interventions in reading. It is also important to note that when students are referred for special education testing, they may not always qualify for additional support. It is important, then, that teachers continue to try new interventions to ensure that all students are learning.

Core Components of RTI

Susan Hall (2008) is a consultant who specializes in reading and teacher training. She is the founder and president of a company that provided school districts with training on early intervention in literacy. Hall (2008) has identified the following eight foundational components of RTI:

1. We can effectively teach all children.
2. Intervene early.
3. Use a multi-tier model of service delivery.
4. Use a problem-solving model to make decisions within a multi-tier model.

5. Use scientific, research-based validated intervention and instruction to the extent available.
6. Monitor student progress to inform instruction.
7. Use data to make decisions. A databased decision regarding student response to intervention is central to RTI practices.
8. Use assessment for screening, diagnostics, and progress monitoring (p. 19).

When a school or district is able to successfully adopt and implement these principles they will see effective results from the RTI model. The first component that all teachers must possess is the belief that all children can learn. If, in fact, teachers truly believe this then the RTI process will be more successful. Secondary to this, is the use of research-based strategies that are implemented with fidelity. Many teachers have indicated that this is the portion of RTI with which they find the most difficulty. Teachers are comfortable with assessing students and monitoring data; however, teachers are required to spend a tremendous amount of time finding these specific strategies that target the various areas of concern students may possess. When these systems are successfully implemented we should be able to meet the instructional needs of all students and thus eliminate the number of failing students (Bernhardt & Hebert, 2011).

Principal Support of RTI

Principal support and understanding of both the purpose and process of the RTI process is another key component to the successful implementation of RTI. Printy and Williams (2014) discuss that policy research has indicated that often principals tend to increase the number of interventions instead of correcting problems with the core instruction provided by teachers. Based on this, it is important that principals understand the underlying process and reasons behind the implementation of the RTI model in schools. Principals must ensure that all students

are receiving high quality instruction in the general classroom setting. A true understanding of the RTI model and the basis of tiers of instruction are key to helping ensure that principals can support the successful implementation in their school.

Leading the Implementation of RTI

Upon reviewing various different leadership styles, adaptive leadership seems the most appropriate in this situation. Peter Northouse (2016), a consultant on leadership development, trends in leadership, and leadership education, states that "adaptive leaders prepare and encourage people to deal with change" (p. 257). Adaptive leadership explores what leaders do to help others manage and implement changes and overcome the challenges, which may occur as a result of the change. Northouse (2016) identifies six key leader behaviors that arise from adaptive and technical challenges. These challenges are:

1. Get on the Balcony
2. Identify the Adaptive Challenge
3. Regulate Distress
4. Maintain Disciplined Attention
5. Give the Work Back to the People
6. Protect Leadership Voices from Below (Northouse, 2016, p. 261)

The concept of *get on the balcony* means that adaptive leaders are able to put things into perspective when a challenging situation arises. Adaptive leaders are able to take a step back from the challenge and see the larger picture while still remaining active in the situation. Secondly, adaptive leaders have the ability to differentiate between adaptive and technical challenges that emerge when new systems are put into place. Northouse (2016) tells us that adaptive changes are those issues that they are unable to solve alone. The third key characteristic

is the ability to regulate distress. In any new situation, people will inevitably feel stress; however, the key is to ensure that the leader keeps stress at a minimum level and channels stress in a positive way. People often struggle with change; especially when it conflicts with their own personal beliefs or values. This is why it is important that an adaptive leader is able to maintain disciplined attention. An adaptive leader must ensure that people focus on the task at hand and ensure that they are able to face the challenge head-on. The fifth important characteristic is that adaptive leaders are able to "give the work back to the people" (Northouse, 2016, p. 270). Northouse (2016) tells us that "people want leaders to provide some direction and structure to their work and want to feel secure in what they are doing, but too much leadership and authority can be debilitating, decrease people's confidence to solve problems on their own, and suppress their creative capacities (p. 270). In working to create an effective RTI model in schools it will be important for the leader to initially provide a framework and support, but teachers must understand and have buy-in for the implementation to ultimately be successful. The final key component that Northouse (2016) discusses is the need to listen to the ideas of everyone that has a role in the implementation of the change. This is vitally important because when as a leader, we are asking others to make a change that is difficult for them, they must know that they have a voice.

Research Based Interventions

The successful implementation of RTI in schools requires that the following core characteristics be incorporated in the model. These core characteristics are research based interventions, universal screening, progress monitoring, problem solving teams, and fidelity of implementation.

The first core characteristic of RTI implementation is research-based interventions. When interventions are effectively implemented it has been proven that they increase the likelihood of positive learning outcomes for students. While any intervention is better than no intervention; the most effective interventions are those that have a strong research base. Rachel Brown-Chidsey (2010), an Associate Professor and Coordinator of the School Psychology Program at the University of Southern Maine and a nationally certified school psychologist and Steege states "when we select interventions that have a solid research base, provide the necessary resources to implement the intervention with precision, and collect meaningful data documenting student progress, we have greatly increased the chances of effecting positive student change" (p. 42). Brown-Chidsey and Steege (2010) also adds that in an educational setting it is often necessary for educators to utilize resources that have already been researched by others and have been proven to be research-based interventions. Some suggested sources include: Florida Center for Reading Research, Oregon Reading First Center, Big Ideas in Beginning in Reading, National Institute for Literacy, What Works Clearinghouse, and California Learning Resource Network (Brown-Chidsey & Steege, 2010). In summary, for an intervention to be considered research-based, Brown-Chidsey and Steege (2010) state that it must be "effective in cases of well-designed and robustly implemented experimental analysis" (p. 55). In Pitt County, the teachers struggle with how to find research based interventions to utilize in their classrooms. One of the small-scale components of this research project will be the creation of a teacher intervention resource room. This room will house pre-made, skills specific, research based interventions that teachers will be able to check out and use in their classroom with their students.

Universal Screening

The second key component to RTI is the implementation of universal screening. Universal screening tools compare a student's performance with a benchmark and help to ensure that all students receive academic support when they need it regardless of any special education referrals (Division for Early Childhood of the Council for Exceptional Children et al., 2013). Most RTI experts recommend that universal screening be conducted three times during the academic school year; initially in the fall, then in the winter, and lastly in the spring. All students are administered universal screenings, typically by the regular classroom teacher. The purpose of a universal screener is to determine which students are in danger of failing academically, and which students may benefit from the implementation of specific, research-based, targeted interventions (Glover & Albers, 2007). The results of the universal screeners are next reviewed by a problem-solving team and the classroom teacher to determine which students need to be more closely monitored versus which students need to begin immediate interventions.

The collection of universal screening data is a key component for the successful implementation of RTI (VanDerHeyden & Burns, 2010). Amanda Vanderheyden, a national RTI trainer and consultant, and Matthew Burns, an Associate Professor of Educational Psychology and Coordinator of the School Psychology Program at the University of Minnesota, have identified three basic requirements of a universal screener (VanDerHeyden & Burns, 2010). These three requirements are:

1. Universal screening measures should be direct measures of student performance that are brief yet meaningfully forecast future student learning without some instructional change.

2. The measures must be brief to minimize the cost to instructional time and to permit their use at routine intervals during the school year.
3. Universal screening measures must reflect local expectations for student performance and yield scores that sensitively distinguish between those students who are at risk and those who are not at risk. (VanDerHeyden & Burns, 2010, p. 17)

Vanderheyden and Burns (2010) have noted, "Teachers tend to identify students who do not need intervention at high rates and also fail to identify those who do need intervention" (p. 19). This is why it is so important that a standardized universal screener be implemented to identify at risk students and remove teacher judgment from the decision making process. Universal screeners should be administered at an instructional level that is the average for most students (Vanderheyden & Burns, 2010). Additionally, these tasks should represent skills that have already been taught to students.

Curriculum-based measurement (CBM) is one of the most commonly utilized screeners in RTI (Vanderheyden & Burns, 2010). CBM's are short, but direct measures of assessment that have been known to reliably provide current levels of student achievement as well as predict which students will require intervention (Vanderheyden & Burns, 2010). Some common examples of universal screeners include the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and AIMS web by Pearson Education. In addition, CBM maze and oral reading fluency are good universal screeners (Vanderheyden & Burns, 2010). VanDerheyden and Burns (2010) also suggest that there are two key decisions that will result from any universal screener. These two decisions are:

1. Is Tier I instruction (sometimes called "core" instruction) working for most students in the instructional setting?

2. Which students are in need of supplemental instruction to move out of the risk range of performance? (VanDerHeyden & Burns, 2010, p. 20)

Once problem-solving teams have met with teachers to review the results of the universal screening data, they must determine the next steps for students. In Pitt County, there does not currently exist a universal screener for either reading or mathematics. Since this universal screener does not exist, determination of students needing assistance is often left up to teacher judgment, not actual data. One of the goals of this small-scale improvement project will be the implementation of a universal screener for grades K-3 to identify students needing additional support.

Progress Monitoring

The third key component of RTI is the implementation of progress monitoring. Progress monitoring involves the systematic process of assessing student's at regular intervals. Daryl F. Mellard and Evelyn Johnson (2008), both research associate with the Center for Research on Learning and the Division of Adult Studies, tells us that progress monitoring has two main purposes. The first purpose is to gage whether or not all students are appropriately benefiting from the core instructional program that is being taught in the regular classroom. The second purpose is to help build a more effective instructional program for the students who are not appropriately benefiting from the traditional core instructional program (Mellard & Johnson, 2008). Mellard and Johnson (2008) further states that in an RTI model, if progress monitoring is to be effective it must contain the following key elements:

1. The monitoring should occur in all tiers of instruction.
2. The measures should be directly related to the curriculum, grade level, and tier level.
3. The assessments should be easy and efficient to administer.

4. The results should be displayed in ways that make analysis and evaluation efficient.
5. Cut scores and decision rules for the level, slope, or percentage of mastery must be designated to help determine if a student is responding adequately.
6. A rationale must be provided for the cut scores and decision rules.
7. The measures should be administered frequently to inform instruction and curricular placement decisions.
8. A student's performance on the measures should represent one source for informing the development of instructional strategies (p. 44-45).

If RTI is to be successfully implemented, consistent progress monitoring must be implemented with fidelity at all tiers. Progress monitoring will ensure that students move up or down through the tiers as needed based on their current levels of achievement. This project will create progress monitoring and tracking forms to assist teachers with organizing their data and ensuring they are progress monitoring at regular intervals.

Problem-Solving Team

Another key component of Response to Intervention is the creation of a problem-solving team. Harlacher, Potter, and Weber (2013) suggest that within the RTI model there exist more than one type of problem-solving team. One of these teams is the grade level team. These meetings are comprised primarily of grade level team members, however they may include a principal, school psychologist, or other support personnel. These meetings are scheduled weekly at a consistent time and follow a specific format. During these meetings, the grade level will focus on core instructional practices and student performance on assessments across the grade level. Whitten, Esteves, and Woodrow (2003) also agree with the concept of more than one type of problem-solving team. They discuss an RTI support team, which is composed of teachers,

speech/language pathologists, school psychologists, literacy specialists, administrators, and other person who may be able to assist with identifying the underlying issues in struggling students (Whitten et al., 2009, p. 23). The RTI support team would review interventional documentation, schedule RTI meetings, assist in the determination of appropriate interventions, assist in tier movement, and analyze individual student assessment data (Whitten et al., 2009, pp. 33-35). In the RTI process, data is used as a basis for all decisions at each tier of the process (Basham, Israel, Graden, Poth, & Winston, 2010, p. 247). Basham et al. (2010) also tell us that "direct assessment of student skills and performance as well as teacher adherence (or fidelity) to design are key to making instructional decisions" (p. 247). The teacher, as well as a problem-solving team, must have a specific process that they use to analyze the data collected. Bergan (1995) proposes a problem-solving model that includes: (a) problem identification, (b) problem analysis, (c) plan implementation, and (d) problem evaluation (p. 115). The problem solving team or teams are responsible for collecting data, analyzing the data, and using this to make informed instruction to help improve student learning at all levels of the RTI process.

Fidelity of Implementation

The final key component of RTI is fidelity of implementation. Fidelity is perhaps the most important of all four components as it is the one that determines if RTI is successful in help underachieving students. Mellard and Johnson (2008) define fidelity of implementation as "the delivery of instruction in the way in which it was designed to be delivered (p. 118)." Fidelity of implementation helps to differentiate between students who are struggling due to poor instruction versus those who truly may have a disability (Shapiro & Clemens, 2009). Frequent checks for implementation fidelity related to research-based interventions is critical to ensuring a positive student response.

Since one of the primary goals of RTI is to increase the amounts of support for all students in the general education classroom, the monitoring of this support becomes paramount. The creation of a problem-solving team (PST) will help to ensure that all interventions are being implemented and monitored with fidelity to ensure the success of students. The PST may be composed of special education and regular education teachers, counselors, instructional coaches, administrators, school psychologists, and other support personnel. This team is responsible for meeting with the regular education teacher to determine the specific academic deficit, review universal screening data, select specific research-based interventions, and monitor student progress (Walker et al., 2012). The problem solving team will provide the fidelity check, which is essential for the successful implementation of RTI. To ensure fidelity of implementation, this project will create uniform tracking forms for teachers to utilize. In addition, teachers will meet with the Problem Solving Team every four weeks to review current data and determine if students will remain in the same tier, move to a higher tier, move to a lower tier, or if a new intervention is necessary.

Evolution of Special Education Policy and RTI

The modern era of special education policy is rooted in the Education for All Handicapped Children Act (EAHCA) in 1975. This law, also referred to as Public Law 94-142, guaranteed that all children with disabilities were to receive a free and appropriate public education. Public Law 94-142 also ensured that the rights of parents and their children would be protected as well as granting financial assistance to states to assist with the implementation of special education services. There were several reauthorizations and amendments to EAHCA: one in 1978, one in 1983, and one in 1986. Among the changes that were made, children ages 3 to 5 with disabilities were included in the act and funding was provided for early intervention

programs. In 1990 EAHCA received a new name and was reauthorized as Individuals with Disabilities Education Improvement Act (IDEIA). This reauthorization focused on adding services for individuals with disabilities aged 18 to 21. IDEIA was reauthorized on December 3, 2004 by President George Bush and was shortened to the Individuals with Disabilities Education Act (IDEA) in 2006. One of the major changes made in the 2004 reauthorization was changing the procedures for the identification of students as Specific Learning Disabled (SLD). This new revision stated that local education agencies (LEA) could no longer require the use of the discrepancy model. In the discrepancy model, a child had to have a severe gap between intellectual ability and achievement in order to qualify for special education services. Additionally, this reauthorization required LEA's to permit the use of children's response to research based interventions as an alternate method of identification.

When EAHCA was initially enacted, there was a drastic increase in the number of students qualifying for special education services (Hall, 2008). The 1975 act provided us with the following definition of a specific learning disability:

1. General. Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations, including conditions such as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.
2. Disorders not included. Specific learning disability does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of

> mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage (Johnston, 2011, p. 513).

Initially, based on this law, if students exhibited the gap in intellectual ability and academic achievement they were classified as specific learning disabled unless they were minority or poor (Johnston, 2011). This led to the identification of mostly middle class students between 1963 and 1973 with only 1.5% of students who were identified as specific learning disabled being minority (Johnston, 2011). This trend, however, did not remain consistent. In the years between 1977 and 1983 there was increase from 3.7 million to 5.3 million children being identified as students with disabilities with the largest increase coming from children being identified learning disabled (Fuchs, Mock, Morgan, & Young, 2003). Approximately 46% of all students with disabilities were identified under the category of learning disabled: an increase from the previous rate of approximately 22% (Fuchs et al., 2003). Additionally, the nation saw an increase in the amount of money spent per student in the 1980s (Fuchs et al., 2003).

The discrepancy criteria for identification began to be questioned for multiple reasons. One reason is that IQ tests validity began to be questioned especially for children from low socioeconomic status and for minorities. Secondly, children with lower IQ's often did not exhibit the required discrepancy and thus did not receive special education services. Finally, for many children, it took several years for students to develop a substantial gap between their intellectual ability and their academic achievement thus children had to fail to learn for several years in order to receive services (Johnston, 2011). Despite all these concerns, the discrepancy model was not completely eliminated; instead the 2004 reauthorization simply added additional methods in which students could qualify for special education services.

In the decade preceding the 2004 reauthorization, the number of children between the ages of 6 and 21 who were eligible to receive special education services jumped by 38% (Hall, 2008). One reason this occurred is that school systems received extra funding to hire special education teachers. Secondly, specific learning disabilities were considered to be permanent and students with this condition therefore were exempt from testing accountability models (Johnston, 2011). Many school systems quickly realized that if a student fell into this category, their scores on state testing would not count. As a result, a disproportionate number of minorities and students in poverty were identified as specific learning disabled (Johnston, 2011). The percent of minority students identified as specific learning disabled increased from 1.5% to over 20% (Johnston, 2011).

On October 2, 2001 President George W. Bush created the President's Commission on Excellence in Special Education. This commission was charged with outlining findings and recommendations for "improving the educational performance of children with disabilities" (President's Commission on Excellence in Special Education, 2001, p. 1). Two of the major findings from this commission are that "the current system uses an antiquated model that waits for a child to fail, instead of a model based on prevention and intervention" and that due to a lack of validity in current identification methods "thousands of children are misidentified every year, while many others are not identified early enough or at all" (President's Commission on Excellence in Special Education, 2001, pp. 7-8). Based on these, as well as other findings, the President's Commission on Excellence in Special Education (2001) made the following three major recommendations:

1. Focus on results – not on process
2. Embrace a model of prevention not a model of failure

3. Consider children with disabilities as general education children first (pp. 8-9)

The commission also noted many students do not receive appropriate instruction in the general education classroom. As a result, "many students in special education programs are instructional casualties and are not students with disabilities" (Yell & Walker, 2010, p. 128). In an attempt to rectify this, the commission suggested that a student's response to research based interventions become a requirement of the special education identification process. The commission noted that this response to intervention model would allow schools to identify students who are having academic difficulties when they first emerge as opposed to waiting for students to begin to fail to intervene.

The 2004 reauthorization of IDEA also included the addition of Early Intervention Services (EIS). This section allowed school districts to utilize up to 15% of their Part B funds for EIS (Yell & Walker, 2010). Early intervention services are geared towards identifying young children that may be at risk for developing academic difficulties. EIS would provide research-based interventions to these students while still in the general education setting to assist in closing academic gaps at an early age. Some advantages of early intervention include "(a) identifying students early in their school careers using a risk rather than a deficit model, (b) emphasizing research-based practices in intervention, and (c) focusing on student outcomes rather than services received" (Yell & Walker, 2010, p. 130). These early interventions along with RTI implementation will result in high quality instruction where all students successfully reach higher standards (Walker & Daves, 2010).

Special education policy has evolved over the years with the goal of trying to best meet the needs of all students. The most important special education policies include the aforementioned EAHCA, IDEIA, and IDEA. One other important piece of legislation that RTI

helps to address is the reauthorization of the Elementary and Secondary Education Act (ESEA) in 2001, better known as No Child Left Behind (NCLB). Some of the major components of NCLB include providing accelerated educational programs, increasing the amount and quality of instructional time, promoting school-wide reform related to the implementation of research-based instructional strategies, and rigorous academic content (Mellard & Johnson, 2008). RTI helps to provide a framework for some of the major goals of NCLB such as tiers of research-based interventions, the use of progress monitoring to improve overall student achievement, and implementation of strong and rigorous instructional programs in the general education classrooms. Together all of these important pieces of legislation have played a pivotal role in the introduction of RTI into mainstream public instruction.

Legal Context of RTI and Over-Identification

In the legal realm, court cases and due process hearings regarding the issue of RTI fall under IDEA regulations in the following three areas: (a) child find (IDEA Regulations §300.301), (b) evaluations (IDEA Regulations §300.301 and §300.307), and (c) eligibility – specifically in reference to the identification of specific learning disabled (Walker & Daves, 2010, p. 41; Yell & Walker, 2010, p. 130). Presently, the Supreme Court has not heard any cases related to RTI but there has been one case reaching the Federal Circuit Court of Appeals and several cases reaching the Federal District Courts (Walker & Daves, 2010; Yell & Walker, 2010). In 2007 there was a class action suit where it was argued that local education agencies delayed the process of identifying students who may be eligible to receive special education services. This case, *J.S. et al. v Attica Central Schools 2007*, is the only case to have reached a Federal Circuit court. In that case it was ruled that the local school system did violate IDEA by not promptly identifying students (Walker & Daves, 2010; Yell & Walker, 2010). A second case

where the courts ruled that RTI violated IDEA was *Marshall Joint School District No. 2 v. C.D. by Brian and Traci D. 2008*. In this case, the court determined that even though the student, after receiving accommodations, performed on the same level as his peers this did not release the school from the responsibility of conducting a special education evaluation (Walker & Daves, 2010; Yell & Walker, 2010). When discussing court cases where RTI violates IDEA, the most precedent setting case is *El Paso Independent School District v. RICHARD R. 2008*. In this case, the court ruled that when a parent makes a request for a special education referral, the school has the obligation to initiate that referral and to concurrently conduct interventions aligned with their teacher referral process (Walker & Daves, 2010; Yell & Walker, 2010). The ruling further indicated that the thirteen months that passed between the time parents requested special education services and when the school offered testing was unreasonable (Walker & Daves, 2010; Yell & Walker, 2010).

The three cases listed above may indicate that the implementation of RTI for special education determination may be problematic; however, there are several cases where the courts have rules that the implementation of RTI is consistent with IDEA (Walker & Daves, 2010; Yell & Walker, 2010). One such case involved the *Baltimore City Public School System 2007*. In this case, it was ruled that school systems may implement interventions prior to the completion of a special education referral as long as these interventions do not delay or deny a student access to special education services (Walker & Daves, 2010; Yell & Walker, 2010). Another case with consistent findings is *A.P. by Powers v. Woodstock Bd. of Education 2008*. In this case, A.P. was a student at Woodstock schools from kindergarten through sixth grade. During his time at Woodstock, A.P. had some difficulties in the classroom, but responded well to interventions and

performed commensurate with grade level peers on state testing. In this case, U.S. District Judge Mark R. Kravitz states:

> This is decidedly not a case in which a school turned a blind eye to a child in need. To the contrary, [the teacher] acted conscientiously, communicating regularly with [the mother] and utilizing special strategies to help [the student] succeed. Given the student's response to interventions, however, the district did not err in failing to evaluate him sooner. There is nothing in either the IDEA or in the state or federal implementing regulations to indicate that a student would qualify as a "student with disability," when the school voluntarily modifies the regular school program by providing differentiated instruction which allows the child to perform within his ability at an average achievement level. (*A.P. Powers v. Woodstock Bd. of Education, U.S. District Court, Connecticut,* 2008, p. 4).

Both of these cases aid support to the RTI process when used to identify students with disabilities. When a student who once exhibited learning difficulties is able to succeed using interventions then they are no longer considered a candidate for special education services (Walker & Daves, 2010; Yell & Walker, 2010). In an effort to remain consistent with IDEA it is important that schools complete the RTI process in less than six months which is about the same amount of time school districts are given to complete a parent request for special education testing (Walker & Daves, 2010; Yell & Walker, 2010).

Educators have long been concerned with the over-identification of students as exceptional children (Bender, 2009). Today, more students nationally are identified under the category of specific learning disabled than any other category; thus making overrepresentation significant (Coutinho, Oswald, & Best, 2002). When RTI is implemented with fidelity it should

delineate between students who are truly in need of special education services and those students who have not received a solid core instruction. One pilot in North Carolina showed that 83% fewer students were referred and found eligible for special education services as a result of successful RTI implementation (Bender, 2009). Another study in Florida showed a decrease from 10.4% to 6% of students being identified as learning disabled over a 3-year period when a multi-tier system was utilized (Bender, 2009). Douglas Fuchs, the Nicholas Hobbs Chair of Special Education & Human Development at Vanderbilt University, and Lynn S. Fuchs, Nicholas Hobbs Professor of Special Education & Human Development at Vanderbilt University, have stated that "because RTI encourages appropriate use of evidence-based instruction across tiers, it should in principal decrease the numbers of children incorrectly identified as disabled" (Fuchs & Fuchs, 2006, p. 96).

Discussion of the legal implications is very important because North Carolina currently uses the discrepancy model as the primary method of identification of special education students. Under current North Carolina guidelines, a student must exhibit a minimum of a 15-point discrepancy between their Intellectual Quotient (IQ) and their academic achievement. In 2020, North Carolina will no longer operate under the discrepancy model, but instead will utilize RTI for identification of students. In April 2015 the North Carolina Department of Public Instruction Exceptional Children Division published a paper titled Proposed Policy Revisions: Specific Learning Disabilities. In this paper they propose that a multi-tiered system of support must be implemented with fidelity and contain the following components to be used for the identification of students with a specific learning disability. These components are: "(a) a system of high-quality evidence-based core instruction and scientific research-based instruction, (b) multiple tiers of instruction, that vary in intensity, matched to student need, (c) a systematic process of

problem-solving/data-based decision making to inform decisions regarding student academic, behavioral, and functional needs and (d) a comprehensive, balanced assessment system that includes common formative assessments, interim/benchmark assessments, outcome assessments, universal screening, progress monitoring, and diagnostic assessments" (North Carolina Department of Public Instruction, 2014, pp. 4-5). With this shift in policy in North Carolina, it is important to understand that there will always exist legal ramifications for correctly applying procedures for screening and identification while providing the least restrictive learning environment for all students.

Summary

The primary topics discussed in this literature review are the history of RTI, the structure of RTI, the core components of RTI, the evolution of special education policy and RTI, as well as the legal context of RTI and over-identification. The discussion of these topics is vital to understanding my project for several reasons. First, understanding the history of RTI helps to understand how and why this tiered method of improving students learning was introduced. Secondly, in order to discuss how RTI relates to both special education and regular education it is essential that one understand both the structure of RTI as well as the core components of RTI. Understanding the structure and components of RTI will enable me to effectively create processes and procedures to improve student learning. Finally, it is important to discuss the evolution of special education policy and the legal context of RTI and over-identification as one of the goals of my project will be to increase the strike rate for special education referrals that do occur as a result of the implementation of the RTI process. The effective understanding of the entire RTI process will ensure that fewer unnecessary special education referrals occur and that

all students needing interventions will receive them by the use of universal screening to eliminate teacher judgment.

CHAPTER 3: APPROACH FOR ADDRESSING PROBLEM OF PRACTICE

Improvement Science

Pitt County Schools is composed of sixteen traditional elementary schools, seven traditional middle schools, six K-8 schools, seven traditional high schools, and one early college high school. At this time, none of Pitt County schools have adopted the year-round school option. Pitt County Schools serves more than 23,500 students at its 37 campuses. During the 2014-2015 school year, Pitt County Schools had 1,842 National Origin Minority students, representing 43 different native languages. Of these students, approximately 968 were identified as Limited English Proficient and were served in the English as a Second Language (ESL) program. Pitt County School students are approximately 48.2% African-American, 0.2% American Indian, 1.4% Asian, 11% Hispanic, 3.5% Multiracial, and 35.6% White. During the 2014–2015 school year, Pitt County Schools served approximately 2,732 special education students, which is approximately 11.6% of the total student body. This will be a small-scale improvement project that will focus on one of Pitt County's K-8 schools, Pactolus School. Pactolus School has approximately 570 students, with 404 in grades K-5 and 166 in grades 6 – 8. Pactolus School students are approximately 0.4% Asian, 40.8% African-American, 34.7% Hispanic, 0.4% American Indian/Alaskan Native, 1.8% Multiracial, and 21.9% White. Appendix F contains data retrieved from PowerSchool on March 26, 2015.

The plan of improvement focuses on creating and implementing a comprehensive process for identification and placement of students in the RTI process. This plan will include the creation of a school-based problem solving team, the implementation of a universal screener for Reading in grades K–3, the creation of a research-based intervention room for teachers, the creation of uniform paperwork to track interventions, the implementation of a uniform process,

and the implementation of monthly data meetings by the problem-solving team with all K–3 teachers. The problem-solving team will be composed of a regular education teacher representing grades K-2, a regular education teacher representing grades 3-5, the school counselor, the instructional coach, a special education teacher, the school psychologist, and an administrator. While leading the problem-solving team, I plan to use Improvement Science as a framework to answer the 3 fundamental questions (1) What are we trying to accomplish?, (2) How will we know that a change is an improvement?, and (3) What changes can we make that will result in an improvement? (Langley, Moen, Nolan, Nolan, Norman, & Provost, 2009). This information will be used to improve the response to intervention procedures in the Pitt County School District. Solving the problems of students not performing at grade level as well as over-identification of students as needing special education is unlikely to occur; however, a reduction in the number of unnecessary special education referrals and an increase in the strike rate for students referred will be the improvement goals of this project.

Tenets of Improvement Science

Profound Knowledge

When trying to implement an effective change, acquiring knowledge is a vital component of sustaining any change. W. Edwards Deming suggests that a "system of profound knowledge" is essential for creating an effective change (Langley et al., 2009). Langley et al. (2009) define profound as "the deep insight this knowledge offers into how to make changes that will result in improvement in a variety of settings" (p. 75). When subject matter knowledge and profound knowledge are effectively combined the result is the increased ability to create sound improvements in an organization (Langley et al., 2009). Deming tells us that profound knowledge is composed of an appreciation for a system, an understanding of variation, the

building of knowledge, and the human side of change (Langley et al., 2009). These four essential components are the lens through which we must view our organization to create an effective improvement. One key goal of the implementation of this project is total school improvement; therefore, it is essential that knowledge of RTI be shared among all stakeholders.

Appreciation for a System

Langley et al. (2009) describe a system as being "an interdependent group of items, people, or processes working together toward a common purpose" (p. 77). In Pitt County Schools, there are multiple smaller systems which make-up a larger system. Pitt County Schools is composed of classroom level systems, building level systems, and district level systems. All of these systems must work together for the overall goal of educating students. The mission statement for our district states "Pitt County Schools will ensure that all students are provided a rigorous and personalized education that prepares them for the ever-changing challenges of the 21 Century" (Taken from PCS Webpage, 2014). The Pitt County School district also has a vision that states, "…a system of excellence partnering with family and community to prepare students to function effectively in a rapidly changing world by developing global citizens through academic excellence" (Taken from PCS Webpage, 2014). In order to effectively accomplish the mission and vision of Pitt County Schools, all the levels of the system must work collaboratively to achieve the goal of creating academically competent students. Improving on the RTI process in Pitt County Schools by implementing a universal screener, problem-solving team, uniform procedure, uniform intervention tracking documents, and a teacher resource room at Pactolus School will assist in the mission of a personalized education for all students. This process, which will represent a small-scale improvement will occur at Pactolus School. The results of the data

obtained from this small-scale improvement model will then be shared with district leaders and hopefully incorporated in other schools in the district.

Understanding Variation

One of the pioneers in variation theory, Walter A. Shewhart, emphasizes the importance of collecting data over time (Langley et al., 2009). When observing data over time we find both predictable and unpredictable patterns that emerge (Langley et al., 2009). There exist common causes and special causes that can be used to explain these variations in data over time (Langley et al., 2009). Langley et al. (2009) explain that common causes are "those causes that are inherent in the process (or system) over time, affect everyone working in the process, and affect all outcomes of the process" (p. 79). They describe special causes to be "those that are not part of the process (or system) all the time, or do not affect everyone, but arise because of specific circumstances" (Langley et al., 2009, p. 80). When only commons causes exist, it is said to be a stable process and the variation remains relatively constant over time (Langley et al., 2009). In this instance, a fundamental change in the system must occur to see an improvement (Langley et al., 2009). An unstable process occurs when both common and special causes are present (Langley et al., 2009). If the special causes can be identified and removed, then the system will again become stable (Langley et al., 2009).

In the past four years, Pitt County Schools has seen an increase of 18% in the total number of students identified as needing special education. In the area of Specific Learning Disabled, the most commonly over-identified area nationally, Pitt County Schools has seen an increase of 11% in the past four years. Another area that has seen a significant increase in the number of students identified is the category of Developmental Delay. This area of identification has seen an increase of 167% in the past four years. Table 1 shows the information related to

Table 1

Pitt County Schools Special Education Data

Year	DD	LD	OHI	ED	Total # of Students in all Categories
2012	137	756	379	140	2,529
2013	353	789	387	133	2,874
2014	366	809	424	135	2,980
2015	366	839	409	142	2,992

Note. Special Education Data Obtained online from North Carolina Department of Public Instruction Exceptional Children Reports. DD = Developmental Delay, LD = Learning Disabled, OHI = Other Health Impaired, ED = Emotionally Disabled.

identification in Pitt County over the previous four years. The information in Table 1 can help us to see the increase in the number of students needing special education in Pitt County Schools over the past four years. This information helps us to see that a more effective method of screening, paperwork, and interventions are needed to ensure that we are not over-identifying students as needing special education.

Building Knowledge

Langley et al. (2009) tell us that in the context of improvement science, "a change is a prediction: if the change is made, improvement will result" (p. 81). They also remind us that the more knowledge we have about how a system functions the better our prediction will be and the higher the probability that a change will result in an improvement. When one makes changes and measures the results they are skillfully increasing their knowledge and building the foundation for improvement (Langley et al., 2009). The Plan-Do-Study-Act (PDSA) model includes both deductive and inductive learning in the cycle. Deductive reasoning is used in both the *plan* and *do* stages while inductive reasoning is utilized in the *study* phase of the model (Langley et al., 2009). In the *plan stage*, the theory will be tested by utilizing some predictions while in the *do* stage, observations will note differences from the prediction. The study phase analyzes any gaps and then updates the theory if needed. Finally action is taken based on the information received (Langley et al., 2009).

The Human Side of Change

Learning about the human side of change will help one to better understand how human beings interact with both a system and with each other (Langley et al., 2009). This knowledge will help one to make predictions regarding how individuals will react to changes and how to increase the commitment of the individuals.

Studies from the field of psychology tell us that people have their own learning styles, preferences, motivations, aspirations, values and beliefs which impact how they will handle and accept change (Langley et al., 2009). Langley et al. (2009) also tell us that leaders must recognize that people are often resistant to change if they do not feel that they have a role in the change or don't see the benefit in implementing a change. Langley et al. (2009) discuss several factors that should be considered when beginning a change process. These factors include appreciating the differences in individuals; understanding that individuals hold their own unspoken assumptions and beliefs; appreciating the value of cooperation; using both intrinsic and extrinsic motivators; and ensuring that individuals are part of the change planning. As I strive to improve the RTI processes in Pitt County, I plan to utilize these key elements. I will conduct an initial beliefs survey related to RTI and utilize this information in the planning and implementation stages. Staff beliefs will be a vital piece of information in working towards making a change in the RTI process at Pactolus School that will result in increasing student success and reducing the number of unnecessary special education referrals.

Using the Model for Improvement

I will use the Improvement Science model, as previously mentioned, to answer the key questions of (1) what are we trying to accomplish; (2) how will we know that a change is an improvement; and (3) what changes can we make that will result in improvement? These three questions will be used in conjunction with the PDSA cycle to form the basis of my improvement in the RTI process in Pitt County Schools. Langley et al. (2009) tell us that there exist three fundamental changes that will lead to improvement. These three changes are:

1. Alter how work or activity is done or the makeup of a product

2. Produce visible, positive differences in results relative to historical norms (from the viewpoint of those served by the system)
3. Have a lasting impact (Langley et al., 2009, p. 89).

As I work toward the goal of improving the RTI process in Pitt County, I will keep these three fundamental concepts in mind.

The first question to be answered then, is what is the goal I am trying to accomplish with this improvement project? My overarching goal is to create a more improved RTI process in Kindergarten through third grade. Within this overarching goal, I also have several smaller goals that I plan to accomplish. First, I plan to create the model in K-3 that can then be applied to grades 4 -8. Secondly, I plan to implement the use of a universal screener in Reading to ensure that all students not performing at grade level are receiving necessary interventions in the regular education setting. Third, I plan to create a uniform process and paperwork for tracking interventions at each tier of the RTI process. Next, I will implement monthly PST meetings to review data and interventions with teachers. Finally, I plan to create an intervention resource room with ready-made resources that teachers can simply *grab and go* to use with students. These resources will be focused on the most common areas of difficulty for students in grades K–3.

The second question to be addressed is how will I know if the change is an improvement? The way that I will know that this project has resulted in improvement is that there will be fewer unnecessary special education referrals and an increase in the strike rate for actual special education referrals. By strike rate, I mean that when a child is referred for special education testing, they will actually qualify for services because they have a true learning disability, not because they have received poor instruction in the regular education setting. I will compare data

regarding the number of special education referrals and the strike rate to demonstrate that an actual improvement has occurred

The third question to be answered in this improvement project is what changes can we make that will result in improvement? One of the most important changes that can be made is the use of a universal screener to identify students that are not performing at grade level. The implementation of a universal screener will put an end to teacher judgment being the basis for determining which students need intervention in the classroom. The universal screener will also assist teachers in *drilling back* to determine which foundational skills students are lacking. This will enable teachers to begin filling gaps thus improving student performance and helping them to be more successful in the regular education setting. Another important goal that we can set is to insist that minimum of 80% of students in each class are mastering a skill or concept. It is important to understand that if 80% of students are not mastering a concept then the problem does not lie with the students, but instead with the instruction. The way to help teachers understand this is through data analysis and professional development. It is important for all educators to understand that the key to successful students is high quality instruction in the classroom. Another important change that we can make is to meet on a regular, consistent basis with teachers to review data. The problem-solving team will meet once a month with all teachers to review universal screening data as well as progress monitoring data. The team will use this data to determine if students need to remain in their current tier, move to a higher tier, or move to a lower tier of support. These meetings will able enable the teachers to share concerns and modify interventions as needed to meet the needs of the students they are serving.

Measure of Improvement

As previously stated, the measure of improvement will be fewer unnecessary special

education referrals and an increase in the strike rate for actual special education referrals. Strike rate means that when a student is referred for special education services testing, that they will qualify for services. During the 2013-2014 school year, Pactolus School had 15 initial referrals for special education and only 6 of those students met the criteria for identification. This represents a strike rate of only 40%. The measure of improvement for the strike rate will be that 85% of students referred for special education testing will qualify for special education services. Since this project is being implemented on a small scale, the results will then be reviewed to determine if the process is successful and then the district will determine how to most effectively implement these changes in other schools across the district. One other measure that will be reviewed is to look at the number of students who began interventions, but were able to exit the RTI process as a result of effective interventions. The measure for improvement for this goal will be that approximately 15% of all students who initially begin interventions will make enough progress to be on grade level and thus will exit the tiered intervention process. All students will be given the universal screener and any student who is not performing at grade level at the beginning of the year will be provided interventions, initially at the Tier 1 level. The problem-solving team will meet after the universal screener has been administered to all students to determine which students will receive interventions. The team will also discuss the most appropriate intervention for each student based on the results of the universal screener. The problem-solving team will then meet every 4 weeks to determine the effectiveness of the interventions and decide if a student needs to remain in their current tier, move up a tier or move down a tier. If a student is making consistent progress at their current tier, they will remain in that tier and continue the interventions until the next time the universal screener is given. When the universal screener is given again, if a student demonstrates grade level proficiency then they

will be exited from the RTI process. If a student is not making progress in their current tier then the team may decide to change the intervention, change the frequency of the intervention, or move the student to another tier and layer another level of support. In addition to the PST meeting, the teacher will provide notification to the parent that the child is not meeting grade level proficiency and explain to them what interventions are being provided to help their child be more successful in the regular education setting. All children will begin in Tier one and move through RTI process based on their individual needs based on the data provided by the Universal Screener and progress monitoring assessments.

Plan-Do-Study-Act

The PDSA cycle will serve as the framework for improving the RTI process in Pitt County. The PDSA cycle has four specific components that must be followed to ensure that change is created. These four steps are: (1) Plan: During this step, the researcher will determine the objective, ask questions and make predictions, make a plan to carry out the cycle, and plan for data collection. (2) Do: In this phase, the researcher will implement the plan, document observations and problems, and begin to analyze the data collected. (3) Study: This step in the cycle allows for a complete analysis of the data which has been collected, time to compare the data to the predictions made, and time to summarize what was learned from the implementation of the project. (4) Act: In the final phase, the researcher will determine what changes, if any, need to be made and then determine what will occur next (Langley et al., 2009).

As a part of the plan phase of PDSA, I will determine the objective, begin collecting baseline data related to staff beliefs, develop an organized process and create paperwork to be utilized for tracking interventions. I will also begin researching universal screeners and researched-based interventions. Finally, I will plan for how I will collect and organize data

collected from the universal screening and monthly data meetings. In the Do phase of PDSA, I will begin implementing professional development on the RTI process and paperwork. Also, in this phase, I will begin the implementation of our universal screener and begin monthly data meetings. I will document the information discussed in monthly data meetings as well as creating the teacher intervention resource room. Finally, in the phase I will begin analyzing the data from the beliefs survey as well as feedback provided in monthly data meetings and professional development trainings. In the study portion of the PDSA I will fully analyze data that was collected during the implementation of the small-scale improvement project. I will also administer a post-beliefs survey after all professional development has occurred and teachers have the opportunity to implement RTI for a minimum of 6 months. Lastly, in the act phase of the PDSA, I will review the information and determine what changes need to be made and then make recommendations for the implementation of this project at other schools in the district.

CHAPTER 4: REVIEW AND CONCLUSION

Review of Problem of Practice

My problem of practice was focused on the creation of a plan for the implementation of Response to Intervention (RTI) in Pitt County Schools. As part of this plan, (a) a systematic process for implementing RTI was created, (b) uniform paperwork was created, (c) a teacher resource room for interventions was created, (d) a review of universal screening data and intervention data was conducted to improve the *Strike Rate* for special education referrals, and intervention data was reviewed to determine if the implementation of a systematic process would result in at least 15% of the students entering interventions after the initial universal screening process making enough progress to be on grade level and thus exiting the tiered intervention process.

In Pitt County, there are approximately 2,605 students identified as exceptional children and receiving direct special education services. In the traditional elementary schools (K-5) there are approximately 995 special education students, in traditional middle schools (6-8) there are approximately 456 special education students, in K-8 schools there are approximately 400 special education students and in traditional high schools (9-12) there are approximately 754 special education students. When considering the identification of specific learning disabled, 20.6% of special education students are identified under this category in grades K–5. In grades 6–8 about 36.4% of identified students fall in the specific learning disability category. In K-8 schools, approximately 34.8% of students are identified as specific learning disabled and 39.1% of special education students in grades 9–12 are identified under this category. It is important to note that an additional 20.4% of students in grades K–5 and 13.3% of students in the K-8 schools are identified under the developmentally delayed category.

In Pactolus School, there are approximately 57 students identified as exceptional children and receiving direct special education services. At Pactolus School, 12% of special education students are identified under the Developmental Delay category, 33% are identified under the Specific Learning Disabled Category, 9% are identified under the Other Health Impaired Category, and the remaining 46% are identified in other areas such as Speech Impaired, Intellectually Disabled, or Autistic. During the 2013 - 2014 school year, Pactolus School had 15 initial referrals for special education and only 6 of those students met the criteria for identification. This represents a strike rate of only 40%.

Response to Intervention, as previously noted, is a general term to describe the implementation of a systematic method of tiered intervention, progress monitoring, and data analysis in our schools today. The purpose of RTI is to provide focused, differentiated instruction to students in the regular education classroom to help them obtain grade level content and material within the context of the core curriculum.

In the RTI model, a universal screening tool identifies students who are not performing at grade level expectations. The classroom teacher and a problem-solving team utilize the results of the universal screening data to together develop a plan to help close gaps in student learning. The RTI model was developed as an approach to addressing the following two major concerns. The first concern, as noted in Chapter 1, is that there had developed a *wait to fail* model which required that students have a specific gap between academic achievement and intellectual ability before they were able to receive special education services. Currently, in North Carolina, there must exist a 15 point discrepancy between a student's intellectual ability and their academic ability to qualify for special education services under the category Specific Learning Disabled. The discrepancy model has two major shortfalls. As previously discussed in Chapter 1, the first

shortfall is that this model does not help to identify students who would benefit from specific, targeted, interventions in a particular skill area. Secondly, because students must currently exhibit the 15 point discrepancy, to qualify for special education services, primary school students rarely exhibit this huge gap between intellectual and academic ability and therefore do not receive the support and interventions necessary to help them obtain grade level proficiency. As a result, the average age for a child to be diagnosed with a reading disability is age 10, which means that they have been performing below grade level for almost 5 years before they are able to receive any additional support.

When considering special education for students, another concern is that, it had been a common practice to identify students as exceptional children without first considering the quality of instruction they received in a general education classroom. One of the criteria that an Individualized Education Plan (IEP) Team must consider as part of their evaluation process is if the student had a lack of appropriate education. In this area, there are basically two factors to consider. First, did the student obtain high quality instruction from a licensed teacher in the regular education classroom? Secondly, was the student's attendance adequate to enable them to obtain the general education curriculum that was presented by the licensed classroom teacher? If either of these questions is *NO* then an IEP team cannot technically rule out a lack of appropriate instruction as the primary cause in the instructional gap that the student exhibits. The two factors led to changes in federal, state, and district policies with regard to special education and the implementation of RTI.

The purpose of RTI, then, is to provide additional support to all students who are experiencing difficulty in the classroom. When RTI is implemented with fidelity it ensures that the model for referring students for special education services is more accurate and that we are

indeed providing a solid core instructional program to all students. This model helps to eliminate students "*falling through the cracks* due to a poor core curriculum program in schools. As noted in Chapter 1, the Federal Government added clarifications to IDEA in 2006 in regards to the implementation of RTI in schools. As a result of this legislation, by 2011, forty-three states were using either RTI or the discrepancy model to determine eligibility for students in the Specific Learning Disabled category. Despite these promising results, RTI implementation is still uneven across the nation and even within individual states and districts.

Response to Intervention is a three or four tiered model that focuses on three layers of instruction. The first of these layers is Tier I or the universal tier. The universal tier is often referred to as the core curriculum. In this level, 80 to 90% of students should be meeting grade level expectations in the regular education classroom with the instruction provided by the classroom teacher. Tier I interventions are normally delivered via a whole class format with some limited small-group instruction. In this model, students should be assessed at least three times per year, typically at the beginning, middle, and end of the year utilizing a universal screening tool. Results of the universal screening tool would, ideally, indicate that between 80 and 90% of students are meeting grade level expectations with the regular classroom instruction. When fewer than 80 to 90% of students are meeting grade level expectations with regular instruction two problems can exist. First, there is a weakness in the core instructional practices and strategies being utilized with the classroom setting. Secondly, as a result of the poor core instruction, the upper two tiers become overloaded with students. It is, then, very important that classroom teachers utilize a variety of research-based instructional strategies, provide differentiation of the content, and provide adequate amounts of time for students to learn and understand new material.

The universal tier also requires that teachers obtain comprehensive data on their students. Teachers are expected to focus on the individual needs of students via differentiation and small group instruction within the context of their instructional day. It is also helpful for teachers to obtain information regarding student's individual learning styles and as well as interests to help engage them in daily activities. In this tier, teachers must learn to scaffold their instruction to reach their struggling students as well as continue to challenge the higher achieving students in the classroom. Students involved in tier I interventions would receive some additional support in a small group setting one to three times per week for five to ten minutes to target specific skills in addition to the regular instruction. When these things are done in conjunction with a minimum 90 minute literacy block and minimum 60 minutes of mathematics daily, there will be an increase in student learning and a decrease in the number of students performing below grade level expectations.

The second tier in Response to Intervention is often referred to as the targeted intervention tier. In Tier II, the interventions are designed to reach approximately 10 to 15% of the students in a classroom. These students are not able to successfully master grade level content with just the core curriculum and therefore require additional support to reach grade level expectations. The targeted tier is designed to specifically address skill deficits that have emerged as a result of the implementation of the universal screening tool. A key feature of Tier II is that students continue to receive the core instruction provided at Tier I as well as receiving an additional support service focused on the specific academic needs of the student.

One key to the success of Tier II interventions is the involvement of a collaborative team who studies the data and works together to propose specific research-based interventions that will address each child's unique skill deficits. This collaborative team, often called the problem -

solving team, meets at regular intervals to monitor each student's progress and to determine if the implemented interventions are meeting the needs of the student. The problem-solving team is composed of a variety of instructional staff such as teachers, counselors, school psychologists, administrators, instructional coaches, and parents. Students in Tier II typically receive interventions in small groups at least three to four times per week for a minimum of 30 minutes per session. At this level of intervention, small group sizes normally range between four and six students. These interventions can be provided by the regular classroom teacher, by a remediation teacher, a special education teacher, or other support staff trained in implementing the intervention with fidelity. Progress monitoring should occur at least biweekly but weekly monitoring will help ensure adequate progress is being made toward the skill deficits being targeted by the intervention.

Students in Tier II are normally working on prerequisite skills which they are lacking. Examples of some prerequisite skills for literacy include phonemic awareness, decoding, reading fluency, and reading accuracy. In the area of mathematics, some prerequisite skills are number recognition, fact fluency, and number sense. Students will routinely remain in Tier II for a minimum of six weeks, with their progress being reviewed at least every four weeks. The average student could remain in tier II as little as four weeks or as many as twelve weeks before the problem-solving team makes a determination as to whether the student needs to move up or down in the tier process. If a student is not experiencing growth or success at the Tier II level, then the problem-solving team may recommend that the student be moved to a more intensive tier of support.

Tier III is referred to as the intensive tier. This tier is designed to meet the specific needs of approximately one to five percent of all students. Just as in tier II, students in tier III will

receive the core instruction as well as the supplemental layers of instruction with a third, more intensive, layer of support being added. Tier III is the most individualized level of support as well as the most rigorous. Students at the intensive level need more frequent interventions, for longer periods of time, and in a more individualized setting. In this level of intervention, students typically will work one-on-one with the person providing interventions, but can be a in a group of no more than three students. At the tier II level, students may receive specific, targeted interventions as many as five days a week for up to one hour per session. It is imperative that interventions at the tier III level are building upon the other two layers of support. When a student reaches tier III, they are progress monitored at least once per week and regularly remain in tier III for a minimum of twelve weeks. At the end of the twelve week period, if a student has not demonstrated growth, a special education referral is often initiated. If however, a student does demonstrate growth they may continue in the intensive tier for a longer period of time or be moved back down to tier II.

Response to Intervention is presented as a three-tiered process; however, it is very important to note that the entire process is very fluid. Students often move between tiers depending upon the level of the material being presented in the classroom. Additionally, students may be in the response to intervention process for both reading and math or for only one subject. Finally, students can remain in the tiered process for an extended period of time or for only a short time and they can enter and exit tiers as needed to help them reach grade level expectations.

Purpose of the Study

This study was designed to create a uniform process of paperwork and administration for the implementation of Response to Intervention (RTI) in Pitt County Schools, specifically focusing on implementation at Pactolus Elementary School. The overall goal in creating this

uniform process and paperwork was to help increase the strike rate in special education referrals and assist in the problem of over-identification of children in the special education program. Beginning in July of 2020, North Carolina will move from the current 15-point discrepancy model for the identification of special education students with a learning disability to a multi-tiered system of support (MTSS) model. Response to intervention is a tiered intervention model that focuses specifically on the academic concerns where the MTSS model focuses on both the academic as well as the behavioral aspects of the whole child. The implementation of a successful RTI model at Pactolus School can then be expanded to include the application toward behavioral concerns as well as academic concerns.

The first step in this process was to obtain the support of both the superintendent of Pitt County Schools as well as the approval of the principal of Pactolus Elementary School. Once the support from these two individual was obtained, the next step was to determine a focus area for the project. I decided to focus this project on reading interventions in grades kindergarten through third at Pactolus School. I selected this subject area and grade span for several reasons. First, reading was an area in which students were struggling at Pactolus. Secondly, there already existed a universal screening tool that was being utilized by all teachers in grades kindergarten through third in the area of reading. Next, research has shown that early literacy is the key to success in higher levels of education. Finally, reading is a foundational skill that is needed to successfully navigate other core curriculum areas.

Once I decided upon the subject area and grade span, I began the process of creating a flowchart to outline the response to intervention process that would be implemented at Pactolus School. This process consists of fourteen steps that outline the specific actions that will be followed as a student moves through the three tiers of interventions. The flowchart (see Figure 1)

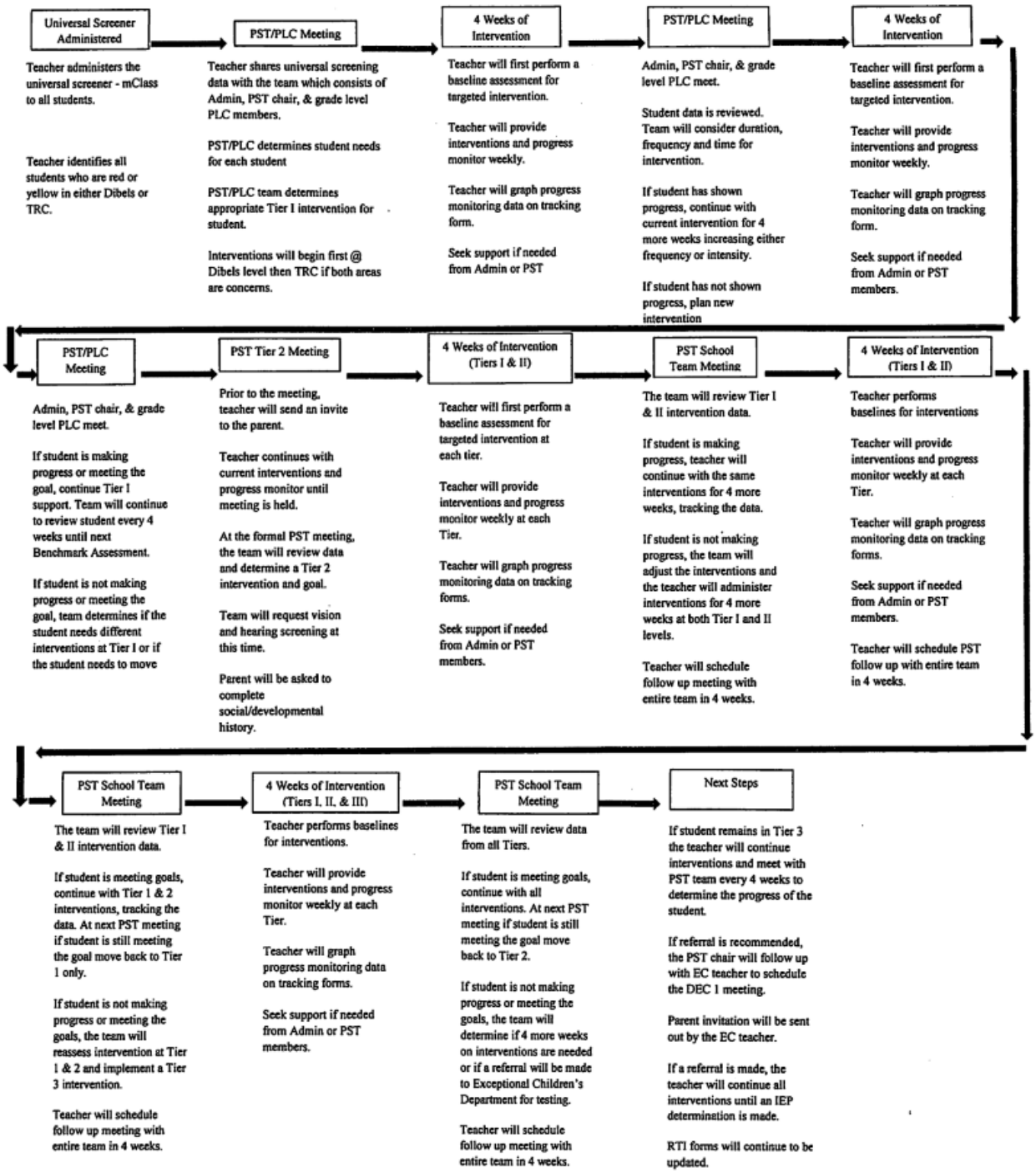


Figure 1. Response to intervention flowchart.

details what will occur at each step of the process and specifically lists how a student moves to higher or lower tiers based on their response to the interventions being implemented. The plan which was created notably addresses reading interventions as this was the focus of the study. This flowchart, however, could be used to address academic concerns in math as well as behavior concerns. The flowchart, which is located on the following pages, will be described in detail in the following section.

Research Components

The next section will detail the steps in the RTI flowchart tha**t** was developed to implement the tiered instruction at Pactolus School. I will also discuss the uniform paperwork that was developed to accompany each step in the flowchart. Information related to the teacher resource room will also be discussed and the contents of the resource room will be explored.

Response to Intervention Flowchart

The Response to Intervention flowchart begins with the administration of the universal screening tool to all students. Since this study is specifically focusing on reading, the universal screening tool used was mClass. The beginning of the year assessment was given to all students in grades kindergarten through third. Students were administered both the Dynamic Indicators of Basic Early Literacy Skills (Dibels) and Text Reading and Comprehension (TRC) test. Once all beginning of the year testing was complete, each homeroom teacher in kindergarten through third grades identified all students who were either well below grade level (red) or below grade level (yellow) in both the Dibels and/or TRC assessments. Once teachers had identified which students were currently meeting grade level expectations, they sent the RTI notification form home to parents, see Appendix H. The purpose of the RTI notification form is inform parents that their student is not currently meeting grade level expectations in reading and that

interventions will be put in place in specific skill areas to help close gaps and move their child toward meeting grade level expectations in reading.

The second step in the RTI flowchart is a professional learning community (PLC) and/or a problem-solving team (PST) meeting. The teacher will share their universal screening data with the team, which consists of an administrator, the PST chair, and grade level PLC members. The team will review each child's data and determine the skill needs of the student. The team will then determine an appropriate tier I intervention for the student. This process will be done for each student in the teacher's class who is currently not meeting grade level expectations; meaning they are either *red* or *yellow* in Dibels or TRC. If a student is below grade level expectations in both Dibels and TRC, the team will first begin intervention on the Dibels skills and will then move to TRC skills as the student makes progress. Once the team has determined an appropriate research-based intervention, the teacher will complete an RTI Tier I form 1 for each student to whom they are beginning interventions. See appendix I for RTI Tier I form 1.

Step three in the flowchart occurs over the next four weeks. The classroom teacher will first perform a baseline assessment for the targeted intervention which was determined during the PST/PLC meeting. Once the baseline assessment has been completed, the teacher will begin implementing the desired intervention and progress monitor the intervention weekly. The teacher will graph the progress monitoring data on RTI Tier I form 1 each week. They will seek support from administration or the PST team members if they have questions about the intervention or the implementation of the research-based intervention. The teacher will continue the interventions until they have collected the baseline data and four weeks of progress monitoring data.

The next stage in the flowchart is another PST/PLC meeting. This meeting will be attended by an administrator, the PST chair, and grade level PLC members. During this meeting, the team will review the student data. They will consider the duration, frequency, and amount of time the interventions have been in place for each individual student who is not performing at grade level expectations. If the student has shown progress with the implementation of the intervention, the teacher will continue the current intervention for four more weeks and will either increase the frequency or duration. They will begin RTI Tier I form 2 for these students. (see Appendix J) If a student has not shown any progress over the four-week period, the team may decide to either increase the frequency and the duration of the intervention or they may opt to select and implement a different research-based intervention that will address the same skill. The teacher will then begin RTI Tier I form 2 for these students indicating the new frequency, duration, or intervention on form 2.

The next step in the flowchart involves the teacher again performing a baseline assessment for the research-based intervention which is being implemented. They will obtain a baseline assessment for each student who was discussed during the meeting that is not meeting grade level expectations. Once the baseline assessment has been completed the teacher will again begin the research-based intervention and weekly progress monitoring. The teacher will graph the progress monitoring data on RTI Tier I form 2. They will seek the support of administration or PST team members if they have any questions about the intervention or the progress monitoring results.

Step six in the process involves another meeting with the PST/PLC teams. Like the previous meetings, the team members will include an administrator, the PST chair, and grade level PLC members. The team will again discuss each student who has been receiving

interventions due to below grade level performance on the beginning of the year universal screener. At this meeting, if a student is making progress or meeting the intervention goal, the teacher will continue with Tier I support. If the student has met the goal, the team will determine if there is another skill area on which the student needs to begin working or if the student will continue to work on the current skill but at a higher level. The teacher will begin a new RTI Tier I form 2 on the student. The team will continue to meet on this student every four weeks until the next Benchmark Assessment is given, which is typically the middle of the year assessment. If a student is not making progress or meeting the intervention goal, the team will determine if the teacher needs to try a different research-based intervention at Tier I or if the student needs a higher level of support and needs to be moved to Tier II for an additional layer of interventions. If the team determines that the student will remain at Tier I, a different research-based intervention is selected and the teacher will begin a new RTI Tier I form 2 on the student. If the team decides that the student needs an additional layer of support, the team will determine if the current Tier I intervention needs to continue or if a new intervention will be selected. The teacher will begin a new RTI Tier I form 2 and then proceed to the next step in the flowchart.

The flowchart continues with the scheduling of an official PST meeting. Prior to the date of the meeting, the teacher will send an invitation, RTI Tier II Problem-Solving Team Invitation (form 3) to the parent to attend the formal PST meeting (see Appendix K). The teacher will continue with the Tier I process by obtaining new baseline data, implementing the research-based intervention, and progress monitoring. They will continue this process until the formal PST meeting is held. At the formal PST meeting, which consists of the entire PST team as well as the parent, the team will review the student data and determine an appropriate research-based Tier II intervention and goal for the student. The teacher will begin an RTI Tier II form 4 for the

student (see Appendix L). During this meeting, the team will seek parent permission to conduct a vision and hearing screening as well as a speech/language screening. The parent will be provided a social/developmental history to complete at home and then return to the PST team.

The next step in the process involves the teacher performing the baseline assessment for the new Tier II intervention, implementing the research-based intervention and weekly progress monitoring. The teacher will continue to implement both the Tier I and Tier II interventions for four weeks and document the interventions on the respective Tier I and Tier II intervention forms. They will seek support from administration and PST team members regarding the interventions or assistance with completing the Tier II interventions. The teacher will schedule a follow-up meeting with the PST team approximately four weeks after the initial formal PST meeting date.

Another formal PST team meeting will take place approximately four weeks after the initial meeting. The teacher will notify the parent of the date of the meeting once it has been scheduled with the team. At the formal PST meeting, the team will review both Tier I and Tier II intervention data from the student. If the student is making progress, the teacher will continue both the Tier I and Tier II interventions for four more weeks, tracking the data on the appropriate RTI forms. If the student is not making progress, the team with adjust the interventions (either by adjusting the actual intervention, adjusting the duration, or adjusting the frequency) and the teacher will continue to implement interventions for four more weeks at both the Tier I and Tier II levels. All PST forms will be updated and the teacher will begin new forms to reflect any changes in the interventions.

Following the PST meeting, the teacher will again collect baseline assessment data on the student for both the Tier I and Tier II intervention. This information will be recorded on the

appropriate RTI form. The teacher will provide the research-based interventions at both the Tier I and Tier II levels as well as conduct progress monitoring weekly for four additional weeks. They will update the progress monitoring information on the appropriate RTI forms weekly. Teachers will seek the support of administration or PST members as needed to ensure that interventions are implemented with fidelity. The teacher will again schedule a follow-up meeting with the PST team approximately four weeks later.

The next step in the flowchart involves another formal PST meeting. The team will review the Tier I and Tier II information obtained on the students since the last meeting. If the student is meeting their goals, the teacher will continue with both Tier I and II interventions for four more weeks. After four weeks, the teacher will schedule another PST meeting and if the student is still meeting their goal, they will be moved back to Tier I interventions only. The team will at that time determine if a different Tier I intervention needs to be implemented for the student. If the student is not making progress or meeting their goals, the team will reassess the Tier I and Tier II interventions as well as add an appropriate research-based Tier III intervention for the student. The teacher will complete a new RTI Tier I form 2, an RTI Tier II form 4, and an RTI Tier III form 5 for the student (see Appendix M). At this point, another staff member will be assigned to assist the teacher with the implementation of the more intensive Tier III intervention. The teacher will schedule a follow-up meeting in approximately four weeks with the PST team.

The flowchart continues with the implementation of the Tier I, Tier II, and Tier III interventions for the student. Just as with previous stages, a baseline assessment will be taken for each intervention at all three tiers. The teachers will provide the interventions as prescribed and will progress monitor the student weekly on each of the interventions at all three tiers. The teacher will seek support from administration or PST team members if needed. Since the student

will be receiving three different interventions, the Tier III intervention will be provided, monitored, and tracked by another staff member. The teacher will schedule another follow-up meeting with the PST in approximately four weeks.

In approximately four weeks, the PST team will reconvene and review all the student data which has been collected to date. If the student is making progress and meeting their goals, the interventions will continue at all three levels for another four weeks. After four more weeks of interventions, if the student is continuing to meet their goals, they will be moved back to Tier II. The team will adjust the Tier I and II interventions based on the student's needs. If a student is not making progress or meting the goals, the team will make one of two decisions. The first option is to adjust the interventions at any or all of the tiers and continue interventions for four more weeks. If this option is selected, the teacher will again baseline, provide interventions at all levels, and progress monitor for four more weeks before again meeting with the PST team. The second option is to make a referral to the Exceptional Children's Department for testing. If a referral is made to the Exceptional Children's program, then a 90 day timeline begins. The teacher will continue interventions at all tiers, until the testing process is complete and a determination regarding eligibility for the Exceptional Children's program has been made.

The final step in the flowchart addresses next steps to be completed. If the PST determined that a student will remain in Tier III, the teacher will continue interventions and meet with PST approximately every four weeks to monitor the progress of the student. If a referral to special education is recommended, the PST chair will follow-up with the school's Exceptional Children's contact to schedule a DEC 1 meeting for the student. The invitation to the DEC 1 meeting is sent to the parent by the Exceptional Children's contact for the school. If a special education referral, the teacher will be responsible for continuing interventions until all testing is

complete and an eligibility meeting has been held. The teacher will continue to update all forms and maintain communication with both the parent and the problem-solving team. Once a student is referred to the problem-solving team at Tier II, the parent will always be invited to attend the problem-solving team meetings. The teacher will be responsible for notifying the parent of the date of the meeting. This process will continue until a student is either meeting grade level expectations and exits interventions, or until they are placed in special education.

This flowchart is designed to assist teachers with ensuring that they know the expectations for RTI implementation for students and that they have an overview of the entire process. This process is designed to be a very fluid method that will help to ensure that the individual learning needs of all students are being met and that appropriate interventions are being implemented to help students reach grade level proficiency. The flowchart is specifically designed to ensure that the interventions are being monitored on a regular and consistent basis and that the interventions are being implemented with fidelity.

Teacher Resource Room

The next portion of my problem of practice involved the creation of a teacher resource room at Pactolus School. The purpose of this room was that teachers would be able to have ready-made interventions they could begin implementing as soon as appropriate interventions were determined in either the smaller professional learning committee meetings with select members of the problem-solving team or in the larger school-based problem-solving team meetings. One of the major concerns from teacher regarding the implementation of interventions was the amount of time they had to spend creating materials to use for their interventions. This room was therefore created to enable teacher to be able to access intervention materials without having to spend a lot of time creating them. The resources in this room were focused on reading

skills as this was the primary focus for our RTI process. All the interventions in the room were research-based interventions that would correlate with the Dibels and TRC skills being assessed by the universal screening tool.

The Dibels tool assesses students in a variety of areas based on their individual grade level. In Kindergarten students are assessed at the beginning of the year on first sound fluency (FSF) and letter naming fluency (LNF). At the beginning of the year the goal is for FSF is 10 and letter naming fluency does not have a goal at any stage. First sound fluency is a measure of phonemic awareness skills and tests the student's ability to hear and produce initial sounds in words. Letter naming fluency assesses the student's ability to correct identify both upper and lower case letters of the alphabet. At the middle of the year assessment, kindergarten students are again assessed in FSF and LNF. They are also assessed in phoneme segmentation fluency (PSF) and nonsense word fluency with correct letter sounds (NWF-CLS). The goal for FSF at the middle of the year is 30, the goal for PSF is 20, and the goal for NWF-CLS is 17. Phoneme segmentation fluency is designed to assess a student's ability to segment three and four phoneme words into their individual phonemes fluently. Nonsense word fluency is based on the alphabetic principle including letter-sound correspondence in which letters represent their most common sounds and the ability to blend letters into words. The correct letter sound portion of the assessment only looks at a student's ability to correctly identify the common sound that each letter represents. Then at the end of the year, kindergarten students are assessed on LNF, PSF, and NWF-CLS. The goal for PSF is 40 and the goal for NWF-CLS is 28. Based on the results of the assessment, students are either well below expectations (red), below expectations (yellow), or meeting expectations (green) for each of the areas. Kindergarten students are also tested on the TRC portion of the assessment at the beginning, middle, and end of the year. On this assessment,

students can be well below expectations (red), below expectations (yellow), meeting expectations (green) or above expectations (blue).

First grade students are tested at the beginning of the year on LNF, PSF, and NWF-CLS, as well as nonsense word fluency whole-words read (NWF-WWR). First graders have a beginning of the year PSF goal of 40, NWF-CLS goal of 27, and NWF-WWR goal of 1. At the middle of the year, they are tested on NWF-CLS, NWF-WWR, and Dibels oral reading fluency (DORF). The DORF portion of the assessment looks at both a student's reading fluency as well as their accuracy. The goal for middle of the year NWF-CLS is 43, the goal for NWF-WWR is 8, the DORF fluency goal is 23 words per minute and the DORF accuracy goal is 78%. At the end of the year, first grade students are assessed on NWF-CLS, NWF-WWR, DORF fluency, DORF accuracy, and DORF retell which provides a comprehension check for students. The end of the year goal for NWF-CLS is 58, the goal for NWF-WWR is 13, the DORF fluency goal is 47 words per minute, the DORF accuracy goal is 90%, and the DORF retell goal is 15. Just as with kindergarten students, first graders are also assessed on TRC at the beginning, middle, and end of the year.

Second grade students are assessed on NWF-CLS, NWF-WWR, DORF fluency, DORF accuracy, and DORF retell at the beginning of the year. Their goal for NWF-CLS is 54, the goal for NWF-WWR is 13, the DORF fluency goal is 52 words per minute, the DORF accuracy goal is 90%, and the DORF retell goal is 16. At the middle of the year as well as the end of the year, second grade students are only assessed on DORF fluency, accuracy, and retell. The goal for middle of year on DORF fluency is 72 words per minute, DORF accuracy goal is 96%, and DORF retell goal is 21. Then at the end of the year, the DORF fluency goal is 87, the DORF

accuracy goal is 97%, and the DORF retell goal is 27. Similarly to the other two grades, second grade students also are assessed on TRC at the beginning, middle, and end of the school year.

Lastly, third grade students are assessed at the beginning, middle, and end of the year on DORF fluency, DORF accuracy, DORF retell, and Dibels maze comprehension task (DAZE). The purpose of the DAZE assessment is to determine if students can correctly select which word makes sense in a sentence from three choices. The beginning of the year goals for third graders are: DORF fluency 70, DORF accuracy 95%, DORF retell 20, and DAZE 8. At the middle of the year, the goals are: DORF fluency 86, DORF accuracy 96%, DORF retell 26, and DAZE 11. Then at the end of the year, the goals are: DORF fluency 100, DORF accuracy 97%, DORF retell 30, and DAZE 19. Just as with the other three grade levels, third grade students will take the TRC assessment at the beginning, middle, and end of the year.

All of this information was utilized to select and create interventions for the teacher resource room. The interventions were in labeled containers for the teachers to check out and use with their students in their classrooms. The interventions that were created for the resource room included:

- Core phonics MAZE assessments to be used to help students in need of DAZE interventions
- Fry Fast Phrase flash cards to be used to help with DORF fluency
- Irregular words flash cards to be used to help with both DORF fluency and accuracy
- Dolch sight words flash cards (levels Pre-Primer to Third Grade) to help with improving DORF fluency and accuracy
- Nonsense word fluency flashcards to work on both the correct letter sounds as well as whole words read. There were 7 different sets of flash cards available

- Alphabet flash cards to help with letter naming fluency
- Three and four letter word flash cards to be used with PSF fluency as well as FSF fluency
- TRC fluency and accuracy passages to assist with DORF fluency and DORF accuracy (Levels A - V)
- Written Comprehension Practice to assist students with improving written comprehension which begins to be tested at TRC Level F

Each of these interventions were in labeled containers in the PLC room where the teachers met for data meetings (see Appendix N).

Student Screening Data

The next portion of this portion of this problem of practice involved collecting the results of the universal screening data. The universal screening tool, as previously noted, was mClass. Students in grades kindergarten through third grade were given the mClass Dibels and TRC assessments at the beginning of the school year. Table 2 shows the summary of the universal screening results. Table 2 provides the total number of students at each level of Dibels and TRC by each homeroom teacher. In this table, red indicates the number of students who were assessed to be well below grade level. Yellow indicates the number the number of students who were determined to be below grade level, green represents the number of students who were on grade level, while blue represents the number of students who were assessed to be above grade level based on their performance on the test. It is important to note that Dibels testing only uses the categories well below grade level, below grade level, and on grade level while the TRC testing adds an additional level for students who are performing above grade level expectations.

From this table, you can see that a total of 22 kindergartners were red in Dibels, 15 were yellow

Table 2

Universal Screening Data

Teacher & Grade Level	Student Levels	Dibels Summary	Student Levels	TRC Summary
Kindergarten Teacher A	Red	3	Red	20
	Yellow	7	Yellow	0
	Green	10	Green	0
			Blue	0
Kindergarten Teacher B	Red	9	Red	17
	Yellow	4	Yellow	0
	Green	5	Green	0
			Blue	1
Kindergarten Teacher C	Red	10	Red	19
	Yellow	4	Yellow	1
	Green	7	Green	1
			Blue	0
1st Grade Teacher A	Red	4	Red	5
	Yellow	5	Yellow	4
	Green	14	Green	4
			Blue	10
1st Grade Teacher B	Red	4	Red	1
	Yellow	5	Yellow	5
	Green	13	Green	4
			Blue	12
1st Grade Teacher C	Red	6	Red	3
	Yellow	7	Yellow	1
	Green	9	Green	7
			Blue	11
2nd Grade Teacher A	Red	5	Red	7
	Yellow	2	Yellow	2
	Green	12	Green	8
			Blue	3

Table 2 (continued)

Teacher & Grade Level	Student Levels	Dibels Summary	Student Levels	TRC Summary
2nd Grade Teacher B	Red	5	Red	6
	Yellow	1	Yellow	3
	Green	12	Green	4
			Blue	5
2nd Grade Teacher C	Red	4	Red	5
	Yellow	3	Yellow	2
	Green	9	Green	8
			Blue	1
2nd Grade Teacher D	Red	2	Red	1
	Yellow	2	Yellow	6
	Green	13	Green	8
			Blue	2
3rd Grade Teacher A	Red	5	Red	8
	Yellow	2	Yellow	3
	Green	12	Green	4
			Blue	4
3rd Grade Teacher B	Red	5	Red	3
	Yellow	2	Yellow	6
	Green	12	Green	3
			Blue	7
3rd Grade Teacher C	Red	5	Red	8
	Yellow	2	Yellow	0
	Green	10	Green	8
			Blue	1
3rd Grade Teacher D	Red	6	Red	8
	Yellow	3	Yellow	2
	Green	9	Green	2
			Blue	6

in Dibels, and 22 were green in Dibels. This means that at the beginning of the year, approximately 63% of students entering kindergarten at Pactolus Elementary were either below grade level or well below grade level expectations. In the area of TRC, the results of the universal screener are even more dramatic. The TRC testing indicated that 56 students were well below grade level expectations in text reading comprehension, 1 student was below grade level expectations, 1 student was meeting grade level expectations, and 1 student was exceeding grade level expectations. Based on this information, approximately 96.6% of students entering kindergarten at Pactolus Elementary were either below grade level or well below grade level expectations in TRC. Using this information, the problem-solving team decided that kindergarten teacher would not officially begin documenting interventions and following the new flowchart until middle of the year testing was completed as the majority of the kindergarten students were below where they should be academically when entering kindergarten.

When reviewing the first grade data, 14 students were well below grade level in Dibels, 17 students were below grade level in Dibels, and 36 were performing at grade level expectations in Dibels. These results indicated that approximately 46.3% of first grade students were well below or below grade level in Dibels. In the area of TRC, 9 students were well below grade level, 10 students were below grade level, 15 were on grade level, and 33 were above grade level expectations. This data indicated that approximately 28.4% of first grade students were not meeting grade level expectations at the beginning of the school year in TRC.

A review of second grade data showed that 16 students were well below grade level in Dibels, 8 were below grade level in Dibels, and 46 students were performing at grade level expectations. Overall, approximately 34.3% of students were not meeting grade level expectations based on the universal screening at the beginning of the school year. In terms of TRC, 19 students were

well below grade level, 13 were below grade level, 28 were at grade level, and 11 were above grade level. These results show that at the beginning of the year approximately 45.7% of the second grade students were either well below or below grade level expectations in TRC.

Lastly, in third grade, 21 students were well below grade level in Dibels, 9 were below grade level, and 43 students were meeting grade level expectations in Dibels. Overall, approximately 41% of all third grade students were either well below or below grade level expectations in Dibels at the beginning of the year. In the area of TRC, 27 students were well below grade level, 11 were below grade level, 17 students were at grade level, and 18 were above grade level expectations. This data indicates that overall, approximately 52.1% of students were either well below or below grade level expectations in text reading and comprehension.

Once the initial testing had concluded, the RTI process was put into place. As a result of this information, first grade teachers initially put 28 students into the RTI process at Pactolus School. This number represents approximately 42% of the grade level. Teacher A initially placed 6 students into the RTI process, teacher B placed 10 students into the RTI process, and teacher C placed 13 students into the RTI process. If a student was red or yellow in both Dibels and TRC, the teacher initially began the RTI process for the Dibels skills as these are the more foundational skills.

In second grade, there were a total of 31 students who were started in the RTI process. This number represents approximately 44.3% of the total number of students enrolled at Pactolus School. Teacher A initially started the RTI process for 8 students, teacher B started RTI for 9 students, teacher C had 8 students in the RTI process and teacher D had 6 students in the process. Just as with first grade students, if a student was red or yellow in both Dibels and TRC the

teacher first began putting interventions in place for the Dibels skills before working on the TRC skills.

The third grade began the RTI process for a total of 30 students. This number represents approximately 41.1% of the total population of third grade. Teacher A began the RTI process for 9 students, teacher B began with 7 students, teacher C had 8 students, and teacher D had 6 students involved in the RTI process. Just as with first and second grades, if a student was not meeting grade level expectations in both Dibels and TRC, the teacher first began interventions with the Dibels skills as they are the most fundamental skills that must first be obtained for a student to read.

At the middle of the year, when mClass benchmarking testing was completed, first grade teachers added an additional nine students into the RTI process, second grade teachers added an additional seven students, and third grade teachers added three students. This brought the total number of first graders in RTI to 38, the total number of second graders to 38, and the total number of third graders to 33. In addition, the Kindergarten teacher officially began the RTI process for their students at middle of the year. Kindergarten teacher A placed six students in the process, kindergarten teacher B placed eight students in the process, and kindergarten teacher C placed seven students in the process. The total number of kindergarten students in the RTI process was 21 students which represented approximately 35.6% of the total kindergarten population.

Intervention Tracking

With the universal screening process complete for all students in grades kindergarten through third, the RTI implementation began. The first PLC/PST meetings were held on October 22nd for first through third grade teachers. At these meetings, the team began following the RTI

flowchart for the implementation of the process. Subsequent meetings were held for first grade on December 3rd, January 27th, February 25th, April 7th, and May 4th. At these meetings, the team reviewed the information and updated the intervention tracking form, see Appendix O. The second grade held subsequent meetings on December 3rd, January 14th, February 25th, April 7th, and May 5th. The information from these meetings can be found in Appendix P. In the third grade, additional meetings were held on December 1st. January 14th, March 7th, April 7th, and May 11th. Information from these meetings is located in Appendix Q. In kindergarten, the first official meeting was held on January 21st with additional meetings to review the data held on March 3rd, April 14th, and May 15th. The information from these data meetings is located in Appendix R.

Results

The students were given the end of the year assessment in mClass in May and the results of this testing was reviewed as well as the intervention data. I will begin by comparing the results of the universal screening data obtained at the beginning of the school year to the end-of-year screening results obtained from the same screening tool. I will complete this analysis for each grade level and then provide an overall summation of the results from grades K-3.

Kindergarten Results

Table 3 shows the results from the Universal Screening given at the beginning of the year as well as the End-of-Year Screening results for students in Kindergarten. I will begin first with kindergarten teacher A. At the beginning of the school year, teacher A had 10 students who were on grade level as compared with 16 who were on grade level at the end of the year. This is an increase from 50% to 80%. At the beginning of the school year, this teacher had no students who were on grade level in TRC, but at the end of the year 90% of her students were at or above

Table 3

Kindergarten Comparison Results

Class	Level	Dibels BOY	Dibels EOY	Level	TRC BOY	TRC EOY
	Red	3	1	Red	20	2
Kinder - A	Yellow	7	3	Yellow	0	0
	Green	10	16	Green	0	5
				Blue	0	13
	Red	9	0	Red	17	2
Kinder - B	Yellow	4	4	Yellow	0	3
	Green	5	14	Green	0	3
				Blue	1	10
	Red	10	3	Red	19	3
Kinder - C	Yellow	4	1	Yellow	1	2
	Green	7	17	Green	1	1
				Blue	0	15

grade level in TRC; which means they were either blue or green. All of her students showed growth from the beginning of the year in TRC to the end of the year in TRC. Of the six students who began interventions at the middle of the year, three of them exited interventions at the end of the year due to meeting grade level performance expectations. This teacher had one student who was referred for special education testing and that student qualified for special education in the area of Developmentally Delayed.

Kindergarten teacher B placed eight students in interventions at the middle of the year. Two of her eight students exited interventions at the end of the year because they were meeting grade level expectations. Teacher B also had two students who were referred for special education testing and both students placed. One student qualified in the area of Speech Language and the other student qualified in the area of Developmentally Delayed. At the beginning of the year, Teacher B had 5 students on grade level in Dibels and 14 students on grade level at the end of the year. This is an increase in on grade level performance from 28% to 78%. At the beginning of the year only 5% of this teacher's class was at or above grade level expectations in TRC and by the end of the year, 68% of her class was at or above grade level expectations in TRC. In teacher B's class, 100% of her students showed growth in TRC from the beginning to the end of the school year.

Kindergarten teacher C had seven students to begin interventions at the middle of the year and two of them exited interventions at the end of the year by meeting grade level expectations. Teacher C did not have any special education referrals. At the beginning of the school year, teacher C had 33% of her students on grade level in Dibels and at the end of the year 81% of her students were on grade level. At the beginning of the school year teacher C had 5% of her class at or above grade level expectations in TRC and by the end of the year 76% of her

class was at or above grade level expectations in TRC. In teacher C's class, 100% of her students showed growth from the beginning of the year to the end of the year assessment in TRC. Appendix S contains the data related to students who entered and exited interventions during the school year.

First Grade Results

Table 4 shows the results from beginning of the year testing as well as the results from end of the year testing. In first grade, teacher A had a total of seven students who were receiving interventions. She had two students who were referred for special education testing and both students qualified for services in the area of Specific Learning Disability. At the beginning of the school year 61% of the class was on grade level in Dibels as compared to 48% at the end of the school year. At the beginning of the school year, teacher A had 61% of her students at or above grade level in TRC and ended the year with the same proficiency. In teacher A's class, 96% of the students demonstrated growth in TRC levels.

In teacher B's class, there were 15 students who were receiving interventions and by the end of the year six students had exited interventions because they were meeting grade level expectations. Teacher B did not have any students who were referred for special education testing. At the beginning of the year in Dibels, 59% of the students were on grade level as compared to 50% at the end of the year. In teacher B's class at the beginning of the year 70% of the students were at or above grade level expectations in TRC and by the end of the year 91% of her students were at or above grade level expectations in TRC. All of the students in teacher B's class demonstrated growth in TRC from the beginning to the end of the year.

Teacher C had 16 students in interventions and three of these students exited interventions at the end of the school year because they had obtained grade level proficiency in

Table 4

First Grade Comparison Results

Class	Level	Dibels BOY	Dibels EOY	Level	TRC BOY	TRC EOY
	Red	4	7	Red	5	4
1st Grade - A	Yellow	5	5	Yellow	4	5
	Green	14	11	Green	4	3
				Blue	10	11
	Red	4	2	Red	1	0
1st Grade - B	Yellow	5	9	Yellow	5	2
	Green	13	11	Green	4	6
				Blue	12	14
	Red	6	4	Red	3	1
1st Grade - C	Yellow	7	11	Yellow	1	7
	Green	9	7	Green	7	3
				Blue	11	11

TRC. At the beginning of the year, 41% of the students were on grade level in Dibels as compared to 32% at the end of the year. At the beginning of the year 78% of this teacher's students were at or above grade level expectations in TRC and at the end of the year 65% of the students were at or above grade level expectations in TRC. Despite the decline in the percentage of students who were at or above grade level at the end of the year, 100% of teacher C's students showed growth in TRC. Teacher C did not have any special education referrals during this school year. Appendix S contains the data related to students who entered and exited interventions during the school year.

Second Grade Results

In the next section, I will discuss the results from the second grade beginning and end of the year screening. The data utilized is located in Table 5. In second grade, at the beginning of the school year, teacher A had 63% of her students on grade level in Dibels and ended the year with 74% of her students on grade level. Teacher A had nine students in interventions and four of the students exited due to meeting grade level expectations. This teacher did not have any special education referrals this school year. At the beginning of the year, 53% of teacher A's class was at or above grade level expectations and by the end of the year 68% of her students were at or above grade level expectations. In teacher A's class, 100% of the students demonstrated growth in TRC from the beginning to the end of the school year.

In teacher B's class, 67% of her students were on grade level in Dibels at the beginning of the school year and 67% of her students were on grade level at the end of the school year. In teacher B's class, ten students were in interventions and four of them exited by the end of the school year. Teacher B has one student who was referred for special education testing, but did not meet the 15 point discrepancy to be identified as specific learning disabled. At the beginning

Table 5

Second Grade Comparison Results

Class	Level	Dibels BOY	Dibels EOY	Level	TRC BOY	TRC EOY
	Red	5	4	Red	7	4
2nd Grade - A	Yellow	2	0	Yellow	2	2
	Green	12	15	Green	8	8
				Blue	3	5
	Red	5	3	Red	6	3
2nd Grade - B	Yellow	1	3	Yellow	3	3
	Green	12	12	Green	4	7
				Blue	5	5
	Red	4	2	Red	5	2
2nd Grade - C	Yellow	3	3	Yellow	2	3
	Green	9	11	Green	8	5
				Blue	1	6
	Red	2	3	Red	1	1
2nd Grade - D	Yellow	2	2	Yellow	6	2
	Green	13	12	Green	8	9
				Blue	2	5

of the school year, 50% of teacher B's class was at or above grade level in TRC and by the end of the year 67% of her students were at or above grade level. All the students in teacher B's class demonstrated growth in TRC from the beginning to the end of the school year.

In teacher C's class, at the beginning of the year, 56% of the students were on grade level in Dibels and 69% of the students were on grade level at the end of the year. Teacher C had nine students who were in interventions and five of them exited by the end of the school year. Teacher C did not have any special education referrals during the year. At the beginning of the year 56% of teacher C's students were at or above grade level expectations and by the end of the school year 69% of her students were at or above grade level expectations in TRC. All of the students in teacher C's class demonstrated growth in TRC from the beginning of the school year to the end.

In teacher D's class 76% of the students were on grade level in Dibels at the beginning of the school year and 76% were on grade level at the end of the school year. Teacher D's class had ten students in interventions and by the end of the school year six had exited interventions due to meeting grade level expectations. At the beginning of the school year 59% of teacher D's students were at or above grade level expectations in TRC and by the end of the year 82% of the class was at or above grade level expectations. Teacher D did not have any special education referrals and 100% of her students demonstrated growth from the beginning to the end of the year in TRC. Appendix S contains the data related to students who entered and exited interventions during the school year.

Third Grade Results

The next section will explore the data collected from beginning of the year and end of the year for third grade students. Table 6 lists the data that was collected. In third grade, teacher A began the year with 63% of her students on grade level and ended the school year with 63% of

Table 6

Third Grade Comparison Results

Class	Level	Dibels BOY	Dibels EOY	Level	TRC BOY	TRC EOY
	Red	5	5	Red	8	3
3rd Grade - A	Yellow	2	2	Yellow	3	1
	Green	12	12	Green	4	5
				Blue	4	10
	Red	5	3	Red	3	1
3rd Grade - B	Yellow	2	2	Yellow	6	2
	Green	12	14	Green	3	5
				Blue	7	11
	Red	5	3	Red	8	5
3rd Grade - C	Yellow	2	3	Yellow	0	2
	Green	10	11	Green	8	3
				Blue	1	7
	Red	6	5	Red	8	7
3rd Grade - D	Yellow	3	3	Yellow	2	3
	Green	9	10	Green	2	4
				Blue	6	4

her students on grade level. Teacher A had nine students in interventions and by the end of the year, five students had exited interventions due to meeting grade level expectations. In teacher A's class at the beginning of the year 42% of students were at or above grade level expectations in TRC and by the end of the year 79% were at or above grade level expectations in TRC. Teacher A did not have any special education referrals and 95% of her students demonstrated growth in TRC from the beginning to the end of the school year.

At the beginning of the school year, Teacher B had 63% of her students on grade level in Dibels and at the end of the school year 74% of her students were on grade level in Dibels. Teacher B had eight students in interventions and two exited interventions as a result of meeting grade level expectations. At the beginning of the year 53% of teacher B's class was at or above grade level expectations and by the end of the year 59% of the students were at or above grade level expectations. Teacher B had one special education referral and the student did qualify under the category of Specific Learning Disabled. In teacher B's class 100% of students demonstrated growth in TRC from the beginning to the end of the school year.

In teacher C's class 59% of the students were on grade level in Dibels at the beginning of the year and 65% were on grade level at the end of the year. Teacher C had eight students in interventions and five were able to exit by the end of the year. At the beginning of the year 47% of teacher C's students were at or above grade level and by the end of the year 84% were at or above grade level. Teacher C did not have any special education referrals and 100% of her students demonstrated growth in TRC from the beginning to the end of the school year.

Lastly, in teacher D's class 50% of the students were on grade level in Dibels at the beginning of the year and 56% were on grade level by the end of the school year. Teacher D's class had eight students in interventions and two were able to exit. At the beginning of the school

year 44% of teacher D's students were at or above grade level and at the end of the year the percentage was the same. Despite not seeing an increase in student's meeting or exceeding grade level expectations, 89% of teacher D's students demonstrated growth in TRC from the beginning to the end of the school year. Teacher D did not have any special education referrals. Appendix S contains the data related to students who entered and exited interventions during the school year.

Summary of K-3 Results

In this section, I will discuss the overall grade level results for students in grades Kindergarten through Third (see Table 7). When looking at all four grades as a whole, the overall percentage of students who were at or above grade level expectations in Dibels grew from 147 students to 173 students from beginning of the year to end of the year. This is an increase in on grade level expectations from 55% to 64%. Overall student's TRC proficiency grew from 124 students at beginning of the year to 194 students at the end of the year. This is an increase from 46% at the beginning of the year to 72% at the end of the year. A total of 130 students were in interventions and 49 were able to exit interventions due to meeting grade level expectations. This means that approximately 37.7% of the students who began interventions due to not meeting grade level expectations reached grade level proficiency standards by the end of the school year. The other major data that I was seeking to improve was the strike rate for special education referrals. The previous school year, there were 15 referrals to special education with only 6 students meeting eligibility requirements. This represented a strike rate of only 40%. This year, a total of 7 students were referred for special education testing and 6 of the students met the eligibility requirements for special education. This represents a strike rate of 85.7%.The only student who did not qualify did not meet the 15 point discrepancy for the specific learning disabled category; however if the team had initially considered qualification in

Table 7

K-3 Comparison Results

	Dibels		TRC	
Grade Level	BOY	EOY	BOY	EOY
Kindergarten	22	47	2	47
First Grade	36	29	48	48
Second Grade	46	50	39	50
Third Grade	43	47	35	49
Total	147	173	124	194

the area of Intellectually Disabled Mild, the students would have placed for special education services. Appendix T shows the comprehensive mClass data for beginning, middle, and end of the year in both Dibels and TRC. This is the information that was utilized to determine the results listed above.

Conclusion

The results of the data from the implementation of RTI were extremely positive. The monthly data meetings provided an opportunity for teachers, the problem solving team chair, the administrator, and coaches to collectively discuss each child's individual progress and needs in a small group setting. At the conclusion of these meetings, teachers were able to obtain the new materials they needed in order to be able to continue to provide interventions to students. Having an administrator present at these meetings also ensured that teachers were following through with the implementation of the interventions with fidelity.

The flowchart proved to be a valuable tool in assisting both teachers and the problem-solving team with successfully implementing and monitoring interventions. This provided a systematic, step-by-step process that teachers could follow to best meet the needs of their individual students. The flowchart could also be shared with parents to help ensure that they understood the process that was occurring. By sharing this information with parents, teachers were able to better help them understand the process that must be followed and the steps that occur prior to referring a student for special education testing.

The teacher resource room provided teachers with easily accessible interventions they could use with their students. The resource room allowed teachers the opportunity to have more time to review the data and implement interventions because they did not have to seek out interventions. After data meetings concluded, teachers were able to pick up the new materials or

in some cases a different level of the current materials and take them back to their classrooms to immediately be used with the students. The teachers did not have to spend countless hours finding research-based interventions nor did they have to spend the time to create any of the materials needed for the interventions.

When implemented with fidelity, the problem solving process does assist teachers with helping students to meet grade level expectations as well as fill gaps in student learning. The data shows that with careful monitoring of instruction and appropriate intervention students were able to achieve grade level proficiency. When looking specifically at Dibels data, the percentage of students who were meeting grade level expectations increased from 55% at the beginning of the school year to 64% at the end of the school year. This represents an increase of 9% overall in Dibels performance for students in grades K-3. When reviewing TRC data, the results are even more impressive. At the beginning of the school year, only 46% of students in grades K-3 were meeting grade level expectations while at the end of the year, this number increased to 72%. This represents an overall increase of 26% from beginning of the year to end of the year. Lastly, it is important to note that 130 students in grades K-3 began reading interventions during the 2015-2016 school year. Of these 130 students, 49 were able to exit interventions because they were successfully meeting grade level expectations in reading.

During the 2014-2015 school year, there were 15 students referred for special education testing at Pactolus School and only six of them met the criteria for identification. This represented a strike rate of only 40%. During the 2015-2016 school year, only seven students were referred for special education testing. This represents less than half the number of students who were referred for testing during the previous school year. Of the seven students who were referred for testing, six of the students actually met the criteria for identification under the special

education program. The only student who did not meet criteria did not exhibit a 15-point discrepancy in her intellectual ability versus her academic ability. It is important to note, however, that this student exhibit significant cognitive delays and if the IEP team had initially considered the area of Intellectually Disabled Mild, the student would have qualified for services. This evidence supports the idea that a multi-tiered system of support does enable students to successfully make the academic gains necessary for them to meet grade level expectations.

Recommendations

Moving forward, the RTI process needs to be expanded to include all grade levels at Pactolus School in the area of Reading. Additionally, the RTI process needs to expand to include students who are struggling with mathematics in grades K-8. It is my recommendation that this process be phased in to allow K-3 mathematics interventions be added during the 2016-2017 school year. Interventions need to be added to the teacher resource room for reading in grades 5-8 as well as adding interventions for K-3 mathematics. I would suggest having a problem-solving team that works with grades K-4 and a different team that works with grades 5-8 to ensure that the team members are able to effectively follow the flowchart and be able to monitor intervention implementation with fidelity. I would also suggest that monthly data meetings continue for grades K-3 and be expanded to included data meetings for grades 4-8. In these data meetings, the team should look at both reading and math data for grades K-3. Following this pattern of phasing in interventions, I would recommend adding 4-8 mathematics and the resources needed for interventions during the 2017-2018 school year. It is imperative that a representative from the school administrative team participate in these monthly data meetings. Data meetings provide the opportunity to review and effectively monitor students' progress as

interventions are being implemented. The presence of a representative from the administrative team helps to ensure that interventions are being implemented and monitored with fidelity to meet the instructional needs of each individual student.

Lastly, mClass is a great universal screening tool; however, it is only currently available in Pitt County for students in grades K-3. I would suggest purchasing additional licenses to be able to utilize the mClass tool with all students in grades K-5. I would also suggest that the district consider purchasing a universal screener such as AIMS web or iReady for K-8 mathematics and 6-8 reading. In order for the RTI process to effectively be implemented in the larger K-8 setting a universal screening tool must be purchased district-wide. An effective and research-based universal screening tool that is implemented with fidelity across the district will be pivotal in the success of this process.

REFERENCES

Al Otaiba, S., Wagner, R. K., & Miller, B. (2014). "Waiting to fail" Redux: Understanding inadequate response to intervention. *Learning Disability Quarterly*, *37*(3), 129 -133. doi: 10.1177/0731948714525622

A.P. by Powers v. Woodstock Bd. Of Education, U.S. District Court, Connecticut, 572 F. Supp. 2d 2221. (2008).

Baltimore City Public School System, Maryland State Education Agency, 108 Law Review Press 2530. (2007).

Basham, J. D., Israel, M., Graden, J., Poth, R., & Winston, M. (2010). A comprehensive approach to RTI: Embedding universal design for learning and technology. *Learning Disability Quarterly*, *33*(4), 243 – 255. Retrieved from http://www.jstor.org/stable/23053228

Bender, W. N. (2009). *Beyond the RTI Pyramid: Solutions for the first years of implementation.* Bloomington, IN: Solution Tree Press.

Bergan, J. R. (1995). Evolution of a problem-solving model of consultation. *Journal of Educational and Psychological Consultation*, *6*(2), 111 – 123. doi: 10.1207/s1532768xjepc0602_2

Bernhart, V. L., & Herbert, C. L. (2011). *Response to intervention and continuous school improvement: Using data, vision, and leadership to design, implement, and evaluate a schoolwide prevention system.* Larchmont, NY: Eye on Education, Inc.

Bradley, M. C., Daley, T., Levin, M., O'Reilly, F., Parsad, A., Robertson, A., & Werner, A. (2011). *IDEA National Assessment Implementation Study – Final Report.* Washington, DC: US Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from http://www.ies.ed.gov/ncee….201140207.pdf

Brown-Chidsey, R., & Steege, M. W. (2010). *Response to intervention: Principles and strategies for effective practice.* New York, NY: The Guilford Press

Cook, C. R., Lyon, A. R., Kubergovic, D., Wright, D. B., & Zhang, Y. (2015). A supportive beliefs intervention to facilitate the implementation of evidence-based practices within a multi-tiered system of supports. *School Mental Health, 7*, 49–60. doi: 10.1007/s12310-014-9139-3

Coutinho, M., Oswald, D. P., & Best, A. M. (2002). The influence of sociodemographics and gender on the disproportionate identification of minority students as having learning disabilities. *Remedial and Special Education, 23*(1), 49–59. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/236324522?accountid=10639

Cuticelli, M., Coyne, M. D., Ware, S. M., Oldham, A., & Rattan, S. L. (2015). Improving vocabulary skills of Kindergarten students through a multi-tier instructional approach. *Intervention in School and Clinic*, *50*(3), 150–156. doi: 10.1177/1053451214542041

Division for Early Childhood of the Council for Exceptional Children, National Association for the Education of Young Children, and National Head Start Association. (2013). Frameworks for response to intervention in early childhood: Description and implications. *Communication Disorders Quarterly*, *35*(2), 108–119. doi: 10.1177/1525740113514111

El Paso Independent School District v. RICHARD R, 567 F. Supp. 2d 918 U.S. District Court, Western District of Texas. (2008).

Fuchs, D., & Fuchs, L. S. (2006). Introduction to response to intervention: What, why, and how valid is it? *Reading Research Quarterly*, *41*(1), 92–99. Retrieved from http://www.jstor.org/stable/4151803

Fuchs, D., Mock, D., Morgan, P. L., & Young, C. L. (2003). Responsiveness-to-intervention: Definitions, evidence, and implications for the learning disabilities construct. *Learning Disabilities Research & Practice*, *18*(3), 157–171. doi: 10.1111/1540-5826.00072

Fuchs, L. S., & Vaughn, S. (2012). Responsiveness-to-intervention: A decade later. *Journal of Learning Disabilities*, *45*(3), 195–203. doi: 10.1177/0022219412442150

Glover, T. A., & Albers, C. A. (2007). Considerations for evaluating universal screening assessments. *Journal of School Psychology*, *45*(2), 117 – 135. doi: 10.1016/j.jsp.2006.05.005

Hall, S. L. (2008). *Implementing response to intervention*. Thousand Oaks, CA: Corwin Press.

Harlacher, J. E., Potter, J. B., & Weber, J. M. (2015). A team-based approach to improving core instructional reading practices within response to intervention. *Intervention in School and Clinic*, *50*(4), 210 – 220. doi: 10.1177/1053451214546405

Hoover, J. J. (2011). Making informed instructional adjustments in RTI Models: Essentials for practitioners. *Intervention in School and Clinic*, *47*(2), 82–90. doi: 10.1177/1053451211414193

Howell, R., Patton, S., & Deiotte, M. (2008). *Understanding response to intervention: A practical guide to systematic implementation*. Bloomington, Indiana: Solution Tree.

Johnston, P. H. (2011). Response to intervention in literacy: Problems and possibilities. *The Elementary School Journal*, *111*(4), 511–534. doi: 10.1086/659030

J.S. et al. v. Attica Central Schools, U.S. District Court, Western District of New York, 47 IDELR 43. (2007).

Langley, G. J., Moen, R. D., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The improvement guide: A practical approach to enhancing organizational performance.* San Francisco, California: Jossey-Bass.

Loeser, L., & Makor, L. (2015). Proposed policy revisions: Specific learning disabilities. Retrieved from http://ec.ncpublicschools.gov/gcs04-taskforce-report.pdf

Marshall Joint School District No. 2 v C.D. by Brian and Traci D., U.S. District Court for the Western District of Wisconsin, 51 IDELR 242. (2009).

Mellard, F., & Johnson, E. (2008). *RTI: A practitioner's guide to implementing response to intervention*. Thousand Oaks, California: Corwin Press.

Metcalf, T. (2015). What's your plan? Accurate decision making within a multi-tier system of supports: Critical areas in Tier 1. Retrieved from http://www.rtinetwork.org/essential/tieredinstruction/tier1/accurate-decision-making-within-a-multi-tier-system-of-supports-critical-areas-in-tier-1#.VvX5wjKFDzo.email

National Center for Education Statistics. (2015). Special Education Data. Retrieved from http://nces.ed.gov/programs/digest/d15/tables/dt15_204.30.asp

North Carolina Department of Public Instruction. (2014). Policies for governing services for children with disabilities. Retrieved from http://ec.ncpublicschools.gov/policies/nc-policies-governing-services-for-children-with-disabilities/policies-children-disabilities.pdf

Northouse, P. G. (2016). *Leadership: Theory and practice*. Thousand Oaks, California: SAGE Publications, Inc.

President's Commission on Excellence in Special Education. (2001). A new era: Revitalizing special education for children and their families. Retrieved from http://www.ed.gov/inits/commissionsboards/whspecialeducation

Printy, S. M., & Williams, S. M. (2014). Principal's decisions: Implementing response to intervention. *Educational Policy, 29*(1), 179–205. doi: 10.1177/0895904814556757

Public Schools of North Carolina. Special Education Data. (2015). Retrieved from http://ec.ncpublicschools.gov/reports-data/child-count/reports/april-1

Reeves, S., Bishop, J., & Filce, H. G. (2010). Response to intervention (RTI) and tier systems: Questions remain as educators make challenging decisions. *The Delta Kappa Gamma Bulletin, 76*(4), 30–35. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/578232834?accountid=10639

Robins, J., & Antrim, P. (2013). Planning for RTI. *Knowledge Quest, 42*(1), 44–47. Retrieved from http://search.proquest.com.jproxy.lib.ecu.edu/docview/1437351956?accountid=10639

Shapiro, E. S., & Clemens, N. H. (2009). A conceptual model for evaluating system effects of response to intervention. *Assessment for Effective Intervention, 35*(1), 3–16. doi: 10.1177/1534508408330080

VanDerHeyden, A., & Burns, M. K. (2010). *Essentials of response to intervention*. Hoboken, NJ: John Wiley & Sons, Inc.

Walker, D. W.. & Daves, D. (2010). Response to intervention and the courts: Litigation-based guidance. *Journal of Disability Policy Studies, 21*(1), 40 – 46. doi: 10.1177/1044207310365060

Walker, J. D., Emanuel, N. J., Grove, R. E. Argabrite, B., Anne, E., & McGahee, D. W. (2012). The squeeze play: Will RtI unite or divide and conquer? *Journal of Cases in Educational Leadership*, *15*(2), 48 – 55. doi: 10.1177/1555458912448432

Whitten, E., Esteves, K. J., & Woodrow, A. (2009). *RTI Success: Proven tools and strategies for schools and classrooms*. Minneapolis, MN: Free Spirit Publishing Inc.

Wixson, K. K., & Valencia, S. W. (2011). Assessment in RTI: What teachers and specialists need to know. *The Reading Teacher*, *64*(6), 466–469. doi: 1031598/RT.64.6.13

Yell, M. L., & Walker, D. W. (2010). The legal basis of response to intervention: Analysis and implications. *Exceptionality: A Special Education Journal*, *18*(3), 124–137. doi: 10.1080/09362835.2010.491741

APPENDIX A: PCS EXCEPTIONAL CHILDREN DATA

School	DD	LD	OHI	Other
Elementary A (K-5)	12	18	1	23
Elementary B (K-5)	7	10	3	19
Elementary C (K-5)	16	21	7	41
Elementary D (K-5)	23	15	12	40
Elementary E (K-5)	12	12	4	39
Elementary F (K-5)	11	9	7	24
Elementary G (K-5)	17	2	3	21
Elementary H (K-5)	25	20	10	42
Elementary I (K-5)	21	16	3	37
Elementary J (K-5)	5	9	9	39
Elementary K (K-5)	0	19	7	14
Elementary L (K-5)	11	19	2	24
Elementary M (K-5)	4	10	4	35
Elementary N (K-5)	17	5	4	35
Elementary O (K-5)	0	17	13	24
Elementary P (K-5)	22	3	7	34
Totals – Elementary (K-5)	**203**	**205**	**96**	**491**
Middle A (6-8)	0	26	29	46
Middle B (6-8)	0	13	2	12
Middle C (6-8)	0	28	14	32
Middle D (6-8)	0	32	17	48
Middle E (6-8)	0	28	17	25
Middle F (6-8)	0	23	12	26
Middle G (6-8)	0	16	4	6
Totals – Middle (6-8)	**0**	**166**	**95**	**195**
K-8 School A	12	18	7	30
K–8 School B	8	52	28	32
K-8 School C	12	21	11	18
K-8 School D	5	19	10	29
K-8 School E	8	19	5	27
K-8 School F	8	10	2	9
Totals – K-8 Schools	**53**	**139**	**63**	**145**
High School A (9-12)	0	41	17	38
High School B (9 -12)	0	64	33	53
High School C (9-12)	0	31	12	27
High School D (9-12)	0	57	30	74
High School E (9-12)	0	40	20	50
High School F (9-12)	0	62	34	71
Totals – High (9-12)	**0**	**295**	**146**	**313**

Note. Data retrieved from the Comprehensive Exceptional Children Accountability System (CECAS) on February 16, 2016. DD = Developmental Delay; LD = Learning Disabled; OHI = Other Health Impaired; Other = All other categories of identification.

APPENDIX B: PACTOLUS SCHOOL EXCEPTIONAL CHILDREN DATA

School	DD	LD	OHI	Other
Pactolus School	7	19	5	26

Note. Data retrieved from the Comprehensive Exceptional Children Accountability System (CECAS) on March 25, 2016. DD = Developmental Delay; LD = Learning Disabled; OHI = Other Health Impaired; Other = All other categories of identification.

APPENDIX C: PITT COUNTY EXCEPTIONAL CHILDREN DATA

Year	LD	DD	OHI	Other	Total
2011-2012	756	137	379	1,257	2,529
2012-2013	789	353	387	1,345	2,874
2013-2014	809	366	424	1,381	2,980

Note. Data retrieved from the Public Schools of North Carolina website on September 5, 2016. DD = Developmental Delay; LD = Learning Disabled; OHI = Other Health Impaired; Other = All other categories of identification.

APPENDIX D: NORTH CAROLINA EXCEPTIONAL CHILDREN DATA

Year	LD	DD	OHI	Other	Total
2011-2012	69,165	13,486	32,726	76,884	192,261
2012-2013	71,337	13,975	33,743	76,361	195,416
2013-2014	72,485	14,316	34,507	76,067	197,375

Note. Data retrieved from the Public Schools of North Carolina website on September 5, 2016. DD = Developmental Delay; LD = Learning Disabled; OHI = Other Health Impaired; Other = All other categories of identification.

APPENDIX E: UNITED STATES EXCEPTIONAL CHILDREN DATA

Year	LD	DD	OHI	Other	Total
2011-2012	2,303,000	393,000	743,000	2,962,000	6,401,000
2012-2013	2,277,000	402,000	779,000	2,971,000	6,429,000
2013-2014	2,264,000	410,000	817,000	2,973,000	6,464,000

Note. Data retrieved from the National Center for Education Statistics website on September 5, 2016. DD = Developmental Delay; LD = Learning Disabled; OHI = Other Health Impaired; Other = All other categories of identification.

APPENDIX F: PCS 2014-2015 REFERRAL DATA

School	Number of Initial Referrals	Number of Eligible Students	Percent of Students Eligible	Number of Students Not Eligible	Percent of Students Not Eligible
Elem A	25	13	52%	12	48%
Elem B	27	20	74%	7	26%
Elem C	26	17	65%	9	35%
Elem D	33	19	58%	14	42%
Elem E	23	13	57%	10	43%
Elem F	16	9	56%	7	44%
Elem G	21	8	38%	13	62%
Elem H	40	25	63%	15	37%
Elem I	34	16	47%	18	53%
Elem J	19	13	68%	6	32%
Elem K	23	14	61%	9	39%
Elem L	17	9	53%	8	47%
Elem M	24	19	79%	5	21%
Elem N	18	11	61%	7	39%
Elem O	23	19	83%	4	17%
Elem P	29	9	31%	20	69%
Elem Totals	**398**	**315**	**79%**	**83**	**21%**
Middle A	12	4	33%	8	67%
Middle B	10	6	60%	4	40%
Middle C	8	5	63%	3	37%
Middle D	11	6	55%	5	45%
Middle E	12	6	50%	6	50%
Middle F	4	1	25%	3	75%
Middle G	13	4	31%	9	69%
Mid Totals	**70**	**32**	**46%**	**38**	**54%**
K-8 A	14	10	71%	4	29%
K-8 B	40	27	68%	13	32%
K-8 C	14	8	57%	6	43%
K-8 D	16	10	63%	6	37%
K-8 E	14	10	71%	4	29%
K-8 F	15	6	40%	9	60%
K-8 Totals	**113**	**71**	**63%**	**42**	**37%**

Note. Each school counselor provided data to the district lead counselor who compiled all the data for the 2013 – 2014 school year.

APPENDIX G: PCS ETHNICITY DATA

Grade Level	Asian	African American	Hispanic	American Indian/Alaskan Native	Multi-Racial	White
K	0	27	20	0	0	14
1	0	29	24	0	2	14
2	0	27	25	1	1	18
3	0	31	22	0	2	20
4	1	22	21	1	0	14
5	0	30	26	0	2	10
6	1	20	17	0	0	13
7	0	31	21	0	1	12
8	0	16	22	0	2	10
Total	**2**	**233**	**198**	**2**	**10**	**125**
%	**0.4%**	**40.8%**	**34.7%**	**0.4%**	**1.8%**	**21.9%**

Note. Data retrieved from PowerSchool on March 26, 2015.

APPENDIX H: RTI TIER I PARENT NOTIFICATION FORM

P a c t o l u s S c h o o l
3405 Yankee Hall Road
Greenville, *NC* 27834
Ph: 252-752-6941 | Fax: 252-758-5817

Steve Lassiter, Principal Shannon Cecil, Assistant Principal

Response to Intervention (RTI)

Tier I Parent Notification

Student:_____ Date: _____

Dear Parent/Guardian:

This letter is to inform you that your child is experiencing some difficulty in class with _____ and the current data indicates that he/she is not meeting grade level expectations in Reading. I will be working with a school- based problem-solving team to put interventions in place to assist your child in this area. Interventions will be conducted within the regular education classroom approximately 1 to 3 times per week for 5 to 10minutes. These interventions will occur for a minimum of four weeks and then your child's progress will be reviewed by a subset of the school-based problem-solving team. If no improvement is made with our first round of interventions, our Problem-Solving Team chair will contact you and begin a screening process for your child so that we can better understand his/her instructional needs and offer suggestions about ways to address those needs.

Please continue to monitor and assist your child with homework, stress good study habits, and encourage your child to give 100% every day. We look forward to working with you to help your child be more successful. If you have any questions or concerns, please feel free to contact me.

Classroom Teacher _____ Date _____

Parent's Signature: _____ Date _____

(Please sign and return this form to your child's teacher to acknowledge that you are aware that your child is performing below grade level expectations and that extra measures are being taken to help your child be successful in his/her academic endeavors.

APPENDIX I: RTI TIER 1 - FORM 1

RTI - Tier I Intervention Form

Student Name:_____ Teacher Name: _____

Targeted Skill Area: _____ Universal Screener: _____

Core Program Support Strategies							
What is already in place?							
	Learning Environment		Curriculum		Instruction		Accommodations
	Regular Classroom		Leveled Text		Explicit Instruction		Modified Assignments
	Inclusion Classroom		Tiered Assignments		Scaffolding of Instruction		Modified Grading
	Small Group		Off Grade Level Material		Pre-Test/Post-Test		Extended Time
	Flexible Grouping		Advanced Content or Curriculum		Re-Teaching		Read Aloud
	Remediation		Independent Research Assignment		Use of Graphic Organizer or Study Guides		Chunking of Material
	Other: (Please specify)		Specialized Curriculum		Additional Practice		Peer Helper
			Novel Studies		Differentiated Teaching Tools		Other: (Please specify)
			Other: (Please specify)		Other: (Please specify)		

Intervention Information

Intervention (Specify)	Frequency	Duration

*Goal: _____

Progress/Performance

	Baseline	Week 1	Week 2	Week 3	Week 4
Date	_____	_____	_____	_____	_____

Team Members Present: _____

Date of Meeting: _____

APPENDIX J: RTI TIER I FORM 2

RTI - Tier I Intervention Form

Student Name:_____ Teacher Name: _____
Targeted Skill Area: _____ Universal Screener: _____

Intervention Information

Intervention (Specify)	Frequency	Duration

*Goal: _____

Progress/Performance

	Baseline	Week 1	Week 2	Week 3	Week 4
Date	_____	_____	_____	_____	_____

Team Members Present:

_____

Date of Meeting: _____

APPENDIX K: RTI TIER II PROBLEM-SOLVING TEAM

INVITATION FORM 3

Tier II Problem-Solving Team Parent Invitation

School: Pactolus School
DATE: _____
TO: Parent/Guardian of _____
FROM: Patricia Hopkins & Shannon Cecil – RTI Facilitators

A TIER II PROBLEM-SOLVING TEAM MEETING HAS BEEN SCHEDULED FOR:

Date	**Time**	**Location**
		Conference Room

You are invited to attend. The Tier II Problem-Solving Team meets on a regular basis to offer assistance to students, teachers and parents regarding students' success in school. We would like to discuss your child's progress at this upcoming meeting.

The following people are scheduled to attend:

Parent/Guardian
RTI Facilitators – Ms. Hopkins & Ms. Cecil
Pactolus School Problem-Solving Team Members
Teacher

Our goal is for each child to have a successful school experience. Please feel free to call me at
(252) 752 – 6941.

Parent Signature: _____

(Sign and return to child's teacher)

[] I will attend this meeting as scheduled above.
[] I will be unable to attend. Please contact me to reschedule.
Email: _____
Phone: _____

cc: Persons scheduled to attend

APPENDIX L: RTI TIER II INTERVENTIONS FORM 4

RTI - Tier II Intervention Form

Student Name:_____

Teacher Name: _____

Targeted Skill Area: _____

Universal Screener: _____

Layers of Interventions/Frequencies

Tier I Intervention (Specify)	Frequency	Intensity
Tier II Intervention (Specify)	**Frequency**	**Intensity**

*Goal: _____

Progress/Performance

	Baseline	Week 1	Week 2	Week 3	Week 4
Date	_____	_____	_____	_____	_____

Team Members Present: _____

_____

Date of Meeting: _____

APPENDIX M: RTI TIER III INTERVENTION FORM 5

RTI - Tier III Intervention Form

Student Name:_____ Teacher Name: _____
Targeted Skill Area: _____Universal Screener: _____

Layers of Interventions/Frequencies

Tier I Intervention (Specify)	Frequency	Intensity
Tier II Intervention (Specify)	**Frequency**	**Intensity**
Tier III Intervention (Specify)	**Frequency**	**Intensity**

*Goal: _____

Progress/Performance

	Baseline	Week 1	Week 2	Week 3	Week 4
Date	_____	_____	_____	_____	_____

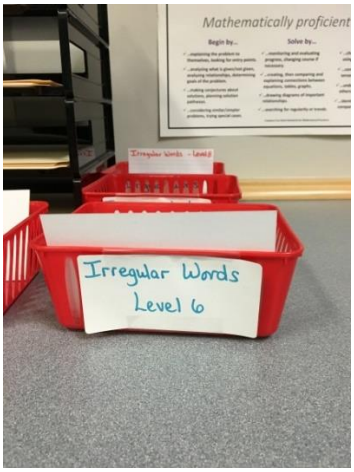
Team Members Present: _____
_____
Date of Meeting: _____

APPENDIX N: PICTURES FROM TEACHER RESOURCE ROOM

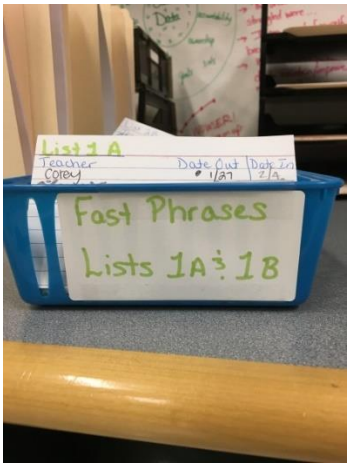
Nonsense Word Fluency Flash Cards

Dolch Sight Words Flash Cards

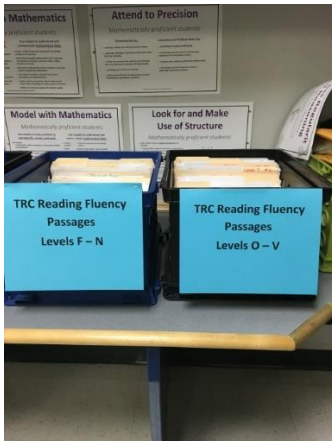
Irregular Words Flash Cards



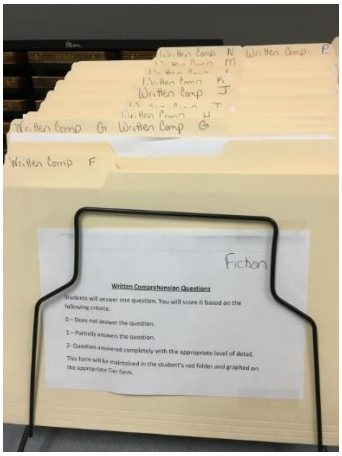
Fry Fast Phrases Flash Cards



Fluency and Accuracy Passages



Written Comprehension



APPENDIX O: FIRST GRADE INTERVENTION INFORMATION

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
A	A1	Yellow	C	First sound fluency - grown moving to 2 sound PSF	Keep at PSF, consider at next meeting	NWF and add sight words. Keep in Tier I.	Continue sight words and NWF	Continue sight words and NWF	Did well on NWF. Working on primer level sight words - making progress. Went from 29 to 43.
	A2	Yellow	RB	Absent - frequently	Move at PSF, move to Tier 2 @ next meeting	NWF at Tier I, sight words at Tier II. Move to Tier II	Continue NWF, continue sight words (Pre-Primer); Add letter sounds identification. - Parent request for testing. Has been moved to Tier III.	Continue NWF, continue sight words (Pre-Primer); Add letter sounds identification. - Parent request for testing. Has been moved to Tier III.	No progress at NWF. No growing on sight words. Did well with individual letter sounds. Working on blends, he is getting r's and l's.
	A3	Red	C	Middle Sounds - move to PSF 3 sounds	Move to NWF	Continue NWF add sight words. Leave at Tier 1	Has language issues related to ESL. Mixes up vowels. Take back to Pre-primer list. Continue NWF	Has language issues related to ESL. Mixes up vowels. Move to primer sight list. Continue NWF	Went from 35 to 44 in sight words. Is growing. Still having trouble vowels.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
	A4	Yellow	RB	PSF - 2 sounds move to 3 sounds	Move to NWF	Start on DORF	Continue DORF on level F also working on primer sight words. If she continues to make progress, move to Level G in 2 weeks	Continue DORF on level F also move to 1st grade sight words. If she continues to make progress, move to Level G in 2 weeks	Making great progress with Fluency - still working at level F. Sight words - moved up to 1st grade list. Goal is 40 she is currently at 35
	A5	Green	D	Decoding - Constantly mixes up D and B. Very slow to respond - Repeater.	Keep at NWF, is improving	Currently in Tier 2. NWF. Move to Tier 3 add DORF.	Continue Interventions for Tiers 1-3. Implement math fast fact fluency. Has been referred for Special Education	Continue Interventions for Tiers 1-3. Implement math fast fact fluency. Has been referred for Special Education	Continue interventions
	A6	Red	C	PSF	Making progress, continue PSF	Met goal for PSF, move to NWF-CLS	Met goal for CLS, move to NWF - whole word recognition	NWF - whole word recognition	Continue interventions
2/24/2016	A7	Yellow (MOY)	E (MOY)	[redacted]			DORF	DORF	Continue interventions

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
B	B1	Yellow		NWF - can say sounds, struggles to put back together.	Making progress, continue	Exit - On grade level	Exit - On grade level	Exit - On grade level	Exit - On grade level
	B2	Yellow		NWF - making progress	Making progress, continue	Exit - On grade level	Exit - On grade level	Exit - On grade level	Exit - On grade level
	B3	Red	RB	Begin PSF	PSF	NWF and sight words at Tier 1	Making slow progress with NWF. Continue w/NWF. If he reaches goal in NWF before next meeting, move him to DORF.	Met goal for NWF - moved to DORF	DORF level F - 32 to 47. Continue on F. Grew from 33 to 47 on sight words.
	B4		C	Begin PSF	Making progress, continue - NWF	Exit - On grade level	Exit - On grade level	Exit - On grade level	Exit on grade level
	B5	Yellow		NWF - gets the first sound struggles with other sounds.	Making progress, continue NWF	Move to Fluency	Continue DORF at Level F	Making progress, continue DORF	Growing, up to 51 words at level F. Continue

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
	B6	Red		PSF- Mastered 2 sounds move to 3 sounds	PSF mastered, move to NWF	Exit - on grade level	Exit - on grade level	Exit - on grade level	Exit - on grade level
	B7	Yellow		NWF- keep going	Making progress, continue	Exit - on grade level	Exit - on grade level	Exit - on grade level	Exit - on grade level
	B8		C	Starting sight words	Making progress, continue	NWF	Making great progress - move to DORF	Making progress, continue DORF	Growing from 40 to 59, level G.
	B9	Red	C	NWF - Making growth	Good progress, look to exit at next meeting	exit - on grade level	exit - on grade level	exit - on grade level	exit - on grade level
	B10	Yellow	C	NWF - can say sounds, struggles to put back together	Continue w/NWF whole word	DORF	Continue DORF at level F	Making progress, continue DORF	Growing - Move to Level G
1/27/2016	B11	Yellow (MOY)	E	[redacted]		DORF at level F	Making progress, continue at level F.	Making progress, continue DORF	Continue at level G
1/27/2016	B12	Yellow (MOY)	E			DORF at level F	Making progress, continue at level F.	Making progress, continue DORF	Move to level G

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
1/27/2016	B13	Yellow (MOY)	E			NWF	Making progress, continue NWF	Making progress, continue NWF	Move to DORF. Has gotten NWF. Level F
1/27/2016	B14	Red (MOY)	D			NWF	Making progress, continue NWF	Making progress, continue NWF	Move to DORF. Has gotten NWF. Level F
1/27/2016	B15	Yellow (MOY)	E			NWF	Making progress, continue NWF	Making progress, continue NWF	Move to DORF, level G
C	C1	Red	D	PSF - not making progess -- Ask Congleton for suggestions	Keep working on PSF	NWF	Growing, continue NWF	Growing, continue NWF	Slow progress on NWF. Next year, begin oral retell
	C2	Yellow	E	NWF - flatlining	Continue NWF, making progress	DORF	Continue DORF - growing Move up to level G	Continue DORF - growing Move up to level G	Making progress. Continue at G.
	C3	Yellow	D	NWF - not making growth. Keep going	Keep working on NWF - if no progress move to tier 2	DORF	Continue DORF - growing Move up to level G	Continue DORF - growing Move up to level G	Making slow progress - continue at G

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
	C4	Yellow	E	PSF - great growth. Move to NWF	Keep on NWF	exit - on grade level	exit - on grade level	exit - on grade level	exit - on grade level
	C5	Green	RB	Sight words - Continue	Sight words- making progress continue	Continue sight words, add DORF at Tier 1	Sight words - primer list: continue; Continue DORF level F	Sight words - primer list: continue; Continue DORF level F	Moved to grade 1 sight words. Fluency is at 51 on F, move to level G
	C6	Red	RB	PSF - began w/2 phenome. PM is 50 - 60. Move to 3 phoneme words.	Working on sight words - making progress	Keep at sight words add nonsense words	Attendance is a concern. Makes some progress. Continue working on both	Attendance is a concern. Makes some progress. Continue working on both	Attendance still a concern. Continue 1st grade sight words
	C7	Red	D	NWF - growing	Great progress, continue NWF	DORF	DORF, move to a G	DORF, move to a G	Continue DORF move to level H
	C8	Yellow	E	NWF - making growth	Great progress, continue NWF	exit - on grade level	exit - on grade level	exit - on grade level	exit - on grade level
	C9	Red	RB	Sight words - making progress	Making progress, continue	Keep sight words, add NWF at Tier 1	Growing at NWF. sight words primer list - making progress	Growing at NWF. sight words primer list - making progress	Has met goal for NWF. Move to 1st grade sight words

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
	C10	Yellow	D	Will begin today	Great progress, look to exit at next meeting	DORF	DORF - making progress. Continue on an F for at least one more week	DORF - making progress. Continue on an F for at least one more week	Inconsitent at level G - continue
	C11	Red	E	NWF - Making growth	Making progress, continue	NWF	NWF	NWF	Consistent at level G on DORF, fluency is slow, but accuracy is great
	C12	Yellow	D	NWF - Making growth	Great progress, look to exit at next meeting	DORF	DORF - making progress. Continue on an F for at least one more week	DORF - making progress. Continue on an F for at least one more week	Growing. Move to level H
	C13	Yellow	D	NWF - Making growth	Great progress, reduce to 2 times per week.	DORF	Switch to sight words. Lots of errors with basic sight word in DORF	Switch to sight words. Lots of errors with basic sight word in DORF	Mastered sight words. DORF continue level F.
1/27/2016	C14	Yellow (MOY)	H	[redacted]		DORF	Making progress, move to G	Making progress, move to G	Making progress, move to level H

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round - 12/3	3rd Round - 1/27/16	4th Round - 2/25/16	5th Round - 4/7/16	6th Round - 5/4/16
1/27/2016	C15	Yellow (MOY)	E	[redacted]		DORF	Making progress but continue F	Making progress but continue F	Moved to level G, making progress
1/27/2016	C16	Yellow (MOY)	H			DORF	Making progress but continue F	Making progress but continue F	Moved to level G, making progress

APPENDIX P: SECOND GRADE INTERVENTION DATA

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
A	A10	Green	I	Reading @ a J currently - working on written comp	Continue written comp	Exited	Exited	Exited	Exited
	A1	Yellow	G	NWF - up to 15, move to DORF	Goal met for DORF - move to oral comprehension	Oral comprehension (who/what/when/where/why) intervention	Making progress, move to written comp	Continue written comp at N	Continue working with written comp
	A2	Red	E	NWF - will recheck and move to DORF	Continue with DORF	Continue DORF	Making progress , continue working on DORF Level I	Continue DORF at level I	Continue DORF
	A3	Red	C	PSF - needs to work on basic sounds and letters	Continue PSF and add sight words - move to Tier 2	Move to Grade 1 sight words as Tier 2 intervention and go to NWF(WWR) as Tier 1 intervention	NWF - very slow to no progress. Sight words - making good progress - continue these. Try 2nd grade words.	Has gotten 31 2nd grade sight words. Continue working on these. Continue doing NWF.	Has gotten 31 2nd grade sight words. Continue working on these. Continue doing NWF.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	A4	Green	I	PM @ J - working on written comp	Continue written comp	exited	exited	exited	exited
	A5	Green	E	Reading @ G - working on written comp	Continue written comp	Continue written comp at Tier I, move to Tier II and add Oral comprehension (who/what/when/where/why) intervention	Continue oral and written comp	Continue oral and written comp	Has met goal for oral comp. Move back to Tier I and continue written comp.
	A6	Red	E	PSF - met goal , move to NWF	continue w/NWF	Move to DORF in Tier 1 (based on progress). Move to Tier 2 and add fast phrases as Tier 2 intervention	Fast Phrases - struggling. Start sight words. In DORF she slowing making progress. Continue w/ level I passage.	Continue DORF. Continue fast phrases. Still making slow progress.	Continue DORF. Continue fast phrases. Still making slow progress.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	A7	Red	RB	FSF- done, PSF - done, move to NWF	move to DORF	Immerse in English via books on tape or others reading to her and answer them in English	Immerse in English via books on tape or others reading to her and answer them in English	Immerse in English via books on tape or others reading to her and answer them in English	Needs vocabulary, she is an ESL student
	A8	Yellow	J	NWF - up to 17, move to DORF	Met DORF goal for fluency and accuracy, work on written comp.	Exited - On grade level in mclass	exit	exit	exit
New on 2/25/16	A9	Green	J	-	-	-	Working on written comp	Working on written comp.	Continue written comp, would benefit from Vocabulary
B	B1	Red	C	NWF - Making progress - continue w/NWF	Continue w/NWF - making progress	Continue Fluency, move to Tier 2 add sight words	Continue Fluency, move to Tier 2 add sight words	Continue DORF and sight words	Continue DORF and sight words
	B2	Green	H	Written Comp - remaining same	Continue written comp	Exited	Exited	Exited	Exited

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	B3	Green	I	DORF - Growing, continue	Continue DORF	Continue with DORF	Continue DORF	Continue DORF	Continue DORF
	B4	Red	E	DORF - Not making progress. Continue	Added sight words and continue DORF.	Move to Tier 3 - Continue DORF, Sight Words, Add Comprehension	Continue Interventions. Has been referred for special education testing	Continue Interventions. Has been referred for special education testing	Oral comprehension and written comprehension.Student qualified for EC in LD
	B5	Yellow	J	NWF - move to DORF	Tier I - speech interventions, making slow progress in academic	Exit academic interventions continue speech	Exit academic interventions continue speech	Exit academic interventions continue speech	Exit academic interventions continue speech
	B6	Red	G	NWF - move to DORF	Continue w/DORF - making progress	Move to Tier 2, continue DORF (Tier 1) add phrase fluency at Tier 2	Move to Tier 2, continue DORF (Tier 1) add phrase fluency at Tier 2	Vowel team words and continue DORF	Continue vowel team words and DORF
	B7	Green	G	Written Comp - PM @ H	Continue written comp	Written Comp @ K	Continue Written comp	Continue written comp	Continue written comp

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	B8	Red	G	NWF - Making progress - continue w/NWF	Move to DORF	Continue DORF	Continue DORF	Continue DORF	Continue DORF
	B9	Green	I	Written Comp - PM @ H	Continue written comp	Exited	Exited	Exited	Exited
New 2/25/16	B10	Green	J	-	-	-	Written Comp	Written Comp	Exit
C	C1	Yellow	G	NWF - whole word - no progress, go back to Sounds	Great job w/PSF. Move to NWF	Move to Fast Phrases - Tier 1	Making good progress. Move to DORF passages at level K if too hard move to J.	Continue DORF move to level L	Continue DORF move to level L
1/14/2016	C2	Green	J			Add to Tier 1 - Written Comp	Skill working on written comp at level K	Skill working on written comp at level K	Skill working on written comp at level K

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	C3	Red	E	PSF - making progress, move to NWF	Absent frequently - 2 days a week during intervention he is in ESL, but continue NWF	Move to Tier 2. NWF at Tier 1 and Sight Words at Tier 2	Not making adequate progress in Sight Words (only 16 out of 40). Go down to grade 1 sight words. If he continues w/good progress in NWF, move to fast phrases.	Has gotten Kinder sight words bump up to 1st grade sight words. Go down to Kinder phrases.	Making progress, continue working with both
	C4	Red	H	NWF - great progress, move to DORF	Continue w/ DORF, decrease to once per week	Move to fast Phrases - Tier 1	Making good progress. Move to DORF passages at level K if too hard move to J.	Continue DORF move to level L	Continue DORF on M
	C5	Yellow	J	NWF - continue for 2 more weeks	Move to DORF	Working on Oral Comp	Continue w/oral comp	Continue w/oral comp	Continue oral comp
	C6	Green	F	NWF - making progress	Scores have decreased. Move back to PSF.	Met PSF goal, Move to fast Phrases - Tier 1	Making progress. Continue w/phrases	Move to DORF	Continue DORF on L

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
	C7	Green	H	Written comp - struggles to answer the question. Give teacher answer then have them write it. Have her to repeat it twice, write it, then read it outloud to the teacher.	Making great progress, continue	Performing on grade level, exit interventions	Performing on grade level, exit interventions	Performing on grade level, exit interventions	Performing on grade level, exit interventions
	C8	Yellow	E	DORF - went backwards, move back to NWF - to help w/blending sounds	Move back to DORF	Move to Written Comp	Currently at a J, continue w/ written comp	Currently at a J, continue w/ written comp	Written comp at level L
	C9	Red	E	NWF - making progress, move to DORF	Move to DORF	Move to Tier 2; NWF at Tier 1 and Sight words at Tier 2	Doing well in NWF - PM one more time then move to fast phrases. Continue w/2nd grade sight words. Look at the how long it takes her.	Doing well in NWF - PM one more time then move to fast phrases. Continue w/2nd grade sight words. Look at the how long it takes her.	Made progress with sight words. Begin oral comp.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
D	D1	Green	I	Written Comp - PM @ J	Making progress - Continue Written Comp	Exit on grade level	Exit on grade level	Exit on grade level	Exit on grade level
	D2	Red	H	NWF - making great progress	Met goal for NWF - move to DORF	Continue DORF	Continue DORF	Continue DORF on level K	Continue DORF
	D3	Yellow	I	NWF - making progress but will continue	Met goal for NWF - move to DORF	DORF on level K	DORF on level K	DORF on level L	Continue DORF - Teacher feels that she needs ESL services.
	D4	Yellow		NWF - making growth, move to DORF	Making progress - Continue DORF	Continue DORF	Continue DORF	Continue DORF	Sounding out every single word - work on sight words
	D5	Green	I	DORF - keeping working on it	Continue DORF	Continue DORF	Continue DORF	Continue DORF on level M	Continue DORF
	D6	Green	I	Written Comp - PM @ J	Making progress - Continue Written Comp	Exit- on grade level	Exit- on grade level	Exit- on grade level	Exit- on grade level

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/3	3rd Round - 1/14	4th Round - 2/25/15	5th Round 4/7/16	6th Round 5/5/16
1/14/2016	D7	Green	K (MOY)	[redacted]		Add to Tier 1 - Oral Comprehension	Add to Tier 1 - Oral Comprehension	Continue Oral comp	Continue oral comp
1/14/2016	D8	Green	J (MOY)			Add to Tier 1 - Oral Comprehension	Oral Comprehension at level L	Oral Comprehension at level M	Continue oral comp
1/14/2016	D9	Green	H (MOY)			Add to Tier 1 - Oral Comprehension	Add to Tier 1 - Oral Comprehension	Continue Oral comp	Continue oral comp - has just begun receiving ESL services
1/14/2016	D10	Green	J (MOY)			Add to Tier 1 - Written Comp	Continue written comp at level L	Continue Written Comp at Level M	Continue written comp

APPENDIX Q: THIRD GRADE INTERVENTION DATA

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
A	A1	Yellow	N	DORF - N	DORF - Try at O. Scores high 90%.	Exit based on MOY data	Exit based on MOY data	Exit based on MOY data	Exit based on MOY data
	A2	Green	L	Oral Comp - L	Making progress - continue with Fluency	Begin fast phrases to help improve fluency	Continue fast phrases, he is making progress, but is just slow.	Continue fast phrases but give the student the paper instead of flash cards.	Making progress, continue fast phrases
	A3	Green	J	Written Comp - J	Continue w/written comp	Continue w/written comp	Continue w/written comp - use leveled readers.	Continue working with written comp at level N	Exit based on EOY data
	A4	Red	J	NWF	Discontinue - has made tremendous growth	Add fast phrases then maybe move to Fluency next time	Move to Fluency at level M	Move to oral comp at level M	Exit based on EOY data
	A5	Yellow	J	DORF - J	Continue DORF and add incremental rehearsal for math - move to tier 2 @ next meeting.	Move to Tier 2 - Continue DORF add fast phrases as a second intervention	Continue fluency, but go down to Level M. Continue working with fast phrases.	Continue fluency, but go down to Level M. Continue working with fast phrases.	Continue working on fluency, but move up to level O. Continue working on fast phrases.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	A6	Red	F	NWF	DORF - I	Move to Tier 2 - Continue DORF add fast phrases as a second intervention	Continue fluency on level K. Continue fast phrases.	Continue fluency on level K. Continue fast phrases.	Continue working on fluency, but move up to level L. Continue working on fast phrases
	A7	Red	L	NWF	NWF - do another list with her (continue)	Fluency @ Level N.	Continue w/fluency an accuracy.	Continue w/fluency an accuracy.	Continue working on DORF fluency and accuracy
	A8	Green	J	DORF - J	DORF - K making progress (high 90%)	Begin fast phrases to help improve fluency	Continue fast phrases to help improve fluency	Continue fast phrases to help improve fluency	Exit based on EOY data
	A9	Green	J	Oral Comp -J	Discontinue - Currently on a Level N for PM	Fluency @ Level N. - Add some oral comp questions	Continue working with oral comp questions.	Continue w/ oral comp	Exit based on EOY data
B	B1	Red	I	DORF - level I	Continue DORF - Level J (inconsistent)	Continue fluency and add intervention for ending sounds	Still very inconsistent. Move down to fast phrases.	Change to oral comp at level J	Continue oral comp, but move to level L. Student will be retained in grade 3

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	B2	Yellow	M	NWF - sounds	Mixes up b and d, has mastered NWF. Begin DORF	Met goal for DORF, exit based on MOY data	Exited	Exited	Exited
	B3	Red	E	NWF - sounds	Has made progress with NWF. Move to sight words.	Begin fast phrases	Continue with fast phrases.	Continue w/fast phrases.	Continue with fast phrases. Move to Tier II and add, written comp. at Level J. Student will be retained in grade 3
	B4	Green	J	Written Comp - J	Written Comp - J(making progress)	Continue Written Comp w/Reading A-Z passages and questions.	Continue Written comp at level H.	Continue written comp but move to level I.	Continue written comp, but move to level L
	B5	Red	F	New	NWF - WWR; can do this well. Start on sight words.	Begin fluency phrases	Continue Interventions. AHas been referred for special education testing.	Continue Interventions. Has been referred for special education testing.	Student was eligible for EC services
	B6	Red	J	DORF - Level J	DORF - Level K	Continue Fluency	Move to oral comp at level K	Continue w/oral comp at level K	Continue w/oral comp, but move to level O.

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	B7	Yellow	F	Written Comp - J	Written Comp - J (making progress)	Continue Written Comp w/Reading A-Z passages and questions.	Continue written comp at level H	Continue written comp but move to level I	Exit interventions based on EOY testing
1/19/16 - add	B8	Green (MOY)	N (MOY)			Written Comp @ N (hold on letter)	Continue written comp at level N	Continue written comp	Exit interventions based on EOY testing
C	C1	Red	L	Begin NWF - CLS	Met goal for NWF- CLS, begin NWF-WWR interventions	Met goal for NWF-WWR, begin Sight words intervention	Met goal for sight words. Begin fast phrases intervention	Making steady progress with fast phrases. Continue w/phrases	Exit interventions based on EOY testing.
	C2	Green	L	Begin written comprehension interventions at level L	Continue written comp	Continue written comp-move to level M questions	Continue written comp at level M	Continue written comp, but move to level N questions	Exit intervntions based on EOY testing
	C3	Red	L	NWF - making growth	Move to DORF on level that he is currently PM.	Continue DORF	Continue DORF for fluency and accuracy	Intervention for ending sounds - this will hopefully to increase fluency	Move to Tier II. Continue intervention for final sounds and add intervention for Written Comp at level O

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	C4	Yellow	L	Accuracy - L	Making progress, one more week at M, if she improves move to N	Add a writing intervention - discontinue DORF	Continue working on written comp	Continue working on written comp	Exit interventions based on EOY testing
	C5	Green	G	Starting written comp	Written comp	Continue written comp - need more complex questions	Continue working on written comp at level J	Continue working on written comp	Exit interventions based on EOY testing
	C6	Red	I	NWF - making slow growth	DORF - Level J, track repetitions	Continue DORF at Tier one & add sight word phrases as a Tier 2 intervention.	Continue DORF at Tier I and Sight word phrases at Tier II	Continue sight word phrases and try to find intervention for word repetition.	Continue working on sight word phrases and begin written comp at level O
	C7	Red	L	NWF - making slow growth	Move to DORF - Level L	Continue DORF	Continue DORF for fluency and accuracy	Fluency has gotten much better. Intervention for ending sounds - this will hopefully to increase fluency	Continue working on DORF for fluency and accuracy

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	C8	Yellow	M	Fluency - L	Making progress, continue fluency	Continue fluency	Continue working on DORF for fluency	Intervention for ending sounds - this will hopefully to increase fluency	Exit interventions based on EOY testing
D	D1	Red	J	DORF - J	Continue, highest was 39 words goal was 70. Bump down to level I. - Move to tier 2 at next meeting.	Continue Fluency - Keep at an L, making progess - Possibly tier 2 next time	Move to oral comprehension at Level L. Made good progress w/fluency	Continue working on written comprehension	Move to Tier II. Continue working on written comp at level L for Tier I. Add DORF fluency and Accuracy at Level L
	D2	Green	I	Written comp - I	Continue written comp	Continue written comp	Move to Tier II. Continue written comp at tier I and add decoding at Tier II	Continue written comp at Tier I and decoding at Tier II	Continue written comp at Tier I and decoding at Tier II. Student is begin retained in grade 3

Teacher	Student	BOY Dibels	BOY TRC	1st Round Intervention - 10/22	2nd Round Intervention - 12/1	3rd Round - 1/14	4th Round - 3/7	5th Round - 4/7/16	6th Round - 5/11/16
	D3	Yellow		NWF	Continue NWF - inconsistent	Fluency on N	Exit interventions	Exit interventions	Exit interventions
	D4	Green	J	Written comp - J	Continue written comp	Continue written comp intervention	Continue written comp on N	Struggles to maintain focus, continue working on written comp	Continue to work on written comp
	D5	Yellow	K	NWF - sounds	Need comprehension intervention for her	Fluency on O	Exit from interventions. Has made good progress.	Exit from interventions. Has made good progress.	Exit from interventions. Has made good progress.
	D6	Red	L	NWF - sounds	Continue NWF - inconsistent	Continue NWF	Exit from interventions - primary cause is language as he is ESL.	Exit from interventions - primary cause is language as he is ESL.	Exit from interventions - primary cause is language as he is ESL.
added on 1/14/2016	D7	Green	L (MOY)	[redacted]		Add to Tier 1 - Written comp intervention	Continue written comp on level N	Struggles with "why" questions continue written comp	Continue written comp at level O
Added on 3/8/2016	D8	Yellow (MOY)	L (MOY)				Work with oral comp and retell at N.	Continue written comp with details	Continue with written comp at level M

APPENDIX R: KINDERGARTEN INTERVENTION DATA

Teacher	Student	MOY Dibels	MOY TRC	Initial Meeting - 1/21/16	1st Round Intervention - 3/3/16	2nd Round Intervention - 4/14/16	3rd Round Intervention 5/15/16
A							
	A1	Red	RB	Begin letter sounds	Letter sounds mastered, begin working on PSF	Continue working on PSF	Continue working with PSF
	A2	Yellow	B	Tier 1 - sight words	Sight words mastered, begin working on PSF	Goal met for PSF, begin NWF - CLS	Exit interventions based on EOY testing
	A3	Yellow	RB	Tier 1 - sight words	Continue working on sight words	Move to Tier II sight words	Exit interventions based on EOY testing
	A4	Yellow	RB	Tier 1 - sight words	Continue working on sight words	Move to PSF	Exit interventions based on EOY testing
	A5	Red	RB	Tier 1 - Letter names, Tier 2 - Letter sounds	Move to Tier III. Add intervention for first sound fluency. Continue Tier I and Tier II interventions.	Refer for EC testing	Student qualified for EC services in area of DD.
	A6	Yellow	RB	Tier 1 sight words	Continue working on sight words	Sight words mastered, begin working on oral comprehension	Exit interventions based on EOY testing

Teacher	Student	MOY Dibels	MOY TRC	Initial Meeting - 1/21/16	1st Round Intervention - 3/3/16	2nd Round Intervention - 4/14/16	3rd Round Intervention 5/15/16
B	B1	Red	RB	Has been working on Letter recognition. Continue 2 more weeks and begin interventions on letter sounds	Knows all letters, knows 17 sounds. Has 11 sight words after 6 weeks. Began with 3 sight words. Does receive ESL services, but it is very inconsistent.	Continues to make progress. Knows 13 sight words currently. Knows 23 sounds.	Continue working with sounds and sight words.
	B2	Red	RB	Tier 3 for speech	Tier 3 for speech	Tier 3 for speech	Student was placed in EC for speech
	B3	Red	RB	Has been working on Letter recognition. Continue 2 more weeks and begin interventions on letter sounds	Letter recognition - inconsistent in progress, with letter sounds baseline of 15 and went down. Continue letter sounds for Tier 1. Add sight words at Tier II.	Has gotten 23 of 26 sounds. Knows 11 of 18 sight words.	Continue with sight words as Tier II intervention. Change Tier I intervention to oral comprehension
	B4	Yellow	RB	New to us, will begin with letter recognition	Letters - goal was 40, baseline 17. Now at 41. For sight words baseline 3, now at 11. Continue at Tier 1 with sight words	Up to 12 sight words - making slow growth. He knows 49 letters consistently. Up to 19 sounds, baseline was 3 sounds. Continue in Tier 1.	Student has mastered sight words. Begin new Tier I intervention for oral retell.

Teacher	Student	MOY Dibels	MOY TRC	Initial Meeting - 1/21/16	1st Round Intervention - 3/3/16	2nd Round Intervention - 4/14/16	3rd Round Intervention 5/15/16
	B5	Red	RB	Begin sight words	Baseline of 3 with letter sounds, now at 14. Baseline of 16 with letter recognition, is very inconsistent. Struggles with focusing. Sight words baseline was 8, now at 13. Continue at Tier 1.	Student has mastered letter sounds and letter recognition. Continue working on sight words	Student has mastered sight words. Begin new Tier I intervention for oral retell.
	B6	Yellow	RB	Begin sight words	Sight words - 10 is baseline and now at 13. Continue sight words at Tier 1. Gets first sound, but does blend the second two sounds instead of segmenting.	Student has begun a small dose of meds for ADHD. Phonemic awareness has improved tremendously. She has 28 sight words currently which is above the goal. Change Tier I intervention to oral retell	Continue intervention for oral retell
	B7	Yellow	B	Tier 3 for speech, work on increasing speed for letter recognition. Currently has speech interventions in place.	Has met goal for letter recognition. Continue w/Speech - Tier 3	Continue w/Speech - Tier 3	Student will receive EC services for speech

Teacher	Student	MOY Dibels	MOY TRC	Initial Meeting - 1/21/16	1st Round Intervention - 3/3/16	2nd Round Intervention - 4/14/16	3rd Round Intervention 5/15/16
	B8	Green	B	Work on oral retell at level A	Continue working on oral retell	Continue working on oral retell at level B	Exit interventions based on EOY testing
C	C1	Red	<PC	Started interventions on 1/4 for letter sounds	Is currently working on sight words. Went from 10 to 19.	Up to 27 sight words. Passed the 3rd nine weeks goal. Move to oral comprehension.	Continue working on oral comprehension
	C2	Red	<PC	Started interventions on 1/4 for letter sounds.	Move to Tier 2 - Letter recognition at Tier 1 and Letter Sounds at Tier 2	Making good gains with/letters and sounds. Continue interventions	Student knows letters and sounds. Tier I intervention will be PSF and Tier II interventions will be oral comprehension
	C3	Green	<PC	Begin interventions for PSF	Continue working on PSF	Continue working on PSF	Exit interventions based on EOY testing
	C4	Red	RB	Currently EC - Letter recognition	Currently knows 22 sounds - Continue in Tier 1	Knows 20 sounds and 41 letters. Begin sight words.	Has mastered sight words. Begin working on oral comprehension.

Teacher	Student	MOY Dibels	MOY TRC	Initial Meeting - 1/21/16	1st Round Intervention - 3/3/16	2nd Round Intervention - 4/14/16	3rd Round Intervention 5/15/16
	C4	Red	RB	Currently EC - Letter recognition	Currently knows 22 sounds - Continue in Tier 1	Knows 20 sounds and 41 letters. Begin sight words.	Has mastered sight words. Begin working on oral comprehension.
	C5	Green	RB	Sight words continue working w/ her at Tier 1	Continue working on sight words	Up to 28 sight words. Passed the 3rd nine weeks goal. Move to oral comprehension.	Continue working on oral comprehension
	C6	Red	RB	[redacted]	Beginning speech interventions. Beginning letter names and letter sounds. New to Pactolus was out of school from Dec. to Feb.	Move to Tier 2 - Letter recognition at Tier 1 and Letter Sounds at Tier 2. Still struggling with letter names and sounds. 25 letter names at last PM. Baseline was 12.	Continue working on letter recognition and letter sounds. Student will be retained in K
	C7	Green	RB	Begin working on sight words	Continue working on sight words	Up to 38 sight words. Passed the 3rd nine weeks goal. Move to oral comprehension.	Exit interventions based on EOY testing

APPENDIX S: SUMMARY OF INTERVENTION DATA

Teacher	Grade Level	% of Students w/Growth from BOY to EOY	% of Proficient Students BOY	% of Proficient Students EOY	# of Students in Interventions	# of Students who exited Interventions	# of Special Education Referrals	# of Students who Qualifed for EC Services
A	1	96%	61%	61%	7	0	2	2
B	1	100%	70%	91%	15	6	0	0
C	1	100%	78%	65%	16	3	0	0
A	2	100%	53%	68%	9	4	0	0
B	2	100%	50%	67%	10	4	1	0
C	2	100%	56%	69%	9	5	0	0
D	2	100%	59%	82%	10	6	0	0
A	3	95%	42%	79%	9	5	0	0
B	3	100%	53%	59%	8	2	1	1
C	3	100%	47%	84%	8	5	0	0
D	3	89%	44%	44%	8	2	0	0
A	K	100%	0%	90%	6	3	1	1
B	K	100%	5%	68%	8	2	2	2
C	K	100%	5%	76%	7	2	0	0
Totals		**98.60%**	**44.50%**	**71.60%**	**130**	**49**	**7**	**6**
-								
	Exited Interventions = 37.7%						**Strike Rate = 85.7%**	

APPENDIX T: COMPREHENSIVE MCLASS DATA

Class	Level	Dibels BOY	Dibels MOY	Dibels EOY	Level	TRC BOY	TRC MOY	TRC EOY
Kinder - A	Red	3	3	1	Red	20	0	2
	Yellow	7	5	3	Yellow	0	17	0
	Green	10	12	16	Green	0	2	5
					Blue	0	1	13
Kinder - B	Red	9	4	0	Red	17	0	2
	Yellow	4	5	4	Yellow	0	13	3
	Green	5	9	14	Green	0	2	3
					Blue	1	3	10
Kinder - C	Red	10	4	3	Red	19	4	3
	Yellow	4	0	1	Yellow	1	14	2
	Green	7	17	17	Green	1	1	1
					Blue	0	2	15
1st Grade - A	Red	4	7	7	Red	5	10	4
	Yellow	5	4	5	Yellow	4	0	5
	Green	14	12	11	Green	4	9	3
					Blue	10	4	11
1st Grade - B	Red	4	3	2	Red	1	2	0
	Yellow	5	7	9	Yellow	5	0	2
	Green	13	12	11	Green	4	15	6
					Blue	12	5	14
1st Grade - C	Red	6	6	4	Red	3	5	1
	Yellow	7	9	11	Yellow	1	0	7
	Green	9	7	7	Green	7	12	3
					Blue	11	5	11
2nd Grade - A	Red	5	5	4	Red	7	6	4
	Yellow	2	0	0	Yellow	2	2	2
	Green	12	14	15	Green	8	6	8
					Blue	3	5	5
2nd Grade - B	Red	5	4	3	Red	6	5	3
	Yellow	1	2	3	Yellow	3	7	3
	Green	12	12	12	Green	4	2	7
					Blue	5	4	5
2nd Grade - C	Red	4	3	2	Red	5	3	2
	Yellow	3	2	3	Yellow	2	6	3
	Green	9	11	11	Green	8	1	5
					Blue	1	6	6
2nd Grade - D	Red	2	2	3	Red	1	3	1
	Yellow	2	2	2	Yellow	6	5	2
	Green	13	13	12	Green	8	5	9
					Blue	2	4	5

Class	Level	Dibels BOY	Dibels MOY	Dibels EOY	Level	TRC BOY	TRC MOY	TRC EOY
3rd Grade - A	Red	5	3	5	Red	8	3	3
	Yellow	2	5	2	Yellow	3	6	1
	Green	12	11	12	Green	4	3	5
					Blue	4	7	10
3rd Grade - B	Red	5	3	3	Red	3	2	1
	Yellow	2	3	2	Yellow	6	7	2
	Green	12	13	14	Green	3	0	5
					Blue	7	10	11
3rd Grade - C	Red	5	5	3	Red	8	7	5
	Yellow	2	2	3	Yellow	0	2	2
	Green	10	10	11	Green	8	1	3
					Blue	1	7	7
3rd Grade - D	Red	6	6	5	Red	8	8	7
	Yellow	3	4	3	Yellow	2	3	3
	Green	9	8	10	Green	2	1	4
					Blue	6	6	4

APPENDIX U: INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** · **www.ecu.edu/irb**

Notification of Initial Approval: Expedited

From:	Social/Behavioral IRB
To:	Shannon Cecil
CC:	Jim McDowelle
Date:	3/22/2017
Re:	UMCIRB 16-002456 Response to Intervention

I am pleased to inform you that your Expedited Application was approved. Approval of the study and any consent form(s) is for the period of 3/22/2017 to 3/21/2018. The research study is eligible for review under expedited category #5. The Chairperson (or designee) deemed this study no more than minimal risk.

Changes to this approved research may not be initiated without UMCIRB review except when necessary to eliminate an apparent immediate hazard to the participant. All unanticipated problems involving risks to participants and others must be promptly reported to the UMCIRB. The investigator must submit a continuing review/closure application to the UMCIRB prior to the date of study expiration. The Investigator must adhere to all reporting requirements for this study.

Approved consent documents with the IRB approval date stamped on the document should be used to consent participants (consent documents with the IRB approval date stamp are found under the Documents tab in the study workspace).

The approval includes the following items:

Name	Description
Response to Intervention	Study Protocol or Grant Application

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418
Study.PI Name:
Study.Co-Investigators: