

A CASE STUDY OF ONE TEXAS SCHOOL'S JOURNEY: THE ESTRELLA
MODEL OF RtI FOR ENGLISH LANGUAGE LEARNERS AND
IMPLICATIONS FOR SPECIAL EDUCATION

A DISSERTATION
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

DEPARTMENT OF SPECIAL EDUCATION
COLLEGE OF TEACHER EDUCATION

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DENTON, TEXAS
AUGUST 2014

DEDICATION

This dissertation is dedicated to my loving husband Matt and, to our spunky and spirited children Gabi and Zeke. Your support and unconditional love have carried me for many years. God has truly blessed me.

ACKNOWLEDGEMENTS

First, I would like to thank Dr. Jane Pemberton for chairing my committee. I could not accomplish this goal without your mentorship and unwavering support. I thank you for making a genuine commitment to my educational journey. I will always treasure your words of encouragement.

I would also like to thank the members of my committee: Dr. David Marshall, Dr. Heather Haynes-Smith, and Dr. Holly Hansen-Thomas. Thank you to each member of my committee for the number of hours you spent in reading and providing feedback during the dissertation process.

Next, I would like to thank the following members of my Lewisville ISD family who served as a source of support and encouragement: Ale Babino, Buddy Bonner, Cheryl Close, Toni Hall, Janie Pribanic, and Perla Silva. A special thank you to Dr. Alex Alexander, Dr. Lisa Davison, Dr. Sarah Fitzhugh, Dr. Charles Fruge, and Dr. Glenn Brown for philosophical conversations and guidance during the dissertation process. I would like to express my deep appreciation to the staff members and students at Central Elementary School. You all inspired me to be the best that I could be.

Finally, I would like to thank my husband Matt for believing in me. Your support means the world to me. Your sacrifices never went unnoticed and they will never be forgotten. A hug and a thank you go out to my children, Gabi and Zeke. I persevered to show you that hard work and dreams do matter. My dear children, dream BIG!

ABSTRACT

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A CASE STUDY OF ONE TEXAS SCHOOL'S JOURNEY: THE ESTRELLA MODEL OF RtI FOR ENGLISH LANGUAGE LEARNERS AND IMPLICATIONS FOR SPECIAL EDUCATION

AUGUST 2014

The purpose of this study was to examine how the Estrella model of Response to Intervention (RtI) impacted a campus whose student population is comprised of 88% English Language Learners (ELLs). The researcher investigated how the Estrella RtI model affected the academic performance of ELLs, students in special education, and the number of students referred for special education eligibility.

The research design for this case study included a comprehensive analysis and review of archival data. The principal of the campus served as the primary researcher and named the specialized model, “Estrella”, the Spanish word for “star.” The following data sets were used to measure the impact of the Estrella model of RtI: attendance rates, discipline data, state-mandated assessment scores (i.e., general education and special education assessments, Academic Excellence Indicator System [AEIS] Reading, Math, Science and Writing Assessment scores, Evaluación del Desarollo de Lectura [EDL] scores, Developmental Reading Assessment scores [DRA], RtI data, Texas English Language Proficiency Assessment System [TELPAS] scores, and comprehensive historical data for case study analysis), demographics, school profile, timeline/data for

professional learning implementation, referral rate for special education testing, historical data from the school's special education program, and informal interviews.

The findings of this study illustrate the impact that the Estrella model of RtI can have on the academic performance of ELLs. Research-based interventions and the implementation of the Estrella model of RtI may impact students in positive ways. The students on the test campus demonstrated gains and stability in academic areas after implementation of the specialized model. The gains occurred over a 7 year time period when the state mandated test was TAKS. The percentage of students enrolled in special education remained the lowest of the study years and relatively stable, between 8.1% – 10.2%, from 2008 through 2014. This time period coincides with the years of implementation of the specialized model of RtI on the school campus. Prior to this time period, the elementary campus had one of the highest special enrollment percentages in the district.

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CHAPTER I

INTRODUCTION

The Response to Intervention (RtI) model in schools was developed to address concerns outlined in the Individuals with Disabilities Education Improvement Act (IDEIA). According to IDEIA (2004), states must allow schools to use RtI procedures: (a) as a process of examining students' responsiveness to scientific, research-based interventions, (b) in determining eligibility to receive special education services, and (c) as a component of determining if students have specific learning disabilities (Rinaldi & Samson, 2008). One area of concern that surfaced with regard to RtI and English Language Learners (ELLs) is the impact of interventions on students, particularly students eligible for or receiving services in special education.

According to Vaughn, Mathes, Linan-Thompson, and Francis (2005), assumptions about effective academic interventions for ELL students are typically based on what is known about interventions for monolingual students. RtI has the potential to positively affect ELLs by requiring the use of research-based interventions designed to speak to their specific needs. Students' language proficiencies are critical to take into account in both languages for instruction to be appropriate. (Brown& Doolittle , 2008). ELLs need culturally and linguistically appropriate instruction as such ELL students and the RtI model should be further researched as educators seek interventions to meet the specific needs of this group of students.

Purpose of the Study

The purpose of this study is to examine how the Estrella model of RtI affects an elementary school campus where the student population is 88.0% ELL. This study will include a case study analysis of archival data, including historical state-mandated assessment data, universal screening data, special education referral rates, ELL measures of language proficiency, campus demographics, and ELL representation in special education programs. Although the use of an RtI model with ELLs has not been examined as frequently as it has been with native English speakers, sufficient amounts of evidence suggest that RtI can lead to positive outcomes for ELLs. The study will focus on the impact of the Estrella model using data prior to its implementation and current data. The period of time analyzed encompassed twelve years

Research Questions

Given the above research purposes, two research questions were identified:

1. How does the Estrella model of RtI for ELLs affect student success as evidenced by state-mandated assessment scores including Texas Assessment of Knowledge and Skills (TAKS), State of Texas Assessments of Academic Readiness (STAAR), Texas English Language Proficiency Assessment System (TELPAS), and reading assessment data.
2. How does the Estrella model of RtI for ELLs affect the number of students referred for special education assessment and the number of students qualifying for special education services?

Background

The north Texas elementary school where the study was conducted is the largest elementary campus in a large district with a current enrollment of 966 students. The population consists of 96.0% Hispanic students, 2.0% Caucasian students, and 1.0% African American students; 88.0% ELL students and 94.0% economically disadvantaged students. The percentage of students receiving special education services is 9.7%. The school has instructional initiatives to target the instructional growth of all students, which are predominately ELLs. Campus leadership from 2007–2012 was consistent with one campus principal, and the campus focused on research-based instructional practices. The 2012–2013 and 2013-2014 school years marked a change in principal leadership. The teachers on the campus maintained the prioritized goal of providing high quality, research-based practices to all students.

A critical component of providing quality instruction and intervention is the use of the Estrella model of RtI that has been in place for the past 6 years with enhancements made as demographics change over time. Universal screeners are used to determine the levels of students in academic areas. Developmental reading, oral language, writing, and math assessments are used to identify the strengths and needs of students. The campus uses curriculum based assessments, guided reading and writing levels on the Developmental Reading Assessment (DRA), Evaluacion de Lectura (EDL), universal math screeners, and curriculum based assessments in the areas of science and math. The model is distinct because it has critical components in Tier I that specifically target the needs of ELLs. All students, including students in special education, receive the

interventions/Estrella model as part of their core instruction. Both general education and special education teachers have been trained on all components of Tier I research-based instruction. The interventions at Tier I are used in the areas of reading, writing, math, science, and social studies. The Estrella model of interventions and assessments (Appendix G) that will be reported consists of the following:

Tier I Interventions/Instructional Model

- Research-based Tier I instruction for all ELL students using the Sheltered Instruction Observation Protocol (SIOP): The SIOP Model (Appendix B) is an instructional framework used on the selected elementary campus to increase academic and language proficiency. (Echevarria, Voght, & Short, 2004) All staff members received specialized training, and the model has been implemented in all classes.
- Specialized universal screenings and state assessments to gauge the academic and language proficiency levels of students: Developmental Reading Assessment (DRA), Evaluación del Desarrollo de Lectura (EDL), district math and science curriculum-based assessments in English and Spanish, Woodcock Muñoz Test of Oral Proficiency in English and Spanish, and the Texas English Language Proficiency Assessment System.
- Pre-teach of content vocabulary: The elementary campus uses the Academic Vocabulary Program (Appendix D) to pre-teach content area vocabulary words. Academic vocabulary is taught using Robert Marzano's six-step direct instruction model (Marzano, 2004).

- Language modeling and opportunities for academic language: Students understand these concepts through content and language objectives for each academic area. Every teacher uses interactive content and language objectives so students know the expectations for learning.
- Graphic organizers to help students organize thoughts and ideas: The elementary school has implemented Thinking Maps (Appendix C) campus wide. Thinking Maps are used to help students organize information in content areas. (Hyerle & Yeager, 2007)
- Systematic and explicit instruction in the area of reading: The elementary school uses a balanced literacy approach with an emphasis on guided reading in English and Spanish. Teachers use a bi-literacy model to develop fluent readers in both languages.
- Strategic use of language: The dual-language model (Appendix E) is used campus wide to ensure that students are learning academics in both languages. Students follow a prescribed schedule of Spanish and English instruction at each grade level.
- Student progress is monitored: Monitoring occurs in both languages by a multi-faceted RtI committee, including parents, administrators, dual-language teachers, an ELL specialist, a special education teacher, and bilingual literacy specialists.

Tier II Interventions/Instructional Model

- Students who are not responding to Tier I interventions are provided more intensive supports and progress monitoring using linguistically appropriate assessments and interventions.
- Intensive reading and math interventions for ELLs demonstrating reading below grade level. Guided reading and leveled reader kits are utilized to target decoding, fluency, and comprehension skills. Guided math is used to develop specialized math interventions for students
- Ensure that interventions are sufficiently intense by utilizing small groups (3–6 students) who are provided intervention for a minimum of 30 minutes each day. Content area specialists work with students who are identified as Tier 2 students in the areas of reading, writing, math, and science.

Tier III Interventions/Instructional Model

- ELLs who are significantly behind in reading receive highly intensive and extensive reading interventions and continue until the student is able to adequately benefit from reading instruction provided within the core classroom instruction.
- Literacy and math specialists work intensively with students to close the achievement gaps. The specialists at the elementary campus are certified in ESL and/or bilingual education.

- A team approach to problem solving is used to analyze data and identify factors that influence progress and provide suggestions for designing instruction.

Significance

The use of an RtI model to meet the diverse and complex needs of ELLs who are experiencing academic difficulties represents a shift in educational programming. Issues of overrepresentation in special education exist among ELLs. (Garcia & Tyler, 2010) To ensure that there is fidelity in the RtI process regarding ELLs, the Estrella framework and research-based process should be considered as an option. Effective RtI models and interventions for ELLs will be highlighted in the review of literature. RtI is used to seek improving educational outcomes for students. RtI may also contribute to improving literacy rates by providing interventions for all students who experience difficulty in reading. (Haager, 2007). According to Brown and Doolittle (2008), personalized instruction is the foundation of RtI because all students' unique and individual needs are assessed; then, appropriate interventions are prescribed so all students can be successful in learning.

Many of the RtI models in schools are created using research-based interventions that are effective for monolingual students. As the number of ELLs in the United States (US) grows, the need for guidelines about how best to address their educational needs also grows. This study can provide recommendations for research-based practices that are effective for meeting the individual needs of all students.

CHAPTER II

REVIEW OF LITERATURE

History and Background

The United States Department of Education defines ELLs as national-origin-minority students who are Limited English Proficient. (Francis, Rivera, Lesaux, Kieffer, & Rivera, 2006). The ELL term is often preferred over Limited English Proficient (LEP) because it highlights accomplishments instead of highlighting deficits. As a group, ELLs represent one of the fastest-growing groups among the school-aged population in this nation.

In the last two decades, the population of ELLs has grown 169 percent, while the general school population has grown only 12 percent. ELLs in the US collectively speak over 400 different languages; Spanish being the most common language. Researchers project that by 2015, 30 percent of school-aged populations in the US will be ELLs. The largest and fastest-growing populations of ELLs in the United States consist of U.S.-born children of immigrants and children who immigrated before kindergarten (Francis et al., 2006).

Academic Difficulties

The number of ELLs in urban areas around the nation has increased significantly in recent years. Statistics continually demonstrate the pervasive academic difficulties of ELLs in academic areas. (Najarian, Pollack, & Sorongon, 2009). Students who entered

kindergarten with LEP status were in the lowest performing quartile in fifth grade reading and math (Najarian et al., 2009). Data released the same year by the National Assessment for Educational Progress (NAEP, 2009) in reading and mathematics illustrated that fourth grade and eighth grade ELLs lag far behind their English-proficient peers, with a staggering achievement gap between 29 and 30 percent (National Center for Educational Statistics, 2009). Many students who enter school with a primary language other than English score below level on various measures of academic achievement (Haager, 2007). According to Vaughn et al. (2005), assumptions about effective reading interventions for students are based on what is known about interventions for monolingual students. The interventions educators use to respond to the needs of the ELL population is a critical area to address.

Across the United States (U.S.), the achievement gap is significant between the English-speaking student and a student who started attending school speaking a language other than English. Thomas and Collier (2010) assert that by the end of high school, this achievement gap between students is equivalent to about 1.2 national standard deviations, as measured by standardized achievement tests across the curriculum. Therefore, it is important to highlight research on ELLs and RtI as educators are seeking interventions to meet the specialized needs of students who started attending school speaking a language other than English.

Response to Intervention (RtI) Brief History

According to the U.S. Department of Education, in order to achieve national goals for access to education for all children with disabilities, a number of special issues and

special populations have required federal attention. These national issues are reflected in a number of key amendments to the Education for the Handicapped Act (*EHA*; P.L. 99-457) and *IDEA* between 1975 and 2000. Since the passage of P.L. 94-142, the nation has been concerned with expanding the opportunities for educating children with disabilities in the least restrictive environment.

The RtI model, as referenced in the IDEIA (2004), was developed as a method to ensure that students receive early intervention and assistance before they are referred for special education testing. The IDEIA (2004) legislation has been used to assure that schools provide early identification and intervention with students who struggle in reading; develop an alternative method of identifying students who have disabilities; provide effective, intensive, evidence-based early intervention; monitor all students' progress using data-based documentation; produce accelerated reading growth to meet annual yearly progress criteria; create a multi-tiered, problem-solving team; and provide high quality professional development to teachers (Allington , 2009).

The 2004 amendments to *IDEIA* also allow states and school districts to employ a response to intervention (RtI) framework and consider a student's response to scientific, research-based interventions when identifying students with specific learning disabilities. With RtI, schools identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. *IDEIA* has supported the provision of culturally relevant instruction for diverse learners in inclusive environments.

RtI can be used to positively impact the achievement of all students, especially students who are struggling in academic areas.

According to the National Center on RtI (2010), the four essential components of Response to Intervention include a school-wide, multilevel instructional and behavioral system for preventing school failure, universal screening to identify students at risk for poor learning outcomes or challenging behavior who may benefit from more intensive instruction, progress monitoring to determine when a student has or has not responded to instruction at any level of a prevention system, and data-based decision making for instruction, movement within the multi-level system, and disability identification (U.S. Department of Education, 2014).

RtI methods of assessment and intervention support educators with a framework to meet the needs and challenges of an increasingly diverse student population (Linan-Thompson, Cirino, & Vaughn, 2007; Vaughn & Fuchs, 2003). An effective RtI model can help educators identify students who are at risk for poor learning outcomes. Educators can also monitor student progress, provide evidence-based interventions, and ensure that students are successful in content areas, such as reading. Benefits of RtI have motivated educators to utilize large amounts of time, resources, staff development, and monies to create a research-based process in schools (Fuchs & Vaughn, 2012).

Current research about RtI suggests that a model that incorporates assessment, progress monitoring, research-based interventions, and collaboration among teachers is effective in meeting the needs of students (Fuchs & Vaughn, 2012). Studies have been conducted to evaluate the effectiveness of RtI in public schools. These researchers

suggest that RtI is effective when there is a prescribed implementation of tiers in the academic, content areas. Recent studies support a model that focuses on early intervention, targeted instruction, progress monitoring, and data-based decision-making as being the most effective ways to meet the diverse needs of students (Calhoon, Otaiba, Cihak, King, & Avalos, 2007; Vaughn et al., 2006; Linan-Thompson et al., 2007). The RtI models, components, and differentiation for special populations are significant in gauging the level of program effectiveness on a campus.

The review of literature is limited in the area of campus-wide implementation of a model for ELLs. A significant amount of the research focuses on student achievement in a classroom with implementation of a specialized RtI model for ELLs. The researcher used studies and articles that focused on best practices for ELLs, implementation of RtI in a district, and research articles that focused on teachers implementing RtI for ELLs and the fidelity of the process. Furthermore, current research in the area of RtI for ELLs and literature review articles were used for the purpose of developing the study and answering the research questions.

ELLs and Special Education

Along with factors of culture and assessment, a growth in the number of minority students enrolled in the United States has become disproportionate in identifying students in special education programs (Salend & Garrick Duhaney, 2005). IDEIA (2004) and No Child Left Behind (NCLB, 2001) have included mandates to protect ELLs from misidentification. IDEIA (2004) recognizes LEP as an exclusionary factor in LD identification. Educators should use racially and culturally unbiased assessment

measures to gain an appropriate representation of children's abilities (Rinaldi and Samson, 2008).

RtI Framework and Modeling

One main purpose of RtI is to address students' unique learning needs before students develop severe academic problems that require special education services (Whitten, Esteves, & Woodrow, 2009). An effective RtI model can help schools use data to identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions, and ensure that students are successful. The RtI framework focuses on the importance of quality teaching, early intervention, and progress monitoring through effective instruction. RtI integrates assessment and intervention within a multilevel prevention system to maximize students' achievements and to reduce students' behavior problems. RtI was founded on principles that: (a) all children can learn when provided with effective instruction, and (b) most academic difficulties can be prevented with early identification of their needs and an immediate intervention (Fuchs & Deschler, 2007).

RtI Framework

RtI is commonly referred to as a three-tiered approach for identifying students who are at risk for poor learning outcomes; however, it is more accurate to describe RtI as a multi-tiered process because there may be more than three tiers in the RtI process (Vaughn & Klinger, 2007). In some schools, the tiers represent the following: Tier I is the general education classroom and core curriculum that all students receive on the campus. Tier II involves the delivery of core curriculum with the use of research-based

instructional practices and accommodations. Tier III involves more intensive, individualized intervention and may or may not include students who have diagnosed disabilities and who are in Individualized Education Programs (IEP). In some models, students who are in special education with IEPs receive special education services in Tier IV. The following is a general RtI model that consists of a tiered system and distinct attributes (Brown & Sanford, 2011).

Tier I: Universal screening and research-based instruction. In Tier I, baseline data through universal screenings are gathered for all students and achievement is monitored regularly. An RtI system relies on the use of evidence-based curricula that are taught in a manner consistent with the desired outcome. Effective and research-based instruction occurs in the general education classroom for all students. At Tier I, instruction is adjusted to meet all students' individual or personalized needs, then progress is closely monitored, and decisions are made about whether students are meeting predetermined targets or benchmarks.

Tier I has the following features:

- Appropriate, effective, and research-based core instruction for all students in reading, math, and writing
- A variety of flexible, grouping configurations for instruction and practice
- A team approach with teachers, administrators, and parents working collaboratively
- Targeted, intensive support within the classroom for students experiencing difficulty

- Instruction with specific adaptations and modifications based on assessment and progress monitoring
- A process that includes formal, universal screening focusing on specific skills, strategies, and content knowledge

If students do not make the targeted gains after receiving instructional accommodations, that could include re-teaching and smaller groupings in the general education classroom, they are considered for Tier II support (Brown & Sanford, 2011).

Tier II: More intensive support. In Tier II, interventions are provided to students, rather than instructional adjustments to the general curriculum. Tier II interventions are often delivered in a small group setting and may be provided by a reading specialist, a math interventionist, or a Title I teacher. Tier II interventions are supplemental to the general education curriculum. Students should receive additional instruction targeted at specific goals according to students' needs identified by Tier I screening. The following are features of a Tier II model :

- Focuses on and targets specific skills that are associated with broader academic success
- Contains designs for students who are not making adequate progress on core skills
- Uses explicit instruction

If a student does not respond to Tier II intervention, the RtI committee uses collected data to determine if intensive, individualized instruction is necessary at the Tier III level. (Sun , Nam, & Vanderwood, 2010)

Tier III: Intensive individual instruction. In Tier III, interventions are more intensive and may be delivered individually or in small groups. Students' progress continues to be closely monitored. RtI models vary in their conceptualization of Tier III, but are characterized by the following:

- Strategic instruction that promotes learning for all students based on individual needs
- Implementation is allotted a specific time using frequent progress monitoring to inform ongoing decisions about placement
- Part of a recursive RtI process in which students move in and out of tiers
- A method to aid in the identification of a learning disability

In addition to the variations in the numbers of tiers used to deliver RtI services, schools use different approaches in implementation, such as problem-solving, standard treatment protocol, and hybrid approaches. Although RtI components look similar under problem-solving and standard treatment protocol, approaches vary in how interventions are implemented. (Sun , Nam, & Vanderwood, 2010)

RtI Models

There are two distinct RtI models: a standard treatment protocol model and a problem-solving model (Fuchs, Mock, Morgan, & Young, 2003). Most schools use a combination of the two models (National Association of State Directors of Special Education [NASDE], 2006). According to NASDE (2006), both models outline tiers, or stages, of intervention.

Standard treatment protocol model. In the model for standard treatment protocol, the same empirically validated treatment is used for all students who have similar needs, and achievement is measured against specified benchmarks. The standard treatment approach suggests that providing the same intervention to students who have similar needs introduces a level of quality control. This model has been used as a framework for early intervention, particularly in reading. The model for standard treatment protocol provides standard interventions chosen to address the most common weaknesses of students who attend the school. Interventions are readily available to students once needs are identified. Interventions are provided in small groups by teachers or tutors who have been thoroughly trained in the specific program or strategy (Echevarria & Vogt, 2011).

Problem-solving model. In the problem-solving model, students' concerns are defined behaviorally, and interventions are planned specifically for targeted students and provided over a reasonable period of time (Brown & Sanford, 2011). Then, students' performances are measured in the natural setting, and a student's progress is compared to that of peers (Brown & Sanford, 2011). Furthermore, a team of practitioners identifies and evaluates difficulties of individual students and designs and implements flexible interventions to meet the needs of those students. The problem-solving model typically has four stages: problem identification, problem analysis, plan implementation, and plan evaluation. The problem-solving model is labor and time intensive (Echevarria & Vogt, 2011).

Elements of RtI may vary slightly from one another, but, essentially, all RtI approaches contain the following components: high quality classroom instruction, research-based instruction, universal screening, continuous classroom monitoring, research-based interventions, progress monitoring during instruction and interventions, fidelity of program implementation, staff development and collaboration, parent involvement, and determination of specific learning disabilities.

Fidelity of RtI

Regardless of the model used, fidelity in the RtI process is critical. In education research, fidelity is defined as the degree to which an intervention or model of instruction is implemented as it was originally designed to be implemented. Fidelity in RtI involves students' receiving systematic, research-based instruction that is consistent and effective, intervention that is implemented with high fidelity and the way it was intended, and assessments that are used for progress monitoring. Documentation of comprehensive student performance is necessary for the decision-making process. (Echevarria & Vogt, 2011).

Swanson, Solis, Ciullo, and McKenna (2012) evaluated the RtI process and implementation in a school district. Their study included a report about the perceptions and instructional practices of special education teachers for Grades 3 through 5 in a school district that implemented a multi-tiered RtI framework for the previous five years. Swanson et al. used purposive sampling procedures to gather comprehensive data about instructional practices and teacher perceptions. They sought to identify one school district that met the following criteria: (a) a majority of the schools met minimum

standards on state assessments of reading and mathematics, (b) the population was ethnically diverse and included a proportion of students identified as having a learning disability that aligned with national trends, (c) an RtI model had been implemented district wide for at least three years, and (d) the school district employed a designated RtI coordinator.

The selected school district is in a southwestern state near a large city. The district served more than 20,000 students. The rate of special education enrollment during research sampling phase was 9.0% and 5.0 % ELLs. Approximately 42.0% of students qualified for free or reduced lunch and were designated as economically disadvantaged. Approximately 36.0% of students were Hispanic, 32.0% were White, 23.0% were Black, and 9.0% were Asian or Pacific Islanders. Initially, seventeen special education teachers volunteered to participate in the study. Five were reassigned to general education positions which yielded a total of twelve teachers who continued to participate in the study. The range of teaching experience for the sample group was 1 to 31 years. Four teachers in the sample group held master's degrees. Eleven teachers in the study had received additional training in reading strategies and methods; no teachers reported additional training in mathematical methods or strategy instruction.

Using focus groups and interviews to examine how special education teachers perceived RtI the researchers observed the mathematics and reading instruction that these teachers provided (Swanson et al., 2012). The authors investigated three facets of the RtI process: (a) perceptions of special education teachers about the RtI framework, (b) time these educators teach critical components of reading and mathematics to students in

Grades 3 to 5, and (c) how much teachers use evidence-based instructional practices to teach reading and mathematics. The teachers were administered a survey to interviewed to gauge their perceptions of the RtI process. The researchers conducted observations in the classroom to assess the fidelity of RtI interventions and instruction. Results from this study supported the need for schools to closely examine their RtI process and the implementation. Teachers in the study mentioned that key benefits of RtI are accessing early intervention, meeting unique student needs, and collaborating with other staff members (Swanson et al., 2012). Furthermore, the researchers found evidence of high levels of student and teacher engagement, which is significant because high quality instruction yielded a strong core of Tier I instruction.

Components of RtI for ELLs

Researchers have identified several critical components for RtI and ELLs. Research-based strategies and interventions are necessary for meeting diverse needs of ELLs (Barrera & Liu, 2010). Kamps et al. (2007) highlight evidence-based direct instruction and small group intervention as critical components of early intervention for ELLs at risk for reading difficulties. In addition, early literacy interventions that modify the existing program and provide language support activities have been effective for meeting the needs of ELLs (Cirino et al., 2009; Vaughn et al., 2006). ELLs also benefit from language support activities that actively engage students, such as using visuals and gestures, clarifying meaning, and making explicit explanations on directions.

The lack of progress in academic language development impacts ELLs' abilities to comprehend and analyze texts in secondary education. Furthermore, this lack of

development impacts the students' abilities to write and express themselves effectively, which can hinder their acquisition of academic content in all academic areas. ELLs must overcome challenges to acquiring content-area knowledge because their academic language, and, therefore, achievement, does not improve as well as that of their monolingual peers (Francis et al., 2006).

Vaughn et al. (2005) described critical elements of early literacy intervention for ELLs in English and in Spanish by suggesting there should be four major phases to the development of the interventions: (a) developing English intervention (Mathes, Torgesen, Wahl, Menchetti, & Grek, 1999), (b) designing activities with language support to modify English intervention, (c) developing Spanish intervention, and (d) designing oral intervention in English and in Spanish. An example of one of the language supports is for teachers to define the words that students may not know to ensure they understand instructions and tasks they are asked to perform.

Orosco and Klingner (2010) used a case study with a qualitative approach to describe how RtI was implemented for ELLs at the primary level (K-2) who had reading difficulties. The purpose of Orosco and Klingner's study was to determine how one urban elementary school with a high percentage of ELLs implemented RtI at the primary level (K-2). Orosco and Klingner investigated how teachers' understandings, beliefs, judgments, and training affected their implementing the RtI program with ELLs. Orosco and Klingner focused on students' understanding literacy instruction across the three tiers of the RtI model and examined what happened in problem-solving meetings at the elementary school, which is part of an urban school district. The school's population

consisted of 290 students: 14.0% were Caucasian, 1.0% were African American or Asian, and 85.0% were Hispanic. Of the Hispanic students, 80.0% were considered ELLs. In addition, 11.0% of the ELLs were reading at a basic proficiency level. Additionally, almost all of the schools' students qualified for a free or reduced-price lunch (98.9%). The school was designed to function as an English as a Second Language (ESL) immersion program that provided pull-out and in-class ESL services, except one bilingual first- and second-grade classroom.

In Orosco and Klingner's (2010) study, eight school professionals participated, including six teachers, one principal, and one school psychologist. During a 5-month period, Orosco and Klingner collected multiple sources of data (e.g., interviews, observations of RtI meetings and classroom instruction, and assessment and instructional documents) to document implementation of RtI and to identify participants' perceptions. The researchers conducted 48 observations of classroom reading instruction (three times per week for approximately two hours each session). The purpose of these observations was to describe classroom reading instruction for ELLs and to explain how the assessment process functioned for ELLs who were being recommended for further intervention support.

Orosco and Klingner's (2010) observations and data were analyzed using coding. The researchers determined that the school's RtI process appeared to be a fragmented model that resulted in part from a misalignment in assessment and instruction. For instance, teachers applied RtI procedures of assessment (progress monitoring) and evidence-based reading principles that, for the most part, failed to facilitate individual

students' learning and development. The quality, or appropriateness of assessment and instruction, was never questioned for this population; evidence showed that the school's teachers used assessment and instructional values and standards that had little relevance to ELLs home culture and language. Eventually, this misalignment resulted in teachers' recommending many students for further RtI support and special education.

Recommendations from the authors include the need to differentiate for ELLs when they are referred to the RtI team. Teachers, who work with ELLs ought to use instructional and assessment practices, that have shown effective with similar populations. Teachers should also be knowledgeable about cultural and linguistic diversity for ELLs. Furthermore, teachers should develop a socio-cultural awareness to understand how culture and language affect learning. Teachers should also learn how to develop and implement an effective RtI model for meeting diverse needs of ELLs (Orosco & Klingner, 2010).

Orosco (2010) demonstrated through a case study of classroom observations that sociocultural factors influence RtI for ELLs. Orosco used samples of classroom observations to analyze Tier I instruction for ELLs. Orosco also highlighted interactions of two teachers who were working with ELLs. One teacher had received professional training in meeting the needs of ELLs, and the other teacher had not received any professional training to differentiate classroom instruction between English-speaking students and ELLs. The teacher who had received ELL training used socio-cultural teaching methods to contextualize knowledge and meaning and to incorporate literacy practices based on students' homes and communities. However, the teacher who had not

received professional training for meeting the needs of ELLs did not engage her students in meaningful and relevant learning experiences.

Students who are provided with an RtI program that considers socio-cultural aspects are more engaged and motivated by bridging their socio-cultural experiences with curriculum and social context (Orosco, 2010). Professional development should focus on culturally responsive instruction that prepares teachers to effectively differentiate ELL instructional approaches, to understand the process of bilingual language acquisition and how it affects learning to read in two languages, and to build on ELLs' contextual experiences (Klingner, Méndez Barletta, & Hoover, 2008).

Choi, Oh, Yoon, and Hong (2012) conducted a systematic literature review to delineate various components, strategies, and implications of RtI for ELLs. They analyzed 26 articles for themes and important findings; these articles included peer-reviewed and data-based studies published from 2004 to 2011. Trends and considerations highlighted about implementing RtI for ELL students included instruction in general education classrooms assessments for progress monitoring, and quality of reading intervention. Choi et al. asserted that instruction provided in general education classrooms is considered to be the first tier of the RtI model and for ELL students' language development.

Choi et al. (2012) used the following descriptors to search through Education Full text, PsychINFO, Proquest, and Eric: learning disabilities, reading disabilities, RtI, response to instruction, response to intervention, non-responders, responders, Tier II intervention, early literacy, reading difficulties, at-risk, continued risk, and reading

intervention. The articles were then coded; the coding sheet included the following: (a) method of research, (b) participant information, (c) type of study (quantitative, qualitative, or mixed methods), (d) data collection procedures, (e) data analysis procedures, (f) RtI stages, (g) soundness and quality of research, and (h) school setting. Choi et al. were able to identify 26 viable articles that met their identified criteria to analyze. Four authors in dyad groups read each article and filled out coding sheets, which were created to eliminate unrelated articles. Upon comparison of individually completed coding sheets, the researchers came to an agreement that yielded an inter-rater reliability of 0.94.

Based on this study's literature review, components of a recommended RtI model for ELLs were identified. Thirteen studies suggested effective strategies and teaching methods for implementation of RtI for ELLs. Gilbertson and Bluck (2006) examined how RtI interventions affected letter-naming performances by comparing 1-second response wait time with 5-second response wait time and 1-second interval duration with 5-second interval duration. Gilbertson, Maxfield, and Hughes (2007) examined relative effects of two response modes (i.e., see/say and hear/point) on letter-naming rates. Also, language support activities were employed to modify existing programs to satisfy students' linguistic and cultural diversities (Cirino et al., 2009; Vaughn et al., 2006; Vaughn et al., 2005).

Recommendations about teachers' roles were also provided. Two articles reported what teachers do for effective RtI for ELLs (Wilkinson, Ortiz, Robertson, & Kushner, 2006; García & Tyler, 2010). Barrera and Liu (2010) indicated the importance

of making appropriate assessment decisions for ELLs. Four articles addressed procedural differences that should be considered when using RtI for ELL students (Klingner & Artiles, 2006; Haager, 2007; Linan-Thompson et al., 2007; García & Tyler, 2010).

Researchers from these articles recommended three areas to help with implementing RtI with ELLs: (a) instruction in general education classrooms, (b) assessments that are culturally congruent for progress monitoring and (c) quality of reading interventions designed for ELLs. These areas were highlighted as being key components for implementing RtI for ELLs. Furthermore, researchers have noted that implementing an RtI process should preserve cultural aspects of ELLs. Professional learning for teachers' meeting ELLs' needs was also cited as non-negotiable for a fidelity-based RtI process.

Healy, Vanderwood, and Edelston (2005) explored the use of an RtI model for ELLs to identify students who needed additional intensive services. As part of a three-tier prevention model, 259 first grade students in a large urban school district were screened with measures of phonological awareness and nonsense word fluency to determine students in need of a tier-two reading intervention. The 15 lowest performing ELL students were selected and received a scripted phonological awareness intervention and a token economy. Students were monitored weekly with a Phoneme Segmentation Fluency (PSF) task and a Nonsense Word Fluency (NWF) task to assess improvement of their reading skills. A modified single-case A-B design was used to track the progress of students and their responses to the treatment. Students left the intervention when they reached a predetermined level of PSF tasks and NWF tasks. Of the 15 ELL students, 12

students were able to leave the intervention. The remaining three students were referred for Tier-III intervention. Data from this study supports using an RtI model to intervene with ELLs students who struggle with literacy.

Assessment. RtI programs emphasize using assessments for screening and monitoring the progress of students. It is important to consider the validity of screening and progress monitoring tools and their effectiveness with ELLs (Haager, 2007). Assessment tools are effective for collecting data needed on students' current levels of performance. Data can be used to determine types of research-based interventions for individual students. Progress monitoring is suggested for the RtI model to carefully track students' improvements in reading.

Instruction. García and Tyler (2010) suggested that intensive reading interventions provided by teachers who have a deep understanding of ELL instructional methods would be helpful for ELL students who have learning difficulties in academic areas. Although direct instruction is known to be highly effective with ELLs, the fidelity of how these instructions are being delivered is just as important as determining which students need interventions. To provide assistance in this area, teacher education programs should ensure that professional instruction is provided effectively to ELLs who may be at risk of failing to read.

RtI and Special Education Identification of ELLs

The number of ELLs has more than doubled since the 1980s and has grown significantly in U.S. schools (Huang, Clarke, Milczarski, & Raby, 2011). Appropriate assessments and identification of ELLs who have a learning disability is a critical

component of meeting students' needs in our schools. Researchers have highlighted a disproportionate representation of ELLs receiving special education services (Sullivan, 2011). Many issues have surfaced with assessments used to identify ELLs and the unique challenges in assessing second language learners who are suspected of having LD (Chu, S., & Flores, S, 2011).

Early intervention and high quality explicit instruction are optimal in the education of ELLs. García and Tyler (2010) recommended that general education teachers use strategies to support students' cognitive and academic development by presenting techniques such as reducing independent information retrieval, focusing on self-monitoring skills, increasing study skills, and utilizing students' preferred learning modalities. The education field lacks research in teachers' effective instruction for ELLs who have a learning disability. (Baker, Gersten, Haager, & Dingle, 2006; Gersten, Baker, Haager, & Graves, 2005; Haager, 2007). Furthermore, Linan-Thompson et al. (2007) suggested that teachers need to provide explicit, systematic, and intensive interventions to ELL students who are at risk of falling behind in reading. Students can benefit more in reading instruction, which will further help with decreasing false positives in identifying LD.

Researchers who focus on assessments and LD have also highlighted the complexities of identifying ELL students who have LD. Orosco and Klingner (2010) noted that valid assessments are critical for evaluating successful RtI implementation for ELLs. Assessments for accurate identification and appropriate instruction of ELLs who have LD have remained a concern for schools. Educators have a difficult time

determining the difference between acquiring a second language and having a language-based LD (Barrera & Liu, 2010). If ELLs have LD and do not receive services for years because teachers are waiting for them to learn new languages, then ELLs may have serious consequences, including falling multiple years behind their peers or having emotional issues. Some educators quickly refer students for special education tests because they struggle in the classroom (Rinaldi & Samson, 2008). Assessment procedures for ELL students should be research based and address languages and accommodations in assessments (Abedi, 2009).

Proper identification of ELLs who have a learning disability (LD) has presented challenges because LD can be masked by students' limited English proficiency. According to Huang et al. (2011), schools struggle to provide language assistance that ELLs who have LD need and often must advocate getting extra assistance to be successful. Issues related to assessments of ELLs include the following: substantial performance gaps between ELLs and non-ELLs; linguistic complexity of test items that make it more difficult for ELL students to comprehend and contributes to lower scores; criteria for classification of ELL status; lack of accuracy, validity, and test/item fairness; standards of the English-speaking culture; allows over referral of ELLs to special education; and cultural barriers (Abedi, 2009). Improper ELL identification leads to inappropriate instruction, assessment, and accommodation for ELL students. According to Huang et al. (2011), it is important to examine and continue researching ELLs and their assessments.

The following factors also contribute to the overrepresentation and underrepresentation of ELLs in special education for LD: misunderstandings of the educational needs of students identified as ELLs, trouble understanding poorly designed assessments, lack of effective instruction, difficulty distinguishing between emergent English proficiency and disability, and difficulty distinguishing linguistic differences from LD (Abedi, 2009). Measures should exist to ensure that ELLs receive appropriate assessments within the RtI process.

Chu and Flores (2011) highlighted that teachers should assess in English and in students' native languages whenever possible. Assessments in their native languages may provide more accurate inventories of students' knowledge and skills. Chu and Flores also recommended using interpreters when needed to maximize validity and reliability of assessment results.

Accommodations. Testing accommodations were also recommended to help ELLs with the complexity of the testing process (Chu & Flores, 2011). The following accommodations were highlighted as being effective: simplifying language, using dictionaries, reducing linguistic complexity in assessment materials, testing beyond the ceiling, providing clarification in the native language, modifying tests, modifying tests' procedures, and differentiating testing accommodations depending on level of language proficiencies.

Chu and Flores (2011) advocated for families' involvement in assessment processes. IDEIA (2004) supports family's legal rights and responsibilities for being involved in the special education process, including assessments. Educators should be

proactive and reduce barriers to parent involvement in the assessment process for their children. Chu and Flores recommended that parents of ELLs be involved in meaningful and qualified participation during the assessment process. Schools should build positive partnerships with parents to ensure they provide and receive assessment information.

Donovan and Cross (2002) recommended moving from a discrepancy model for identifying students who have LD to an RtI model for ameliorating some causes of disproportionality. This recommendation was consistent with similar suggestions by the President's Commission on Excellence in Special Education (2002), which was to eliminate a discrepancy model for IQ-achievement and instead consider how much students respond to valid interventions when determining whether they may have LD. RtI programs can also assist readers who struggle more quickly in the general education classroom. RtI can provide individualized instruction to students who have performed poorly because of inadequate instruction, which separates these students from students who may have disabilities. Moreover, distinguishing between students who have LD and students who have received poor instruction can potentially lead to reductions in inappropriate misidentifications and referrals to special education.

Components of the Estrella RtI Model

A review of literature supported a specialized RtI model for ELLs (Choi, et. al, 2012). Assessment and instruction must be both linguistically and culturally congruent for ELLs to be successful. Teachers must know students' level of language proficiencies and implement curriculum to meet their needs. Furthermore, teachers should view students' languages and cultures as strengths, not liabilities. A specialized model should

be implemented to meet diverse needs of this student population (Brown & Doolittle, 2008).

The model should include a number of different elements. First, the model should include a systematic process for examining the specific background variables or ecologies of ELLs (i.e., first and second language proficiency, bilingual education models, immigration pattern, socioeconomic status, and culture). The model should also consist of examining the appropriateness of classroom instruction, the classroom context based on knowledge or individual student factors, and interventions that are developmentally, culturally, linguistically and experientially appropriate. Also contained in the specialized model should be information gathered through formal and informal assessments, standardized assessments in both languages, nondiscriminatory interpretations of assessment data, and tiered intervention approaches where each tier provides intervention of increasing intensity. Finally, the model should include teacher training and communication with parents in their native language.

Interventions for ELLs in Content Areas

Researchers have suggested that in order to make RtI effective in teaching ELLs, teachers need to effectively implement evidence-based instructional strategies and make appropriate accommodations for the learning context to be culturally and linguistically meaningful (Brown & Sanford, 2011). Supporting and promoting academic success of the growing population of ELLs is challenging and necessary for educators across the US. Francis et al. (2006) identified six recommendations to guide the planning and implementation of any instructional approach or academic intervention to promote ELLs'

reading abilities: (a) early, explicit, and intensive instruction in phonological awareness and phonics to build decoding skills; (b) K–12 classrooms across the nation must increase opportunities for ELLs to develop sophisticated vocabulary knowledge; (c) reading instruction in K–12 classrooms must equip ELLs with strategies and knowledge to comprehend and analyze challenging narrative and expository texts; (d) instruction and intervention for promoting ELLs’ reading fluency must focus on vocabulary and increased exposure to print; (e) ELLs need significant opportunities in all K–12 classrooms across the US to engage in structured, academic talk; (f) independent reading is only beneficial when it is structured for ELLs.

Francis et al. (2006) also identified three considerations when planning and implementing any instructional approach or academic intervention to promote ELLs’ mathematics ability: (a) ELLs need early, explicit, and intensive instruction and intervention in basic mathematics concepts and skill; (b) academic language is as central to mathematics as it is to other academic areas because it is a significant source of difficulty for many ELLs who struggle with mathematics; and (c) ELLs need academic language support to understand and solve the word problems that are often used for mathematics assessment and instruction. In general, ELLs need specialized instruction and intervention to ensure that they are successful.

Another critical component of meeting the needs of ELLs is to have a collaborative team of experts on the RtI team. Members should include general education teachers, ELL specialists, bilingual teachers, special education staff, administrators, and parents (Xu & Drame, 2008). Collaborations will foster a sense of

shared responsibility and increase the accountability of monitoring progress. According to Rinaldi and Samson (2008), teachers and members of the RtI team should participate in the following professional development to meet ELLs' needs: using appropriate formal and informal evaluation practices, understanding and evaluating second language acquisition, matching instructional strategies at each stage of language development, including typical and atypical language and literacy characteristics of ELLs, accommodating and adapting for their needs during testing situations, using linguistic accommodations in the classroom, collaborating with colleagues, and monitoring ELLs progress.

Brown and Doolittle (2008) recommended that carefully designed RtI should include cultural competencies embedded in the tiers. Students' cultural backgrounds should be an integral part of program construction, along with experiences and interventions provided in English and in their native languages. Additionally, language proficiency in students' first and second languages should be equally prioritized so interventional outcomes are maximized.

Cultural Considerations

Successfully implementing RtI programs for ELLs is based largely upon participating teachers' knowledge of cultural diversity. Brown and Doolittle (2008) suggested that classroom teachers and teachers who provide interventions to ELLs should be familiar with the importance of cultural values in reading difficulties and respond to the specialized needs of students. Systematic planning and understanding from key personnel are valuable and highly critical. Furthermore, teachers and key staff members

in school-wide implementations of RtI should be familiar with culturally sensitive instruction and first and second language acquisitions.

The PLUSS Model

According to Sanford, Brown, and Turner (2012), teachers should use a model of effective instruction and intervention for ELLs to successfully meet their specialized needs; the researchers also note that teachers should use a systematic enhancement of instruction and intervention to target specific needs of these students. Sanford et al. developed a model that is based on a synthesis of research about interventions that are successful for ELL students. This model is called the PLUSS Model (Pre-Teach, Language Modeling, Use Visuals, Systematic Instruction, Strategic Use of Native Language) and consists of the following: pre-teaching critical vocabulary, language modeling and opportunities to use academic language, using visuals and graphic organizers, systematic and explicit instruction, and strategic use of native language and teaching for transfer. The PLUSS Model is one example of how RtI can be structured to meet the specialized needs of ELLs.

According to Sanford et al. (2012), the components of the PLUSS model are based on research-based practices that are effective for ELLs. The first component, pre-teaching critical vocabulary, involves (a) identifying vocabulary critical to learning lesson content and (b) explicitly teaching this vocabulary in advance to increase ELLs' access to academic content. Second, language modeling and opportunities for practice involves the teacher modeling academic language, and then providing multiple opportunities for students to practice academic language using it in meaningful contexts.

The third component is the use of visuals and graphic organizers, which can be an effective learning tool for ELLs. Using visuals, such as photographs, pictures, drawings, and gestures can make content more comprehensible to students. Also, systematic instruction can be used to carefully sequence and provide sufficient practice for students to master content and increase retention of learning over time.

Teachers who provide systematic, explicit instruction provide clear, comprehensive, and careful explanations, actively demonstrate how to implement skills and strategies, provide guided practice, and provide opportunities for independent practice as students master the content. Finally, strategic use of native language can be as simple as providing a single synonym in students' native languages for an English word or as complex as previewing an entire lesson in students' native languages before teaching the lesson in English. Teaching for transfer involves identifying what students already know in their native language, and teaching them which skills are similar or the same and which skills are different in English.

PLUSS is intended to support ELLs at many levels of English proficiency in acquiring oral language proficiency and literacy skills in English. The model was designed to be used across all RtI tiers. PLUSS was implemented along a continuum of supports consistent with an RtI model and is more likely to be implemented by teachers based on its ease of use. According to Sanford et al., (2012) PLUSS is effective because it incorporates research-based instructional strategies that work for ELLs.

Summary

Educators should design and create specialized instructions and interventions for ELLs. Teachers must be able to distinguish between cultural/linguistic differences and suspected LDs. Accurately examining data by a multidisciplinary team is critical to developing tiered interventions for ELLs. According to Echevarria and Vogt (2012), RtI teams should examine data, such as records, interviews, observations, and testing histories. The fidelity of RtI programs must increase for ELLs to avoid over-representing students who are referred for and receive special education services. Researchers have identified the need to develop differentiated RtI models, interventions, and professional learning activities to help educators meet diverse needs of these students. Currently, more research is needed to determine the effectiveness of interventions and RtI models for ELLs. Rinaldi and Samson (2008) asserted that educators who implement RtI with ELLs should be required to have experience and training on various topics, such as including formal and informal evaluations, making accommodations in classrooms for ELLs, and understanding acquisition of a second language. Orosco and Klingner (2010) also recommended that teachers who work with or instruct ELLs should be knowledgeable of second language acquisition.

CHAPTER III

METHODOLOGY

This chapter begins with a description of the research design/rationale, research questions, hypotheses, and data analysis regarding RtI and ELLs. A description of the urban Pre-kindergarten through 5th grade elementary school campus is used to develop a robust view of the campus and the role of the researcher at the campus.

Research Design

A qualitative design was selected to conduct a case study of a school's specialized model of RtI for ELLs. Creswell (1998) defines qualitative research as “inquiry process of understanding based on methodological traditions of inquiry that explores a social or human problem” (p. 15). Qualitative research is conducted in a natural setting and seeks to explore human behavior within the context of a bounded program. The qualitative researcher wants to answer the “what” and the “how” questions. The “what” question may involve a phenomenon, a person, or a program; whereas, the “how” question looks at the effects of the study focus on all stakeholders within a bounded system (Hatch, 2002).

A case study approach was selected based on its appropriateness for this particular study. According to Yin (1994), a case study is a special kind of qualitative work that investigates a contextualized, contemporary phenomenon within a specified boundary. Merriam (1988) presented examples of a bounded phenomenon in education as “...a

program, an event, a person, a process, an institution, or a social group” (p. 13). Case study characteristics include examining a particular subject bounded in time and space, providing a detailed description of contextual material about the case setting, gathering extensive material from multiple sources to provide an in-depth picture of the case, and using the researcher as an instrument of data collection (Creswell, 1998).

This qualitative case study was conducted using the philosophical assumptions of epistemology and methodology. The epistemology research paradigm examines the relationship of the researcher to the research and involves the researcher as a data collection instrument. The goal is for the researcher to get close to the subject being researched. The researcher is able to meet this goal due to his position in the field of study as she is considered an “insider” by the participants. (Creswell, 1998; Hatch, 2002). In this study, the researcher collected and analyzed archival data and clarified information through staff interviews.

Role of the Researcher

Creswell (1998) emphasizes the role of researcher as builder of a complex, holistic picture and conducts the study in a natural setting. Merriam (1988), Yin (1994), and Hatch (2002) cite the role of the researcher in qualitative research as a data collection instrument. The researcher in this case study works in the school as the campus principal and has developed and sustained some of the components under review. Thus, the researcher considered the concept of reflexivity as an essential component to ensure the integrity of the study. Hatch (2002) defined reflexivity as the researcher’s

ability “to keep track of one’s influence on a setting, to track biases, and to monitor one’s emotional responses”

Campus Profile

The selected elementary school has a current enrollment of 966 students and is the largest elementary school campus in a large independent school district in north Texas. At the time the study was conducted the population includes 96.0% Hispanic students, 2.0% Caucasian students, and 1.0% African American students. Student population includes 88.0% ELL students, 94.0% economically disadvantaged students, and 9.7% of students receive special education services. The school is a Title I campus with instructional initiatives to target the academic growth of all students. The campus has a range of service delivery options to meet the individual needs of students. It is the only campus in the district with a Medically Fragile classroom, which was designed and implemented during the 2013–2014 school year. The campus is home to an Academic Vocation Life Skills Unit and an Academic Life Skills Unit. Students are also provided a continuum of special education services through resource and inclusion support. The campus and itinerant staff provide speech, occupational, and physical therapy in push-in (provided in classrooms) and pull-out (provided in other classrooms) formats.

Campus leadership included one campus principal from 2007–2012. In 2012, campus leadership changed for one year to a new principal. In the Fall of 2013, the current principal was appointed with a prioritized goal of providing high quality,

research-based practices. A critical component of providing quality instruction and intervention is the use of the Estrella model of RtI.

The campus implemented the Estrella RtI model with the components of strategically designed instruction/intervention and assessment in 2007. The specialized model included the following components: research-based Tier I instruction for all ELL students using the Sheltered Instruction Observation Protocol (SIOP) Model (Appendix B), specialized universal screenings and state assessments to gauge the academic and language proficiency levels of students, district math and science curriculum-based assessments in English and Spanish.

Educators at the elementary school pre-teach content vocabulary using Robert Marzano's six-step direct instruction model (Appendix C), and content and language objectives are used with language modeling. Graphic organizers are used to help students organize thoughts and ideas. The elementary school has implemented Thinking Maps (Appendix D) campus-wide, which are used to help students organize information in content areas.

Educators on the campus also use systematic and explicit instruction in the area of reading with a balanced literacy approach that emphasizes guided reading in English and Spanish. Teachers use a bi-literacy model to develop fluent readers in both languages. The dual-language model (Appendix E) is used campus-wide to teach academics in English and in Spanish. Students follow a prescribed schedule of Spanish and English instruction at each grade level. Lastly, student progress is monitored in both languages by a multi-faceted RtI committee, including the students' parents, administrators, dual-

language teachers, an ELL specialist, a special education teacher, and bilingual literacy specialists when needed.

Research Questions

1. How does the Estrella model of RtI for ELLs affect student success as evidenced by state-mandated assessment scores (TAKS, STAAR, TELPAS) reading assessment data, AEIS data, and PBMAS data)
2. How does the Estrella model of RtI for ELLs affect the number of students referred for special education assessment and the number of students qualifying for special education services?

Hypotheses

1. The Estrella model of RtI will improve ELL state-mandated assessment scores and improve student performance on multiple measures used to gauge students' progress. The model will also enhance the performance of students who receive special education services.
2. The Estrella model will decrease the number of students referred for special education testing and will decrease the number of students who do not qualify for services. The percentage of students in special education will decrease from implementation of research-based RtI model for ELLs.

Data Collection

The researcher conducted a comprehensive data collection process to answer the research questions. The following data points were used to develop a picture of the campus: attendance rates, discipline data, state-mandated assessment scores including

education and special education assessments, Academic Excellence Indicator System [AEIS], Reading, Math, Science and Writing Assessment scores, Evaluación de Desarrollo de Lectura (EDL) scores, Development Reading Assessment (DRA) scores, RtI data, Texas English Proficiency Assessment System (TELPAS) scores, demographics, school profile, timeline/data for professional learning implementation, referral rate for special education testing, historical data from the school's special education program, and informal interviews. Data were collected from multiple sources including Texas Education Agency (TEA) Reports, Performance-Based Monitoring Analysis System (PBMAS), district assessment reports, district special education reports, screening data from the Aware, the district's assessment electronic database, and the district Special Education Automation Software (SEAS).

State assessment data over a period of twelve years were used to measure the impact of the specialized model of RtI on the campus. Twelve years of data were used because of changes in state mandated assessment for students: academic performance for 2002 was measured by Texas Assessment of Academic Skills (TAKS), 2003–2010 student performance was measured by the TAKS, and 2011–2013 was measured by the STAAR and TAKS. All assessments were administered to students in grades 3–5, including students who receive special education services. Assessments measure students' performances on the Texas Essential Knowledge and Skills (TEKS). Assessments have grown in complexity with the change in the testing formats. Additional assessment data that were used to measure the performance of ELLs included the TELPAS, which is designed to assess ELLs' progress in learning English. The

average of students' composite TELPAS scores was used to analyze the progress of ELLs on the campus. Furthermore, universal screening data were collected and analyzed in reading for K–2nd grade students. Students were assessed in Spanish and in English.

The progress of students who receive special education services was analyzed using state mandated assessment scores. Moreover, the special education referral rates and Does not Qualify (DNQ) status was analyzed using campus RtI logs, PBMAS data, DNQ data, and the Initial Admission, Review, and Dismissal process for a period of ten years. The data were retrieved from the district special education department and from SEAS. Finally, information about professional learning implementation was obtained from Title I records and reports from the Title I specialists for the elementary school. The researcher also clarified with special education supervisors and the district assessment personnel about information in the reports.

The following data were collected and analyzed to answer the research questions: attendance scores, discipline data, state-mandated assessment scores (i.e., general education and special education assessments, AEIS Reading Assessment scores, EDL scores, Woodcock Muñoz language assessment scores, RtI data, and comprehensive historical data for case study analysis), demographics, school profile, timeline/data for professional learning implementation, referral rates for special education testing, historical data from the school's special education program, and informal interviews. Data files were used to create a multifaceted profile of the campus using 12 years of archival data.

Data Analysis

After the data was collected, they were analyzed using trend and time series analyses to determine how the Estrella RtI model affected the performance of the specified elementary campus. Graphs and data displays were used to analyze the data over a 10-year period. The data collection and analysis began in February, 2014 and extended to May 2014. The data were used to answer the research questions and make recommendations for meeting the needs of ELLs.

CHAPTER IV

FINDINGS

This chapter presents findings from trend and time series analyses of the data.

The data are presented in figures interspersed with description to explain the significance of the findings. The Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) is represented visually in each figure by the black vertical line at the 2004 mark. The specialized model of RtI that was implemented on the school campus in 2008 and is still intact is represented visually in each figure with gray shading. There was also a strong instructional leader (principal) at the school from 2007-2012, and then campus leadership changed in 2012 with the new principal who stayed for 1 year. The dashed vertical lines at 2007, 2012, and 2013 indicate principal changes at the school. For each TAAS, TAKS, and STAAR measures, nonparametric analyses were conducted to examine specific time comparisons; prior to the start of the RtI program (2008) compared to RtI implementation 2008 - 2013, as well as comparison between the key time points; 2002 – 2004, 2005 – 2007, 2008 – 2011, 2012 – 2013.

The nonparametric approach for comparisons between groups within a time period, or comparing between time periods, involved the computation of the difference between mean ranks for any two groups or time periods. The 95 percent margin of error, correcting for unequal sample sizes when necessary, was then added to and subtracted from the mean rank difference, yielding a 95 percent confidence interval around the mean

rank difference. Intervals that did not include zero were taken as evidence against the null hypothesis of no difference. The margin of error used the product of the square root of the critical chi-square and the standard error (correcting for unequal samples.)

Due to the small sample size, alpha levels were set at $< .10$. Nonparametric analyses were not conducted on the TELPAS and DRA/EDL measures as all data was during the RtI timeframe; however visual trend analysis was conducted on these measures. This chapter concludes with a summary of findings and an analysis of data.

The research questions investigated were:

1. How does the Estrella model of RtI for ELLs affect student success as evidenced by state-mandated assessment scores including Texas Assessment of Knowledge and Skills (TAKS), State of Texas Assessments of Academic Readiness (STAAR), Texas English Language Proficiency Assessment System (TELPAS), and reading assessment data.
2. How does the Estrella model of RtI for ELLs affect the number of students referred for special education assessment and the number of students qualifying for special education services?

The purpose of this study was to examine how the Estrella model of Response to Intervention (RtI) impacted a campus that has 88% of the students who are English Language Learners (ELLs), 94.0% economically disadvantaged student, and 9.7% of student receiving special education services. The researcher investigated how the

Estrella RtI model affected the academic performance of ELLs, students in special education, and the number of students referred for special education eligibility.

Demographic Information

The demographics of the school have transformed over a ten year period, which has warranted specialized instructional interventions and programming for ELLs. School profile characteristics included the number of students enrolled on campus and the percentage of students enrolled in special education programs. School profile characteristics also included the percentage of ELL students, the percentage of economically disadvantaged students, the percentage of student mobility, the percentage of at risk students from 2005 – 2014, the number of staff, and years of average teacher experience. Demographic changes on the school campus over the time period of 2002 – 2014 were analyzed. The campus developed the Estrella model of RtI to meet the needs of ELLs, many of whom are economically disadvantaged.

As shown in Figure 1, overall school enrollment fluctuated between 816 students to 917 students from 2002 – 2005. Enrollment numbers experienced an upward trend from 2005 through 2008, with the largest number of students enrolled in 2008 at 1,122 students. After 2008, enrollment numbers dropped back down and remained relatively stable, between 892 and 933 through 2013. Student enrollment numbers showed a minor increase in 2014.

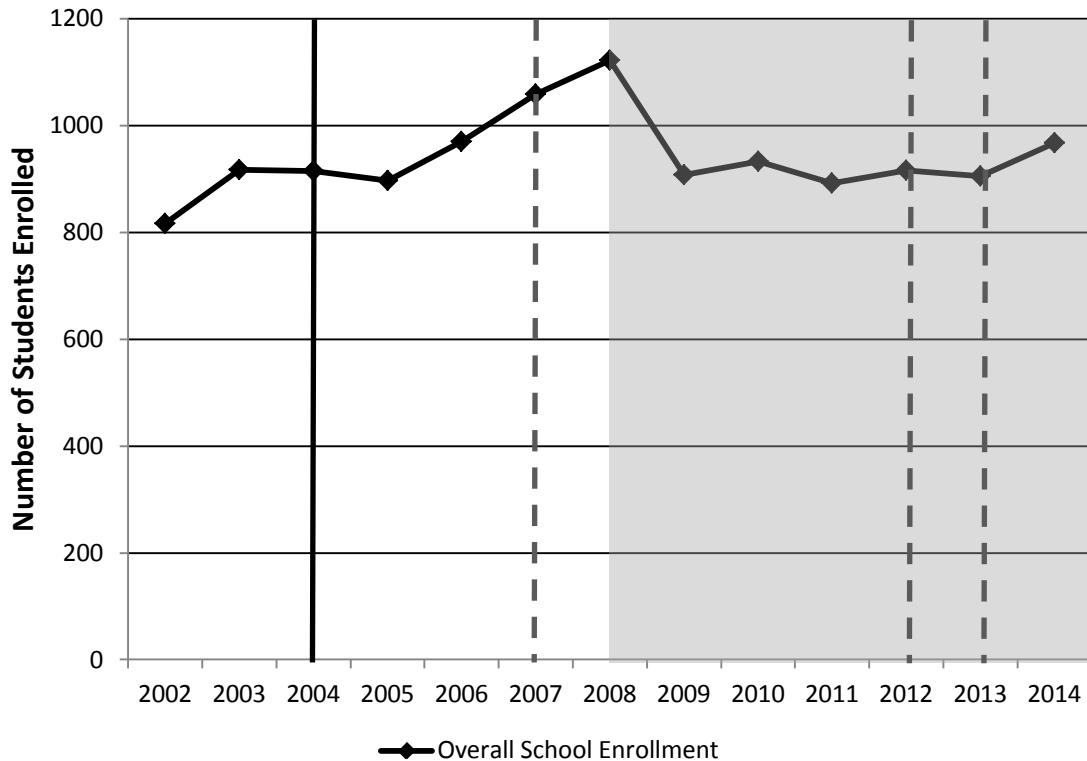


Figure 1. Number of students enrolled on campus from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 2, the percentage of ELLs on campus increased on an upward trend from 2002 through 2010. The percentage of ELLs stabilized around 88.0% from 2010 through 2014. During the years of the implementation of the specialized model of RtI (2008 – 2014), ELL percentages remained at approximately 85.0% or above.

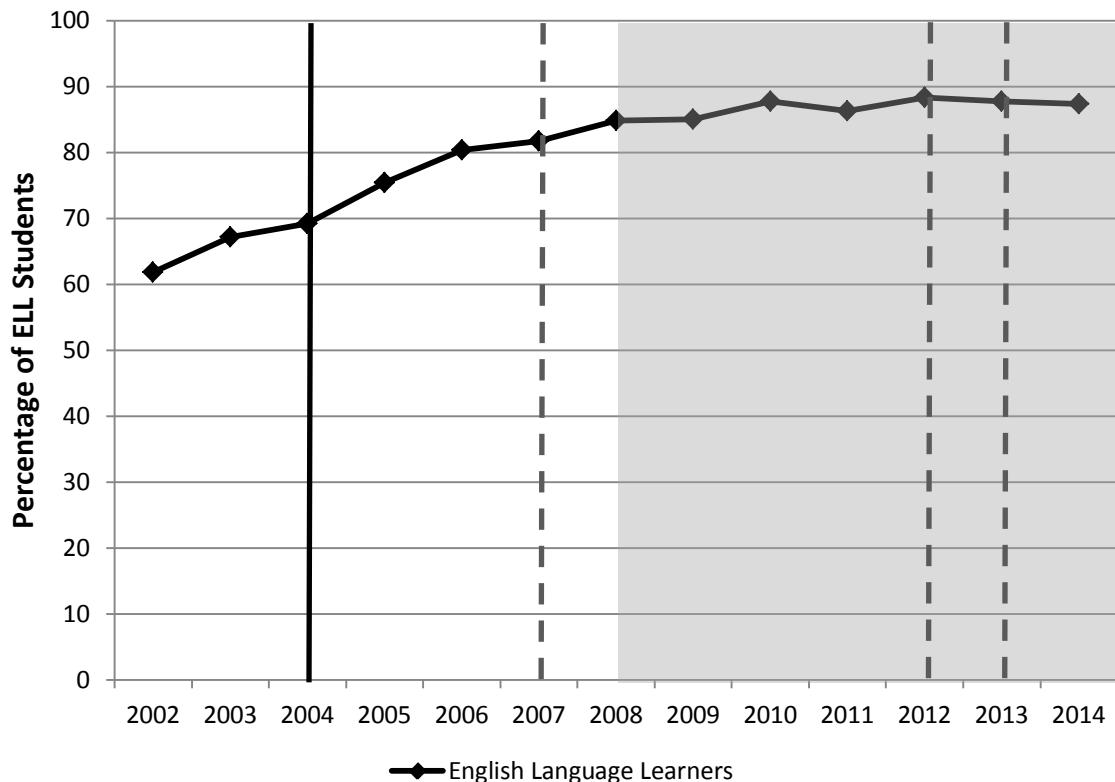


Figure 2. Percentage of ELL students from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 3, the percentage of students who were considered to be economically disadvantaged dropped in 2004 to 56.6% and then peaked the next year by 30 percentage points to 87.2%. Percentages remained relatively stable from 2005 through 2014, with percentages ranging from the upper-80s to mid-90s. The school campus had the highest number of ELLs enrolled during the years of the implementation of the specialized model of RtI (2008 – 2014).

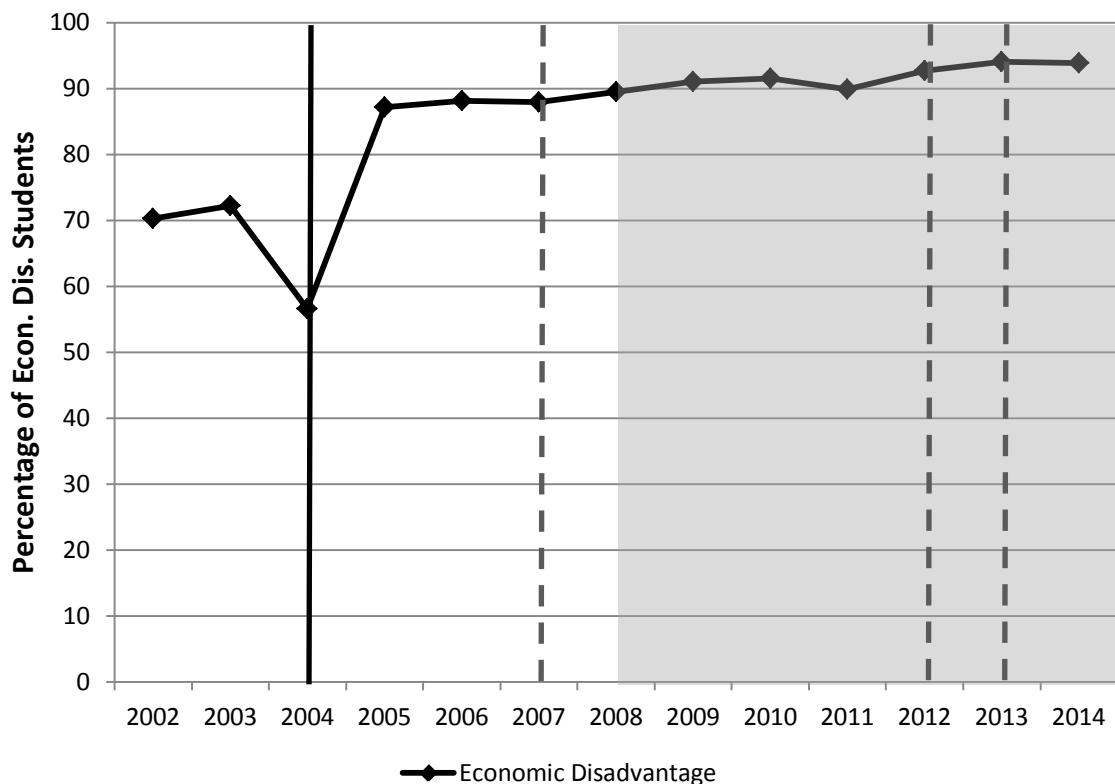


Figure 3. Percentage of economically disadvantaged students from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

Student mobility percentages were stable from 2002 to 2006, with most percentages near 20.0% (see Figure 4). Student mobility is the rate at which a student makes non-promotional school changes. There was a small drop in student mobility from 2006 – 2008. During the majority of the years of the implementation of the specialized model of RtI (from 2008 – 2013), there was a downward trend with the percentage of student mobility dropping to 9.3% in 2013. In 2014, mobility increased for the first time in five years, to 17.2%.

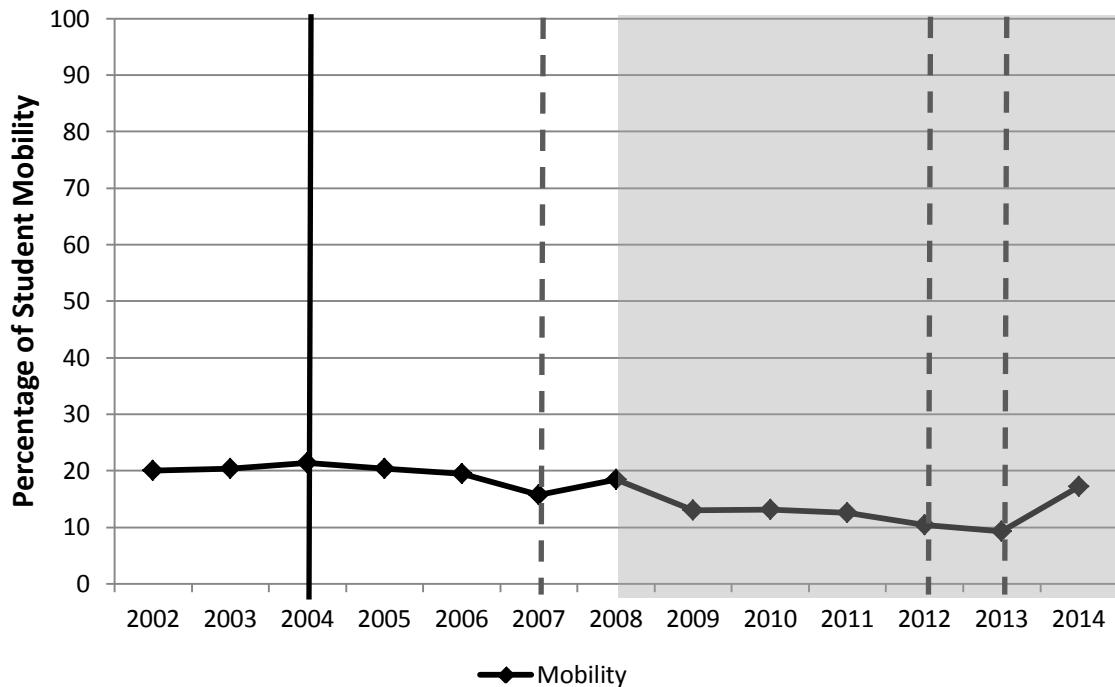


Figure 4. Percentage of student mobility from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 5, the percentage of students who were considered to be at risk for dropping out of high school was the lowest in 2005 at 79.0% (at risk data for 2002 – 2004 were unavailable). Percentages of at risk students increased from 2005 through 2010 (with a minor drop in 2008), with percentages peaking at 92.5% in 2010. Percentages remained relatively stable, in the lower-90s, from 2010 through 2014. Of the study years, the school campus had the highest number of at risk students enroll.

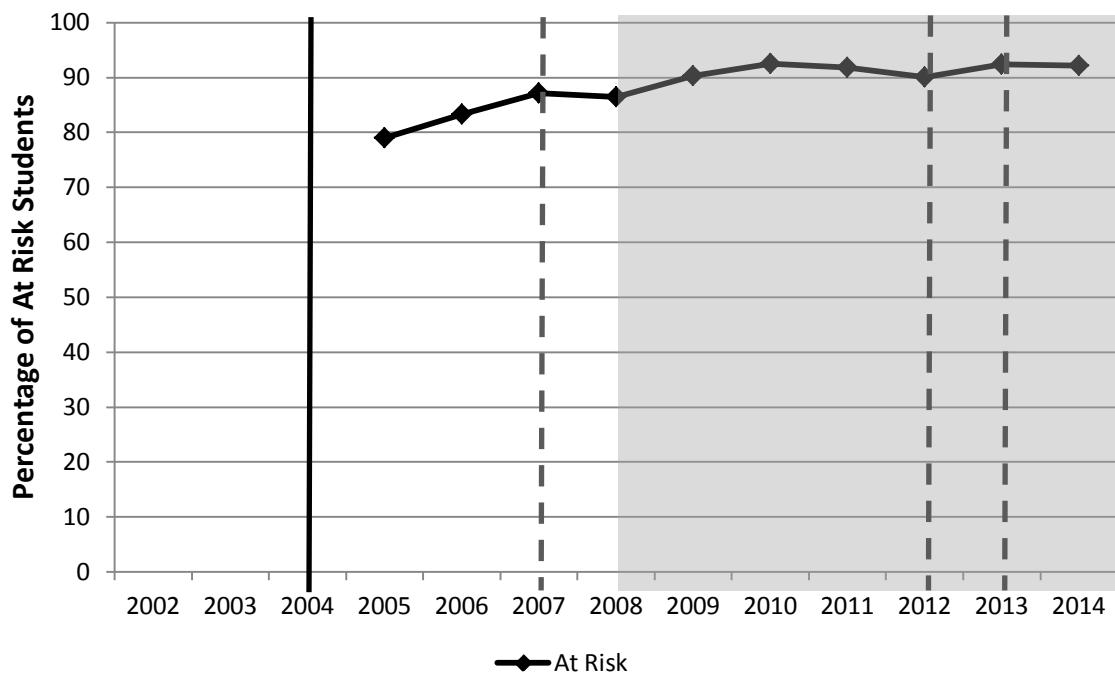


Figure 5. Percentage of at risk students from 2005 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 6, the total number of school staff was relatively stable from 2002 to 2005, with numbers in the lower to mid-90s. Number of staff increased from 2005 through 2007, and peaked at 112 in 2007. The number of staff members dropped from 2007 – 2010 to 79, and then fluctuated between 83 and 91 through 2014. Of the study years, the school had the least amount of total staff on campus during the time of the implementation of the specialized model of RtI (2008 – 2014).

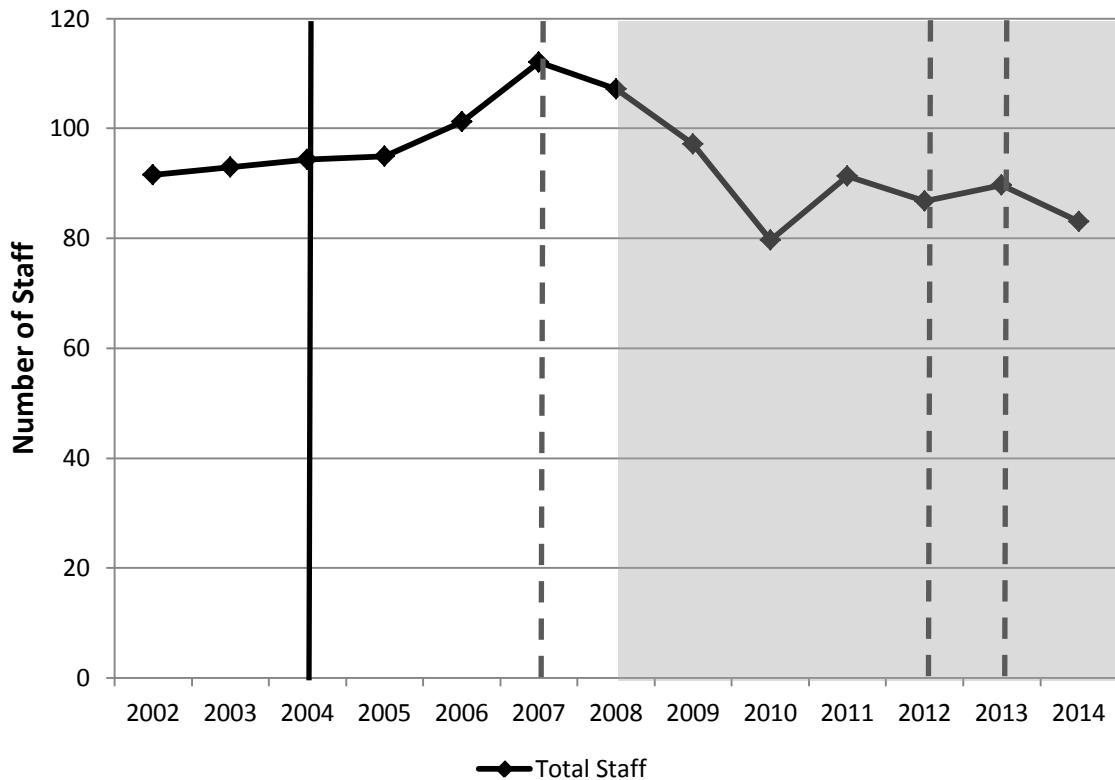


Figure 6. Number of staff from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 7, the average years of teacher experience increased from 2002 and peaked in 2006 at 11.3 years. Average years decreased from 2006 to 2011, where the lowest average was 7.5 years in 2011. Years of experience increased over the next two years, with the average being 8.5 years in 2013 (data for 2014 was unavailable). Of the years of the study, the lowest average years of teacher experience occurred during the years of the implementation of the specialized model of RtI on the school campus.

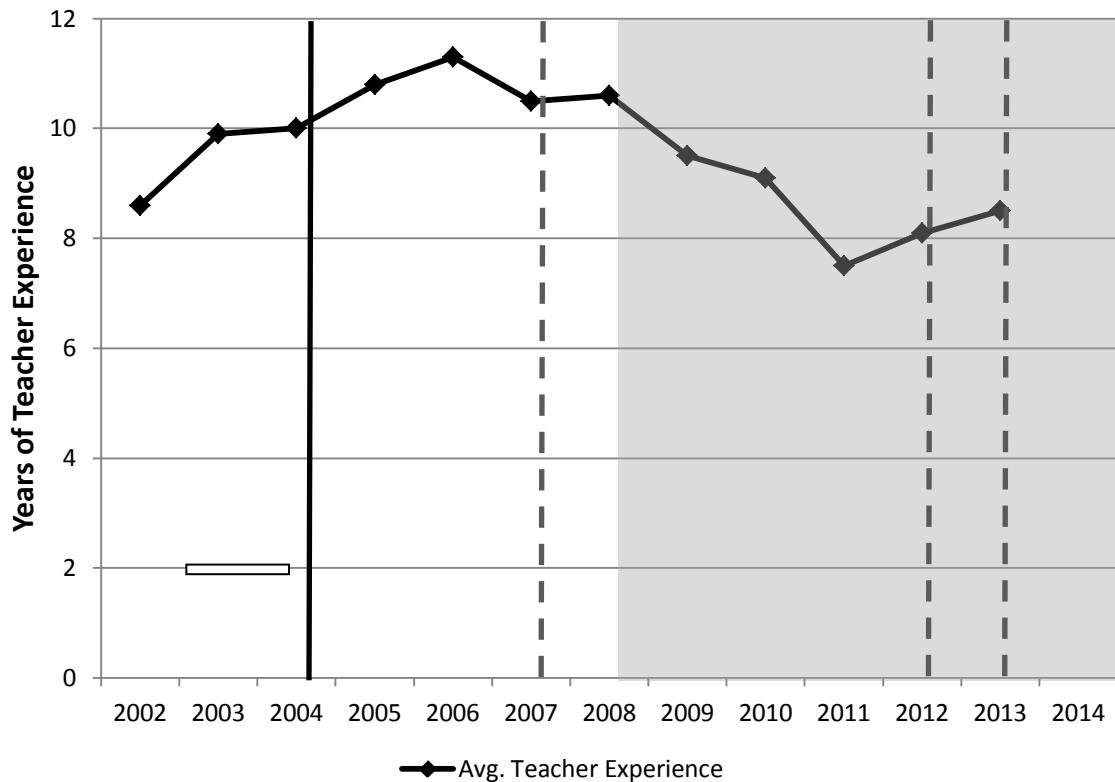


Figure 7. Years of average teacher experience from 2002 – 2013. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

State Mandated Assessments

State assessment data from the TAAS, TAKS, and STAAR assessments were analyzed to measure the impact of the specialized model of RtI on the school campus. Student performance was measured in 2002 by the TAAS, and then yearly by the TAKS from 2003-2010. From 2011-2013, performance was measured by the STAAR and

TAKS. Percentage scores for reading, writing, math, and science were analyzed when available.

Reading

As shown in Figure 8, the reading scores for the total sample of students (ALL) fluctuated between 60.0% and 75.0% through the majority of the study years 2002-2013. Reading scores for all students remained relatively stable with scores in the mid-70s during the implementation of the specialized model of RtI in 2008 through 2011; however, there was a drop in reading scores from 2011 to 2013, with scores lowering to 59.0%. The drop in scores beginning in 2011 coincides with the change in the state assessment from the TAKS to the STAAR. Reading scores for students considered to be economically disadvantaged (ED) closely mirrored the overall trend for all students. Reading scores for English Language Learners (ELLs) followed a similar pattern to the overall trend; however, their scores were generally lower at each time point than the overall sample.

A large peak in reading scores for students in special education occurred in 2004 (the same year as the IDEA) at 92.0%, but scores dropped sharply by more than 40 percentage points over the next two years. In 2008 with the implementation of the specialized model of RtI, reading scores for SPED students peaked again to 80.0%, but then followed a relative downward trend through 2013 (see Figure 8).

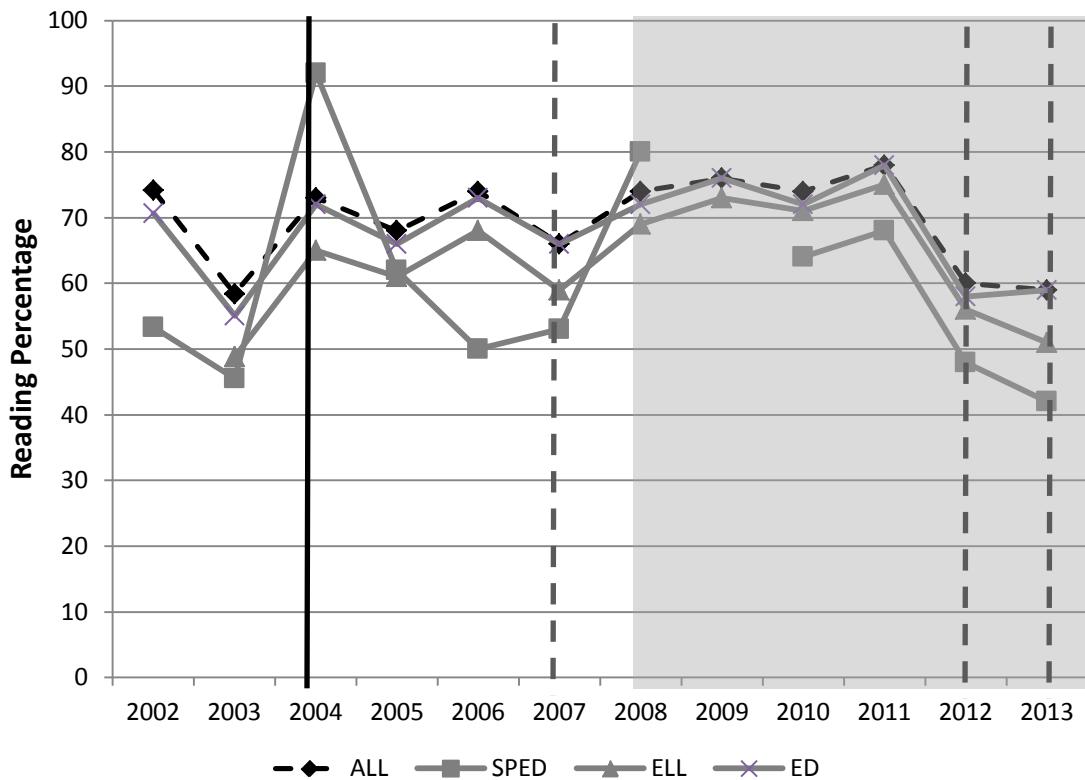


Figure 8. TAAS, TAKS, and STAAR reading percentage scores from 2002 – 2013. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2013 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

Nonparametric analyses compared the different groups of students (All, SPED, ELL, ED) across the various time points on the reading scores. No significant differences were found between pre-RtI years compared to RtI implementation years for the overall sample of students, SPED, ELL or ED. Comparisons between the key time points; 2002 – 2004, 2005 – 2007, 2008 – 2011, 2012 – 2013 revealed some significant differences over time. Reading scores for SPED, ELL, and ED students were significantly greater

during 2008 – 2011 compared to 2002 – 2004, all $p < .10$. Reading scores for ELL students were significantly greater during 2008 – 2011 compared to 2005 – 2007, $p < .10$. For ELL and ED students, reading scores were also significantly greater during 2008 – 2011 compared to 2012 – 2013, all $p < .10$.

Writing

As shown in Figure 9, the writing scores for the total sample of students (ALL) dropped by 15 percentage points to approximately 65.0% between 2002 and 2003, which is the time period in which the state assessment changed from TAAS to TAKS. Writing scores for all students peaked in 2004 and continued to rise modestly to the lower-90s through 2006. There was another smaller drop in 2007; however, writing scores for all students increased by 9 percentage points during the implementation of the specialized model of RtI in 2008 through 2011. The most dramatic drop in writing scores for all students occurred between 2011 and 2012, with scores lowering by 46 percentage points. Writing scores for the total sample of students continued to follow a relative downward trend through 2013. The drop in writing scores for all students beginning in 2011 coincides with the change in the state assessment from the TAKS to the STAAR. Writing scores for ED students closely followed the overall trend for all students. Scores for ELL students also closely mirrored the overall pattern; however, scores in 2003 were 17 percentage points lower than the overall sample. Writing scores for ELL students from 2002 were unavailable.

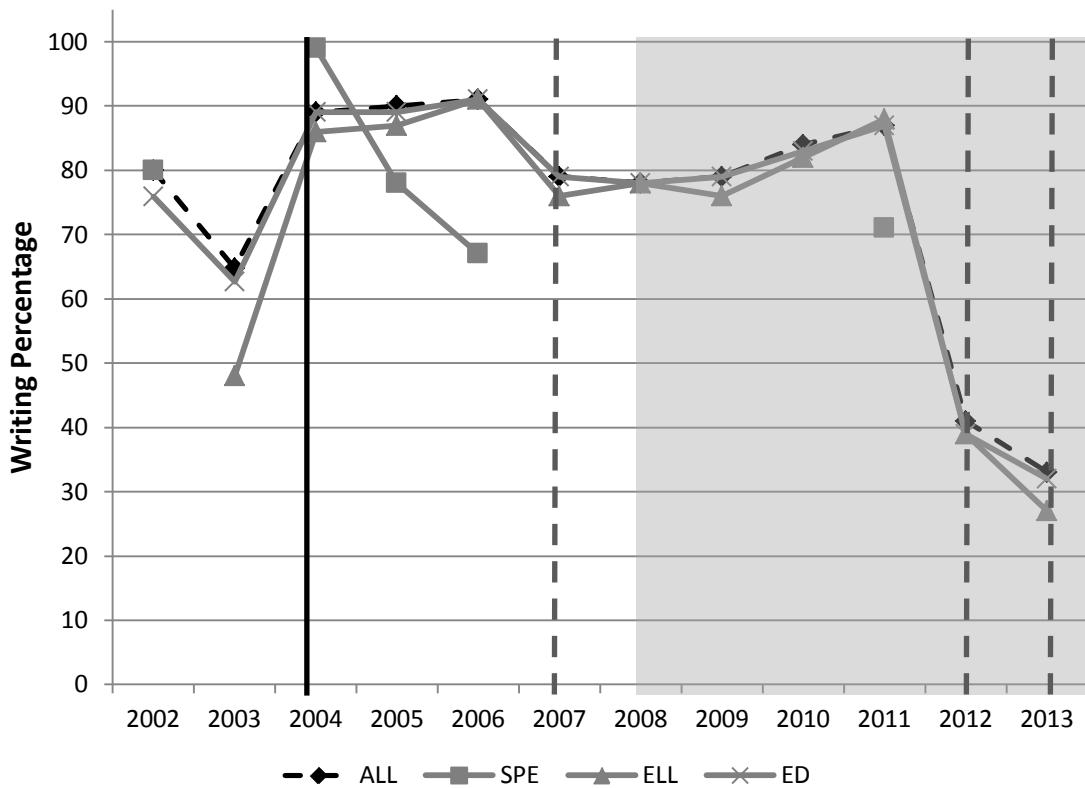


Figure 9. TAAS, TAKS, and STAAR writing percentage scores from 2002 – 2013. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2013 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

Writing scores for SPED students were unavailable for 2003, 2007-2010, and 2012-2013. Scores peaked above all other groups to 99.0% in 2004 (the year of the IDEA); however, scores dropped by more than 20 percentage points the following year and continued to fall through 2006, diverging from the overall trend. Writing scores for SPED students in 2011 showed a minor improvement from 2006 (see Figure 9).

Nonparametric analyses compared the different groups of students (All, SPED, ELL, ED) across the various time points on the writing scores. No significant differences were found between pre RtI years compared to RtI implementation years for the overall sample of students, SPED, ELL or ED. Comparisons between the key time points; 2002 – 2004, 2005 – 2007, 2008 – 2011, 2012 – 2013 revealed only one significant difference over time. Writing scores for SPED students were significantly lower during 2008 – 2011 compared to 2002 – 2004, $p < .10$.

Math

As shown in Figure 10, math scores for the total sample of students (ALL) dropped sharply by 34 percentage points between 2002 and 2003, the same time period in which the state assessment changed from the TAAS to the TAKS. Math scores for all students improved and remained relatively stable in the mid to upper-60s between 2004 and 2007. In 2008, at the time of implementation of the specialized model of RtI, scores improved to a small degree and continued to rise through 2011 where they peaked at 78.0%. The years of 2011-2013 (the same years that the state assessment changed to the STAAR) saw a drop in scores and a downward trend. Math scores for ED students followed a similar pattern to the total sample of students, however, their scores tended to be slightly lower than the overall group in some years. Math scores for ELLs also followed the same trend as the total sample of students, but their scores were below the total sample in all years. The ELL composite score was unavailable for 2002.

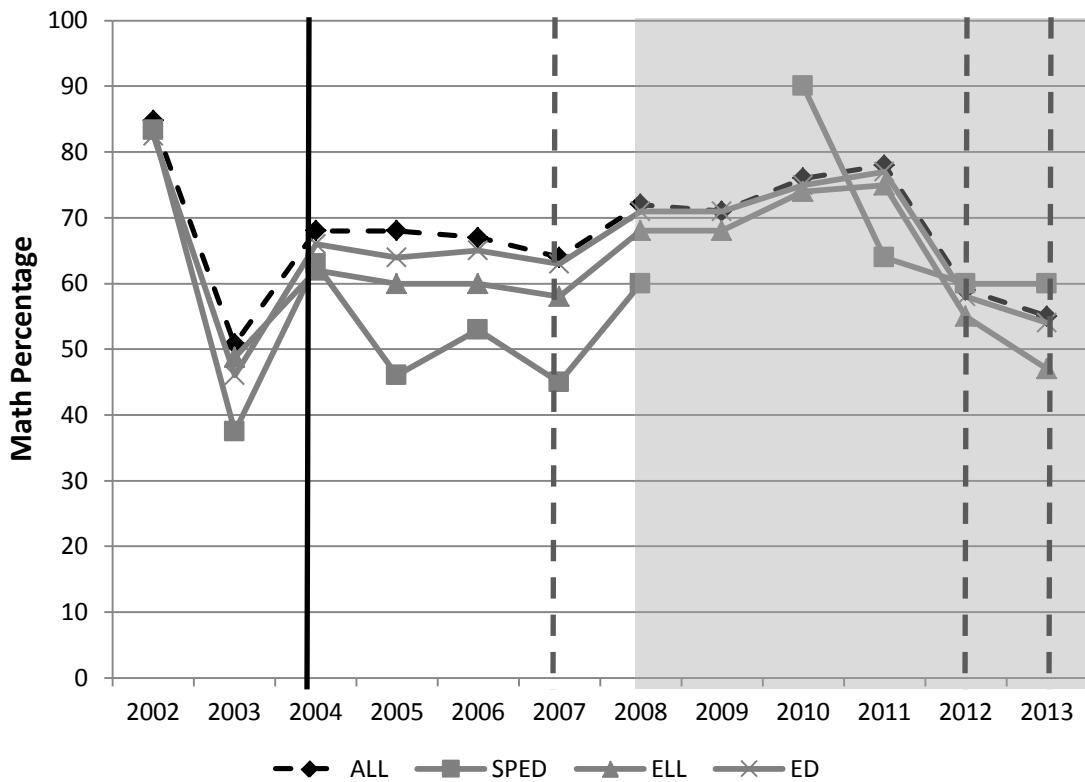


Figure 10. TAAS, TAKS, and STAAR math percentage scores from 2002 – 2013. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2013 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

Math scores for students in special education follow a relatively similar trend to the total sample from 2002 – 2004, although the drop in scores between 2002 and 2003 was even greater at 45 percentage points. Math scores for students in special education fluctuated between 45.0% and 63.0% from 2004 – 2008, and unlike the other groups analyzed, they peaked (at 90.0%) in 2010 rather than in 2011 (the Math score for students from 2009 was unavailable). Another large drop in math scores for students in special

education occurred in 2011 (26 percentage points), with scores stabilizing in the lower-60s through 2013 (see Figure 10).

Nonparametric analyses compared the different groups of students (All, SPED, ELL, ED) across the various time points on the math scores. No significant differences were found between pre RtI years compared to RtI implementation years for the overall sample of students, SPED, ELL or ED. Comparisons between the key time points; 2002 – 2004, 2005 – 2007, 2008 – 2011, 2012 – 2013 revealed some significant differences over time. Math scores for SPED, ELL, and ED students, as well as all students were significantly greater during 2008 – 2011 compared to 2005 – 2007, all $p < .10$. Math scores for ELL students were significantly greater during 2008 – 2011 compared to 2002 – 2004, $p < .10$.

Science

As shown in Figure 11, Science scores for the total sample of students progressively improved from 2003 – 2010, from a low score of approximately 13.0% to a high score of 79.0% (science scores from 2002 were not available for any of the groups analyzed because the TAAS assessment administered in 2002 did not include a science component). The highest composite science scores occurred during the years of 2008 – 2010 of the implementation of the specialized model of RtI. Science scores for the total sample of students steeply declined by 37 percentage points over the next two years, with a small improvement in 2013. Science scores for ED and ELL students followed a

similar pattern as that of the total sample however; science scores for ELL students were lower than the total group in all years.

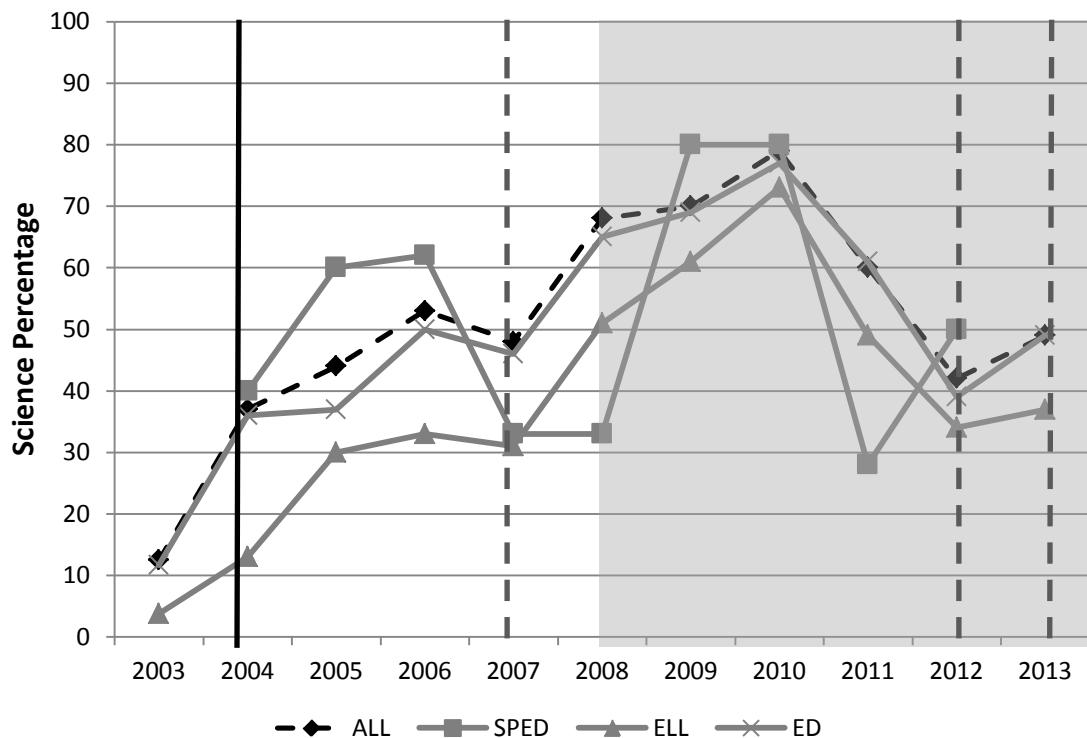


Figure 11. TAKS and STAAR science percentage scores from 2003 – 2013. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2013 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

Science scores for students in special education improved by 22 percentage points from 2004 – 2006 (the 2003 and 2013 science scores for students were not available), but then dropped by 29 percentage points over the next year and stabilized through 2008. Similar to other groups analyzed, scores improved dramatically from 2008 – 2010, with

the high composite score being 80.0% in 2009 and 2010. Science scores for students in special education experienced a sharp decline of 52 percentage points over the next year, with a minor upward trend through 2012 (see Figure 11).

Nonparametric analyses compared the different groups of students (All, SPED, ELL, ED) across the various time points on the science scores. Science scores were significantly greater during RtI implementation years compared to pre RtI years for the overall sample of students, ELL or ED. Scores were not significantly different for students in special education from pre RtI years compared to RtI implementation years, however their science scores from pre RtI years was greater than the other groups of students. Comparisons between the key time points; 2002 – 2004, 2005 – 2007, 2008 – 2011, 2012 – 2013 revealed some significant differences over time. Science scores for ELL and ED students, as well as all students were significantly greater during 2008 – 2011 compared to 2005 – 2007 and 2002 - 2004, all $p < .10$.

TELPAS

Data from the TELPAS assessment from 2008 – 2013 were also analyzed to measure the impact of the specialized model of RtI on the school campus. The TELPAS is designed to assess ELL student progress in learning English. TELPAS composite proficiency scores for ELL students in the domains of listening, speaking, reading, and writing were used to analyze the progress of ELLs on campus. Proficiency scores for each of the domains ranged from 1 to 4, where 1– 1.5 was *Beginning*, 1.6 – 2.5 was *Intermediate*, 2.6 – 3.5 was *Advanced*, and 3.6 – 4.0 was *Advanced High*.

As shown in Figure 12, composite scores for ELL students in all domains remained in the *Intermediate* or *Advanced* ratings. Listening domain scores fluctuated between *Intermediate* and *Advanced* ratings throughout 2008 – 2013. The lowest *Intermediate* rating of 2.2 occurred in 2009 in the listening domain, with an upward trend in *Advanced* ratings over the next two years. Listening scores for ELL students in 2012 declined to the *Intermediate* rating of 2.49 and then peaked in 2013 to the highest rating for listening (*Advanced*, 3.18) and for all domains through the study years.

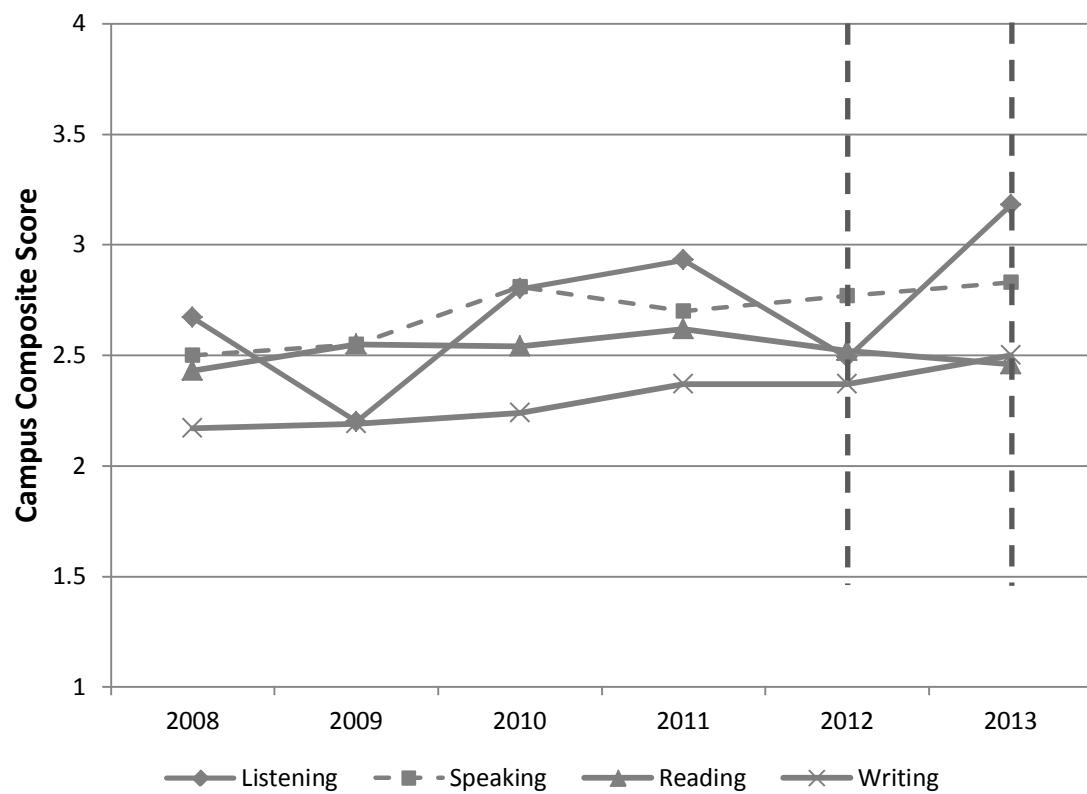


Figure 12. TELPAS listening, speaking, reading, and writing composite scores from 2008 – 2013. Dashed vertical lines at 2012 and 2013 indicate changes in the principal.

Speaking scores for ELL students remained relatively stable (between 2.5 and 2.83) and primarily in the *Advanced* ratings throughout the study years with only one rating classified as *Intermediate*. Speaking scores for ELL students displayed a minor upward trend from 2011 through 2013. Similarly, reading scores for ELL students also remained relatively stable, although they fluctuated between the *Intermediate* and *Advanced* ratings. Reading scores for ELL students experienced a small downward trend from 2011 – 2013. Writing scores for ELL students tended to be the lowest of all the domain scores, with the lowest score for all domains at 2.17 in writing in 2008. However, writing scores displayed a small, progressive upward trend throughout the study years (see Figure 12).

DRA and EDL

Data from the specialized universal screenings of the Developmental Reading Assessment (DRA) and the Evaluación del Desarrollo de Lectura (EDL) from 2009 – 2013 were analyzed (2010 data were not available) to measure instructional reading levels of students in Kindergarten- 2nd grade.

As shown in Figure 13, percentages are shown for students who scored on the DRA on grade level and below grade level, as well as for students who scored on the EDL on grade level and below grade level.

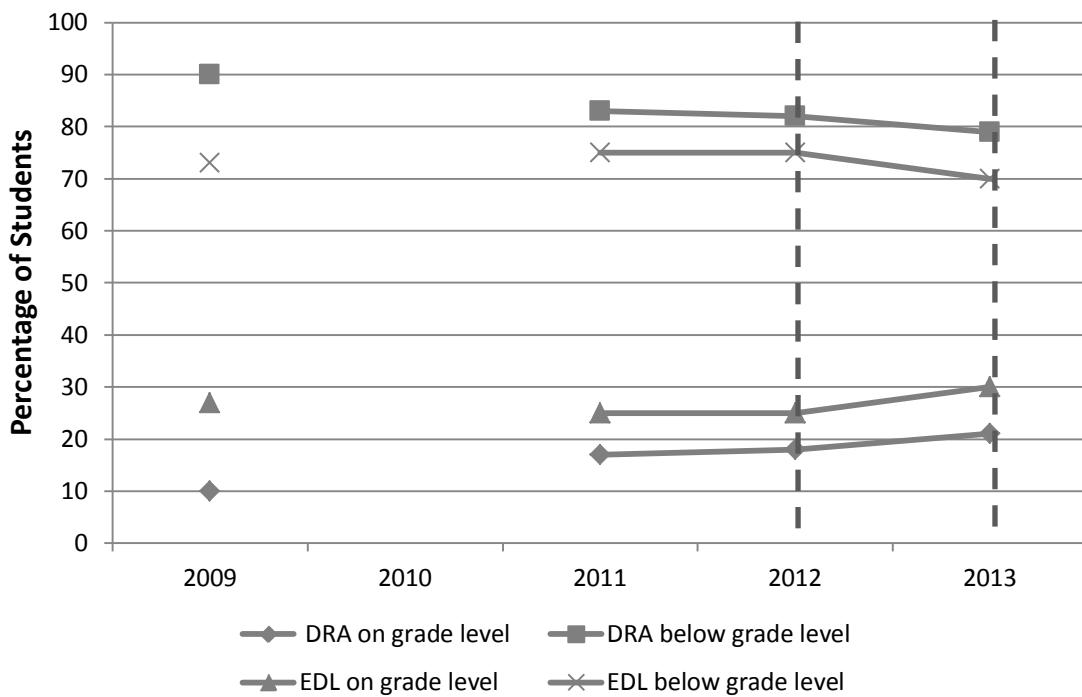


Figure 13. Percentage of students on grade level and below grade level on the DRA and EDL from 2009 – 2013. Dashed vertical lines at 2012 and 2013 indicate changes in the principal.

Throughout the years of the study, more students scored below grade level on the DRA than on the EDL. While the percentage of students who scored on grade level on the DRA in 2009 was only 10.0%, a small upward trend occurred through 2013. The percentage of students who scored on grade level on the EDL in 2009 was higher than that on the DRA (at 27.0%), however, the percentage dropped to a small extent through 2011 and remained level through 2012. In 2013, scores improved to 30.0% of students on grade level (see Figure 13)

Special Education

As shown in Figure 14, the percentage of students enrolled in special education remained at approximately 11.0% from 2002 – 2004. Between 2004 (the year of the IDEA) and 2006, the percentage of students in special education peaked to the highest percentage of the study years, at 14.2%. The percentage dropped by 6 percentage points over the next two years, and percentages remained the lowest of the study years and relatively stable, between 8.1% – 10.2%, from 2008 through 2014. This time period coincides with the years of implementation of the specialized model of RtI on the school campus.

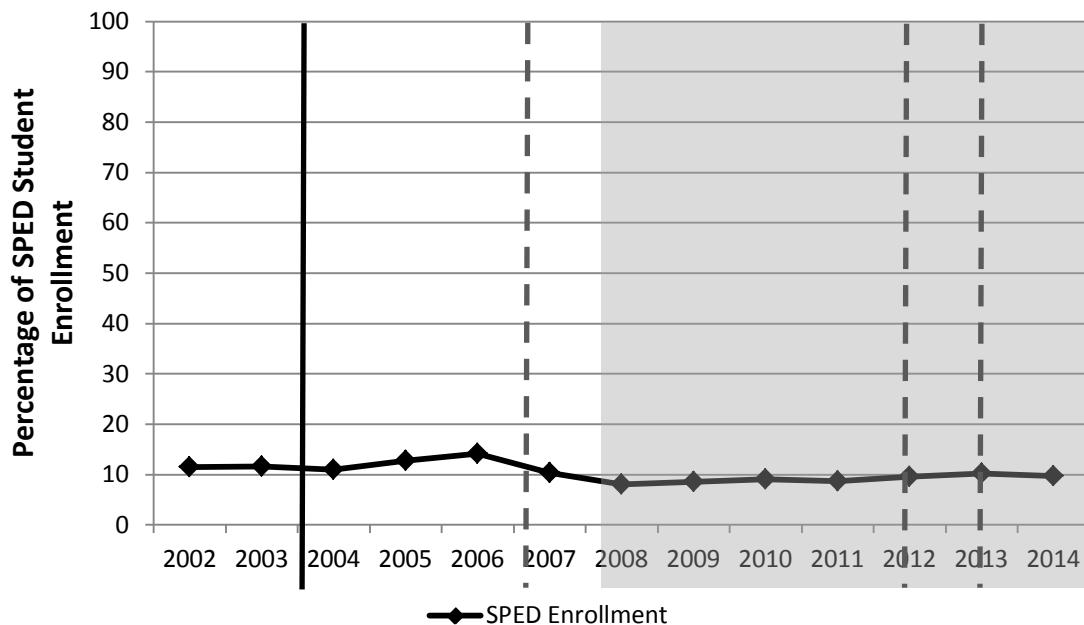


Figure 14. Percentage of students enrolled in special education from 2002 – 2014. The line at 2004 indicates the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004). The gray shaded area from 2008 – 2014 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

As shown in Figure 15, the number of students referred for special education trended upward from 2006 – 2008. The number remained relatively stable over the next year, and then continued to trend upward from 2009 – 2012, where it peaked at 28 students. The number of students referred for special education dropped in 2013 by 8 students. The number of students who did not qualify for special education increased to a small degree during the years of implementation of the specialized model of RtI, except in 2010 when there were 0 students who did not qualify. The highest number of students who did not qualify (6 students) occurred in 2013.

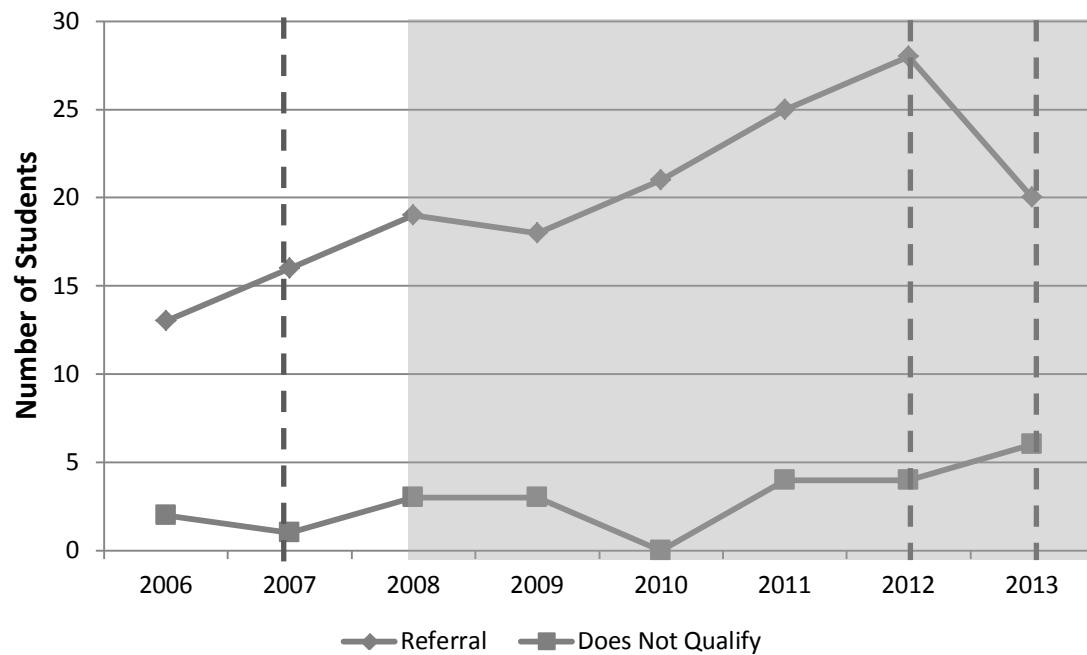


Figure 15. Number of students referred for special education and number of students that did not qualify for special education from 2006 – 2013. The gray shaded area from 2008 - 2013 indicates the implementation of the Estrella model of RtI on the school campus. Dashed vertical lines at 2007, 2012, and 2013 indicate changes in the principal.

CHAPTER V

DISCUSSION

The purpose of this study was to examine how the Estrella model of Response to Intervention (RtI) impacted a campus that has 88.0% of students who are English Language Learners (ELL). The researcher investigated how the Estrella model of RtI impacted the academic performance of ELLs, students in special education, and the number of students referred for special education testing.

A research design for a case study included a comprehensive analysis and review of archival data. The results of the study indicate that the Estrella model of RtI on the elementary school campus increased and stabilized scores during the seven year period of TAKS state mandated assessments. Initially, the transition from TAAS to TAKS caused a sharp decline in student performance in all subject areas. Scores on the TAKS stabilized and increased after a period of implementation and maintenance of the specialized model of RtI. The performance of students declined after the transition to STAAR, which is more rigorous and complex than the TAKS. Campuses across Texas with similar demographics also decreased in student performance after the transition to STAAR.
(Texas Education Agency, 2014)

Summary of Findings

A comprehensive analysis and review of archival data was used to answer the research questions and document the instructional and academic progress of students

attending the identified elementary school. The case study design was selected because it allows investigation of how the specialized RtI model affects one campus. An advantage of the case study is that large amounts of available data can be used for analysis. The effects of the specialized RtI model on students' and campus' performance over time was analyzed using state mandated assessment scores, reading assessments, language proficiency assessments, and special education data.

Research Question One

How does the Estrella model of RtI for ELLs affect student success as evidenced by state-mandated assessment scores including Texas Assessment of Knowledge and Skills (TAKS), State of Texas Assessments of Academic Readiness (STAAR), Texas English Language Proficiency Assessment System (TELPAS), and reading assessment data?

State assessment data from the TAAS, TAKS, and STAAR assessments were analyzed to measure the impact of the specialized model of RtI on the school campus. Student performance was measured in 2002 by the TAAS, and then yearly by the TAKS from 2003-2010. From 2011-2013, performance was measured by the STAAR and TAKS. Percentage scores for reading, writing, math, and science were analyzed when available. The specialized model of RtI impacted student performance as noted below:

Reading. State mandated assessment reading scores for the total sample of students fluctuated between 60.0% and 75.0% through the majority of the study years 2000-2012. Reading scores for all students remained relatively stable with scores in the

mid-70s during the implementation of the specialized model of RtI from 2008 through 2011; however, there was a drop in reading scores from 2011 to 2013, with scores lowering to 59.0%. The drop in scores beginning in 2011 coincides with the change in the state assessment from the TAKS to the STAAR. Reading scores for students considered to be economically disadvantaged (ED) closely mirrored the overall trend for all students.

Reading scores for English Language Learners (ELLs) followed a similar pattern to the overall trend; however, their scores were generally lower at each time point than the overall sample. The researcher noted that the specialized model of RtI stabilized state mandated assessment scores after the drop in scores from TAAS to TAKS. During the years of TAKS (2003-2010), reading scores increased and stabilized after implementation of the specialized model in 2008. Reading scores for ELL students were significantly greater during 2008 – 2011 compared to 2005 – 2007. For ELL and economically disadvantaged (ED) students, reading scores were also significantly greater during 2008 – 2011 compared to 2012 – 2013. Reading scores for SPED, ELL, and ED students were significantly greater during 2008 – 2011 compared to 2002 – 2004.

The increase in reading scores for ELLs and ED were significant. The elementary campus had previously been at risk for identification as an unacceptable school. The campus reached recognized status during the period of TAKS and the specialized model of RtI. According to Cirino, et. al.(2009), early literacy programs that provide language support activities have been effective for meeting the needs of ELLS. All students during this time period had rich, language support activities with the components of the specialized RtI model.

The specialized model increased state mandated reading scores when the same statemandated assessment, TAKS, was used to measure student achievement over a period of 7 years. It is important to note that the shift from TAKS to STAAR (Appendix H) was marked by an increase in rigor and length of the tests. The STAAR assessments increased in length at most grades and subjects. Furthermore, the overall test difficulty was be increased by including more rigorous items. The rigor of items was increased by assessing skills at a greater depth and level of cognitive complexity (Texas Education Agency, 2014) The same trend was noted when the state mandated assessment changed from TAAS to TAKS. Reading scores decreased sharply, but stabilized after the implementation of the specialized model of RtI.

A large peak in reading scores for students in special education occurred in 2004 (the same year as the IDEA) at 92.0%, but scores dropped sharply by more than 40 percentage points over the next two years. In 2008 with the implementation of the specialized model of RtI, reading scores for students in special education peaked again to 80.0%, but then followed a relative downward trend through 2013. The instability in reading scores for students in special education could be attributed to changes in the service model over the time period. The campus shifted to a less restrictive environment and increased inclusion minutes for students in special education. In addition, some of the state mandated assessments for students in special education are not available in a Spanish version. The reading assessments for students in general education are available in both English and Spanish. ELLs who take a modified version of the assessment do not have the opportunity to take it in their native language.

Writing. State mandated assessment writing scores for the total sample of students (ALL) dropped by 15 percentage points to approximately 65.0% between 2002 and 2003, which is the time period in which the state assessment changed from TAAS to TAKS. Writing scores for all students peaked in 2004 and continued to rise modestly to the lower-90s through 2006. There was another smaller drop in 2007; however, writing scores for all students increased by 9 percentage points during the implementation of the specialized model of RtI in 2008 through 2011. The most dramatic drop in writing scores for all students occurred between 2011 and 2012, with scores lowering by 46 percentage points. Writing scores for the total sample of students continued to follow a relative downward trend through 2013. The drop in writing scores for all students beginning in 2011 coincides with the change in the state assessment from the TAKS to the STAAR. Writing scores for ED students closely followed the overall trend for all students. Scores for ELL students also closely mirrored the overall pattern; however, scores in 2003 were 17 percentage points lower than the overall sample. The state mandated assessment results demonstrate a similar pattern as the reading scores. Scores decreased following a transition to a new state mandated assessment. Writing scores increased and stabilized after implementation of the specialized RtI model and decreased sharply after the implementation of the STAAR test.

Writing scores for students in special education were unavailable for 2003, 2007-2010, and 2012-2013. Scores peaked above all other groups to 99.0% in 2004 (the year of the IDEA); however, scores dropped by more than 20 percentage points the following

year and continued to fall through 2006, diverging from the overall trend. Scores for students in special education were not available for many of the study years because the writing portion was not requirement for these students. The instability of the scores and divergence from the overall trend may be attributed to the use of a composition to assess writing. In previous years, students were required to complete a revising and editing portion of a state assessment to gauge their writing skills.

Math. State mandated assessment math scores for the total sample of students (ALL) dropped sharply by 34 percentage points between 2002 and 2003, the same time period in which the state assessment changed from the TAAS to the TAKS. The drop in scores followed the same trend as reading and writing state mandated assessment scores. In 2008, at the time of implementation of the specialized model of RtI, scores improved to a small degree and continued to rise through 2011 where they peaked at 78.0%. The math scores stabilized after the implementation of the specialized model of RtI.

Furthermore, the years of 2011-2013 (the same years that the state assessment changed to the STAAR) were marked by drop in scores and a downward trend. Math scores for ED students followed a similar pattern to the total sample of students, however, their scores tended to be slightly lower than the overall group in some years. Math scores for ELLs also followed the same trend as the total sample of students, but their scores were below the total sample in all years. Math scores for SPED, ELL, and ED students, as well as all students were significantly greater during 2008 – 2011 compared to 2005 – 2007. Math scores for ELL students were significantly greater during 2008 – 2011

compared to 2002 – 2004. The implementation of the specialized model of RtI positively increased and stabilized state mandated assessment scores when the test remained constant over a 7 year period. The scores decreased when the STAAR was used to measure student performance.

Science. State mandated assessment science scores for the total sample of students progressively improved from 2003 – 2010, from a low score of approximately 13.0% to a high score of 79.0% (science scores from 2002 were not available for any of the groups analyzed because the TAAS assessment administered in 2002 did not include a science component). The highest composite science scores occurred during the years of 2008 – 2010 of the implementation of the specialized model of RtI. Science scores for the total sample of students steeply declined by 37 percentage points over the next two years, with a small improvement in 2013. The drop occurred when STAAR was used to measure student performance in Texas. Science scores for ED and ELL students followed a similar pattern as that of the total sample however, science scores for ELL students were lower than the total group in all years. Science scores for students in SPED improved by 22 percentage points from 2004 – 2006 (the 2003 and 2013 science scores for SPED students were not available), but then dropped by 29 percentage points over the next year and stabilized through 2008.

Similar to other groups analyzed, scores improved dramatically from 2008 – 2010, with the high composite score being 80.0% in 2009 and 2010. Science scores for SPED students experienced a sharp decline of 52 percentage points over the next year,

with a minor upward trend through 2012. Science scores were significantly greater during RtI implementation years compared to pre RtI years for the overall sample of students, ELL or ED. The science scores follow a similar trend as the other subject area tests. Student performance increased in response to the implementation of the specialized model of RtI. However, the scores declined sharply during the transition from TAKS to STAAR.

TELPAS. Data from the TELPAS assessment from 2008 – 2013 were also analyzed to measure the impact of the specialized model of RtI on the school campus. Scores were not available prior to 2008. The TELPAS is designed to assess ELL student progress in learning English. TELPAS composite proficiency scores for ELL students in the domains of listening, speaking, reading, and writing were used to analyze the progress of ELLs on campus. Proficiency scores for each of the domains ranged from 1 to 4, where 1– 1.5 was *Beginning*, 1.6 – 2.5 was *Intermediate*, 2.6 – 3.5 was *Advanced*, and 3.6 – 4.0 was *Advanced High*. Composite scores for ELL students in all domains remained in the *Intermediate* or *Advanced* ratings.

Listening domain scores fluctuated between *Intermediate* and *Advanced* ratings throughout 2008 – 2013. The lowest *Intermediate* rating of 2.2 occurred in 2009 in the listening domain, with an upward trend in *Advanced* ratings over the next two years. Listening scores for ELL students in 2012 declined to the *Intermediate* rating of 2.49 and then peaked in 2013 to the highest rating for listening (*Advanced*, 3.18) and for all domains through the study years.

Additionally, Speaking scores for ELL students remained relatively stable (between 2.5 and 2.83) and primarily in the *Advanced* ratings throughout the study years with only one rating classified as *Intermediate*. Speaking scores for ELL students displayed a minor upward trend from 2011 through 2013. Similarly, reading scores for ELL students also remained relatively stable, although they fluctuated between the *Intermediate* and *Advanced* ratings. Reading scores for ELL students experienced a small downward trend from 2011 – 2013. Writing scores for ELL students tended to be the lowest of all the domain scores, with the lowest score for all domains at 2.17 in writing in 2008. However, writing scores displayed a small, progressive upward trend throughout the study years.

The specialized model of RtI did not appear to make a dramatic impact on language proficiency level of students at the elementary school. The scores remained stable throughout the years that TELPAS was used to measure English language proficiency.

DRA and EDL Reading Assessments. Data from the specialized universal screenings of the Developmental Reading Assessment (DRA) and the Evaluación del Desarrollo de Lectura (EDL) from 2009 – 2013 were analyzed (data prior to 2009 and 2010 data were not available) to measure the instructional reading levels of students in Grades Kindergarten through 2nd grade. The DRA and EDL were administered in previous years however, the scores were not available in a database for the years prior to

2009. Throughout the years of the study, more students scored below grade level on the DRA than on the EDL.

While the percentage of students who scored on grade level on the DRA in 2009 was only 10.0%, a small upward trend occurred through 2013. The percentage of students who scored on grade level on the EDL in 2009 was higher than that on the DRA (at 27.0%) however, the percentage dropped to a small extent through 2011 and remained level through 2012. In 2013, EDL scores improved to 30.0% of students on grade level. The data from DRA and EDL assessments show that an increase occurred in the reading growth in the Spanish language. One of the components of the specialized RtI model includes dual language delivery of instruction. Students receive half of their instruction in Spanish and the other half in English. The elementary school embraces bi-literacy as a goal for ELLs in a bilingual program.

Research Question Two

How does the Estrella model of RtI for ELLs affect the number of students referred for special education assessment and the number of students qualifying for special education services?

Between 2004 (the year of the IDEA) and 2006, the percentage of special education students peaked to the highest percentage of the study years, at 14.2%. The elementary campus had one of the highest percentages of students in special education in the large school district. The implementation of IDEIA translated to district and campus trainings about RtI. Initially the campus adopted the district model of RtI. In 2008, the

Estrella model was implemented to address the diverse needs of ELLs. The percentage dropped by 6 percentage points over the next two years, and percentages remained the lowest of the study years and relatively stable, between 8.1% – 10.2%, from 2008 through 2014. This time period coincides with the years of implementation of the specialized model of RtI on the school campus.

Additionally, the number of students referred for special education trended upward from 2006 – 2008. The number remained relatively stable over the next year, and then continued to trend upward from 2009 – 2012, where it peaked at 28 students. The number of students referred for special education dropped in 2013 by 8 students. The number of students who did not qualify for special education increased to a small degree during the years of implementation of the specialized model of RtI, except in 2010 when there were 0 students who did not qualify. In 2010, the campus had a temporary, grant-funded RtI facilitator to support students and staff. The highest number of students who did not qualify (6 students) occurred in 2013. This is the year that a change in campus principal occurred, which was characterized by fewer RtI meetings to design and monitor RtI plans for students.

Limitations

The study was conducted on a campus where the majority of the learners are classified as ELLs. The study addresses students whose native language is Spanish. Additional research is needed in the area of RtI for ELLs who speak a language other than Spanish. Further limitations of the study include the change in leadership over the

course of ten years. The campus had four principals in a ten year period. Another limitation is some of the data for the study had to be hand counted. The campus and district transitioned from hard copies of data to software-based housing of information. The researcher had to use multiple sources and methods of data collection to develop the profile and case study of the campus.

Another limitation of the study is the high teacher turnover on the campus. It is difficult to determine whether a higher teacher retention rate would have yielded higher state mandated assessment scores. The change in demographics is also a limitation of the study. In instances where scores stabilized, the specialized model may have generated a greater impact if the campus population had not increased in economically disadvantaged status and mobility rates. The shift from TAKS to STAAR is also a limitation of the study. It would have been beneficial to continue the analysis over a longer period of the time with the same assessment. Additionally, the RtI model can be applied to difficulties in all content areas and behavior however; most available research on its impact pertains to reading difficulties and research-based interventions in literacy development. Furthermore, research in the area of specialized models of RtI for ELLs are limited, while research in the area of RtI for general education students is more robust.

Discussion and Implications

The findings of the research support the Estrella model of RtI for ELLs to ensure that educators are meeting the needs of English Language Learners. (Choi, et. al, 2012). Assessment and instruction must be both linguistically and culturally congruent for ELLs to be successful. Teachers must know students' level of language proficiencies and

implement curriculum to meet their needs. Furthermore, teachers should view students' languages and cultures as strengths, not liabilities. The Estrella model should be implemented to meet diverse needs of ELLs.

As the ELL population grows, the fidelity of interventions for this group of students will continue to be an area of need. The implementation of the Estrella model of RtI for ELLs yielded increases in content areas on state mandated assessments. The specialized model of RtI stabilized academic performance after the transition from TAAS to TAKS administrations. The performance of students on tests of language proficiency yielded results in the Advanced and Intermediate ranges, which increased over a period of time with implementation of the model. Furthermore, the percentage of students enrolled in special education programming decreased over time. The students referred for testing increased over the period of the implementation of the model and the number of DNQs showed both increases and decreases over time.

The specialized model increased or stabilized scores on TAKS as demographics changed over a twelve year period. It is important to note that the campus was at risk for being an academically acceptable school prior to the implementation of the Estrella model. After the campus implemented the model, it was identified as Acceptable and Recognized by the Texas Education Agency. The demographic changes as outlined in Chapter four included an increase in economically disadvantaged students, mobility, ELLs, and Hispanics. The ten year period was marked by a decrease in campus leadership, certified teachers, campus support services, and overall teacher experience. Given the changes, the campus had stable state mandated assessment scores for a

majority of the study years. Kosters and Mast (2003) Title I resources may not be narrowing achievement gaps but may be preventing them from growing larger. A majority of the funding for specialized instruction for ELLs is funded with Title I funds.

In addition to campus-wide Tier I instruction for students, the campus used research-based intervention at each Tier. Another component of the RtI process at the elementary school that ensures the success of all students is the research-based focus on interventions. The following guiding questions drive the campus RtI Committee to make decisions about interventions (Garcia, 2010):

- How well does the intervention accommodate varying levels of language dominance and proficiency, and language development needs of struggling English language learners? In the native language? In English?
- Does the intervention reflect characteristics of culturally/linguistically responsive pedagogy and curriculum? If yes, for which groups? If no, are other interventions available?
- Will adaptations be required to ensure that the intervention(s) will be successful with the bilingual and ELL student sub-groups at our school?
adaptations can be made without losing the instructional integrity of the intervention or program?
- What will we have to know and be able to do, to successfully implement the selected interventions or programs?

Researchers recommend that in order to make RtI effective in teaching ELLs, teachers need to effectively implement evidence-based instructional strategies and make appropriate accommodations for the learning context to be culturally and linguistically meaningful for ELLs (Brown & Sanford, 2011). ELLs require effective instructional approaches and interventions to prevent further difficulties and to augment and support their academic development. Educators should implement and design interventions that target the specialized needs of ELLs. It is especially important to consider the role of second language proficiency in their difficulties as well as in their ability to make gains from the planned instruction or intervention. Research also supports the strategies used on the elementary campus for the implementation of RtI for ELLs. Choi et. al. (2012) recommended instruction in general education and culturally congruent practices to support ELLs. The specialized model of RtI supports the ELLs with their academic and linguistic needs.

Recommendations

As the demographics in the United States and Texas increase in ELLs, research in the area of RtI and special education would be beneficial to meet the needs of all children in the school. (Chu & Flores, 2011) Research and development of assessment tools in a child's native languages would be valuable to educators. Future research should also target the impact that interventions have on the language development and academic success of students. Another facet of the RtI process that warrants further research, is the effectiveness of professional learning in meeting the needs of ELLs. The delivery of a

specialized model requires extensive knowledge in the area of second language acquisition, assessment, ELL interventions, and progress monitoring.

The research is limited in the area of ELLs and the professional learning requirements of teachers. A study investigating an effective model of professional learning would add to the literature in this area. Furthermore, the initial preparation of students in university education program to meet the needs of ELLs would be a valuable area to investigate Future research would also be recommended in the area of cultural responsiveness in the RtI process when one is serving ELLs. This component of the RtI process for ELLs is overlooked. The research in this area is limited and definitely warrants investigation. As the number of ELLs increases in the schools, educators must develop new tools to meet their needs in the areas of instruction, intervention, and assessment.

Finally, another area that should be considered for future research is the role of parents in the delivery and maintenance of a specialized RtI model for students. The research in this area is scarce with regard to parent involvement in the RtI process including interventions, assessments, and referrals for special education. It would be beneficial to study the impact of parent involvement in the RtI process.

Summary and Conclusions

A specialized model is a necessary component of the RtI process with regard to ELLs. In order to serve ELLS effectively, research-based instruction, interventions, and assessments should be used to provide fidelity to the RtI process. As the growth of

ELLs continues to grow in the United States, the needs to develop effective processes in the schools will increase. ELLs. To ensure that there is fidelity in the RtI process regarding ELLs, a specialized model and research-based process should be considered as an option. Personalized instruction to meet the needs of all students is the foundation of RtI. It is critical to develop and implement interventions that meet the needs of ELLs. Interventions should be research-based and target the academic and language skills of students. Implementation of the Estrella model could positively enhance the attendance and discipline rates at a campus. It was noted that after implementation of the Estrella model, the campus had one of the lowest discipline rates in the district and one of the highest attendance rates.

The study can be used to develop effective models of RtI on campus with similar demographics. Increases in ELLs warrant specialized interventions to ensure that they are not overrepresented in special education. School leaders can use the study as a launching ground for developing and implementing an RtI process that addresses specialized needs of all students. Furthermore, educators may explore how to meet the specialized and diverse needs of ELLs. The information presented in the study could be used for the purpose of educating parents about ELLs and the components that impact them in the schools. In order to meet the needs of all students in our schools, a team approach is critical to program for students. Experts from different areas of specialization can glean information about collaboratively programming for ELLs. Furthermore, the impact of changes in state mandated assessments across the nation can be used to make decisions or conduct further research in this area.

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Appendix A

Permission Letter



REQUEST TO CONDUCT RESEARCH IN LEWISVILLE INDEPENDENT SCHOOL DISTRICT

Name of person making the request: Cynthia Baird

Lewisville ISD employee: yes: no:

Contact information: 972-746-0879 or 469-446-9143

Name of University or organization sponsoring your research: Texas Woman's University

In order to consider your request, the following information is required:

What is the purpose of your research proposal?

The purpose of this study will be to investigate the effects of a specialized framework of RtI on an elementary school campus with 88% of students who are ELLs. A case study analysis and archival data will be used to gauge the impact of the specialized model of RtI.

Research Questions

1. What effects does a specialized model of RtI for ELLs have on student success as evidenced by state mandated assessment scores and archival data?
2. How does a specialized model of RtI for ELLs affect the number of students referred for special education assessment and students qualifying for special education services?

What data do you propose to collect in LISD?

Data Sources for case study: 10 year comprehensive data collection: attendance scores, discipline data, state mandated assessment scores-general education and special education assessments, Academic Excellence Indicator System (AEIS) reports, Performance-Based Monitoring Analysis System (PBMAS) data, Developmental Reading Assessment (DRA) scores, Evaluación del Desarrollo de Lectura (EDL) scores, Woodcock Muñoz language assessment scores, Response to Intervention (RtI) data, comprehensive historical data for case study analysis-demographics, school profile, professional learning implementation timeline/data RtI referral rate, referral rate for special education testing, state mandated assessment scores for students receiving special education services, special education historical data for case study analysis.

How do you plan to collect this data?

I will obtain archival data such as AEIS and PBMAS data from TEA. Special education data and reports will be obtained by working with the LISD special education department, state assessment and campus data will be obtained from the LISD assessment office. DRA and EDL reading scores will be obtained from AWARE. Eduphoria and campus records will be used to collect professional learning implementation data.

How do you plan to ensure confidentiality of the identity of participants?

There are no human subjects who will be used in the study; All records and data will be in a secure location on my campus. (Central Elementary School)

Have you received IRB approval from your university? IRB approval in process

Please provide the name, contact information, and signature of your university supervisor, below.

Name of University Supervisor: Dr. Jane Pemberton

Contact information: jpemberton@mail.lwsd.k12.tx.us

Phone Number: (940) 898-2271

My signature below indicates that I am aware of and approve of this proposal and that I am available for questions should the need arise.

Jane Pemberton
University Supervisor

1/16/14
Date

My signature below indicates that I, as Executive Director of Special Education in LISD, am aware of this proposal to use SPED data for research purposes, and that:

I approve of the proposal without further revision(s)

I conditionally approve of the proposal, with revisions (see attached)

Bruce J. Hall
Executive Director, LISD Special Education

1/17/2014
Date

Penny Reddell
Associate Superintendent, LISD

1/17/2014
Date

Appendix B
Eight Components of the SIOP Model of Instruction

Component	Description
1. Lesson preparation	The features under lesson preparation examine the lesson planning process, including the incorporation of language and content objectives linked to curriculum standards. In this way, students gain important experience with key grade-level content and skills as they progress toward fluency in the second language. Other features include the use of supplementary materials and meaningful activities.
2. Building background	Building background focuses on making connections with students' background experiences and prior learning, and developing their academic vocabulary. The SIOP Model underscores the importance of building a broad vocabulary base for students to be effective readers, writers, speakers, and listeners. In the SIOP Model, teachers directly teach key vocabulary and word structures, word families, and word relations.
3. Comprehensible input	Comprehensible input considers adjusting teacher speech, modeling academic tasks, and using multimodal techniques to enhance comprehension (e.g., gestures, pictures, graphic organizers, restating, repeating, reducing the speed of the teacher's presentation, previewing important information, and hands-on activities). The academic tasks must be explained clearly, both orally and in writing, with models and examples of good work so students know the steps they should take and can envision the desired result.
4. Strategies	The strategies component emphasizes explicit teaching of learning strategies to students so that they know how to access and retain information. Good reading comprehension strategies, for example, need to be modeled and practiced, one at a time with authentic text. SIOP teachers must scaffold instruction so students can be successful, beginning at the students' performance level and providing support to move them to a higher level of understanding and accomplishment. Teachers have to ask critical thinking questions as well so that students apply their language skills while developing a deeper understanding of the subject.
5. Interaction	Interaction features encourage elaborated speech and grouping students appropriately for language and content development. They need oral language practice to help develop content knowledge and second-language literacy; thus, student-student interaction is important and needs to occur regularly in each lesson. ELs need to practice important language functions, such as confirming information, elaborating on one's own or another's idea, and evaluating opinions.
6. Practice/application	Practice/application calls for activities that extend language and content learning by encouraging students to practice and apply the content they are learning, as well as their language skills. It is important to build and reinforce reading, writing, listening, and speaking skills within content learning.
7. Lesson delivery	Lesson delivery ensures that teachers present a lesson that meets the planned objectives. Successful delivery of a SIOP lesson means that the content and language objectives were

met, the pacing was appropriate, and the students had a high level of engagement.

8. Review/assessment

English learners need to revisit key vocabulary and concepts, and teachers need to use frequent comprehension checks throughout lessons as well as other informal assessments to measure how well students understand and retain the information. Each SIOP lesson should wrap up with some time for review and assessment and time to determine whether the lesson's objectives were met.

Note. From Echevarria, J., Vogt, M.E., & Short, D.J. (2010). *Making content comprehensible for secondary English learners: The SIOP Model*. Boston: Allyn & Bacon.

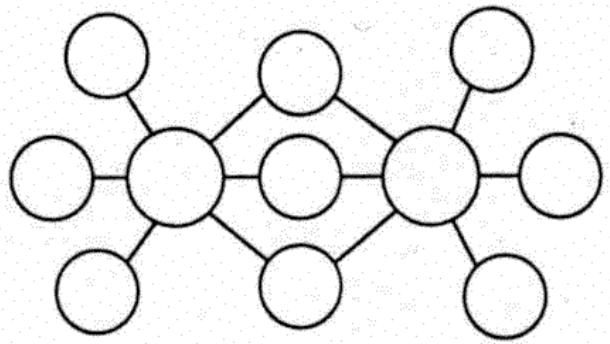
Appendix C
Marzano's Academic Vocabulary

Marzano's 9 Step Process Teaching Academic Vocabulary

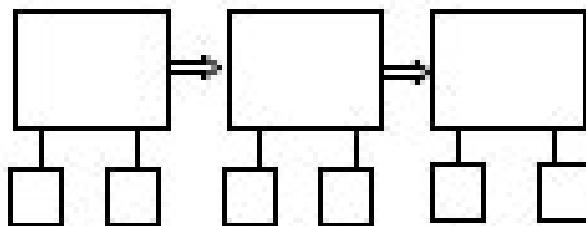
1. Provide a description, explanation, or example of the new term. (Include a non-linguistic representation of the term for ESL kids.)
2. Ask students to restate the description, explanation, or example in their own words. (Allow students whose primary existing knowledge base is still in their native language to write in it.)
3. Ask students to construct a picture, symbol, or graphic representing the word.
4. Engage students periodically in activities that help them add to their knowledge of the terms in their notebooks.
5. Periodically ask students to discuss the terms with one another. (Allow in native language when appropriate)
6. Involve students periodically in games that allow them to play with terms.

Appendix D
Thinking Maps

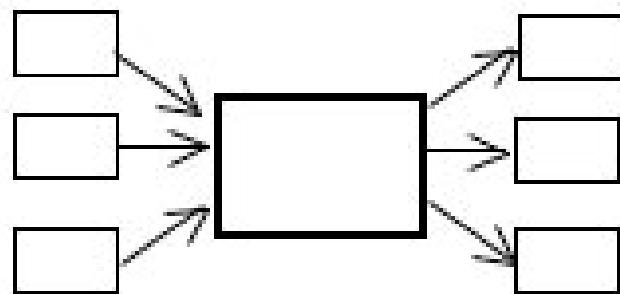
Double Bubble Template



Flow Map



Multi-Flow Map



Appendix E

Dual Language Information Sheet from the Elementary School

What is Dual Language?

Dual Language in the ISD is a bilingual education program model where instruction is split between English 50% of the time and Spanish, 50% of the time. The ISD offers the following:

- Two-Way Dual Language- a percentage of the students participating are native English speakers.
- One-Way Dual Language- all participating students are native Spanish speakers enrolled in the bilingual education program.
- Spanish Immersion—all participating students are learning Spanish (from homes where English or other languages are spoken)

How does The ISD offer Dual Language instruction now and in the past?

The ISD has been offering One-Way Dual Language at three elementary campuses for six years. In 2012-2013, the ISD began offering Two-Way Dual Language at ten elementary campuses.

What is the goal of the Dual Language program?

The goal of the Dual Language program is to develop a second language (Spanish/English) at an early age through academic content. This means bilingualism, biculturalism, and bi-literacy.

When does Dual Language begin?

Dual Language begins at Kindergarten and moves incrementally through fifth grade. Generally, students can not begin after first grade.

Who can participate in Dual Language?

Students who are non-Spanish speakers, as well as those who are Spanish-speakers can participate. Both groups of students will learn the other language.

How is instruction delivered in the Dual Language program?

Generally, instruction is delivered in a co-teach model. Two teachers (one bilingual certified and one English as a Second Language/ESL certified) are partnered and teach 50% of the instructional time in the language of their certification.

How often do students rotate teachers?

Students rotate teachers based on the grade level of the class and the developmental readiness of the students. Learning time is extended based on the maturity and depth of instruction necessary in advancing grades.

Kindergarten and first grade rotate more often (every day or every other day), second grade rotates every two days and third -fifth grade rotates each week. The frequency of the rotation provides support in the respective native language.

Does Dual Language use a special curriculum?

No. The ISD Dual Language model follows the ISD curriculum. Students in the Dual Language program receive instruction equal to that of students in general education.

Are the student expectations for learning different in Dual Language?

No. Students are expected to master the same state required mandates, ISD curriculum performance standards; all the while, acquiring a second language. Language is taught through all academic subjects.

Does a child or parent need to know Spanish in order to participate?

No, no prior knowledge or language proficiency in Spanish is necessary for student participation.

Appendix F

(General) ISD RtI PROCESS

1. Prior to initial referral:

- Teachers will identify students for the RtI process based on the universal screeners.
- Teachers will implement interventions, including tutoring, before an RtI referral is made.
- The teachers will document all interventions in use, indicating whether the interventions are successful or not and how long the interventions have been implemented **on the appropriate Intervention Log**.
- Parents should be contacted regarding teacher's concerns by the time the student is referred to the RtI Process.

2. Referral steps:

- The referring staff member contacts the RtI chairperson to review current interventions in progress.
- If the decision is made to begin the referral. The teacher will complete the RtI referral with the help of the RtI Team designee on Aware and determine other possible sources of information to be collected. These sources can be found on the Tier II Intervention Plan.
- Team chairperson documents information on the LISD RtI Referral Log and gives the referring person a due date for the referral to be completed in Aware or on paper form. Generally the due date is one week prior to the next RtI meeting.

3. Prior to meeting:

- Optional Notice of Meeting may be distributed to the appropriate teachers and appropriate specialists as determined by the referring teacher and RtI Chair.
- It is the responsibility of the referring teacher to notify the parent of the meeting.

4. At the meeting:

- The appropriate RtI members meet, review data, and make recommendations.
- If the group determines student is in need of intensive intervention, the Tier II Intervention Plan is completed in Aware or on paper form.
- If the parent has requested a special ed referral in writing and the group determines that a child does not need a special ed referral, a Notice of Refusal must be sent.
- The RtI chairperson will document action taken on the RtI Referral Log.

5. Implementation Period:

- A progress review will be conducted as determined by the group as indicated on the Tier II Intervention Plan.
- In special circumstances it may be necessary to meet more frequently based on the needs of the student.

6. Review meeting: The RtI Team

- Review the student's progress as documented by the person(s) responsible for implementing the Tier II Intervention Plan.
- Determine whether the Tier II interventions were appropriate for the student
OR

- Revise the Tier II Intervention Plan **OR**
- Move to Tier III

7. Moving to Tier III:

- The teacher will be asked to have parents complete the Sociological Form.
- The appropriate RtI members will complete the Tier III Intervention Plan.
- If the student has a primary home language other than English and more information is needed, the campus LPAC representative **may** complete the RtI Screening Criteria Checklist.

8. Duties of Chairperson:

- Set up meetings.
- Determine who will implement the Intervention Plan and who will document accommodations and interventions.
- Ensure that the appropriate individuals each receive a copy of the Tier II or III Intervention Plan.

9. Record Keeping:

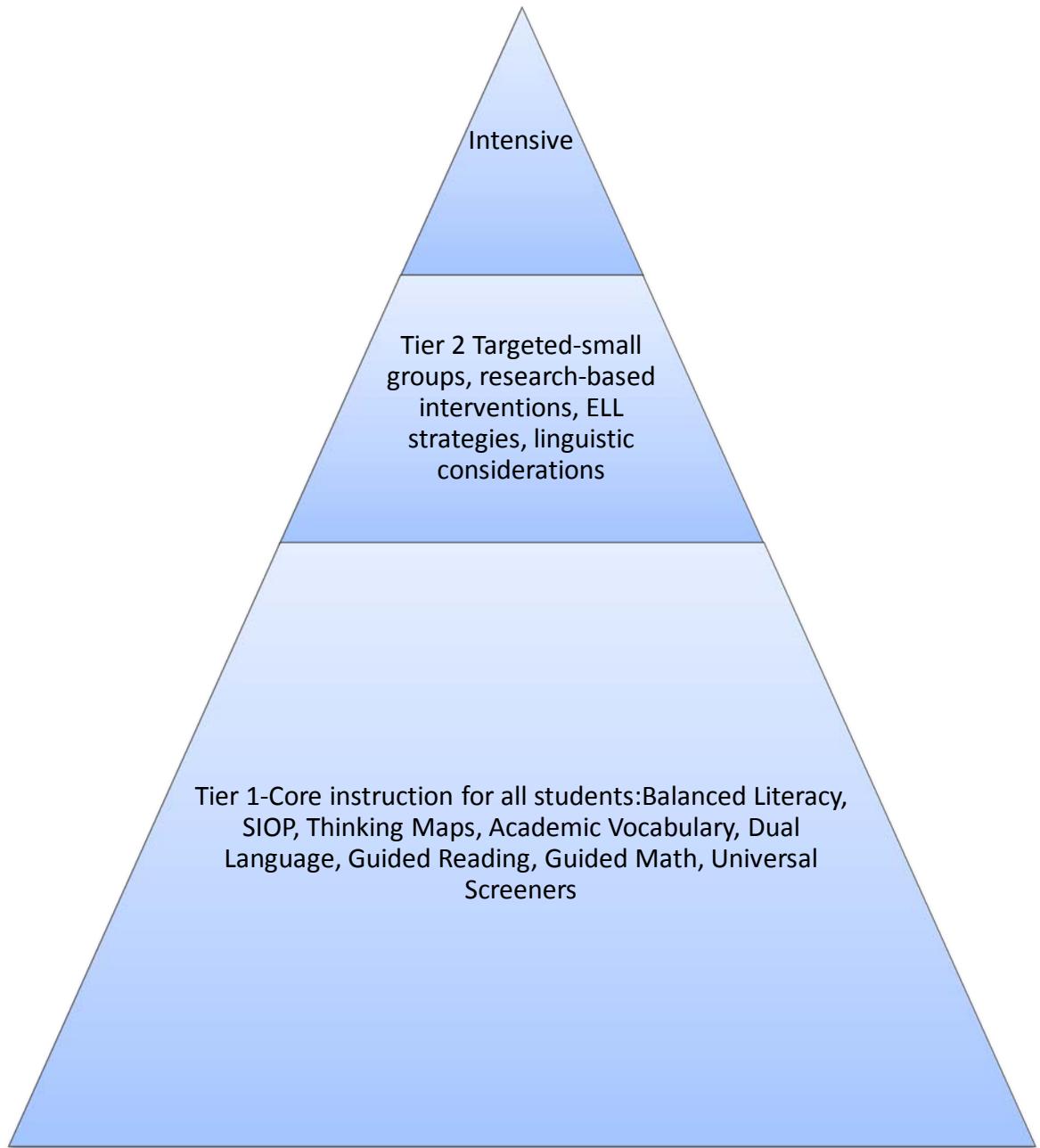
- A yellow folder should be maintained for each student referred to RtI.
- The RtI chairperson would make certain that these folders are given to other campuses if the student transfers within ISD. This includes elementary to middle school and middle school to high school.
- If at any time an immediate referral is necessary, the ISD RtI Documentation Form with the campus principal's signature is required.

RtI Procedures

9/09

Appendix G

Estrella Model of RtI for the Elementary School



Prior to Initial Referral

- 1) Teachers and specialists will identify students for the RtI process based on the school's academic and behavioral red flags, universal screenings, state testing scores, other classroom data and documentation, and parent or staff concerns. The data sources include DRA, EDL, STAAR, curriculum-based assessments, Woodcock Muñoz language scores, and TELPAS ratings.

- 2) Teachers will seek out district and campus resources to aid in implementing differentiated instructional interventions regarding students of concern including the district RtI website, district curriculum on Eduphoria, and collaboration with campus colleagues and grade level teammates.
- 3) Teachers will document all interventions in use, indicating whether the interventions were successful or not and how long the interventions have been implemented by using the tier 1 instructional log.
- 4) Teacher will contact parents to express concerns before the first RtI meeting is held.
- 5) Teacher will complete the Initial Referral to RtI form in AWARE.
- 6) Teacher will gather and upload to AWARE supporting documents including work samples, assessments, and the tier 1 instructional log.

Tier I Referral Steps

- 1) Email the counselor when all above items are complete.
- 2) Counselors will schedule a tier II meeting and invite the referring teacher, administrator, and other support personal via Outlook calendar.
- 3) Counselors will request input from the specials teachers by use of the specials teacher input form.
- 4) Counselors will send parent a formal notification of meeting once the date and time are set.
- 5) Teacher will continue to collect supporting documents and to note evidence of differentiated instructional strategies used in the classroom on the tier 1 instructional log.

Tier II Meeting

- 1) RtI team members will meet, review data, and make recommendations using the Elementary RtI meeting agenda. If the student is an ELL, a language acquisition specialist and bilingual specialists will be a part of the team.
- 2) If the team determines the student is in need of intensive intervention, the tier II intervention plan will be created and completed in AWARE by all team members present.
- 3) If the team determines that the student can benefit from additional differentiated instruction, the student will remain at tier I and additional differentiated strategies will be suggested.
- 4) If the team determines that the student exhibits dyslexic characteristics, the MTA teacher will be consulted and the team will use the RtI procedures for a general education dyslexia referral.

- 5) A review meeting date will be set and a parent notification with that date will be given to parents.

Tier II Implementation Period

- 1) Teacher will implement all tier II interventions as developed by the RtI team.
- 2) Teacher documents progress with interventions on the tier II instructional log to be uploaded into AWARE along with work samples and assessments.
- 3) Length of implementation period to be determined by RtI team (2-20 weeks).

Tier II Review Meeting

- 1) RtI team members will meet, review data, and make recommendations using the Elementary RtI meeting agenda.
- 2) The team will review the student's tier II progress as documented by the teacher logs, work samples, and assessments.
- 3) If the team determines the student is in need of even more intensive intervention, the tier III intervention plan will be created and completed in AWARE by all team members present.
- 4) If the team determines that the student can benefit from additional or revised tier II instruction, the student will remain at tier II and the tier II intervention plan will be revised.
- 5) A review meeting date will be set and a parent notification with that date will be given to parents.

Tier III Implementation Period

- 1) Teacher will implement all tier III interventions as developed by the RtI committee.
- 2) Teacher documents progress with the interventions on the tier III instructional log to be uploaded into AWARE along with work samples and assessments.
- 3) Length of implementation period to be determined by RtI committee (2-20 weeks).

Tier III Review Meeting

- 1) RtI team members will meet, review data, and make recommendations using the Elementary RtI meeting agenda.
- 2) The team will review the student's tier III progress as documented by the teacher logs, work samples, and assessments.

- 3) If the team determines that the student can benefit from additional or revised tier III instruction, the student will remain at tier III and the tier III intervention plan will be revised.
- 4) If the team determines that the student may not be able to experience success with the general education setting, the team may refer the student for special education testing.

Referral to Special Education Testing

- 1) The counselor will send home the sociological form to parents.
- 2) The RtI team will complete the referral form and mark areas of concern.
- 3) The administrator will enter the referral into Zangle.
- 4) The RtI facilitator will collect all other necessary paperwork to submit to the diagnostician.
- 5) The diagnostician will receive paperwork and begin the testing process according to their timeline

Appendix H

TAKS to STAAR Attributes

A Comparison of Assessment Attributes
Texas Assessment of Knowledge and Skills (TAKS) to
State of Texas Assessment of Academic Readiness (STAAR)

Assessment Attributes	TAKS Assessment Program	STAAR Assessment Program
Assessed Curriculum	<ul style="list-style-type: none"> ○ During initial TAKS development, Texas Essential Knowledge and Skills (TEKS) student expectations to be assessed were determined by Texas educators. ○ Test objectives that matched the student expectations were developed. ○ Blueprints for each assessment—the number of items per objective and on the overall test—were developed, with test lengths ranging from 30–60 items. ○ At grades 3–8, content areas assess grade-specific content, with the exception of science at grades 5 and 8, which assess multiple grades of science curriculum. ○ At grades 9–11, grade-level assessments assess content from multiple courses. 	<ul style="list-style-type: none"> ○ Educator committees identify which TEKS cannot be assessed on a paper/pencil assessment, which TEKS should be emphasized because they are necessary both for success in the current subject/grade or course and for preparedness in the next subject/grade or course, and which TEKS are considered supporting and should be assessed but receive less emphasis. ○ New test blueprints will emphasize the assessment of the curriculum standards that best prepare students for the next grade or course. ○ The assessments will encompass only the curriculum for that grade or course, with the exception of science at grades 5 and 8. The science assessments at these two grades will emphasize the 5th and 8th grade curriculum standards that best prepare students for the next grade or course; in addition, these assessments will include curriculum standards from two lower grades (i.e., grades 3 and 4 or grades 6 and 7) that support students' success on future science assessments.
Rigor of Assessment	<ul style="list-style-type: none"> ○ The item-development process has been consistently followed once item-writer guidelines were developed in 2001. ○ Performance standards were recommended by standard-setting committees and approved by the SBOE in November 2002. ○ Because performance standards have remained consistent since the first operational administration in 2003 and after the phase-in of standards, students have "outgrown" the assessments. ○ Measuring students' growth within the "Commended" performance category is difficult because too few items are rigorous enough to reflect this performance category 	<ul style="list-style-type: none"> ○ Assessments will increase in length at most grades and subjects. ○ Overall test difficulty will be increased by including more rigorous items. ○ The rigor of items will be increased by assessing skills at a greater depth and level of cognitive complexity. In this way, the tests will be better able to measure the growth of higher-achieving students. ○ In science and mathematics, the number of open-ended (griddable) items on most tests will increase to allow students more opportunity to derive an answer independently. ○ Students will be required to respond to two writing tasks (including personal narrative, literary, expository, persuasive, and analytic) rather than one task. ○ Performance standards will be set using empirical data gathered from studies that link performance year to year from grades 3–8 to high school and from specific courses to college and career readiness. ○ Empirical studies will be conducted comparing students' performance on

September 2010

Appendix I

Definition of Terms

English Language Learners (ELL): students whose primary languages are languages other than English and whose English language skills are such that students have difficulty performing ordinary classwork in English. The terms LEP and ELL are used interchangeably (Texas Education Agency [TEA], 2012, Sec. 29.052.).

Limited English Proficient (LEP): students whose primary languages are languages other than English and whose English language skills are such that students have difficulty performing ordinary classwork in English. The terms LEP and ELL are used interchangeably (Texas Education Agency [TEA], 2012, Sec. 29.052.).

No Child Left Behind Act of 2001 (NCLB): This term is also referred to as the reauthorization of the Elementary and Secondary Education Act (ESEA); under this legislation, all students must reach proficiency, as defined by each state's proficiency measures. This act also requires annual testing in 3rd–8th grade and 11th grade in reading and mathematics and requires disaggregated reporting of scores on an annual basis to the federal government (Echevarria & Vogt, 2011)

Response to Intervention (RtI): This model integrates students' assessments and evidence-based instructional interventions within a multilevel prevention framework to maximize students' achievements and reduce behavior problems (The National Center on Response to Intervention [NCRTI], 2010).

Sheltered Instruction Observation Protocol (SIOP): A scientifically validated model of sheltered instruction designed to make grade-level academic content understandable for ELLs while also developing their English language (Echevarria & Vogt, 2011)

State of Texas Assessments of Academic Readiness (STAAR): Assessment that replaced the Texas Assessment of Knowledge and Skills (TAKS). The STAAR includes annual assessments for the following: students in 3rd–8th grade in reading and mathematics; students in 4th and 7th grade in writing; students in 5th and 8th grade in science; and students in 8th grade in social studies. The assessment also includes end-of-course assessments for English I, English II, Algebra I, Biology, and U. S. history (TEA, 2007–2012a).

Texas Assessment of Knowledge and Skills (TAKS): These assessments were designed to measure how much students have learned and are able to apply the defined knowledge and skills at each tested grade level (TEA, 2007–2012b).

Texas English Language Proficiency Assessment System (TELPAS): This assessment is designed to assess the progress that LEP students make in learning English (TEA, 2007–2012c).

Thinking Maps: Thinking Maps, developed by Dr. David Hyerle, are visual teaching tools that foster and encourage lifelong learning. They are based on a simple yet profound insight: The one common instructional thread that binds together all teachers, from pre-kindergarten through postgraduate, is that they all teach the same thought processes.

Universal screening: This screening is a quick-check assessment of all students' current levels of performance in content or skill areas (Echevarria & Vogt, 2011)