EVALUATING A READING RESPONSE TO INTERVENTION MODEL: A CASE STUDY
OF ELEMENTARY EDUCATORS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
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ABSTRACT

This case study sought to explore the perceptions of classroom teachers and an instructional support team regarding the effectiveness of an established reading Response to Intervention model. It compared the perceptions of both groups regarding the model’s effectiveness, focusing on its strengths and weaknesses. The similarities and differences between the two participant groups’ perceptions that emerged from the individual interviews and focus groups were identified and discussed. This research also compared the perceptions of the participants to the success rates of students in the school in terms of the Response to Intervention measures of reading and standardized student achievement on the state English Language Arts assessment. Faculty at the site, Hayes Elementary School (pseudonym), participated in the study and contributed to the evaluation of the model’s effectiveness, using Stufflebeam’s (2007), Context Input Process and Product (CIPP) program evaluation model. The findings of the study, aimed at exploring the perceptions of school faculty towards the effectiveness of an elementary school’s Response to Intervention (RTI) model, were determined through the aggregation and open coding of multiple sources of data.

Keywords: Response to Intervention (RTI), effectiveness of RTI, program evaluation, school improvement
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List of Abbreviations

Individuals with Disabilities Education Act (IDEA)
Response to Intervention (RTI)
Context Input Process Product Framework (CIPP)
English as a Second Language (ESL)
English Language Learners (ELL)
Curriculum Based Measures (CBM)
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
Oral Reading Fluency (ORF)
Nonsense Word Fluency (NWF)
Letter Naming Fluency (LNF)
Letter Sound Fluency (LSF)
Phoneme Segmentation Fluency (PSF)
Pennsylvania System of School Assessment (PSSA)
English Language Arts (ELA)
Florida Comprehensive Assessment Test (FCAT)
Stanford Achievement Test (SAT)
Specific Learning Disability (SLD)
Individualized Education Plan (IEP)
CHAPTER ONE: INTRODUCTION

Overview

For decades, since the introduction of the Individuals with Disabilities Education Act (IDEA) in the 1970s, the overrepresentation of minority students in special education programs has been a concern of educators, politicians, and special interest groups. As a result of these concerns, the reauthorization of this legislation allowed states to replace the traditional intelligence and academic discrepancy model to identify students with specific learning disabilities, with an alternate method called Response to Intervention (RTI). The RTI approach is based on the use of quality core instruction in the general-education classroom, a framework and process for identifying and classifying struggling learners, the use of evidence-based interventions to target learning difficulties, and a system for monitoring student progress over time. Federal legislation purposefully allowed states and school systems flexibility in developing and implementing the RTI model. This leniency was allowed so that states and school districts could adapt and implement approaches that could best meet their unique circumstances (Wixson, 2011). As such, there has been a lack of consistency in the use of RTI amongst states, as well as between school districts within the same state. Concerns have been raised regarding intervention validity, lack of professional development, confusion regarding the diagnosis of a disability, and a need for further research (Bineham, Shelby, Pazey, & Yates, 2014).

Background

Following the 2004 and 2006 reauthorization of the Individuals with Disabilities Education Act legislation, states were provided with the opportunity to use a RTI model as a systematic approach to improve student learning through universal screening and differentiated
tiers of instructional interventions (Wixson, 2011). One of the intended objectives of the RTI initiative was to address a national concern that minority and economically disadvantaged students have long been disproportionately identified and overrepresented for special education services by use of the traditional intelligence and academic discrepancy model. Minority students embody significantly greater likelihoods of being identified with a learning disability as a result of adverse societal factors, rather than intrapersonal factors such as neurological functioning. African American and Native American male students, as well as students receiving free and reduced lunch, have a significantly higher likelihood of being referred and identified for special education services (Bal, Sullivan, & Harper, 2014).

Provisions of IDEA required each state to develop and implement RTI criteria to assist with identifying students with learning disabilities, while ruling out exclusionary factors such as limited English proficiency, a lack of appropriate instruction in math, reading, and writing, vision, hearing, or motor disabilities, cultural, environmental, or economic factors, or an atypical educational history. In addition, states are required to include evidence that teachers are highly qualified and that data is being collected by school districts at scheduled intervals to assess student progress (Fuchs, Compton, Fuchs, Bouton, & Caffrey, 2011). Universal screening tools, typically curriculum-based measures (CBM), are administered three or four times a school year for all students. The results of these universal screening assessments allow educators to classify students within a tiered-model. An RTI framework generally consists of three tiers, which determine the types and frequencies of instructional interventions and progress-monitoring assessments each student will receive. These progress-monitoring tools measure student progress across weekly or bi-weekly increments, and focus on specific subskills. The reading measures generally take between one and three minutes to administer, and might include letter
recognition, letter sounds, sight word recognition, reading fluency, and comprehensions assessments (Kaminski & Cummings, 2007). The first tier encompasses students who have met or exceeded benchmark expectations on universal screening measures. For students in this first tier, core instruction is effective without the need for additional intervention. A secondary tier is comprised of students who may have fallen somewhat short of this goal, and whom will need supplemental instruction. A student in this tier might receive an academic intervention between three to five times weekly in a small group setting. Students in this tier may be progress monitored on a weekly or biweekly schedule until he or she demonstrates an ability to meet grade-level expectations on a consistent basis. Students who are found to be significantly below grade-level expectations would be classified into a third tier, requiring intensive daily instruction from specialists within the school setting. Students receiving tier three supports are progress monitored weekly, with the data being used to make instructional changes as needed. Progress may indicate a need to change tiers, while continued failure might indicate that a student has failed to respond adequately to instructional interventions. At this point, the data may be used to assist in identifying students with a specific learning disability using the RTI model (Brown-Waesche, Schatschneider, Maner, Ahmed, & Wagner, 2011; Fuchs & Fuchs, 1997, Hauerwas, Brown, & Scott, 2013; Lipson, Chomsky-Higgins, & Kanfer, 2011).

Although RTI can still be considered a relatively recent educational reform movement, it has greatly impacted public schools across the country. Essentially, each state was provided the directive to allow RTI in conjunction with, or as a replacement to, the discrepancy model in identifying students with specific learning disabilities (Zirkel & Thomas, 2010). While the implementation and outcomes of the mandate vary greatly across states and individual school districts (Greenfield, Rinaldi, Proctor, & Cardarelli, 2010), all but seven states have required
school districts to incorporate all of the core components of the RTI model (Zirkel & Thomas, 2010). The majority of schools across the United States adopted and implemented RTI models by 2008 (Zirkel & Thomas, 2010). As the implementation of the RTI model has been shown to vary from state to state, district to district, and school to school, it must be assumed that the quality and effectiveness of these models vary just as greatly.

**Situation to Self**

As a classroom teacher, I initially became interested in RTI as an instructional framework in 2008, when the elementary school where I taught participated in the Monitoring Progress of Pennsylvania Pupils (MP3) research project. This study was conducted in coordination with two universities, and was focused on the implementation of an RTI model for reading and the effectiveness of instructional decisions made within this model. Several years later, I accepted a position as a Data and Instruction Specialist at a larger elementary school in the same district. This school had also participated in the MP3 project and was guided by the same expectations from district and state administrators, yet the RTI varied greatly from the model at my first school. In my new placement, as a member of the school leadership team, I participated in all aspects of the RTI process. Ultimately, I made the request to return to the classroom, but this experience allowed me to question the consistency and effectiveness of RTI models for reading. The third and final school to participate in the MP3 project is the site of the current study.

Many research studies have analyzed the effectiveness of an initial RTI implementation, but few researchers have sought to evaluate the effectiveness of an established model. As each state has defined and set forth expectations regarding the federally required RTI criterion (Hauerwas et al., 2013), each public school district and every teacher has been impacted in some way by the model. Yet, for many states and schools, student achievement continues to decline.
The national report card on student achievement in 2015 found that the majority of states saw a decline in student achievement between 2013 and 2015. This same report found no significant improvement between the achievement gaps of various minority groups and white students over the two year time period (“The Nation’s Report Card”, 2015).

As a classroom teacher who participated in a RTI implementation study several years ago, and one who continues to work closely with this instructional model daily, my interest in RTI is embedded within an epistemological worldview. Epistemology, as a philosophical assumption, relies on the pursuit of and interpretation of knowledge. This worldview is practical in nature, and research influenced by epistemology often requires extensive time and experience in the field of study (Creswell, 2013). Do other educators find that the universal screening, interventions, and progress monitoring assessments that have been implemented are effective in identifying struggling students and improving instruction and learning? Are Response to Intervention models truly successful in promoting student learning and increasing reading achievement?

**Problem Statement**

School districts across the United States have worked to develop their own RTI procedures based on the specific needs of student populations, as well as each school’s and district’s access to available professional development, personnel, and curricular resources. According to Wixson (2011), the IDEA reauthorization purposefully allowed states and school districts flexibility in the development and implementation of RTI approaches. This flexibility has contributed to variations in assessment tools, intervention programs, frequencies and durations of interventions, and in the timelines used for identifying students with specific learning disabilities across states and schools (Burns, Appleton, & Stehouwer, 2005; Hauerwas
et al., 2013). As each RTI model is implemented and maintained uniquely, an interest in qualitative case studies has emerged over the last ten years.

Stuart, Rinaldi, and Higgins-Averill (2011) have made the assertion that the perceptions of classroom teachers, who are integral to the RTI process, have been underrepresented in existing literature. Classroom teachers are typically responsible for referring struggling students and implementing academic interventions and accommodations, but are often excluded from child study teams and the decision-making process, and “minimally represented in the leadership role” “(Wilcox, Murakami-Ramalho, & Urick, 2013, p. 88). There are, however, recent studies that have explored the perceptions of various groups of school personnel. This research can be categorized into studies focused on classroom teachers, special education teachers, and school leadership. The studies focus mainly on the initial implementation of an RTI model, and the impact of RTI on special education identification. Few studies (Stockslager, 2011; Maskill, 2012) have attempted to measure the effectiveness of RTI models, with success typically being analyzed in terms of oral reading fluency. Although program evaluations were originally developed as a way of facilitating educational improvement (Stake, 1971), this type of comprehensive evaluation has not been applied to RTI models in the existing body of literature.

While several studies have explored the effectiveness of RTI implementation, it is clear that there is a lack of research focused on evaluating the effectiveness of established RTI models. Due to the variability of these models (Bal et al., 2014), research should be conducted at the case study level. As suggested by previous research, the current study included the perceptions of both classroom teachers and instructional leadership team members (Wilcox et al., 2013). A qualitative research design utilizing the CIPP framework was capable of encompassing the various components of RTI in order to conduct this comprehensive program evaluation.
Purpose Statement

The purpose of this case study was to explore, describe, and compare the perceptions of a school’s instructional leadership team and classroom teachers regarding the effectiveness of an established RTI model in a large, diverse school (further referred to by the pseudonym Hayes Elementary School) near the capital of Pennsylvania. Throughout the research, the perceptions of the participants was generally defined as their understanding of the intended objectives of RTI, and their professional insights regarding the effectiveness, including strengths and weaknesses, of this model on student learning and achievement. These perceptions were explored through interviews and focus groups, and compared to student achievement records within the greater context of a decision- and accountability- oriented program evaluation of the school’s RTI model using Stufflebeam’s (2007) Context, Input, Process, and Product (CIPP) framework.

Significance of the Study

While many studies have explored the effectiveness of the implementation of RTI models in both elementary and secondary schools, much less research has been conducted to follow up on the effectiveness of these models (Burns et al., 2005; Fagella-Luby & Frey, 2011; Fisher & Frey, 2011; Griffin & Hattendorf, 2010; Noltemeyer, Boone, & Sansosti, 2014; Robinson, Bursuck, & Sinclair, 2013; Shapiro et al., 2012; White, Polly, & Audette; 2012). With the majority of elementary schools across the United States utilizing RTI as a framework for student instruction, particularly in reading, how effective are these models?

When studies exploring the effectiveness of RTI have been conducted, often they focus on specific groups of educators. Several studies have sought the perceptions of special education teachers and supervisors, while a fewer number of studies have explored the perceptions of
classroom teachers and principals (Bineham et al., 2014; Fuchs, Fuchs, & Compton, 2012; Gessler-Werts, Lambert, & Carpenter, 2009; Gessler-Werts & Stahl-Carpenter, 2013; Greenfield et al., 2010; Isbell & Szabo, 2014; Malone & Gallagher, 2010; O’Donnell & Miller, 2011; Printy & Williams, 2015; Sanger, Mohling, & Stremlau, 2012; Stuart et al., 2011; Vaughn & Fletcher, 2012; Wilcox et al., 2013). How do different groups of educators differ in regards to their perceptions of the goals of RTI models? How do they perceive the effectiveness of these models, including their strengths and weaknesses, differently?

This case study hoped to provide administrators at Hayes Elementary School, and its overseeing school district, with a comprehensive evaluation of the reading RTI model currently in place. The perceptions of teachers and instructional leadership team members were explored and compared. These perceptions provided insight into how the goals of the model were understood, and identified several perceived strengths and weaknesses. As noticeable differences between the perceptions of the two participant groups, administrators may want to consider engaging in an open discussion of its RTI model for reading, possibly revisiting professional development. Participants had perceived significant weaknesses to the model, so it may be necessary for administrators to use the information collected in this study to engage in a discussion on ways to improve the reading RTI model.

Case study design is bounded within the specific context of the research. It may not be generalizable across settings (Creswell, 2013). Yet, while reading RTI models across individual schools will vary, it is my belief that these models often embody similar goals, strengths, and weaknesses. As such, the discussion and findings of this study may prompt educators and administrators outside of the study to question and evaluate the effectiveness of the reading RTI models utilized in their own schools and districts.
Research Questions

As this study was a comprehensive program evaluation, only a few questions were studied in-depth. Scheyer and Stake (1976) assert that it is more effective in an evaluation to study a few questions at a greater depth, than to attempt to analyze several questions. The research questions have been adapted from the program evaluation recommendations of Scheyer and Stake (1976). The first question prompted educators to communicate their understanding and interpretation of the objectives of the RTI model. The discussions that resulted from this question helped describe the context of the site, as explained in Stufflebeam’s (2007) Context, Input, Process, and Product evaluation theory. Scheyer and Stake (1976) suggest that it is necessary for a program evaluation to describe the goals of a program as understood by its stakeholders.

The second and third questions focused on the participants’ perceptions of how well the school was progressing towards the objectives of its RTI model. The second question specifically compared the perceptions of classroom teachers and members of the school leadership team, regarding the effectiveness of the school’s RTI model, while the third question explored the model’s perceived strengths and weaknesses.

The fourth and final research question attempted to provide further evidence as to the success of the program based on its outcomes, a necessary aspect of program evaluation according to Scheyer and Stake (1976). The school used DIBELS data to measure student success through universal screening and progress monitoring measures, while the state used standardized assessments to measure achievement. These sources of data were described and compared in the study to present a more comprehensive measure of the RTI model’s effectiveness.
The following research questions were be used to facilitate the program evaluation of the RTI model at Hayes Elementary School:

1. What are the objectives of the Response to Intervention model for reading, as understood by the classroom teachers and instructional leadership team members, at Hayes Elementary?

2. How do classroom teachers and instructional leadership team members perceive the effectiveness of the reading RTI model in addressing its intended objectives, and how do these perceptions compare?

3. What are the perceived strengths and weaknesses of the school’s RTI model for reading?

4. How does student success at Hayes Elementary School, as defined by DIBELS measures, compare to student achievement in state English Language Arts assessments?

Definitions

1. Response to Intervention - Based on the National Center on Responsiveness to Intervention (2010) definition, RTI is a prevention system that integrates assessment and intervention within a multi-level instructional framework to identify struggling students. These students are provided with research-based interventions at varying levels of intensity and frequency in an attempt to prevent future placement in special education.

“With RTI, schools use data to identify students at risk for poor learning outcomes, monitor student progress, provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student’s responsiveness, and identify students with learning disabilities or other disabilities” (NCRTI, 2010, p. 2).
2. *Effectiveness of Response to Intervention* - In this study, educators will be describing their perceptions of the effectiveness, strengths, and weaknesses of the reading RTI model at Hayes Elementary School. Although participants will evaluate the effectiveness of the model based on its perceived objectives, VanDerHeyden (n.d.), asserts that an effective RTI model embodies several characteristics. These characteristics include a reduction in the amount of students who are significantly below grade-level over time, reliable decision making about student placement within the tier system, an improved efficiency in the allocation of resources, and high rates of success within the model’s specific interventions.

3. *Program Evaluation* - According to Scheyer and Stake (1976), the aim of a program evaluation is to promote a collective understanding of a program. This understanding includes the acknowledgement of its strengths and weaknesses. As program evaluation theory is based in qualitative research, this type of understanding can be considered more experiential than statistical. To help develop this collective understanding, a program evaluation should include a portfolio of data that broadly represents the program. “The portfolio keeper should work out ways to put into words or other public form the goals, perceptions, and values people hold” (Scheyer & Stake, 1976, p. 38).

4. *Perception* - The words perception is found in qualitative studies. These studies may define the term differently, as it is such a commonly used word. This study will understand the word as it is found in the Oxford Dictionary, which defines perception as, “a way of regarding, understanding or interpreting something; a mental impression” (“perception”, 2016). This definition has also been used in qualitative research focused on understanding the perceptions of educators (Lesh, 2013).
5. *Student Achievement* - The National Board for Professional Teaching Standards defines student achievement as, “the status of subject-matter knowledge, understanding, and skills at one point of time” (NBPTS, n.d., p. 5). Rather than understanding student achievement as performance on a standardized assessment though, the National Board for Professional Teaching Standards asserts that student achievement is greater that one test, and that it also encompasses student learning and growth over time (n.d.). To incorporate both of these components of student achievement, performance and growth, this study will collect and analyze two types of data. These records will include student achievement on Pennsylvania’s standardized English Language Arts assessment, as well as student growth and achievement on the DIBELS measures used at Hayes Elementary Schools RTI model.

6. *Participants* - This term will be used to refer to several educators from Hayes Elementary School who consented to participate in the study’s focus groups and individual interviews. These educators, recruited through convenience sampling, meet the prerequisite factors necessary for the study. Classroom teachers each represent at least eight years of teaching experience in the district, while the remaining participants hold positions on the school’s instructional leadership team.

7. *Participant Groups* - The participants will be classified within two participant groups: classroom teachers and instructional leadership team members. These two types of educators will participate in separate focus group interview, and the responses and perceptions of the classroom teachers and the instructional leadership team members will be described and compared.
8. **Instructional Leadership Team** - The instructional leadership team at Hayes Elementary is a group of educators with positions outside of the regular education classroom. The several members of this team meet weekly to discuss school and student concerns. The instructional leadership team oversees any decisions related to RTI and student evaluation. The members of the instructional leadership team include the school’s principal, guidance counselor, psychologist, data and instruction specialist, reading specialists, intervention specialists, and English language learner and special education teachers.

**Summary**

For nearly a decade, public schools across the United States have implemented and maintained RTI instructional models in reading. Many of these models were studied and evaluated throughout the initial introduction, however, few researchers have revisited these RTI models to evaluate their current levels of effectiveness. This case study utilized a program evaluation framework to explore the effectiveness of one elementary school’s RTI model for reading. The study relied on data collected from individual and focus group interviews of two groups of participants, as well as an analysis of the school’s RTI records and student achievement data. The perceptions of the two participant groups, classroom teachers and instructional leadership team members, were compared and analyzed. The perceptions offered by the participant groups were also compared to the school’s RTI records and student achievement.
CHAPTER TWO: LITERATURE REVIEW

Overview

Following the reauthorization of the Individuals with Disabilities Education Act (IDEA) legislation in 2004, states were provided with the responsibility to use components of an instructional process (RTI) to identify students in need of special education services, based on their responses to research-based interventions. The regulations required each state to develop and implement a method of identifying specific learning disabilities apart from the severe discrepancy model used in the past (Zirkel & Thomas, 2010). The shift to the use of the RTI model was to address the longstanding concern that minority students and children in poverty were being overrepresented in the traditional special education identification process. Providing early research-based interventions to struggling students, while consistently monitoring academic progress, was recommended by the National Research Council as a way to help prevent the over-identification of these vulnerable populations (O’Connor, Bocian, Beach, Sanchez, & Flynn, 2013). The RTI model addresses these provisions, introduces data-driven instruction, and can be used as a way of identifying students for special education supports without requiring an IQ versus achievement discrepancy. This instructional framework has become a widely used model in public education (Greenfield et al., 2010).

While the use of the RTI model in identifying students with specific learning disabilities was a component of federal policy, the language and direction of the legislation has been considered vague or unclear. States have interpreted the regulations differently, and the use of RTI varies across and within states (Zirkel & Thomas, 2010). School districts have worked to develop their own procedures, based on their specific needs, student populations, and resources (Stuart et al.
2011). The perceptions of classroom teachers, who play the most integral roles in both student achievement and the RTI processes of referring students, providing interventions, and monitoring student progress, have been underrepresented in existing literature (Stuart et al., 2011). Their participation is often excluded from RTI decision making teams (Wilcox et al., 2013).

While studies have been conducted to evaluate the implementation of RTI models (Shaff, 2009; Hubert, 2013; Robinson et al., 2013; Printy & Williams, 2015), less research has been conducted to evaluate the effectiveness of existing models.

**Theoretical Framework**

The epistemological philosophical assumption shaped the design and purpose of this study, as the study seeks to explore the individual perceptions of school personnel, as formed by professional experiences. Epistemology relies on the researcher as an “insider”, with extensive time and study being conducted in the field (Creswell, 2013). I have not worked in the site school of the study. However, with my experiences as the former Data and Instruction specialist, a member of the school leadership team, and my current position as a classroom teacher in the district, I am uniquely qualified as an insider and a participant observer in both of the groups I wish to study. Interviews and focus groups, both of which will be used in this study, are recommended methods in epistemological research (Louca, Elby, Hammer, & Kagey, 2004). While there is an obvious potential bias because of my proximity to the study, the commonly used qualitative research practices of bracketing, transcription, coding and aggregation, and member checking will be used to counteract research subjectivity (Creswell, 2013).

This study was also influenced by the pragmatic framework. According to Dewey (1905), pragmatism as a theoretical framework, is essentially realistic. It assumes that reality can
be defined and described by the interpretations of individuals, constructing meaning within the context of experiences. These experiences are related to realistic consequences, and pragmatism is invested in understanding these future effects (Dewey, 1905). This study relies on the interpretation of reality from the experiences and perceptions of the participants. It also seeks to identify the effectiveness of the RTI model at the school, understanding that the resulting findings and discussion could be used as a starting point towards consideration of future professional development, training, or communication and collaboration between various school positions and personnel to improve the program. Additionally, multiple methods and types of data will be collected and analyzed in this research, including both qualitative and quantitative data, a characteristic of pragmatic research (Creswell, 2013).

As an attempt to analyze the effectiveness of an RTI model, this study is additionally embedded in the theory of program evaluation as described by Stufflebeam and Shinkfield (2007) and Scheyer and Stake (1976), who explain that the basic premise of evaluation theory is the assessment of a program’s value and merit through systematic description and judgment. According to these authors, the purpose of a program evaluation is to develop and improve the collective understanding of a program. An evaluation emphasizes personal experiences over numerical analyses, as participants describe the perceived strengths and weaknesses of a program.

A program evaluation typically consists of four steps; delineation, data collection, reporting, and application of the evaluation. To begin, an evaluator defines the focus, questions, and participants that will be driving the program evaluation. In this study, the focus of the evaluation is the effectiveness of the RTI model. The participants include the classroom teachers and the school leadership team.
The second phase of an evaluation involves collection of data. In this study of a RTI model, the data will include DIBELS universal screening and progress monitoring measures and the state ELA assessments. Scheyer and Stake (1976) recommend inclusion of a variety of materials and records that broadly represent a program. As such, this study will include studies of two participant groups, embodying different roles and responsibilities in the RTI model, as well as a collection of student achievement data. It is further suggested that the person who undertakes the collection of the records be a staff member (Scheyer & Stake, 1976). As the researcher of the study, a former RTI coordinator at a comparable school to the site school in the district, and a current classroom teacher in the district, I have the ability to both collect and comprehensively interpret the relevant data.

The third step in a program evaluation involves the reporting of the data, which will be conducted in this study by analyses of the focus group and interview transcripts and a description of student achievement data, and will be reported in later chapters of the dissertation. Lastly, a program evaluation leaves the application of the findings to the discretion of the organization itself (Stufflebeam & Shinkfield, 2007). In this study, any resulting decisions or changes will be determined by site and the school district administration.

In further alignment with the pragmatic theoretical framework, program evaluation theory centers on realistic effects and is future-oriented. As stated by Scheyer and Stake (1976), “It is expected that the portrayal will stimulate further discussions among the staff about governance and remind persons of future needs” (40). The current study aims to encourage a conversation on areas of strengths and weaknesses of the existing RTI model at Hayes Elementary, a Title I school in central Pennsylvania that serves a racially diverse local community.
Related Literature

Overrepresentation of Minority Groups in Special Education Today

The numbers of minority students and children of poverty identified with learning disabilities and receiving special education services has long been a concern in public education. IDEA policies began requiring that schools report the ethnic and racial demographics of students identified with learning disabilities to the US Department of Education, beginning in 1997 (Bal et al., 2014). This mandate continued in later IDEA reauthorizations, as states and school districts were required to analyze disproportionality. To address the disproportionality of these at-risk groups, schools were obligated to introduce strategies that would address the historic policies and practices that may have contributed to the overrepresentation of minority groups within special education. Yet even with these provisions, Bal et al. (2014) assert that minority racial and English language learning (ELL) populations continue to be overrepresented across the United States, and internationally as well. Research has shown that African American students are twice as likely as their white peers to be identified with a learning disability, while economically disadvantaged students are more than three times as likely to be referred for special education (Bal, Sullivan, & Harper, 2014).

A critical debate in the discussion of special education disproportionality centered on the use of the severe discrepancy model in diagnosing learning disabilities. For example, at-risk students who have been identified as learning disabled using the discrepancy model may perform similarly on cognitive tests to students who maintained low achievement in reading, but were not identified as learning disabled (Brown-Waesche et al., 2011). In response to educational groups concerned by the over-representation of minority students and students of poverty within special
education, and those who argued that severe discrepancy alone was not sufficient to properly diagnose learning disabilities, Congress provided states with new provisions for identifying students with specific learning disabilities. Rather than requiring use of the severe discrepancy model, states had to implement and allow a RTI process (Gessler-Werts & Stahl-Carpenter, 2013; Hauerwas et al., 2013). While a common misconception exists that RTI must be used before evaluating or identifying with a specific learning disability, federal provisions only permit the use of the early intervention framework. It is stipulated that RTI may not be used to deny or delay a timely evaluation of a student suspected of having a learning disability (Martin, n.d.).

The use of RTI has been commended for placing special education disproportionality within the context of a greater societal problem, inequality. School leaders can attempt to address this problem proactively by improving instruction and assessment of all students. Rather than being seen as a special education initiative, RTI should be considered a general education reform that screens all students and intervenes early to support every student who is struggling academically.

The RTI model is best understood as a systematic approach to the standardization of assessments, interventions, and timelines in improving instruction and learning. It encompasses two main objectives: preventing learning difficulties and identifying students with reading, writing, or math disabilities (Wixson, 2011). A fundamental goal of the RTI model is to provide early identification and intervention to struggling students, focusing on proactively addressing learning difficulties before they would evolve into the need for special education identification (Compton, Fuchs, & Fuchs, 2012). In striving to prevent learning difficulties, RTI focuses on increasing instructional differentiation and improving professional consultation and discussion of students at-risk of falling behind. In the identification of students with learning disabilities,
many states require the use of the data collected through the RTI process as evidence of students who have failed to respond adequately to intervention (Hauerwas et al., 2013).

Proponents of RTI assert that the model strives to ensure that all students are receiving effective instruction, and that a lack of qualified teachers or evidence-based instructional programs is not a contributing factor in the diagnosis of learning disabilities (Gessler-Werts et al., 2009). This model, which Ball and Christ (2012) found to be similar to several earlier problem-solving models, is a framework that helps educators define a problem, identify beneficial interventions, monitor student progress throughout the interventions, and then analyze and reevaluate the success of these students and the interventions. This decision-making process, which relies on the data collected through the universal screening and progress monitoring processes, is arguably the most critical component of RTI (Ball & Christ, 2012).

Rather than approaching instruction in the same manner for all students, an educational practice that has spanned centuries, the RTI model assesses the needs of each student individually and provides multi-tiered levels of support and interventions. This approach aligns with the recommendations of the President’s Commission on Excellence in Special Education, as it represents a proactive model to encourage student growth, and is used to screen and provide support to all students rather than just those identified with disabilities (Wilcox et al., 2013).

A recent meta-analysis of RTI related studies has found that less than 2% of students in schools that use this model are identified with learning disabilities, in comparison to the national estimate of over 5% (Shobo, Anduamlak, Hammer, & Hixson, 2012). Reeves, Bishop, and Gabler-Filce (2010) found that the use of RTI also resulted in a decrease in the rates of minority students and ELL referred for special education, a goal of federal legislation. Understanding
the historical context that drove the development of RTI is important to this study, as the first
two research questions will explore the perceived objectives of a reading RTI model amongst
educators working largely with minority students and English Language Learners.

Although RTI may be considered a relatively recent model in the field of education, it
was quickly adopted and implemented across the majority of public schools in the United States.
Guidelines for the use of RTI can be found in each state’s education regulations (Hauerwas et al.,
2013).

**Response to Intervention in Education Today**

Each state has developed and introduced regulations related to the use of the RTI model.
While a growing number of states are now moving towards the use of RTI in identifying students
for learning disabilities, most states and school districts have already been using RTI. By the
2008-2009 school year, 71% of school districts across the United States had implemented RTI in
some form. The same year, 70% of elementary schools were using RTI in reading and language
arts, while 36% had introduced the model to improve student behavior (Tran, Sanchez,
Arellanoo, & Swanson, 2011).

A national study of state-level RTI guidance found that 17 states require the use of RTI
data in student evaluation, while 33 states allow the use of data collected through RTI to assist in
the identification of a student with a learning disability. There are eight states that have
specifically prohibited use of the severe discrepancy model in special education identification,
although most school districts across the country use a combination of the traditional IQ
evaluation in conjunction with RTI data (Hauerwas et al., 2013).

There have been several organizations providing assistance and guidance to states and
school districts in designing and implementing RTI, and as a result, there are a variety of
approaches to implementation of this instructional framework. However, the U.S. Department of Education provided funding to technical assistance centers to develop screening assessments, study research-based interventions, and to create guidance documentation to help schools across the country understand and adopt RTI. This research has led to the emergence of a generally accepted RTI framework (Tran et al., 2011).

As an educational framework, the RTI model includes four key components. These elements include a school-wide, multi-tiered academic or behavioral system, universal screening of all students, data-based decision making for student instruction and interventions, and regular progress monitoring (Wixson, 2011). If a student has failed to make progress throughout multiple interventions, he or she is then typically referred to a school psychologist for formal evaluation. The first component, which features the multiple levels of instruction, generally involves three or four tiers of student support. These tiers, or levels, are often used in organizing the frequency and duration of student interventions and services, although the same tiers across states and school districts may be representative of differing resources and services (Compton et al., 2012). RTI relies on the universal screening of all students three or four times a year, typically in the fall, winter, and spring. From the screenings, students are classified into the various levels the school has put in place to meet student needs. These tiers include increasingly intense and rigorous instructional programs and interventions (Gessler-Werts & Stahl-Carpenter, 2013). At the most intensive tier levels, where students who are at-risk for difficulties are identified, frequent data-collection, through progress monitoring helps educators decide whether students are responding to assigned interventions and supports. Often these progress monitoring tools are measures of reading skill fluency, dependent upon the age and skill of the student. These measures may include letter recognition and sound fluency, nonsense word fluency, and
oral reading fluency. Schools utilizing an RTI model typically see gains in student achievement from pretest to posttest scores, gains which are used to show that interventions are working. However, as school districts move towards the use of RTI in identifying students for special education evaluation, a student’s lack of progress while receiving research-based interventions from qualified teachers would elicit a referral to a school multi-disciplinary team to determine whether a student should move forward towards evaluation (Shobo et al., 2012). These teams are generally comprised of building principals, school psychologists, guidance counselors, reading specialists, and sometimes RTI coordinators or data specialists (Gessler-Werts & Stahl-Carpenter, 2013). This study will involve two participant groups, classroom teachers and school leadership team members, comparing perceptions of the objectives and effectiveness of a reading RTI model. A discussion of the success of an RTI model should consider a variety of student data sources, as universal assessments and frequent monitoring of struggling students is a hallmark of this instructional approach.

Assessment Data in Response to Intervention Models

A RTI model depends heavily upon data-based decision making, so the validity and reliability of assessment instruments are crucial (Ball & Christ, 2012). These formative assessment tools ultimately drive the planning of instruction, as well as providing educators with measures of student growth and intervention effectiveness (Hagans, 2008). This student data is collected in two forms, universal screening and individual progress monitoring.

Universal screening is the most common form of assessment data used to identify problems and make student instructional decisions throughout the year. All students are screened, and performance levels are compared to predetermined cut scores (Ball & Christ, 2012). These points are used in placing students within the RTI tiers, or levels, and to assess
progress at given times throughout the school year. Curriculum-based measures (CBM) are the most commonly use assessments in the universal screening of students (Ball & Christ, 2012). These assessments are invaluable to the RTI model. A study commissioned by the U.S. Department of Education found that 79% of RTI schools used only one data point, the universal screening measure, when assigning students in RTI tiers and intervention groups (Balu, Zhu, Doolittle, Schiller, Jenkins, & Gersten, 2015). After an initial placement, students who receive interventions are monitored frequently using these measures.

The ease and relative affordability of curriculum-based measures have made them the most popular type of assessment in education today. These assessments are brief, varying between one and five minutes in length for each specific skill or test. Over the past decade, CBM assessment programs and databases have been developed to assist schools in the collection and analysis of student data and growth. According to the National Center on Intensive Intervention, there are a variety of reading progress monitoring programs and tools available for students in grades K-12. These popular commercial programs include DIBELS, AIMSweb, easyCBM, edSpring/edcheckup Standard Reading Passages, FAST reading, i-Ready Diagnostic for English/Language Arts, Scholastic Reading Inventory, and Yearly Progress programs, to name a few (“Academic progress monitoring”, n.d.).

Several studies have focused on the validity and reliability of these programs, and in particular, the commonly cited and studied Dynamic Indicators of Basic Early Literacy Skills, or DIBELS. Shapiro et al. (2012) found that DIBELS has been used across thousands of schools, assessing millions of students. This system of assessments has been proven as valid and reliable (Hagans, 2008). Mellard, Frey, and Woods (2012) reported that median for reliability,
depending on the DIBELS subtests, ranged between .61 and .96, with a concurrent validity between .90 and .96.

Two of the initial creators of the DIBELS, explain that this program is a set of measures and procedures for evaluating early literacy and reading skills in students from kindergarten to middle school (Kaminski & Cummings, 2007). DIBELS is more often used through third-grade, and that the series of assessments is organized developmentally into grade-level appropriate subtests that first measure alphabetic principles, phonemic awareness skills, reading fluency and accuracy, and comprehension and language skills (Ding & Liu, 2013). Each of the subtests is individually administered with a standardized set of procedures, time limits, benchmark goals and scoring scales. The benchmark goals and cut scores are criterion-referenced targets, indicating the probability of achieving the next sequential goal. The scores are based on empirically-derived, longitudinal predictions, where a student achieving a benchmark goal embodies an 80% chance of reaching the next goal (Kaminski & Cummings, 2007). These DIBELS subtests, such as the oral reading fluency measure, have undergone numerous studies to establish reliability and validity. These studies have demonstrated a high correlation with reading outcomes (Hagans, 2008; Paleologos & Brabham, 2011; Ding & Liu, 2013). DIBELS assessments have been proven to embody strong psychometric properties and validities (Shapiro et al., 2012).

The data collection available through DIBELS assessments provide administrators with easily aggregated information of all students in a school system at given points in time (Brown-Waesche et al., 2011). This snapshot of student data allows educators to compare the percentage of students on grade-level and making adequate progress, with percentages of students below these expectations. This collection and analysis of student scores can also be used to identify
trends and patterns across subgroups of students, enabling schools to better target struggling populations (Ball & Christ, 2012). The creators of the DIBELS clearly articulate that the intent of these measures is to serve as formative assessments, where student performance should be viewed in terms of opportunities for instructional improvement and as an evaluation of the effectiveness of interventions in place. Kaminski and Cummings (2007) encourage educators and administrators to use the student data as a whole to make school and grade-level instructional decisions and changes. The data can be used at the individual level to identify students in need of additional supports and possible special education evaluation.

It is important to note that DIBELS data alone may not provide a comprehensive portrayal of student learning. Rather, the data should be used in conjunction with teacher observation and feedback. Shapiro et al. (2012) urged administrators to seek the perceptions and advice of classroom teachers, and to consider this subjective feedback along with the objective DIBELS data in making better-informed student and program decisions.

It has been advised that DIBELS measures alone may not be strong enough to accurately predict student achievement within minority and economically disadvantaged populations. Paleologos and Brabham (2011) conducted a study to determine whether the oral reading fluency measure of the DIBELS program could effectively predict reading achievement on standardized assessments of students from diverse socioeconomic backgrounds. The study ultimately concluded that DIBELS oral reading fluency is not an adequate predictor of student achievement for many schools with populations of economically disadvantaged students. As this study is set in a diverse school setting with a significant population of both minority and economically disadvantaged students, an analysis of DIBELS data alone will not be sufficient in exploring the effectiveness of the reading RTI model (Paleologos & Brabham, 2011).
Studies have contradicted the finding that DIBELS may not accurately predict student achievement within at-risk populations. Roehrig, Petscher, Nettles, Hudson, and Torgeson (2008) concluded that there is no statistically significant difference in the use of DIBELS as a predictor of student achievement amongst diverse demographic groups. Approximately 35,000 students were included in this study. These students were sorted into two equitable groups, a calibration group and a cross-validation group, using a stratification procedure. All students participated in DIBELS oral reading fluency screening four times across the school year, and each student participated in the Florida state assessment, the FCAT-SSS, and the Stanford Achievement Test, SAT-10. Roehrig et al. (2008) found that correlations between the DIBELS measure and both standardized assessments were high, and reflected a significant relationship between oral reading fluency measures and reading comprehension on standardized assessments.

While the current study will not seek to establish a correlation between DIBELS data and standardized test scores, both forms of student achievement data are important. The study seeks to explore educators’ perceptions of the effectiveness, strengths, and weaknesses of a reading RTI model. It is likely that these perceptions will be based in part on student progress as reflected by the school’s use of DIBELS universal screening and progress monitoring data. Additionally, educators may perceive student achievement on Pennsylvania’s required ELA assessments, as indicative of the effectiveness of the instructional model. These records will be considered the products, or outcomes, of the reading RTI model at Hayes Elementary School.

**Achievement in a Response to Intervention Model**

While many studies have been conducted evaluating the validity and reliability of assessment tools such as the DIBELS, less research has been conducted to analyze the effects of
RTI models on overall student achievement. The effectiveness of RTI has yet to be proven. Although the model was quickly adopted by most states and thousands of school districts across the country, the existing studies have focused largely on students within at-risk subgroups. Further study of the effect of RTI on student achievement has been recommended, without which, the evidential validity of the model remains unproven (Mellard et al., 2012).

As a whole, administrators are confident that RTI positively impacts student achievement (Hyatt-Boucher, 2011). Classroom teachers also believe that student achievement on standardized assessments is a direct product of RTI (King, 2011). Yet, although there is a limited availability of this area of research, the studies that have examined student achievement in relation to RTI present different findings. These diverse findings may be representative of the differences in RTI models used across school districts and states. It has been suggested that time and experience may improve the effectiveness of an RTI model. Burns et al. (2005) compared student achievement within newly implemented RTI models to models that had been in place a number of years. They concluded that veteran RTI models show strong, consistent effects on student achievement. These effects were significantly greater than the effects the newly implemented models. It was suggested that these differences may result from the natural refinement of programs that occurs with experience. Burns et al. (2005) concluded that student achievement within an RTI model may be a learning curve that improves over time.

Studies that have examined the effects of RTI on student achievement have tended to gravitate more towards narrow case studies focused of specific grades, schools, or districts. Samuels (2011) reported a significant improvement in student achievement on state assessments in a case study of the Sanger Unified School District.
Gains were made in the percentages of students achieving proficient levels in state mandated ELA and math assessments six years after the implementation of district-wide RTI.

In a later study, Mellard, Fry, and Woods (2012) defined student achievement differently. Rather than focusing on standardized assessments, Mellard et al. (2012) compared the percentages of students achieving the expected DIBELS benchmark scores on universal screening intervals over the course of a school year. This study found three patterns of overall student achievement represented within RTI models. Schools were found to exemplify an accumulated advantage, substantial growth, or a loss of advantage. In an accumulated advantage, a higher percentage of students scored at or above benchmark in the year and continued to maintain and improve upon this advantage in subsequent assessments. Schools that illustrated substantial growth, began the year scoring at a percentage below a normal benchmark, but made progress throughout the year and improved upon the initial percentage throughout the year. Mellard et al. (2012) also observed a loss of a given advantage. Schools exemplifying this type of student achievement pattern had initially scored higher than the expected norm, but in later assessments had fallen below the DIBELS benchmarks. Mellard et al. (2012) concluded that while RTI has the potential to improve student performance, as defined by DIBELS, it is ultimately a school’s individual framework and approach to the model that leads to growth and achievement.

This finding and generalization is reiterated in the work of Balu et al. (2015), who had participated in research organized by the Institute of Education Sciences in conjunction with U.S. Department of Education, MDRC, Instructional Research Group, and SRI International. This comprehensive, multi-state study sought to investigate the impact of reading RTI on student achievement across several states. A large impact sample of 146 elementary schools with at least
three years of RTI implementation was compared to a random sample of 100 schools without RTI. Balu et al. (2015) concluded from the study that RTI failed the students found to be at the margins of risk, with first-grade students actually falling farther behind comparable peers. Of the 119 RTI schools that participated in the first-grade study, only a handful demonstrated statistically significant positive impact on student achievement scores. There were actually 15 schools where the use of RTI was associated with a negative impact. Balu et al. (2015) concluded that there is no consistent correlation between RTI models and student achievement.

A large study across 158 school districts in Mississippi concluded that there is no significant correlation between RTI and student achievement on standardized tests (Hyatt-Boucher, 2011). While this study focused on middle-school age students, it demonstrated the contradiction between educators’ perceptions of the effectiveness of RTI on student achievement and actual student performance on state assessments.

Research has provided inconsistent results regarding the effects of RTI on student achievement, yet this data is often used to determine which students should move towards a formal evaluation for special education.

The Use of RTI in Identifying Specific Learning Disabilities in Reading

A reading disability has long been conceptualized as the existence of unexpected difficulty in reading. This construct evolved into the traditional understanding of a specific learning disorder in reading as a discrepancy between a student’s intelligence, or IQ, and his achievement. However, as discussed earlier, because of the high percentages of students of minority and economically disadvantaged students being identified as learning disabled in this model, questions and concerns arose regarding the use of the discrepancy model. Some studies concluded that there was little difference in the reading difficulties between students identified
with a learning disability and students who exhibited low achievement in reading, typically below the 25th percentile (Brown-Waesch et al., 2011).

Federal provisions in the Individuals with Disability Education Act (IDEA) were revised early this century, allowing states and school districts to move away from the discrepancy model and requiring evidence that students were not struggling in reading due to several exclusionary factors including a lack of effective instruction. School districts were allowed a choice of approaches to special education identification (Bal et al., 2014; Brown-Waesche et al., 2011; Dougherty et al., 2012). When identifying students with a learning disability using the discrepancy model, RTI, or a combined approach, the disability must be diagnosed using a system of classification criteria that represents the 13 disability categories detailed within the IDEA. Additionality, if a disability is found, it should be one that negatively impacts a student’s education to the extent that specially designed instruction or services, such as an Individualized Education Plan (IEP), are required to ensure an appropriate education. As Reschley (2014) explains, these criteria are equally valuable. There may be children with a specific learning disability who do not need special education or additional services to succeed in school, while there may be students who need special education but do not meet IDEA criteria.

Different opinions exist in regards to the use of IQ testing when identifying students for special education, as many states have moved away from a reliance on the discrepancy model. Brown-Waesche et al. (2011) suggest that research should explore whether the different models used to identify students with learning disabilities provide the same findings. If there is agreement between models, it may not matter what approach a school takes in evaluating students for special education. If there would be a lack of agreement between approaches, it
would be necessary to analyze and compare models to identify the most valid and reliable (Brown-Waesche et al., 2011).

Comparison amongst evaluation models is necessary, but it may be a challenge. A crucial concept of RTI, inadequate RTI, has been interpreted differently across studies, states, and school districts (Brown-Waesche et al., 2011). There is a general agreement that non-responders are students who have not made adequate growth in reading albeit participation in evidence-based interventions, but this definition of lack of growth varies. As Hauerwas et al. (2013) found, while every state has referenced RTI in educational policies and legislation, only seven states defined sufficient progress.

Different methods for determining responsiveness, including rates of growth or improvement and cut-off scores or benchmarks, have been used by researchers and educational institutions (O’Connor & Klingner, 2010). In studies using rates of growth, a slope-discrepancy model and a median split model have determined responsiveness. When researchers have used cut-off or benchmark scores, a final benchmark assessment or low achievement analysis has been conducted post-intervention (Brown-Waesche et al., 2011). Additionally, a dual discrepancy model has been utilized to define a lack of responsiveness, combining slope, or rate of growth, and a final benchmark score.

Use of a rate of improvement approach should be used with caution. While one student may respond to a given intervention in place, another student may respond better to an alternate intervention. It is important that these evidence-based interventions be taught with fidelity by a qualified teacher. Students should be monitored in multiple interventions before being evaluated for a learning disability (O’Connor & Klingner, 2010).
In a study used to compare the consistency between multiple definitions of non-responsiveness, Brown-Waesche et al. (2011) developed an affected-status agreement statistic. This statistic analyzed the proportion of students classified with a reading disability by rate of improvement, final-benchmark scores, and dual discrepancies. This affected-status agreement statistic was used to analyze a participant sample of nearly 300,000 primarily disadvantaged students in the first, second, and third-grades. Agreement amongst these models was studied at the 25th, 20th, 15th, 10th, 5th, and 3rd percentiles, using the traditional discrepancy model and the RTI models of slope, final benchmark, and dual discrepancy. Brown-Waesche et al. (2011) concluded that differing definitions and methods of identifying students with a reading disability could not pinpoint the same students consistently, even at the lowest and most intensive percentiles. The study suggested that decisions to evaluate students for special education based upon final benchmark scores or low achievement were more reliable than those based on a student’s rate of growth.

O’Connor et al. (2013) compared the percentages of students identified with specific learning disabilities within an RTI model to the previous year, when the elementary school had used a traditional discrepancy approach. When studying special education identification within each comparison group, O’Connor et al. (2013) found that the percentages of students identified with a learning disability was not significantly different, based on effect size differences. However, the students who were referred within the RTI model were determined to be more impaired than those in the prior discrepancy model. O’Connor et al. (2013) found that educators using RTI were better able to differentiate students with low reading achievement due to environmental factors from students with true reading disabilities. They concluded that the RTI model is a more robust approach to identifying pervasive and persistent reading disabilities.
Although it was found that the percentages of students referred in a specific RTI model did not differ significantly from a traditional approach (O’Connor et al., 2013), it has been asserted that the use of RTI will result in a reduction of students referred for special education. Reschley (2014) compared the rates of the identification of learning disabilities, speech and language disabilities, and other health-impairments. While speech and language rates remained relatively stable over time, the identification of other health-impairment rates increased, and the percentages of students diagnosed with specific learning disabilities declined. Reschley (2014) suggested that as RTI continues to replace the use of the severe discrepancy model, schools should reevaluate the need for intelligence testing in identifying students with learning disabilities. He asserted that through RTI, all students are screened and monitored for learning difficulties. The relevancy of intelligence testing may have changed.

School psychologists have always been integral to the identification of students with learning disabilities. As such, their responsibilities and processes have been impacted by the changes to IDEA and the use of RTI. A 2011 study explored the perceptions and acceptance of school psychologists regarding the validity of diagnosing students with learning disabilities within the severe discrepancy and RTI models. O’Donnell and Miller (2011) surveyed school psychologists from across the country using a random sample obtained from the National Association of School Psychologists. From the 230 useable surveys, O’Donnell and Miller (2011) concluded that acceptance of the RTI approaches to identifying students with specific learning disabilities varied significantly, dependent upon the school psychologists’ levels of exposure and experiences with RTI. The greater the experience with RTI, the more accepting and supportive the school psychologists were with using this model to evaluate students for special education. Overall, the participants reported a higher degree of acceptance for the RTI
model in comparison with the traditional intelligence and achievement discrepancy model, indicating a preference for RTI. This acceptance for RTI was not as prevalent in psychologists working in middle and high schools though, where there has been substantially less implementation and use of RTI. O’Donnell and Miller (2011) found that school psychologists recognize the value of using RTI in diagnosing specific learning disabilities.

In conclusion, the research that exists related to the identification of students for special education within a RTI model remains varied and ultimately produces somewhat inconsistent findings. School psychologists were found to prefer the use of RTI in the special education evaluation process (O’Donnell & Miller, 2011). It has also been suggested that student referrals are more valid through use of RTI (O’Connor et al., 2013). Albeit these findings, clarification is still needed in the definition of non-responsiveness in an RTI model (Brown-Waesche et al., 2011). Additionally, further studies should be conducted to compare and evaluate the use of RTI, the severe discrepancy model, or a combined approach in the identification of students with learning disabilities.

**Lack of Agreement and Consistency in the Use of RTI**

RTI is often viewed as an improvement to the severe discrepancy model in identifying students with learning disabilities, and research has found that special education referrals in an RTI model are often more robust (O’Connor et al., 2013). Yet, it can be argued that the use of RTI actually impedes students from being diagnosed and receiving the supports they need in a timely manner (Wagner & Compton, 2011). A student who is unresponsive to multiple interventions may fail for more than 30 weeks before educators recognize that he or she needs an individualized education plan (Fuchs et al., 2011). While Reschley (2014) concluded that intelligence testing is no longer as relevant in a RTI approach, Wagner and Compton (2011)
argue that RTI data alone should not qualify a student for special education. The creators of DIBELS would seem to support this opinion, asserting that the data collected through its subtests should be used to make instructional decisions, not to place students in special education (Kaminski & Cummings, 2007).

While the RTI model can be used to identify students with specific learning disabilities, it has been concluded that state regulations regarding RTI lack specificity. There are no set standards for data collection and analysis, and there is a lack of consensus on what RTI data and timelines should be used in determining whether students demonstrate a potential disability (Wilcox et al., 2013). This lack of clarity has contributed to significant variation in RTI models across states and school districts (Hauerwas et al., 2013). As mentioned previously, each state differs in its RTI adoption regulations and guidance. While 17 states require collection and analysis of data obtained through the RTI process, only 13 have presented their own comprehensive set of guidance directions on its use. A recent study found that only seven states had established a definition of responsiveness for struggling students. Hauerwas et al. (2013) suggest that there is much work to be done towards developing a consistent national understanding of RTI implementation, expectations, and effectiveness.

Just as state interpretations of RTI have been found to differ, professional development and educator training in RTI model have varied across states, districts, and schools as well. It has been concluded that many educators and school personnel have received inadequate, if any, training related to RTI implementation and referrals. In a qualitative study involving classroom teachers in Michigan and Texas, over 1/3 of the participants reported that they had not received any training (Wilcox et al., 2013). In a study of the perceptions of special education teachers, approximately 40% of respondents who participated in the RTI process, indicated that they had
not received training pertaining to the model. Of the participants who were not directly engaged in the process, less than 30% had ever received training or professional development in RTI (Gessler-Werts & Stahl-Carpenter, 2013).

The majority of professional development that is provided for RTI, generally occurs at the model’s initial implementation. While this training may be beneficial at the time, educators have identified the lack of follow up training as detracting from the success of a RTI model. Teachers who are join a faculty following the initial RTI training and implementation are at a significant disadvantage, and often have to seek sources of help and information (Byrd, 2015). In these situations, new teachers may be provided with incomplete or inaccurate advice. As Hunter (2013) found, a large percentage of experienced teachers lack a true understanding of the RTI model and its components. Many teachers lack confidence in their abilities to implement and track interventions. Classroom teachers have also reported a lack of confidence in their building principals’ understanding of RTI (Karcher, 2014). Administrators themselves may not be fully educated and knowledge about this instructional model.

The use of professional development and training is essential to the success of the RTI reform model (Greenfield et al., 2010). When educators lack an understanding of RTI, the effectiveness of the model is negatively impacted (Hahn, 2015).

The lack of consistency in the use of RTI has been illustrated across states, amongst school districts within the same state, and even between schools in the same district. RTI models may be unique to individual schools based on student populations, access to interventions and professional development, and the availability of staff. As such, case studies have been used frequently in the existing research on RTI models (Byrd, 2015; Hahn, 2015; Hunter, 2013; Karcher 2014; King, 2011, & Ochieng-Sande, 2013).
Existing Research Involving RTI

A variety of studies exists involving aspects of RTI. Qualitative studies have documented the varying regulations and resources provided by each state department of education, as well as state policies on RTI as an instructional framework and its role in specific learning disabilities identification (Hauerwas et al., 2013). The effectiveness of varying forms of interventions have been analyzed to determine the effects on student learning in both general education and special education settings (Reeves et al., 2010). Studies have examined the perceptions of special education directors and special education teachers, in relation to their roles and responsibilities and those of general education teachers in the RTI model (Gessler-Werts et al., 2009; Gessler-Werts & Stahl-Carpenter, 2013). The perceptions of classroom teachers have been also been explored, although these have been focused largely on the effectiveness of initial RTI implementation (Greenfield et al., 2010). Studies have examined the rates of learning support referrals amongst minority students, particularly ELL students, in relation to RTI (O’Connor et al., 2013).

As this study will focus primarily on how two groups of educators perceive the effectiveness of a RTI model, related research focused on the perceptions of school personnel is particularly valuable.

Perceptions of School Personnel Regarding the Use of RTI

As with any school reform, the input of all educators and stakeholders is integral to the process of improving student achievement and learning. Unfortunately, the perceptions of classroom teachers has rarely been sought or used in decision-making processes (Greenfield et al., 2010). According to Wilcox et al. (2013), few studies involving the RTI model have focused on the perceptions of classroom teachers. There is a need to explore the varying perceptions of
school personnel in relation to RTI (Gessler-Werts et al., 2009). In the studies that do exist, a singular group of educators is often studied. Special education teachers have been studied, as have regular education teachers. However, comparisons amongst multiple groups of educators, such as classroom teachers, special education teachers, reading specialists, school principals and psychologists, would be beneficial to better understanding how the RTI roles and responsibilities vary across school personnel (Gessler-Werts & Stahl Carpenter, 2013). These types of studies may help improve understanding and collaboration between child study team members and classroom teachers.

The majority of classroom teachers understand the potential of RTI in helping struggling students. 97% of classroom teachers believe that interventions lead to student success (Karcher, 2014). In a large study of classroom teachers, 89% of educators felt that RTI meets the needs of individual students (Byrd, 2015). Educators even perceive the data used within a RTI model as being more valuable and accurate than their own judgment (Karcher, 2014). However, Stuart et al. (2011) found that approximately 50% of classroom teachers were dissatisfied with the RTI referral rate, process, and efficiency of communication. King (2011) found that only 34% of classroom teachers report satisfaction with their current RTI model.

So while classroom teachers perceive the value of the RTI model, they are often unhappy with the way RTI is practiced in their schools. A significant difference was found in the perceived effectiveness of a current RTI model between experienced teachers and novice teachers (Byrd, 2015). Teachers often report a lack of time and training as the biggest barriers to successful RTI implementation and practice (Karcher, 2014). Besides time and training, receiving support from other educators and a lack of parent involvement were also reported as deterrents to the success of RTI (King, 2011). The dissatisfaction of classroom teachers in
regards to their schools’ RTI models, could also relate to the under-representation of classroom teachers in the RTI decision making process (Wilcox et al., 2013; King, 2011).

Classroom teachers tend to be more positive towards educational change when they feel their experiences and opinions are valued, and when they feel included in the process (Hahn, 2015). This is worth noting, as classroom teachers are often directly responsible for a considerable number of duties within a RTI model. While the school principal is generally recognized as the direct overseer of RTI, King (2011) found that the majority of educators believe it is the classroom teacher’s responsibility to arrange meetings with school administrators when a student is not responding to RTI. Classroom teachers are also expected to collect and gather RTI data through assessments and progress monitoring measures. Many educators feel it is the duty of classroom teachers to identify and implement academic interventions used with struggling students (King, 2011).

Administrators, such as school principals, may not implement interventions and work with students directly, but their responsibilities within an RTI model are equally valuable. An administrator who communicates a clear vision and plan for a school’s RTI model is the key to its effective implementation (Hahn, 2015). It has been concluded that in a RTI model with a high proportion of economically disadvantaged and minority students, there should be consistency between how teachers perceive a principal’s leadership responsibilities and the principal’s self-perception. Zola (2011) found a significant inverse correlation between these perceptions and the effectiveness of a RTI model. As the differences increased between the teachers’ and principal’s perceptions, the success of RTI implementation decreased. Unfortunately, educators do not always believe that their administrators are truly invested in RTI (Karcher, 2014).
In order to provide the most effective instruction, interventions, and referrals, it is integral that all educators and school personnel fully understand and participate in the RTI model (Reeves et al., 2010). Informed and empowered educators are essential to successful RTI (Hahn, 2015).

**Studies Focused on RTI Implementation**

The effectiveness of newly implemented RTI models has been commonly studied. This existing research provides insight into both the challenges and benefits of introducing an RTI model into a range of diverse public schools, both at the elementary and secondary levels.

One such study analyzed the implementation of RTI across several middle schools in Michigan. From this research, Printy and Williams (2015) were able to identify and categorize implementation efforts into two approaches, integrated and differentiated communities. These integrated communities were exemplified by strong leadership, a shared vision of the purpose of RTI, and highly collaborative cooperation amongst school personnel. These schools often used coaches to ensure the consistent implementation of RTI across grade levels and classrooms. Conversely, schools Printy and Williams (2015) classified as differentiated communities demonstrated little evidence of a shared vision, incoherent organization, and inconsistent use of the RTI data that is collected.

Professional development is a critical component of effective RTI implementation. Robinson et al. (2013) conducted a small case study of two rural schools, finding that training, particularly professional development derived from state-level policies and guidance, is crucial to the successful implementation of RTI. Additionally, Robinson et al. (2013) found financial and staffing requirements challenging for schools, especially those already lacking resources.
Beyond effective professional development, the correct use of assessments and intervention tools is necessary in order for an RTI implementation to be successful. Shaff’s (2009) focused largely on the standardization of instructional delivery and RTI implementation across the ten schools in Las Vegas. Through interviews, surveys, observation, and a review of student cases, he concluded that assessments and interventions must be used with fidelity for RTI to be effective. Multiple studies have focused on the implementation of RTI, yet research is needed to evaluate the long-term effectiveness of these models.

**Summary**

Following the reauthorization of the Individuals with Disabilities Education Act (IDEA), states were required to implement instructional policies and practices to demonstrate attempts to prevent over-identification of specific learning disabilities amongst at-risk populations, including students from minority racial backgrounds and those in poverty. The vast majority of states and school districts responded to these regulations by introducing a RTI model of instruction. This model consists of universal screening of all students at benchmarks throughout the year, typically in the fall, winter, and spring. Students are assessed using various standardized measures, and their scores are compared against national grade-level expectations. Dependent upon the assessment measures, students are categorized in one of three groups, or tiers. It is expected that the majority of students will fall within the first tier of reading performance, where students are performing as expected and are responding positively to core classroom instruction. If students fall below the average within a specific range, they are classified into the second tier of reading instruction. This tier generally involves a strategic intervention program in addition to core instruction, three to five times a week with frequent progress monitoring measures being administered. Students who fall lower than the second tier range are identified as at-risk for a
reading disability, and are grouped in a third-tier of intensive reading intervention. This tier requires daily reading intervention with highly qualified reading instructions, and weekly progress monitoring measurements to graph and chart student progress (Shobo, Anduamlak, Hammer, & Hixson, 2012; Wixson, 2011).

Several studies, largely qualitative in nature or mixed-methods designs, have been conducted in the past decade to explore and describe the implementation of RTI models in educational settings, including the work of Burns, Appleton, and Stehouwer (2005), Printy and Williams (2015), Reeves et al., (2010), Robinson et al. (2015), and VanDerHeyden, Witt, and Gilbertson (2007). There are a variety of studies that have focused on identifying the perceptions of teachers and administrators regarding the effectiveness of RTI implementation and decision-making (Bal, Sullivan, & Harper, 2014; Bineham et al., 2014; Bruggink et al., 2014; Greenfield et al., 2010; Isbell & Szabo, 2014; Wilcox et al., 2013; and Stuart et al., 2011). Another aspect of existing research has explored the RTI model and its connection to special education educators, students, and policy (Fuchs, Fuchs, & Compton, 2004; Gessler Werts, Lambert, & Carpenter, 2009; Gessler Werts & Stahl, 2013; Hauerwas et al., 2013; Malone & Gallagher, 2010, O’Connor et al., 2013; and Sanger, Mohling, & Stremlau, 2012).

While these three aspects of the RTI model have been explored at length, a clear gap exists in the literature on an evaluation of the effectiveness of RTI after implementation, considering not only the perceptions of educators, but also the context of the model and site. I hope to address this gap through a program evaluation-based case study in an elementary school site that has utilized a fully implemented RTI model for several years.
CHAPTER THREE: METHODOLOGY

Overview

Researchers have frequently used the case study design of qualitative research to explore the perceptions of various groups of educators regarding the effectiveness of RTI implementation in public schools (Bal et al., 2014; Bineham et al., 2014; Bruggink et al., 2014; Gessler-Werts et al., 2009; Gessler-Werts & Stahl-Carpenter, 2013; Greenfield et al., 2010; Isbell & Szabo, 2014; Malone & Gallagher, 2011; Printy & Williams, 2015; Robinson et al., 2013; Sanger et al., 2015; Stuart et al., 2011; VanDerHeyden et al., 2007; Wilcox et al., 2013). And while program evaluation theory was initially developed to evaluate the effectiveness of government educational programs and initiatives (Scheyer & Stake, 1976; Stufflebeam, 2009), only a few researchers have applied this theory to studies of the effectiveness of RTI. These studies were focused on the initial implementation of RTI models though (Shaff, 2009; Hubert, 2013), leaving a gap in the literature on the effectiveness of an RTI model that has been in place for a number of years. In alignment with program evaluation theory, I had the position and experience to conduct the study as an insider (Scheyer & Stake, 1976). Additionally, a case study was the appropriate design as the focus of the research was unique to a specific site and time (Creswell, 2013).

Design

As this study involved the perceptions of teachers and school personnel in a preexisting working environment, a case study approach was the best research design to use. A case study embodies a real-life context bounded in a specific place and time span (Creswell, 2013; Stake, 2005). This case study centered on the evaluation of a RTI model used in a particular school. The model itself may have been the intended object of the evaluation, but it was first necessary
to understand the real-life context of the participants. As case study design is deeply rooted in the field of sociology, this design allowed for an analysis of a variety of relationships and functions and was appropriate for the exploration of perceptions amongst the different participants groups in this study (Stake, 2005).

A case study research design aligns well with the use of the Stufflebeam’s (2007) CIPP model of program evaluation. Both designs involve a comprehensive collection and exploration of data, and both include the thorough analysis of the context of a site and study. Case study design and program evaluations have been used extensively in specific fields of study, including education. Government agencies have used case studies and program evaluation theory to analyze the effectiveness of particular programs and educational initiatives (Yin, 1993).

Case study design that includes a program evaluation model has an established precedence in the field of education. Stufflebeam and Shinkfield (2007) explain that program evaluation was commonly used in the 1970s to explore the effectiveness of government funded education programs and initiatives. Several recent studies have utilized this approach to explore programs and initiatives in both higher education and in healthcare education (Gunes & Altintas, 2013; Waters, 2013; Goto, Rudd, Lai, & Yoshida-Komiya, 2014; O’Brien, Broom, & Ullah, 2015). This study utilized a case study design along with a program evaluation approach to explore the effectiveness of a reading RTI model.

**Research Questions**

When conducting a program evaluation case study, it is important to understand how different groups perceive a program (Stufflebeam & Shinkfield, 2007). While existing studies have analyzed the perceptions of specific groups of educators (classroom teachers, special education teachers, counselors and psychologists, principals, etc.), compared amongst these
groups’ perceptions regarding the effectiveness of RTI have not been considered. This study questioned the effectiveness of an RTI model, as perceived similarly and differently between classroom teachers and school leadership members. Additionally, as part of a comprehensive evaluation, the products and outcomes of a program were also considered. In order to analyze the products of this RTI model, the fourth question, analyzing student achievement, was necessary.

**RQ1:** What are the objectives of the Response to Intervention model for reading, as understood by the classroom teachers and instructional leadership team members, at Hayes Elementary?

**RQ2:** How do classroom teachers and the instructional leadership team perceive the effectiveness of the reading RTI model in addressing its intended objectives, and how do these perceptions compare?

**RQ3:** What are the strengths and weaknesses of the school’s RTI model for reading?

**RQ4:** How does student success at Hayes Elementary School, as defined by DIBELS measures, compare to student achievement in English Language Arts assessments?

**Setting**

The site of this study was a relatively diverse elementary school (K-5) of approximately 338 students, located in a large school district in Harrisburg, Pennsylvania. The site had been designated as a Title 1 building for several years, indicating a high proportion of students receiving free or reduced lunch. At the time of the study, approximately 55% of the students were categorized as economically disadvantaged, with 13.2% receiving English as a Secondary Language services. Within the school population, 7.4% of the students had previously been identified with learning disabilities and 2% of the students had been classified as gifted. Hayes
Elementary School was racially diverse, 43% Caucasian, 22% African American, 15% Hispanic, 9% Asian, and approximately 11% of students were identified as multi-racial (“School Performance Profile”). This site had undergone RTI training, and the initial implementation of the model, through the help of a Pennsylvania Department of Education research grant in 2008, and had since been using the model in reading. The state of Pennsylvania allowed schools to identify students with learning disabilities through use of the traditional discrepancy model of intelligence testing or through the use of RTI. A school choosing to use RTI to identify students with a specific learning disability must have first submitted documentation describing its model and process, instructional design, and the professional development that has been provided. The site school had been approved by the Pennsylvania Bureau of Special Education to use the RTI model to identify students with specific learning disabilities in reading. While RTI data was used to qualify students for special education services, the school psychologist also conducted traditional IQ and achievement tests within his or her formal evaluation. A student could be identified with a specific learning disability in reading using either approach, and often was determined to be eligible through both approaches.

Participants

Participants were recruited purposively, through convenient and criterion-based sampling. Convenience sampling has often been used in qualitative research, particularly in case study design. Although it is the least rigorous form of sampling, it allows for selection from an accessible population. Convenience sampling was useful for the sampling size of this study, in order to specifically address and answer the research questions (Marshall & Rossman, 2016).

Criterion-based sampling, which is often synonymous with purposive sampling, is used when a sample must be connected to a researcher’s objectives (Palys, 2008). Within purposive
sampling, this study utilized a stakeholder sampling approach. This method of sampling is beneficial to evaluation research and program analysis. “This strategy involves identifying who the major stakeholders are who are involved in designing, giving, receiving, or administering the program or service being evaluated” (Palys, 2008, p. 697). The current study evaluated the effectiveness of a RTI model from the perceptions of classroom teachers and instructional leadership team members. As such, the use of stakeholder sampling was essential to the research.

An important focus of this study was to uncover the perceptions of the educators who comprised Hayes Elementary School’s leadership team. The pool of available participants within this group was limited to approximately nine individuals. These individuals included the school’s principal, guidance counselor, school psychologist, reading specialists, data and instruction specialist, speech and language therapist, ESL/ELL teacher, and special education teachers. With permission from the school district’s administration, each of these specific members of the instructional leadership team was invited to participate in the study. The study had initially hoped to elicit the response of at least five members of this team, and this goal was achieved. Classroom teachers were recruited through criterion-based and convenient sampling based on their teaching experiences having preceded the initial implementation of the RTI model within the school district. This requirement necessitated the exclusion of a number of teachers hired after the initial district-wide RTI training and implementation. Classroom teachers in kindergarten, first-grade, and second-grade classrooms were also excluded. While all classroom teachers participated in the RTI model by teaching reading interventions, collecting student data, and referring students for evaluation, these grades did not participate in state assessments. The study might be presented at one of the school’s monthly faculty meetings, and teachers will be
invited as a group to participate. Although the study assumed that at least five teachers would agree to participate in the focus group and individual interviews, all consenting teachers who met the requirements were included. While I had hoped to represent gender and racial diversity within this case study sample, it was not possible in the pool of available participants.

**Procedures**

Following the Institutional Review Board (IRB) application process and approval, it was necessary to elicit the consent of the school district superintendent and the principal of Hayes Elementary School. The voluntary participation of educators was then solicited at the school’s instructional team and faculty meetings by the researcher. Individuals who agreed to participate in the study were required to sign consent forms.

Individual interviews were conducted prior to the two participant focus groups. These interviews allowed for more personal conversations and open discussions regarding the perceived effectiveness of the RTI model. The interviews were conducted in a semi-structured manner. Semi-structured interviews typically consist of six to twelve key questions. This format allowed the researcher some flexibility in the order of questions and the depth of probing. Semi-structured interviews, according to Rowley (2012), were the most commonly used in qualitative research studies.

Two focus groups were completed following the individual interviews. One focus group included the members of the instructional support team, while the other group was comprised of classroom teachers. Participants from both groups were recruited based on their positions on the instructional leadership team, or their years of experience as classroom teachers. The instructional leadership team consisted of the school principal, counselor, psychologist, data and instruction specialist, reading specialist, intervention specialist, ESL and special education
teachers. Members of this group were recruited through personal invitation at a weekly team meeting. Classroom teachers were recruited through convenience sampling, based on the prerequisite condition that they have taught in the school district at least eight years. This requirement ensured that classroom teachers have previously experienced the initial RTI professional development and training that was provided by the school district. The majority of classroom teachers in the available population were Caucasian females, so the researcher was unable to recruit any male or minority teachers who met the participant requirements. Both groups were asked the same five questions in a semi-structured format.

Individual interviews and focus groups were audio-recorded by a laptop, using the Audacity program. This program ran from the laptop, with the use of an external microphone. There were several features that allowed the recording to be paused or stopped, and the recording could be downloaded in many different formats. Additionally, a handheld digital recorder, the Olympus VN-7200, was used as a backup. These recordings were then transcribed by the researcher, before being uploaded into the qualitative research software program NVivo. Following the transcription of the interviews and focus groups, member-checking was conducted to ensure that statements were being represented and understood as they were intended. Participants were emailed copies of their transcribed interviews, and were asked to confirm that the transcriptions were accurate. Participants were asked to note and clarify any comment or statement that failed to accurately or adequately depict their perceptions. Once members had approved of the transcriptions, software allowed for the coding of data. Coding was used to identify repeating words and statements, as well as to indicate emerging themes.
**The Researcher’s Role**

This study was conducted in partial requirement of my doctorate of education program in curriculum and instruction. As a classroom teacher in the district of this study for over a decade, I participated in the initial training and implementation of its RTI model early in my career. I later worked in the district as a data and instruction specialist, a position that may be better understood as the RTI coordinator of a specific school building. As the data and instruction specialist, I coordinated and facilitated the components of the RTI model, as well as conducting the weekly instructional support team meetings, monthly grade-level meetings, and quarterly student placement meetings. In this position, I also organized student support services and evaluation. These experiences amongst different elementary schools in the same district prompted me to question the effectiveness of individual RTI models.

**Data Collection**

One of the most critical elements of research is the collection and analysis of data, but as qualitative research design so often focuses on exploring lived experiences, quantifiable data and statistics cannot be relied on as heavily to establish the reliability and validity of a qualitative study (Leech & Onwuegbuzie, 2007). Rather, researchers utilize a triangulation of data to establish the trustworthiness of a study. The triangulation of data is the inclusion of multiple sources of data within a study. These forms of data are collected through different methods to corroborate a study’s findings and conclusions (Creswell, 2013). To establish triangulation, researchers use a combination of several forms of data. The most commonly used forms of qualitative data include observations, focus groups, interviews of individual participants, and action research (Creswell, 2013).
This case study utilized individual interviews, focus groups, and a collection of student achievement data related to the school’s RTI model. As a program evaluation, it was necessary to explore the perceptions of the different stakeholders in the program of study (Stufflebeam & Shinkfield, 2007). Interviews and focus groups were used to determine how classroom teachers and various instructional leadership team members perceived the objectives and effectiveness of the school’s RTI model. While the questions that were used within the individual interviews and focus groups were similar in scope, it was important that the individual interviews were conducted prior to the focus groups. This allowed the individual educators to first articulate and communicate their own ideas, before participating in a focus group where their perceptions may have been influenced by the other members in the group. Robinson (1993) has asserted that social forces will influence the responses and information gleaned from a focus group discussion.

Following the individual interviews, focus groups were also conducted. As the study sought to explore the perceptions of two groups of educators, classroom teachers and instructional leadership team members, focus groups may have provided for a better understanding of whether specific perceptions were commonly held by the members of each group. Focus groups could provide more information and discussion than individual interviews, as members may feel less anxious within a group. When participants hear other members speaking, they may be more inclined to contribute to the discussion and might volunteer responses that may not have been offered in an individual interview format (Robinson, 1993).

Following the individual interviews and focus groups, an analysis of student achievement data was conducted. As a program evaluation, this case study utilized the CIPP framework. This framework required an analysis of the outcome, or products, of the program being evaluated.
This case study defined the product of a reading RTI model as student achievement in reading, as evidenced by the DIBELS reading data the school collects within the RTI model. Additionally, student achievement scores from the Pennsylvania System of School Assessments (PSSA) were included in this study. These tests included standardized ELA assessments for students in grades three, four, and five. The student achievement data was described in the study in order to support, or refute, the participants’ perceptions of the effectiveness of the school’s RTI model. It is likely that participant perceptions of effectiveness were based on student achievement, as universal screenings and progress monitoring scores were a critical component of the school’s RTI model. It has previously been found that educators relate standardized test scores to the effectiveness of RTI (King, 2011).

**Interviews**

As Edelman (1999) explains, interviews are fundamental to case study evaluations. Semi-structured interviews, which consisted of a general interview protocol, were conducted in this study with both classroom teachers and school leadership team members. Edelman (1999) finds that a semi-structured protocol provides the researcher with an improved ability to understand the perceptions of the study participants. While this protocol ensured that participants were asked to reflect upon common questions of interest, it also allowed participants to elaborate upon their own experiences (Edelman, 1999). The individual interviews were recorded with a laptop using the software program Audacity. A backup recording device was also used, an Olympus VN-7200 digital recorder. Balbach (1999) recommends that the interviewer establish a rapport with the participants in the study, particularly when conducting interviews. As an employee of the school district and a colleague of the participants, rapport had been established and I am confident that the interviews yielded honest and valuable insight into
the effectiveness of the RTI model at Hayes Elementary School. To encourage robust responses, personal interviews should be flexible and not feel constrained. The interviewer should be knowledgeable on the subject and understand the questions, but should allow interviewees to diverge from the interview protocol and to feel free to volunteer additional information (Balbach, 1999). It was expected that each individual interviews would last between 20 and 60 minutes. The focus groups were expected take longer. The purpose of the individual interviews was to further explore the third research question, centered on the strengths and weaknesses of the specific RTI model at Hayes Elementary. The fourth research question was also addressed, with participants sharing their perceptions on how well the model is working and how they perceived student success within their RTI model based on both DIBELS measures and student achievement on state ELA assessments.

The use of interviews has been frequently found in the existing literature on the effectiveness of RTI implementation and case studies on the perceptions of various groups of educators. Greenfield et al. (2010) used a semi-structured interview format with nine questions to assess the perceptions of educators in an urban elementary school regarding the effectiveness of RTI implementation. Isbell and Szabo (2009) conducted phone and exit interviews of educators to determine concerns of high school teachers participating in a newly implemented RTI model. Interviews were also conducted by Printy and Williams (2014) as they sought to understand the decision-making processes of elementary principals in relation to implementing RTI models in public schools. Robinson et al. (2013) used semi-structured interviews to uncover the challenges faced by educators at the start of RTI models in multiple schools. Participants in this study were allowed to choose the location and timing of these individual interviews,
although as expected, most interviews took place at the site school building. All personal
interviews were conducted prior to the dates of the focus group interviews.

The interview questions that were used in this study had been developed to align with the
recommendations of program evaluation theory (Stake, 1990; Stufflebeam & Shinkfield, 2007).
These questions had a strong basis in existing studies and connected to the overarching research
questions, as recommended by Creswell (2002). Several of the questions correlated directly to
questions that have been used in past studies to explore the effectiveness of RTI implementation
(Byrd, 2015; Hahn, 2015; Hyatt-Boucher, 2011; Karcher, 2010; King, 2011; Ochieng-Sande,
2013), except that this study relied on an open-ended question format. The interview questions
were as follows:

1. What do you perceive as the intended goals or objectives of the reading RTI model at
   Hayes Elementary School?
2. How effective is the reading RTI model at Hayes Elementary School?
3. What aspects of the reading RTI model are strengths?
4. What aspects of the model are weaknesses?
5. What could be done to improve the RTI model at Hayes Elementary School?
6. Is there anything else you would like to mention about the RTI model at your school?

The first interview question, which addressed the first research question, was rooted in
the CIPP framework of program evaluation theory. Stufflebeam and Shinkfield (2007) explains
that when evaluating the context of a program model, it is necessary to define an organization’s
goals and priorities. This first question explored different stakeholders’ perceptions of the RTI
model’s goals and objectives. The first interview question aligned with the work of Ochieng-
Sande (2013), who asked, “What do you see as the main goal of implementing RTI at your school?” (p. 253).

Interview questions two and three, which helped to answer the study’s third research question, related to the process evaluation of a CIPP framework. In this phase of a program evaluation, a researcher works with stakeholders to assess the implementation of their program’s plan and process (Stufflebeam & Shinkfield, 2007). The second question explored the specific strengths of the school’s reading RTI model, while the third question explored its weaknesses. Similar questions have been evidenced in studies that have evaluated the effectiveness of the implementation of RTI. Karcher (2014) adapted interview questions from a survey published by The Florida PS/RTI Project of 2006. These questions were further piloted by an expert panel, and included probes of the successes and barriers of implementing RTI (Karcher, 2014). Parallel questions were asked by King (2011), who asked educators to describe what factors had been the most instrumental, and the most hindering, to the successful implementation of RTI.

The fourth interview question attempted to explore the overall effectiveness of the reading RTI model at Hayes Elementary School, addressing the second and fourth research questions. This question aligned with an evaluation of a program’s product or outcomes, according to the work of Stufflebeam and Shinkfield (2007). This question related to the wording of King (2011), who asked participants, “Do you feel RTI has been a success or failure at your school?” (p. 182). The basic premise of the question has also been explored by Byrd (2015), who asked participates to rate the survey-item statement, “RTI is successful in meeting individual academic needs of students” (p. 87). Han (2015) went a step further, relating the success of an RTI model with its impact on student achievement, “Have the students you work with in RTI made academic progress?” (p. 119).
Participants were then asked to offer feedback regarding possible improvements to the RTI model at Hayes Elementary School. This question demonstrated the sense of equity amongst various stakeholders that should be represented within a program evaluation (Stufflebeam & Shinkfield, 2007). A similar question had been explored by Hahn (2015), who asked participants to identify modifications to the existing multi-tiered model that could improve its overall effectiveness. King (2011) also asked educators to suggestion improvements to their current RTI process in his study of the implementation efforts in a rural school district.

The final interview question allowed participants to comment upon any additional aspect of the RTI model at Hayes Elementary School. This question ensured that the interview is open to discussion and responsive to the perceptions of the participants (Patton, 2002).

**Focus Groups**

Focus groups have commonly been used in qualitative research, particularly when a study has sought to understand the perceptions and experiences of individuals, or the attitudes and possible needs of staff members. Kitzinger (1995) explains that focus groups are beneficial when used as a form of group interview where discussion will be facilitated by open-ended questions.

Most qualitative studies that rely on focus groups as a method of data collection concentrate on a few groups rather than several, with a recommendation that groups are homogenous in nature, and include additional methods of data collection (Kitzinger, 1995).

Focus groups have been used in recent studies to explore the experiences and perceptions of educators regarding RTI implementation in public schools. Stuart et al. (2011) conducted two 90 minute focus groups, as well as follow up interviews to identify the perceptions of teachers of the changes that occurred over the course of one year as a result of the introduction of an RTI
model. Wilcox et al. (2013) also utilized focus groups and subsequent individual interviews to analyze the perceptions of educators on the effectiveness of an RTI model. To further explore the perceptions of educators regarding the effectiveness of the RTI model being used at Hayes Elementary School, two participant focus groups were conducted. Dependent upon the IRB approval process, these groups took place at the beginning of the 2016-2017 school year, following the individual educator interviews conducted that summer. My study included two groups of participants, similar in terms of their positions as either classroom teachers or members of the school leadership team. The available pool of participants included the reading specialist, data and instruction specialist, intervention specialist, psychologist, counselor, and school principal. The second focus group included five classroom teachers who had all worked in the school district prior to and including the initial implementation of the RTI model. This experience requisite allowed participating teachers to compare the current reading RTI model with the referral and evaluation process for identifying students with disabilities based on the severe discrepancy model that was in place previously. According to Grudens-Schuck, Lundy-Allen, and Larson (2004), it is beneficial to utilize homogenous focus groups, such as these. Diverse groups may not allow for the same quality of data, as participants may not feel comfortable expressing their perceptions in the presence of individuals holding differing positions of power and status. Rather than introducing diverse participants to a focus group, it is recommended to hold multiple participant focus groups. These focus groups allow for the social nature of participants to provide greater insight to the study. The participating researcher should strive to produce and maintain good conversation, while still following the interview questions as a guide.
The focus groups in this study were conducted within the site school, in the office’s conference room, as permitted by school administrators. It was expected that each focus group should last approximately 60-90 minutes. Focus groups generally require more time than the individual interviews, due to the potential for interactions amongst the participants. Each group was asked the same questions in a semi-structured format. These questions can be found in Appendix C, and have been grounded in the literature and developed along the recommendations of Marshall and Rossman (2006). The interview questions were clearly connected to the identified problem and the research questions. They were open-ended in order to allow for discussion and exploration (Patton, 2002), but were focused on the objectives of the study. The questions were specific to the site of the study, and Marshall and Rossman (2006) explained that this may be necessary in the study of a specific program or organization. However, the questions also aligned with recommended questions used in a program evaluation. The interview questions aimed to engage participants in a thought-provoking discussion of the strengths, weaknesses, and effectiveness of the specific program of study (Scheyer & Stake, 1976), in this case, the RTI model at Hayes Elementary. The focus group responses directly addressed the first three research questions of the study. It was expected that there may have been a need to modify the focus groups questions in the event that the information generated from the individual interviews requires further explanation or clarification.

In accordance with Mertler (2006), these semi-structured group interviews each began with a set number of essential questions, but allowed for follow-up questions as needed. These questions were clear and concise, and focused on the specific understanding of the components of the reading RTI model, the role and use of data in instructional decisions, training that had been provided related to RTI instruction, the use of the model in the identification of specific
learning disabilities, and the effectiveness of RTI on student learning and achievement in reading. These focus groups were audio recorded on a laptop using the program Audacity, then transcribed by the researcher. The typed transcripts were uploaded into NVivo software, which allowed for the aggregation and coding of raw data. An Olympus VN-7200 digital recording device was used as a backup record of both the focus groups and the individual interviews. In addition to the software program and the handheld recording device, notes were taken throughout the focus group, focused on questions that arise or statements that might have required clarification. As a focus group may not always be an ideal technique for eliciting the true perceptions of participants (Grudens-Schuck et al, 2004), the study also include individual interviews and a description of student achievement data in reading.

The focus group questions are listed in Appendix C. The first question, in a similar manner as the first question of the individual interviews, explored the objectives of the RTI model at Hayes Elementary School. As discussed earlier, this question evaluated the context of a program evaluation and relates to the first interview question. With separate focus groups though, this question allowed for a comparison between the perceptions of two groups of stakeholders, the classroom teachers and the instructional leadership team members.

The second question has commonly been used in the existing literature to establish the professional roles and responsibilities of the participants of the study (Byrd, 2015; Hahn, 2015; Hyatt-Boucher, 2014; Karcher, 2010; Ochieng-Sande, 2013). This question additionally supported the first research question of the study, aimed at exploring the objectives of the RTI model as perceived by stakeholders.

The third, fourth, and fifth focus groups questions asked participants to reflect on the impact of the school’s reading RTI model on students, reading instruction, and reading
achievement. These questions explored the products of the program, as recommended by Stufflebeam and Shinkfield (2004), and addressed the fourth research question, which related to student success within the RTI model. Similar questions have been found in existing literature. Hahn (2015) had adapted a survey from the National Association of State Directors of Special Education to meet the needs of her study, asking participants, “Have the students you worked with in RTI made academic progress?” (p.119). These questions can also be interpreted as more specific probes into whether RTI is perceived as “working”, as used by Ochieng-Sande (2013, p.253).

The sixth, seventh, and eighth focus group questions reiterated discussions from the individual interviews. As discussed earlier, these questions related to an evaluation of the program’s process and products, critical components of the CIPP framework (Stufflebeam & Shinkfield, 2007). Each question had a strong basis in existing studies (Hahn, 2015; King, 2011; Ochieng-Sande, 2013), although this study employed the use of an open-ended question format to encourage and elicit a deeper level of discussion and interpretation. Focus group questions six, seven, and eight addressed the second and third research question, related to the effectiveness of the RTI model at Hayes Elementary School, and its specific strengths and weaknesses.

**Student Achievement Data**

While a program evaluation seeks to explore the perceptions of multiple groups of participants, it should also include an analysis of a program’s outcomes (Stufflebeam & Shinkfield, 2007). As such, this study used student achievement in reading to represent the outcomes of the school’s reading RTI model. The student achievement data included the percentages of students categorized in each tier of the RTI model based on DIBELS universal
screening and progress monitoring measures. Additionally, student performance on the English Language Arts (ELA) state assessment, as reported by the Pennsylvania Department of Education, was included for comparison.

Universal screening data is collected at benchmarks throughout the school year to identify students who are below, on, or above expected grade level norms. Between each benchmark, students who fall below these grade level cut-off scores should be receiving varying frequencies and levels of reading intervention (Kaminski & Cummings, 2007). An effective RTI model matches student needs to evidence-based interventions, and by the end of the year, the percentages of students who are below grade-level norms should have decreased. There should be a greater number of students meeting or exceeding grade-level expectations. In a RTI model that is not functioning effectively, it can be assumed that there is likely to be an increase in the number of students who fail to meet these cut-off scores over the course of the school year.

Progress monitoring data can be used to evaluate the effectiveness of an RTI model in a similar manner. As students participate in interventions throughout a year, their individual rates of improvement (ROI) should increase until they have achieved their projected goals. These goals are calculated by a formula that includes students’ baseline scores and initial progress (Shapiro et al., 2012). In a RTI model that lacks effectiveness, students’ ROI are usually lower than their projected goals. Unfortunately, there is disagreement regarding an acceptable ROI (Hauerwas et al., 2013). Within the site school itself, ROI expectations have varied over time.

The use of standardized reading assessments are a cornerstone of RTI universal screening, or benchmarking. Student performance in comparison to their peers, and students from across the country, is used to determine appropriate levels of support and interventions. These measures are also used to meet the IDEA requirements of frequent progress monitoring of
students at risk of reading failure. Oral reading fluency rate and accuracy are the most commonly used measures of student reading progress, but additional measures of sequential literacy skills are often included as well. Kaminsky and Cummings (2007) assert that these measures are appropriate for the vast majority of all students learning to read in English, with the exception of students who are deaf or who have significant speech-disabilities.

The Dynamic Indicators of Basic Early Literacy Skills (DIBELS), which are used in over 15,000 schools, have been the focus of a variety of studies, and are frequently used as a research tool in educational research since 1998 (Ding & Liu, 2014). These assessments have been used often in studies on RTI models (O’Conner et al., 2013; Shapiro et al., 2012). The site school will maintain and provide these scores over the course of a school year. The data will be reported in the study in terms of the percentages of students found to be meeting grade level goals, achieving slightly below grade level, and those students found to be significantly below grade level.

A majority of educators also perceive student achievement, as defined by standardized assessments, as a direct outcome of RTI (Hyatt-Boucher, 2011; King, 2011). However, Balu et al. (2015) assert that there is no correlation. This study did not seek to identify or quantify a relationship between RTI and standardized achievement on state ELA tests; yet, as both the DIBELS and state standardized assessments seek to measure reading comprehension, the percentages of students determined to be meeting grade-level norms within a RTI model could be assumed to coincide with the percentages of students who achieved adequate scores on state assessments.

The student data collected in this study was used to exemplify the products of the RTI model, following the CIPP program evaluation framework. According to CIPP theory, a product evaluation examines both the anticipated and unanticipated outcomes of a program (Stufflebeam
While the RTI data found in DIBELS universal screening and progress monitoring measures would easily fall under the expected products of the model, standardized ELA assessments was also included, as either an anticipated or unanticipated product.

**Data Analysis**

The analysis of the data collected in this qualitative study relied heavily on the aggregation and coding of focus groups and personal interviews. As described by Glaser and Laudel (2013), these processes allow a researcher to analyze and sort raw data into categories to observe patterns, including words, statements, or ideas that occur repeatedly, as well as conflicting statements or ideas. This analysis was necessarily completed multiple times to identify the significant words, phrases, and statements observed in the focus groups and interviews. The aggregation and coding of these significant statements involved repeated reviews of the recorded interviews and transcripts. The researcher noted, extracted, and labeled repeated concepts or terms to identify emerging themes within the study (Creswell, 2013).

I used five general steps in this coding of the qualitative research data, based on the work and recommendations of Auerbach and Silverstein (2013). To begin, I had to communicate my theoretical frameworks, research concerns and questions, and my own personal biases. I then conducted an initial coding by hand, and then ran a second data analysis using the NVivo qualitative research software. In looking at the transcripts, I highlighted relevant statements and ideas that related to the research study and questions. As I marked each relevant idea, I noted why the idea was important and how it related to my study, theoretical frameworks, or my personal biases.

After all of the relevant information had been extracted, statements were grouped into categories of repeating ideas. There were statements or ideas that were outliers, however, this
aggregation allowed for the narrowing of categories into themes. These themes were named and then further grouped by relation into new theoretical constructs. Theoretical constructs are more abstract interpretations of the relationships amongst the themes that have emerged from the data analysis. Theoretical constructs are ultimately used to create the theoretical narrative in which the participants’ experiences and perceptions are expressed in relation to the emerging constructs (Auerbach & Silverstein, 2013).

In order to address the trustworthiness of the study, it was critical to strive for transparency in the data analysis process. I engaged in bracketing, a commonly used method in qualitative research to counter the negative influence of a researcher’s own preconceptions and bias. This method of improving trustworthiness gained credibility in the first half of the 20th century (Tufford & Newman, 2012). As Auerbach and Silverstein (2013) recommended, the steps of the research process were clearly explained. Transparency in the data analysis process required the inclusion of the theoretical frameworks and bias that was found in my memos. According to Tufford and Newman (2012), the use and communication of this type of journaling, is an integral component of the bracketing process and adds trustworthiness to a qualitative study.

The data collected from the DIBELS universal screening measures and standardized ELA assessments were included in the study as descriptive data. Percentages of students meeting or falling below grade-level benchmarks were included and compared from amongst the fall, winter, and spring universal screening. This screening data is used by the instructional leadership team and the classroom teachers when categorizing students by RTI tier placements and assigning interventions. The percentages of students categorized as Tier 1 (benchmark), Tier 2 (strategic), and Tier 3 (intensive) were reported and compared to performance on state
standardized assessments for ELA. It became apparent during data analysis, that rather than comparing this data amongst three separate cohorts or grade levels of students, it would be more beneficial to follow one group of students over three years. A cohort was identified based on students were attended the school in each of the third, fourth, and fifth-grades. This cohort allowed for a discussion of movement over time, in order to better support participant concerns and themes that emerged throughout the interview process.

The percentages of students who attained passing or failing scores on the state ELA assessments, as determined by the Pennsylvania Department of Education, were also included. This data helped provide a rich and more comprehensive illustration of the RTI reading instruction occurring at Hayes Elementary School. The results of both the DIBELS and ELA data provided additional support to the perceptions of the educators in the study.

**Trustworthiness**

Any research that is conducted, whether quantitative or qualitative in nature, is subject to an evaluation of its validity or trustworthiness. Establishing evidence of trustworthiness may be particularly important in qualitative research, where researchers may not be able to use and demonstrate statistical tests as evidence of a study’s significance. In qualitative studies, a researcher must demonstrate “due diligence” by including a clear and concise description of data collection protocols and procedures, and a thorough report and analysis of the data. (Williams & Morrow, 2009, p.576). The detailed and comprehensive description of a researcher’s methodology allows for the potential replication of the study’s procedures. Quantitative and qualitative research designs define the trustworthiness of a study very differently (Williams & Morrow, 2009). Lincoln, Lynham, and Guba (2011) have defined trustworthiness in qualitative
research in terms of confirmability, credibility, dependability, and transferability. Each of these elements of trustworthiness was addressed in this study.

**Confirmability**

It is necessary for a study to demonstrate the ability for its findings to be corroborated, or confirmed, by others. Williams and Morrow (2009) recommend that a researcher include the frequencies of words, statements, and ideas as they are extracted from data, categorized, and analyzed. This study included a table that displays the frequencies of key words and statements identified from the focus groups and individual interviews. The data collection and analysis procedures were detailed explicitly, with an expert review of the findings. A common method, and one included in this study, of addressing the trustworthiness of a study includes the triangulation of data. The basic premise of triangulation is to utilize multiple sources and forms of data collection types and methods to provide supportive and corroborating evidence to the study (Creswell, 2013). By coding the data and categorizing significant concepts and themes, the use of multiple forms of data and evidence also provides validity to the findings of this case study.

**Credibility**

A qualitative study based on the perceptions and experiences of participants should seek to assure that the data collected in the study is accurately represented. Williams and Morrow (2009) suggest that researchers incorporate the common practice of member checking, or encouraging participants to review and confirm their responses, to counteract researcher subjectivity. This study included member checking by asking participants to review transcripts of their statements at two points, following participation in individual interviews and the focus groups. The discussion and conclusions of the study were shared via email with participants,
who were encouraged to review and discuss the findings with the researcher before the report was completed. This follow up allowed the participants to assess the accuracy and credibility of the interpretation of the data (Creswell, 2013). Member checking is essential to qualitative research, and case studies in particular, to ensure that the observations and generalizations are accurate and representative of the site and participants. Participants are empowered to provide clarification and elaboration, as well as having the opportunity to question or point out possible errors.

**Dependability**

While a case study is not able to be replicated, it is necessary to include and communicate very clear and concise data collection and data analysis procedures (Williams & Morrow, 2009). These approaches should be articulated in a very specific way, and should include pre-established methodologies that have been used in the field of educational research. This study utilized common approaches to data collection, focus groups and interviews, and frequently employed data analysis procedures, aggregation and coding. I clearly described my position to the site and study, clarifying any bias or conflicts encountered throughout the study, in an attempt to make my work as transparent as possible. This study also included the processes of peer reviews and member checks. A peer review is an outside check and analysis of the research process, conducted by a fellow researcher or student familiar with the research design and process. It is beneficial in that it provides constructive criticism and feedback related to the research design, study, process, and researcher. The peer reviewer should question the elements of the study and should provide feedback (Creswell, 2013).
Transferability

While the nature and objectives of a case study are to understand a condition or context, rather than to draw conclusions that may be widely generalized, it is important to address the concept of transferability. As Williams and Morrow (2009) explain, researchers should make an effort to describe the conditions and context of a case study at great depth. I will clearly describe the setting and population of both the students and participants at Hayes Elementary School, and will avoid statements that attempt to generalize the discussion that results from this study beyond the site school and district.

Ethical Considerations

Ethical considerations were taken into account throughout this study, beginning with approval from the Institutional Review Board (IRB). Following this approval, it was necessary to secure the informed consent from the participating school district and each individual participant. To ensure the protection of participants, all information was kept confidential; pseudonyms were used for all participants and the site, and electronic information was stored on password-protected laptop. To protect the confidentiality of individual participants’ responses, interviews were conducted in a comfortable, private location of each participant’s choice. This turned out to be individual classrooms in the site school itself. All participants signed a consent form which informed them of their rights to leave the study at any time.

Summary

This qualitative research study utilized a program evaluation case study approach to explore the effectiveness of a reading RTI model. Program evaluation case studies have been used in schools to evaluate the effectiveness of educational programs and initiatives since the 1970s (Stufflebeam, 2009). As the researcher, I had a unique set of experiences related to the
use of RTI in reading. I also have professional proximity to the setting of this study, having worked as a data and instruction specialist and classroom teacher in the same school district. This experience and proximity allowed me to conduct the research as an insider (Scheyer & Stake, 1976). I was able to establish rapport with the participants and gain access to student achievement records, while also embodying a familiarity with the reading RTI model that is being evaluated.

The data used to evaluate the effectiveness of the reading RTI model were collected through individual interviews and focus groups. These sources of data helped to answer the research questions related to how educators perceive the objectives, strengths, and weaknesses of the reading RTI model and how these perceptions differ between classroom teachers and school leadership team members. Additionally, an analysis of student achievement records allowed for an exploration of the research question related to how student success within the reading RTI model, based on DIBELS measures, compared to student success on state English Language Arts assessments. The interviews and focus groups were recorded, transcribed by hand, and analyzed using computer software, in order that coding and aggregation could be used to identify emerging themes from the data.

The process of coding and interpreting the transcriptions was then described fully and followed qualitative research protocols to improve the trustworthiness of the study. By clearly establishing the confirmability, credibility, dependability, and transferability of the research, as recommended by Lincoln et al., 2011, the subsequent findings and conclusions of the study were strengthened.
CHAPTER FOUR: FINDINGS

Overview

The data collection procedures used in this study, and its subsequent data analysis, have yielded findings that will be discussed in Chapter Four following a brief description of each of the study’s participants. Each participant was asked to describe her professional experience, including the number of years spent working in the field of education, the number of years within Hayes Elementary School specifically, the professional positions that she has held, and why she was first inspired to pursue a career in public education. The perceptions and experiences of each of the participants were the foundations of the data used in this qualitative case study. Their quotes will be used frequently to provide a rich description of the study’s research questions and to support emergent themes.

The purpose statement of this study, as well as its research questions, form the organization of its discussion and findings. Particular attention has been focused on the themes that emerged throughout participant interviews and focus groups. This study began with the purpose of describing and comparing the perceptions of two different groups of educators regarding the effectiveness of an RTI model for reading within Hayes Elementary school. The perceptions of the classroom teachers and instructional leadership team members in this study were defined as their understanding of the objectives of the model, as well as their experience-based insights into the effectiveness of the model on reading improvement and student achievement. The study utilized a program evaluation model, Stufflebeam’s (2007) CIPP framework, to explore the effectiveness of the RTI model through an analysis of individual interviews, two focus groups, and a review of the school’s demographic and student achievement data.
Participants

As RTI models vary greatly across schools, this study focused on one diverse, urban elementary school in Harrisburg, Pennsylvania. Each of the participants were faculty members at this school, Hayes Elementary School. The participants included five classroom teachers, each recruited within the state-tested third, fourth, and fifth-grades, and an additional five participants recruited by their position on the school’s instructional leadership team. The school’s pool of instructional leadership team members included school administrators, the school psychologist, a counselor, a reading specialist, an intervention specialist, a data and instruction specialist, and a learning support teacher. Participants were recruited through personal invitation, and all interviews and focus groups were conducted at the site of the study.

In order to protect the confidentiality of the participants and to ensure honest and open discussions, it was necessary to assign the anonymous identifiers listed below. The 10 participants in the study embodied a significant amount of experience in education, with considerable time spent working at Hayes Elementary School itself. The five classroom teachers averaged 30.4 years of teaching experience, with an average of 25.2 years in the site school. The five instructional leadership team members averaged 13.5 years of teaching experience, with an average of 9.6 years in the site building.

Participant Introductions

Anna. The first classroom teacher interviewed in this study had been teaching for over 30 years in a variety of grade levels and positions, from kindergarten thru sixth-grade. The majority of this professional experience was spent teaching within the site school. Anna had pursued a career in elementary education due a long-seated love of working with children, both recreationally and academically.
Betty. The second teacher to participate in the study had also been teaching for over 30 years. The vast majority of these years were experienced within the site school, spanning second thru fifth-grade. Betty had pursued a career as a teacher, knowing from early age that working with children was a calling.

Catherine. The third classroom teacher included in this study had been working as an elementary school teacher for over thirty years, most of which were in the site school itself. This teacher had experience in each of the third, fourth, and fifth-grades. Catherine became an educator as a way to help children “achieve their potential” and “realize the best versions of themselves”.

Diane. The fourth teacher to participate in the study had been teaching for approximately 20 years, mainly within Hayes Elementary School. Diane had taught first, second, and third-grade, pursuing a career in elementary education due to a love of children and her desire to help them learn.

Evie. The last classroom teacher included in this study had been teaching approximately 30 years, nearly all of which were spent at the site school. All of her teaching experience centered within the primary grades. Inspired to teach by a role model father, also a passionate educator, Evie decided to follow in his footsteps, enjoying the ability to watch students grow both academically and socially.

Francine. The first instructional leadership team member to participate in this study had been an educator for approximately 8 years, with the majority of this time spent at the site school. Francine had held the same position on the team throughout this experience, and was inspired to pursue a career that would reach out to struggling students.
Grace. Grace had spent fifteen years in the field of education, approximately half of which were spent at the site school itself. The remaining experience spanned multiple states and educational levels, from elementary school to high school. Grace’s own family of educators inspired the pursuit of a career in education.

Harriet. The third participant from the instructional leadership team had worked as an educator for approximately 20 years; half of this experience was spent within Hayes Elementary. Harriet had held multiple positions, each of which were within the instructional leadership team. Harriet became an educator in an effort to help struggling students, a goal inspired by a brother who had struggled with negative teachers and educational experiences throughout his adolescence.

Ian. Ian was an educator for 13 years at the time of the study, all of which were within the site school. After first working with troubled teens in a different capacity, Harriet was motivated to return to school to acquire a teaching certification in elementary education. This participant had previously worked as a classroom teacher in the primary grades prior to joining the instructional leadership team.

Mary. The final team member to participate in this study had been working in the field of education for ten years, all of which were spent in the site school. Mary had pursued a career in elementary education as a way to advocate for young people. Like several colleagues, Mary was also inspired to pursue a career in education by the example of a family of educators.
Results

In following the recommendations for use of a program evaluation framework, a limited number of research questions were explored thoroughly within this study (Scheyer & Stake, 1976). These four research questions were developed in alignment with Stufflebeam’s (2007) CIPP model of program evaluation theory. The first research question was used to examine the goals of the RTI model as perceived by its stakeholders, the teachers and the instructional leadership team members. The second and third questions explored the participants’ perceptions of the model’s effectiveness, targeting the model’s strengths and weaknesses. The final research question sought to examine the products or outcomes of the program. The outcomes of Hayes Elementary School’s reading RTI model were considered to be the school’s student achievement measures, including DIBELS reading data and the state’s standardized assessments for ELA.

Theme Development

The data in this study were first collected by interviews of each of the participants, followed by two focus groups. Transcriptions of the interviews and focus groups allowed the data to be analyzed and coded by hand, with a second coding being completed through the use of NVivo software. The categories from the hand-coding and software coding were then compared and merged to best represent emergent themes and are presented in Appendices D and E.

The categories and themes that became evident through the data analysis are detailed below, organized by the four research questions of the study. The interview data and focus group data were listed separately, as recommended in program evaluation (Stufflebeam & Shinkfield, 2007). There was some difference noted between the individual interviews and focus group interview of the instructional leadership team members, although the responses of classroom teachers remained relatively consistent. A discussion and comparison of the findings
between the two participant groups is included within Chapter five, the findings and conclusions of the study.

Effectiveness of the Reading RTI Model: Common Themes

In exploring the effectiveness of Hayes Elementary School’s RTI model for reading, 12 themes, supported by 29 categories, emerged from multiple analyses of interview and focus group data. These themes and categories have been organized by each of the study’s research questions, and are shown in Tables 4 and 5 later in this chapter. The insights and perceptions of the participants have been included as quotes to better elaborate upon the thematic representations of each research question.

Research Question One (What are the objectives of the Response to Intervention model for reading, as understood by the classroom teachers and instructional leadership team members, at Hayes Elementary School?)

Table 1

Research Question One: Common Themes and Associated Categories

<table>
<thead>
<tr>
<th>Intended Objectives of RTI</th>
<th>Classroom Teacher Theme: Grow Them</th>
<th>Instructional Leadership Team Theme: Close Gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Identify Student Needs</td>
<td>b) Improve Reading Ability</td>
<td>d) Improve Reading Ability</td>
</tr>
<tr>
<td>c) Collect Data</td>
<td></td>
<td>e) Collect Data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>f) Prevent Special Education Over-identification</td>
</tr>
</tbody>
</table>

RQ1: Classroom Teacher Theme: Grow Them

In discussing the objectives of Hayes Elementary School’s RTI model for reading, Diane seemed to best sum up the general perception of classroom teachers that RTI is intended, “to really help them [students] grow from wherever they are starting at” (Individual interview,
Four of the five classroom teachers in the study discussed the use of RTI as a way of first pinpointing a student’s initial starting point, so that subsequent discussions and decisions could be used to help that student further progress. The responses of classroom teachers regarding the intent of the school’s RTI model for reading tended to fall within three related subcategories, *identify student needs, improve reading ability, and collect data.*

**Identify Student Needs.** Three of the five classroom teachers believed that the RTI model allowed educators to first identify individual student needs, and then categorize students into tiers (for which participants interchangeably used the terms *benchmark* for Tier 1 students, *strategic* for Tier 2, and *intensive* for Tier 3). Within these tiers, students would ideally be grouped by student need, with research based programs being identified and used to address these specific skills deficits. As Catherine explained:

> I think overall it is to take everyone where they are at and improve their reading. Whether you are a top student and you need a more intense look at skills, or enhancing those skills. Or whether or not you are an intensive student and need to learn basic skills. And I think that is one of the goals. I was thinking another objective they [the MP3 project] said from the very beginning is to take that intensive group and make them less. And each year they should get less and less and less if you are giving them intensive instruction. That is one of the big things they touted at the very beginning (Individual interview, 2016).

Within the focus group setting, classroom teachers responded at a greater level of depth. Teachers elaborated upon the model’s objective to use research-based programs as a means of addressing the needs of students who had been categorized as intensive or strategic. They further
discussed the original intention of the model to remain flexible, so that educators could change the interventions or programs of students who continued to struggle.

**Improve Reading Ability.** Classroom teachers often touched upon another objective of the RTI program, the improvement of reading ability. Four of the five teachers commented on the expectation that RTI should allow students reading below grade level to eventually catch up to their peers, thereby reducing the amount of intensive students over time. Teachers explained that this reading improvement should occur as a result of targeting the individual needs and skill levels of struggling students. Evie explained, “I think the intention is really to target the skill level of the individual student, and use the strategies that work best for them to allow them to make progress” (Individual interview, 2016).

Within the focus group interview, teachers described an expectation that she felt was implied from the school’s initial RTI training and implementation. Classroom teachers held the expectation that the RTI model would reduce the percentage of students classified as intensive, or tier 3, gradually over time. As Betty explained:

> I was told, I think originally, that by the time students came to 4th grade, we wouldn’t have kids in intensive in a perfect world. Because you would have caught those kids that had gaps in kindergarten and first grade, and their small group program would have allowed them to speed up and catch up with everybody else, in a perfect world (Individual interview, 2016).

**Collect Data.** While only one of the classroom teachers referenced the relationship between RTI and the identification of students with learning disabilities during the individual interviews, it was necessary to include this statement as a unique category. This response was
significant in that it touched upon the connection between RTI and IDEA legislation. Diane stated:

I think the second goal was that you could RTI as a way of identifying kids that needed help. We were told that we would not have to collect as much data because this model gives you the data that you need. And you can use all of that (data) to go ahead with an evaluation or referral (Individual interview, 2016).

Within the focus group setting, there was further discussion of special education evaluation and identification. As another classroom teacher alluded to data collection and its necessity within the student referral process, Diane responded, “And then for those students that would show that [an intervention] was not successful for, those specific students, then that would be a good avenue for identifying them, testing then, referring them. Whatever that extra help might be” (Focus group, 2016).

**RQ1: Instructional Team Theme: Close Gaps**

The instructional leadership team tended to reference the potential of struggling students to close the gap between themselves and their peers, when discussing the objectives of the school’s RTI model for reading. Four of the five participants referred to “skill gaps”, and the intent of the RTI model to catch students up to grade-level expectations by addressing these gaps. Similar to the perceptions of classroom teachers, team member responses tended to fall within the categories of improving reading ability, collecting data, and preventing special education over-identification. Grace best summarized the group’s first theme:

I perceive it to be an opportunity for kids who have skill gaps, or who are missing skills at their current grade level, to work on those skills at their own personal instructional level. And to enable them to eventually get to grade level or above, as we would hope
obviously. That is my perception of it [the objective of the RTI model] (Individual interview, 2016).

This theme was further developed within the instructional leadership team’s focus group, which also introduced a new category, *allocating resources*, which is included below.

**Improve Reading Ability.** Four of the five instructional team members perceived the objective of the RTI model as a means of providing early-intervening academic supports to students who exhibited reading difficulty. Team members discussed the model’s ability to address reading skills gaps and to improve student reading ability. As Mary stated, “The goals and objectives are to increase students’ abilities to learn to read and to be able to comprehend” (Individual interview, 2016).

These perceptions were also articulated throughout the focus group session. One of the participants expressed the hope that by progressing through the tiers, most students would eventually become “benchmark”. As Grace stated:

> Using universal screeners to determine where the need is, and what the need is. And to continue giving students the instruction necessary to have them move through the tiers to have them, hopefully, become benchmark at some point. And others are going to be eventually identified as needing special education, but that is not the primary objective, it really is not, especially at elementary. It is to try to move them within that reading framework (Individual interview, 2016).

**Collect Data.** While the majority of the team members referred to closing skill gaps and improving reading ability, Harriet also discussed the importance of data collection within the reading RTI model. Harriet stated, “The intended goals are to look at the school as a whole, (and) use universal screenings to identify the needs of students” (Individual interview, 2016).
This objective was reiterated during the focus group, with the team members referring to the use of universal screening tools as an assessment of the needs of the whole school and of individual students.

**Prevent Special Education Over-identification.** Francine perceived an objective of the RTI model as a way to reduce over-identification of students for special education. This statement was significant in its connection to federal special education policy. As Francine described:

I would say the intended goals would be to get those instructional supports to students who are struggling, the earlier the better, to reduce the amount of students who are identified, (and) to catch them up in the early stages of their difficulties (Individual interview, 2016).

During the focus group interview, two of the team members discussed the impact of RTI on the identification of students for special education and explained that there were specific examples of students that came to mind regarding this objective.

**Allocate Resources.** While the reference to the allocation of resources did not emerge during the individual interviews, it was introduced during the focus group. Ian felt that use of the RTI model allowed the school to use faculty members and schedules in different ways than had been used previously:

I think it is designed to help allocate resources, because, definitely in elementary school, we have these finite resources of people. [RTI is] Where you can get more bang for your buck. You say, ok these students are struggling while these students are doing well. They can do some independent work here and they need less individual instruction. So let’s put some resources towards other students (Focus group, 2016).
In exploring the objectives of Hayes Elementary School’s reading RTI model, both participant groups agreed that the model is intended to improve student reading ability and to collect data. Classroom teachers perceived RTI as a method in which to pinpoint students’ specific needs, while team members discussed the use of RTI as a method of preventing the over-identification of students with specific learning disabilities.

**Research Question Two** *(How do classroom teachers and instructional leadership team members perceive the effectiveness of the reading RTI model in addressing its intended objectives, and how do these perceptions compare?)*

| Table 2 |
|-----------------|-------------------|
| **Research Question Two: Common Themes and Associated Categories** |
| **Effectiveness of the Reading RTI Model** |

**Classroom Teacher Theme: Ineffective**

- a) Changes over Time
- b) “Lifers”
- c) Little Movement
- d) Lack of Flexibility

**Instructional Team Theme: Unsure of Effectiveness**

- a) Hard to Tell
- b) We could do Better
- c) Look at the Numbers

**RQ2: Classroom Teacher Theme: Ineffective**

As classroom teachers were asked to evaluate the effectiveness of the RTI model for reading at Hayes Elementary School, there was unanimous agreement among the participants that the model lacked effectiveness. Teachers described a gap between the initial expectations of RTI and the reality of the model. Throughout individual interviews and the classroom teacher focus group, four categories supported this theme: *changes over time, little movement, “lifers”*, and a *lack of flexibility*. 
Changes over Time. Three of the five classroom teachers discussed changes they had observed in the effectiveness of the reading RTI model from its initial implementation in 2008. These changes to the model were attributed to the differing leadership mindsets of new administrators to the building and district level, changes to components of the model, and a loss of integrity in the RTI design that had been initially implemented. Two of the teachers perceived the school’s RTI model had been negatively affected by trends in education. Teachers agreed that the model had lost effectiveness over time due to these changes. As Betty stated, “I feel like right now, everybody is kind of doing what the latest trend is, and it is changing from year to year. So I think some of the integrity of the model has fallen apart” (Individual interview, 2016).

Within the focus group, teachers discussed changes to their own roles within the RTI model. These shifts in their own roles centered on decision making process, where classroom teachers felt that over time, their participation in meetings and discussions had gradually declined.

“Lifers”. The term “lifer”, although not found in the existing literature on RTI, was used by three of the five classroom teachers. It became evident that this word referred to struggling students, who once identified as intensive within the RTI framework fail to advance beyond this tier over the course of their elementary experience. Classroom teachers felt that “lifers” indicated a lack of program effectiveness. As Catherine explained:

They are put in those programs were you read the script and they answer. And I just think they don’t learn the love of reading. And they are lifers in there. And if you have a lifer in a program, I don’t think that is effective to them (Individual interview, 2016).
Anna repeated this term during the focus group discussion, although she seemed to find that students in the school not just lifers in a tier, but also within specific reading interventions. She stated, “Students end up being lifers in a particular program” (Individual interview, 2016).

**Little Movement.** Each of the five classroom teachers articulated the perception that the school’s RTI model affected little improvement amongst students reading below grade level. Among the individual interviews, nine statements were made regarding “little movement” out of the intensive tier. Teachers tended to agree that there was movement amongst strategic and benchmark students, but that intensive students showed little progress. This perception contradicted their initial expectation that RTI would decrease the percentage of students reading below grade level over time. Catherine stated:

   And they showed slides at the very beginning, like this is going to be like 10% of your population, then it is going to be 8%, then 6%. They showed us the gains that we made in reading words per grade level because they continued to test us. And that was great, but the next year we still had the same number intensive, and then the next year and the next year. So I don’t think that really reaches the kids and motivates them to read (Individual interview, 2016).

**Lack of Flexibility.** Classroom teachers presented seven statements during individual interviews that supported the theme that the RTI model for reading lacked flexibility. Four classroom teachers expressed frustration at the seemingly static nature of the school’s RTI model, where they perceived that instructional changes were not made frequently enough to positively impact student progress. Betty asserted:
It seems like we just keep plugging away, hammering that intervention. So we are going to make the intervention work than let’s change it. Let’s see what we can do to change it [programs] to really get those kids moving (Individual interview, 2016).

During the focus group interview, three of the classroom teachers expanded upon the perception that the school’s RTI model lacked flexibility. They believed that teachers had initially been included in meetings and discussions more routinely following the introduction of RTI, and felt that the increased collaboration had encouraged more frequent changes skills groups and interventions more frequently than teachers observed in the current model. Besides the current lack of communication, teachers expressed the perception that the instructional leadership team no longer seemed as motivated to make intervention and student placement changes. As Diane explained:

> And I know even at meetings, I will come up and say, well they have been in intensive ever since kindergarten and they are in third-grade. I’ve looked at their back sheets and say they have done the same program since kindergarten and they are at the same spot. Can we change programs? We get, well that is the best program for them, that’s the best.”

Classroom teachers perceived that the RTI model for reading at Hayes Elementary School was ineffective, due to changes that detracted from the fidelity of its initial implementation, a lack of opportunity to participate in the decision-making process, a seeming lack of progress for students within the intensive tier, and a lack of flexibility regarding student placements and interventions (Individual interview, 2016).

**RQ2: Instructional Leadership Team Theme: Unsure of Effectiveness**

From individual interviews of instructional leadership team members, it was apparent that participants had trouble truly assessing the effectiveness of the RTI model for reading. In the
focus group setting, however, there was a much stronger consensus that the program was in fact effective. When struggling to evaluate its effectiveness, team member responses fell within the categories “hard to tell”, “we could do better”, and “look at the numbers”.

**“Hard to Tell”**. Each of the five team members participating in the study provided at least one statement that indicated that he or she would have difficulty determining the effectiveness of the school’s RTI model for reading. They were able to identify specific components of the model that were strengths, as well as aspects that represented weaknesses. Francine made the statements, “I don’t know that it would be that effective”, and, “I also think a lot of measuring the effectiveness or looking at the effectiveness depends on the team you are working with” (Individual interview, 2016).

Grace pinpointed specific strengths, but ultimately concluded, “I couldn’t sit here and tell you how well we are doing, because we are not looking at that data enough” (Individual interview, 2016).

Ian seemed to express the common theme among the group, “I actually am not sure. I think that we do not always look at the right information, and I don’t know” (Individual interview, 2016).

While team members struggled individually, the focus group discussion allowed participants to progress from an uncertainty of how to analyze the effectiveness of the model, to a different conclusion. Throughout the focus group discussion, participants referenced the use of data sources such as progress monitoring measures, benchmark assessments, and graphs as indicators of the effectiveness of the model. Additionally, team members concluded its effectiveness based on personal observations. They compared the current reading RTI model to its initial implementation, and they also discussed a reduction in the rate of students being
identified for special education as another way to conclude that the model was effective. As each of these methods of assessment were brought up during discussion, team members seemed more confident that the model was in fact effective. As Harriet summarized:

> When I look at effective, I would need to look at every aspect. Everything we talked about. In that respect, I would say we are highly effective. Despite our differences, despite our human flaws. I think we have done a good job of staying true to the model through the years (Focus group, 2016).

“We could do Better”. Individually, team members identified aspects of the model that could be improved. The quality of communication between the team and the teachers was identified as an area of weakness. Particularly, the process of referring students for special education identification was determined to be a need by Francine:

> I think that sometimes there is a lack of communication between the team and general ed [education] teachers. Sometimes the process is not that clear, so people get confused and frustrated. Sometimes students don’t get referred that need referred. I think we definitely need to work on that as a whole school. We need to work on our communication and a common goal. We are in this to help students and I think we could become more effective (Focus group, 2016).

Besides identifying communication as an area of need, Grace concluded that the school’s RTI model for reading was not effectively closing the instructional gap for struggling students. This finding was reiterated by Ian, who observed that the same students tend to fall within the intensive tier year after year. These individual discussions paralleled the perceptions of classroom teachers, but were not evident during the focus group interview.
Using data advantageously was identified as another area of improvement. The use of data to analyze the effectiveness of the school’s RTI model itself was brought up as a suggestion for improvement by Harriet, while Ian indicated that the team may not always look at the right information and sources of data when discussing individual students.

These suggested areas of improvement, though evident during individual interviews, were not reiterated during the instructional leadership team’s focus group. Rather, team members identified and agreed upon a new aspect of the school’s reading program that may negatively affect student performance in reading, core instruction. As Team Member suggested:

To be completely honest, and this is just my perception, classroom teachers feel that skills group time is when they are working on their skills, so they don’t have to make changes in their core instruction. So they are getting that in skills group, why do I have to differentiate my core instruction (Focus group, 2016).

“Look at the Numbers”. In discussing the effectiveness of the RTI model, team members referenced multiple sources of data collected throughout each school year. These sources of data included universal screenings, conducted on all students at benchmarks throughout the year, and progress monitoring of individual students on a weekly or biweekly basis. Additionally, students participated in state required yearly assessments, and regularly completed reading unit assessments. Although the instructional leadership team members were able to identify all of these sources of data, there was disconnect between this data and their ability to evaluate the effectiveness of the reading model of the school. As Harriet explained, “I think we do that initial stuff really well, it is really just looking at the results. I couldn’t sit here and tell you how well we are doing with it because we are not looking at that data enough” (Individual interview, 2016).
In agreement with classroom teachers, Harriet described a current lack of time spent analyzing and discussing data, and how this practice was a change from the initial implementation of the model. As Harriet explained, at the introduction of RTI in the district, a specific group of instructional leadership team members and classroom teachers referred to as the “data team” had been designated to meet and discuss school-wide data as a whole. From the data team meeting, concerns or ideas were passed along to grade-level meetings regarding reading groups, programs, and individual students.

As the participants in this study were asked to evaluate the effectiveness of Hayes Elementary School’s RTI model for reading, classroom teachers were more consistent in their responses than instructional leadership team members. Teachers unanimously expressed the perception that the program was ineffective. They cited a deviation from the original RTI design that was implemented, as well as a lack of movement and flexibility amongst the students who fell below grade-level expectations. Additionally, classroom teachers introduced a previously unfamiliar term, “lifers”, to describe a group of students unable to progress beyond the intensive tier throughout their elementary experience. Instructional leadership team members were less sure of the model’s effectiveness. Within individual interviews, they presented the perception that it was difficult to tell whether the RTI model for reading was effective. Team members offered the suggestion that the school should look at the data more consistently and that the reading RTI model could be improved. When discussing this question within the focus group context though, team members grew more confident that it was actually an effective model based on the use of data and a reduction in the number of students being identified for special education.
Research Question Three (What are the perceived strengths and weaknesses of the school’s RTI model in reading?)

Table 3

Research Question Three: Common Themes and Associated Categories

Strengths and Weaknesses of the School’s RTI Model

Strengths

Classroom Teacher Theme: Few Strengths
   a) Student Needs
   b) Collect Data

Instructional Team Theme: “We do it right”
   a) Collect Data
   b) Student Engagement
   c) Reducing Special Education Identification
   d) Flexibility

Weaknesses

Classroom Teacher Theme: “We need to do more”
   a) Lack of Progress
   b) Student Engagement
   c) Flexibility
   d) Special Education Identification
   e) Mistrust in Teachers

Instructional Team Theme: “We try to deal with them”
   a) Communication
   b) Resources
   c) “Fall through the Cracks”
   d) Core Reading Instruction
   e) Mistrust in Team

RQ3: Classroom Teacher Theme: Strengths: Few Strengths

When asked to identify strengths of Hayes Elementary School’s reading RTI model during the classroom teacher focus group, Team 3 concluded, “I don’t know that there are a lot”.


This sentiment was reiterated during both the individual interviews and the teacher focus group, where two themes regarding strengths of the program emerged, *student needs* and *collect data*.

**Student Needs.** Three of the five classroom teachers found that the use of RTI allowed them to look at students individually to evaluate their current reading abilities and to identify specific student needs. Teachers felt that the use of RTI provided differentiation to address these individual needs. As Evie stated:

> I think giving that sort of more individualized instruction that we don’t necessarily have time for. Like a kid who is in 3rd grade who needs decoding skills. We don’t necessarily teach that, but at least they can get it in their skills group for the intensive groups (Individual interview, 2016).

**Collect Data.** Classroom teachers also agreed that the collection and use of data within the RTI model had been beneficial. As teachers explained, the benchmark data provided a basis for grouping students according to need within the three-tiered model. This data could also be used to demonstrate evidence of student growth, particularly for students still be far below grade-level. As Diane explained:

> I like that you can look at it as growth. I mean some parents see red [below grade level], or students may just see red, but I try to explain that you are looking for growth. Even if a kid starts off very, very low, you can look at it and see that they made some progress throughout the year. Other than just always viewing them as intensive, you can see they made progress (Individual interview, 2016).

**RQ3: Instructional Team Theme: Strengths: “We do it right”**

While both participant groups felt that the collection of data was a strength of the RTI model, the instructional leadership team discussed additional strengths that were not identified by classroom
teachers. Team members referenced collecting data, student engagement, reducing special education identification, and flexibility as strengths of the model.

Collect Data. When asked to describe the strengths of their RTI model during the focus group interview, the first thing that team members referenced was the collection of data. Three of the five team members discussed the data collected through the universal screening measures conducted three times throughout the year, and the weekly or biweekly progress monitoring data of individual students. The discussion then turned to the team’s strength in knowing how to correctly display and discuss this data. As Harriet stated:

I think another strength is that we do it right. We know how to make graphs. We know how to interpret graphs. I think we have figured it out and got better at it. We have the graphs. Honestly, kids come from other schools and I look at the graphs and their goals or start points are wrong. No one has trained us on how to do this, we kind of had to be self-taught with the graphs, and we figured it out….our team is good with the graphs (Focus group, 2016).

While the team agreed that their data collection process was a strength during the focus group, it was only directly identified during an individual interview with Mary. Although two other team members did refer to team meetings and discussions centered on student data as strengths of the RTI model for reading.

Student Engagement. Team members, in direct contrast to classroom teachers, found student engagement within interventions to be a strength of the school’s RTI model. While student engagement was not referenced during the individual interviews, it emerged during the focus group discussion. As Harriet found:

The kids like coming to skills group. I think it is a relief to them, where they are in a particular situation where they are being taught at their level. And they seem to enjoy
coming, as opposed to what you might think, that they are like, “Oh I am being pulled out, singled out”, because everyone else is moving. They can get what they need without really standing out like they probably do in the classroom most of the time (Focus group, 2016).

Grace supported this perception, stating, “I would agree with that. I mean I only have one student who doesn’t like to come to my skill group, but that is more of a behavior than an academic thing” (Focus group, 2016).

The conversation on student engagement continued, and introduced a new category, community. Two team members discussed how students not only enjoyed their RTI reading groups, but also were able to develop a sense of community within the building. Francine found:

They get to know other teachers. I see that as a positive. As I am walking down the hall, they say hi to me, I say hi to them. They get that recognized feeling, feeling more important and a part of the whole school (Focus group, 2016).

Mary responded, “That is what I was going to say. I was going to say that one of the things I think they get out of it is that they get to know more people in the school” (Focus group, 2016).

**Reducing Special Education Identification.** When discussing the objectives of the RTI model during individual interviews, one team member had discussed the prevention of special education over-identification among struggling students. This perceptions returned during the focus group interview, as the discussion turned to identifying the reduction of special education rates as an indicator that the model at Hayes Elementary School was successful. Francine stated:

I think if we look at special education identification, and reducing that rate. Have we done that? Absolutely. To the point where we are down to one learning support teacher because the case load is so low. That is a success (Focus group, 2016).
**Flexibility.** Over the course of the individual interviews and focus group, all team members agreed that a strength of the model was its flexibility. The flexibility of the model was discussed in regards to the interventions and resources the team was able to use, the specialists who were available to work with struggling students, and the ability of students to change groups or interventions. Mary stated:

I think one of the strengths is flexibility. Ok we are not meeting this student. We are definitely going to look at the data and make some changes. We are really good at being flexible and going with it, and building rapport with our small groups (Focus Group, 2016).

The perception that flexibility was a strength, opposed the classroom teacher perception that a lack of flexibility represented a weakness to the school’s model.

**RQ3: Classroom Teacher Theme: Weaknesses: “We need to do more”**

While classroom teachers found that the collection of data and an improved focus on student needs were strengths of the school’s RTI model, they identified several perceived weaknesses. Two of these weaknesses had previously been identified as strengths by the instructional leadership team. These weaknesses were used to support the classroom teachers’ perceptions that the school’s RTI model for reading was ineffective. The weaknesses they identified included a lack of progress, a lack of student engagement, a lack of flexibility, a lack of special education identification, and a perception that there existed a mistrust in teachers.

**Lack of Progress.** Across the individual interviews and the focus group of the classroom teachers, participants agreed that the school’s RTI model was weak at eliciting student progress, particularly amongst intensive students. Each of the classroom teachers described the perception that the lowest achieving students were not making enough progress over the course of a year, and across several years, to move beyond their intensive tier. As Anna stated:
And I also don’t think we are very good at [sic], there hasn’t been a lot of movement for students, especially out of intensive. If I look back to where they were in kindergarten and first, typically they are the same intensive kids. I don’t see a lot of movement out of intensive, which tells me we are doing something that is not successful (Individual interview, 2016).

This perceived lack of student progress contradicted classroom teachers’ initial expectations, based on their training during the RTI implementation. As Catherine explained:

They showed slides at the very beginning, like this [the intensive tier] is going to be 10% of your population. Then it is going to be 8%, then 6%. They showed us the gains that we made in reading words per grade level because they continued to test us. And that was great, but the next year we still had the same number intensive, and then the next year and the next year (Individual interview, 2016).

**Student Engagement.** According to classroom teachers, a lack of student engagement was an additional weakness to the model. While this was identified as a strength during the instructional leadership team focus group, three of the classroom teachers identified student interest and engagement as a weakness during individual interviews. Anna found:

The scripted programs that are being used, I hear the students talking to each other, and a lot of them are repetitious. Though they are meant to be repetitious, they are not really engaging to the students and are not really exciting for them (Individual interview, 2016).

Betty shared a similar response during her individual interview. She stated, “In intensive, they are reading premade little stories that aren’t really in-depth. I am thinking that could be part of it. I would love to just give them a novel and have them fall in love with it” (Individual interview, 2016).
Similarly, Catherine also discussed the idea that students should learn to love reading. She concluded:

They are put in those programs where you read the script and they answer, and I just think they do not learn that love of reading and they are lifers in there. And if you have a lifer in a program, I don’t think that is effective to them (Individual interview, 2016).

During their focus group, teachers reached a general consensus that students were bored by the interventions used within the intensive groups. As Diane stated:

Sometimes I think they just think skills group is boring, especially in those intensive programs. They are doing such basic things, and then they come back to the classroom where they are expected to read at a much deeper level, so they just don’t know what to do with it (Focus group, 2016).

**Flexibility.** Classroom teachers often voiced frustration at the perceived lack of flexibility embodied by the school’s RTI model for reading. Three classroom teachers discussed this lack of flexibility during their individual interviews. In particular, a lack of flexibility was perceived in regards to the interventions being used. The teachers believed that the same intervention programs were being used year after year, and that struggling students were often kept in those programs for too long. It was also discussed that the scripted nature of many of the intensive programs did not allow for flexibility in meeting individual students’ unique needs. As Evie explained:

It seems like we just keep plugging away, hammering that intervention, so we are going to make the intervention work rather than let’s change it. Let’s see what we can do to change it, to really get those kids moving (Individual interview, 2016).
**Special Education Identification.** Throughout individual interviews, there was a sense that classroom teachers were disappointed at the rate in which students were identified for special education within the reading RTI model. They explained that they had expected a reduction in learning support rates because of RTI, but found that students remained in intensive reading interventions across multiple years, without ever being identified for learning support. Catherine summarized her perspective on identifying students for special education within the school’s RTI model:

> I really think educational wheels turn way too slowly to meet the needs of the children. And you know from even identifying children, it takes a year or more. And I hear it, they [the instructional leadership team] will say, let’s see how he or she does next year. Well then the next year they are back to filling out forms and doing all of those other testing and so forth, and there goes another year where the child’s needs are not met (Individual interview, 2016).

**Mistrust in Teachers.** Two of the classroom teachers discussed feeling as though the instructional leadership team lacked confidence in their insights and ideas. In their individual interviews, teachers brought up a desire to be included in more decision-making processes and to have more input in relation to student placement and intervention assignments. When asked what could be done to improve the reading RTI model at Hayes Elementary, Catherine suggested:

> Well I think that just the team working more with the teachers, being more cohesive with each other, having that open dialogue, having the classroom teachers have more say. Sometimes we are questioned as to why we want this, but you know, I think our opinion does matter and I think we should have more a voice in that (Individual interview, 2016).
RQ3: Instructional Team Theme: “*We try to deal with them*”

Instructional team members tended to see the weaknesses of the reading RTI model differently than classroom teachers. It was evident during individual interviews that team members felt more comfortable discussing these weaknesses alone, than when they were in the focus group. While team members identified the collection of data, student engagement, the reduction of special education identification, and the model’s flexibility as strengths, they found that resources, students “falling through the cracks”, core reading instruction, and mistrust in the team as weaknesses to the reading RTI model.

**Communication.** While one of the team members had initially identified communication amongst team members and classroom teachers as a weakness during her individual interview, this view was contradicted by other participants during the focus group discussion. Francine had stated:

> I think that sometimes there is a lack of communication between the team and general education teachers. Sometimes the process is not that clear, so people get confused and frustrated. Sometimes students don’t get referred that need referred. I think we definitely need to work on that as a whole school. We need to work on our communication and a common goal (Focus group, 2016).

However, during the focus group, communication was discussed as a strength by the instructional support team members. One team member brought up the observation that classroom teachers felt as though they were not allowed enough input in decision-making related to RTI. Harriet responded:

> We have tried to be transparent, tried to include them in every little decision. There are schools where the team gets together and groups the kids and say here it is, here it is and
then you do it. So I guess they don’t talk to other people and see how they do it. We don’t have a data team anymore. We used to, and it included classroom teachers, which was helpful. Now when we have data team, it is really the D and I team [instructional leadership team]. And actually, in a way, administration has told us that is what the team is for: looking at the data and making decisions, whether it is behavioral or academic.

Now we have our placement meetings. We include the teachers. We have a day or two days where classroom teachers share their planning time. Throughout the day the teachers come, so the second day is if we didn’t finish or we had some questions and need to pull them back. And everyone knows that is what we do (Focus group, 2016).

**Resources.** In pinpointing weaknesses of the school’s RTI model, team members found that they often struggled with a lack of staff and a limited number of interventions that were readily available. Ian felt that the neediest students may be struggling to make progress because, “You never really hit them because there is either just not enough bodies to do a 2 to 1 group or a 1 on 1 group for all of those really intensive students”. This team member also expressed the need to have access to a great variety of reading interventions.

It seems like we have had the same programs, at least at this building. I don’t know about other buildings. Like it is Scott Foresman A-E, it is Corrective Reading. I am sure those programs have their benefits, but I am sure that after years there must be new [interventions] that are better than what we have available now (Individual interview, 2016).

The lack of staff members and reading interventions was also discussed during the focus group interview. Grace discussed the variety of interventions that are located throughout the district, with each elementary school housing their own programs and interventions. “I think maybe
some different programs would be useful. I have heard good things about other programs from the other schools, but we don’t have those programs” (Focus group, 2016).

“Fall through the Cracks”. Although this was not evidenced in the Instructional Leadership Team focus group, three team members each expressed individual disappointment in the perception that a small percentage of students failed to make progress even after years of reading interventions. Francine expressed frustration that by the time students were identified for learning support, after having participated in multiple interventions for months, or years, their self-esteem had already been negatively affected.

We have tried every intervention under the sun, and then by fourth-grade they are identified and they are so far behind….and it really significantly impacts everything in their socioemotional health because they have struggled for so long. It is good that we are getting those kids help who need help early on, but for those kids who do need more help [learning support] early on kind of fall through the cracks I feel (Individual interview, 2016).

The conclusion that some students were being overlooked within the RTI model was reiterated by Mary:

It seems like it is the same students that you have each year that stay. I mean some do [make progress], but it is hard to say. Is that because something clicked for them, they had another teacher who did something within the classroom that moved them up? But there are other ones that just seem to stay and stay and stay. You never really hit them (Individual interview, 2016).

Mistrust in the Team. Although this theme did not emerge during the individual interviews, the focus group brought about a significant discussion regarding the perception that
classroom teachers felt a sense of mistrust in the instructional team. Four of the team members engaged in a conversation related to a perceived divide between classroom teachers and the instructional support team. While Grace felt that the division between these two groups was unique to Hayes Elementary, two team members felt that this lack of cohesiveness was evident in every building. Harriet explained a possible cause of this conflict:

I think that if you listen to the classroom teachers, sometimes of the things they say is that they don’t feel like they get enough input. That is counterintuitive because we have grade level meetings and all kinds of meetings. That is why they are there, to provide input…I don’t understand why they feel that way (Focus group, 2016).

While classroom teachers perceived fewer strengths to the school’s reading RTI model than the instructional leadership team members, both agreed that data collection was a positive aspect of the program. Teachers and team members viewed student engagement, the flexibility of the model, and its impact on special education rates very differently. Teachers perceived these aspects as weaknesses, while team members perceived them as strengths of the school’s reading RTI model. Both classroom teachers and team members identified weaknesses to Hayes Elementary School’s reading RTI model, and while these weaknesses differed, both perceived a sense of distrust from the other group of educators in the study.

The frequencies of the open-codes that were extracted from the transcripts of the individual and focus group interviews are included in the tables below. An analysis of these codes led to the development of the themes discussed throughout chapter four. Table 4 is focused on classroom teacher data, while Table 5 illustrates members of the instructional leadership team.
Table 4

<table>
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<th>Classroom Teacher Open-codes</th>
<th>Enumeration of open-code appearance across data sets</th>
<th>Classroom Teacher Themes</th>
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<td>Identify Student Needs</td>
<td>10</td>
<td>Objective: <em>Grow Them</em></td>
</tr>
<tr>
<td>Improve Reading Ability</td>
<td>9</td>
<td>Effectiveness: <em>Ineffective</em></td>
</tr>
<tr>
<td>Collect Data</td>
<td>6</td>
<td></td>
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<tr>
<td>Changes to Model Over Time</td>
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<td>Intensive Student “Lifers”</td>
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<td>Little Movement</td>
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<tr>
<td>Lack of Flexibility</td>
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<td></td>
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<tr>
<td>Student Needs</td>
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<td>Strengths: <em>Few Strengths</em></td>
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<tr>
<td>Collect Data</td>
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<tr>
<td>Lack of Progress</td>
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<td>Weaknesses: <em>We Need to do More</em></td>
</tr>
<tr>
<td>Lack of Student Engagement</td>
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<tr>
<td>Lack of Flexibility</td>
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<tr>
<td>Mistrust in Teachers</td>
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<td></td>
</tr>
<tr>
<td>Prevent Over-identification</td>
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<td></td>
</tr>
<tr>
<td>Hard to Tell</td>
<td>7</td>
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<td>We Could do Better</td>
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<td>Effectiveness: <em>Hard to Tell</em></td>
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<td>Look at the Numbers</td>
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<td>Collect Data</td>
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<td>Student Engagement</td>
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<td>Strengths: <em>We Do it Right</em></td>
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<td>Reducing Over-identification</td>
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<td>Flexibility</td>
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<tr>
<td>Lack of Resources</td>
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<td>Weaknesses: <em>We Try to Deal with Them</em></td>
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<td>Students Fall Through Cracks</td>
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<td>Core Reading Instruction</td>
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<td>Mistrust in Team</td>
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**Research Question Four** *(How does student success at Hayes Elementary School, as defined by DIBELS measures, compare to student achievement in state English Language Arts assessments?)*

As this study sought to include student achievement data, it was necessary to collect and analyze RTI data and state assessment records. In the original proposal, just the percentages of students within each reading RTI tier were going to be compared and included. It became
apparent, as participants discussed a lack of movement and growth across time, that it would be more beneficial to analyze a specific cohort of students across time. The purpose of analyzing a specific group of students allowed for an examination and discussion of student placements and growth over time. It provided insight into patterns related to the use of specific interventions, and student placement and movement amongst these interventions. It was necessary to examine a variety of documents to collect this data. RTI data from the current year of the study, as well as from two years prior, was collected on Hayes Elementary School’s fifth-grade student body. These documents first underwent extensive redacting of all information related to student identity, before the records could be analyzed for this study.

Additionally, the results of state standardized ELA assessments from two years prior to the study (when students were in the third and fourth-grades) was compared to their assignments within the reading RTI tiers. State assessment data of the cohort for the current year of the study (fifth-grade) was not yet available.

**Tiers Vary by Grade.** The line graph below (Table 6) depicts the percentage of students at each reading RTI tier, according to DIBELS data, across the third, fourth, and fifth-grades. The percentage of students categorized as Tier 1 (benchmark) rose each year of the cohort. 51% of students were found to be reading at or above grade level in third-grade. This percentage increased to 56% in fourth-grade, and peaked at 66% in fifth-grade. The trend line for students categorized as Tier 2 (strategic) was not as linear. In third-grade, 30% of students were assigned a strategic intervention. This percentage fell to 18% in fourth-grade, rising slightly in fifth-grade to 21%. The percentage of students categorized as intensive, or Tier 3, was also non-linear, with 19% in third-grade, 26% in fourth-grade, and 13% in fifth-grade.
Students Tend to Stay in Tiers. Examining a specific cohort of students allowed for an analysis of changes and growth over time. In order to analyze this movement and progress, it was necessary to exclude students who had moved into or out of the school in the years within the data exploration. Table 7 shows the percentages of the 5th grade student cohort who remained in the same reading tiers across the third, fourth, and fifth-grade, as well as depicting the percentages of students who progressed into an improved tier. There was no evidence that students within this cohort regressed into a tier below their initial starting assignment. For example, a student who was initially assigned to the strategic tier in third-grade, was not re-categorized into the intensive tier by the fall benchmark of fifth-grade (the time of the record analysis). Occasionally, a student who had once been promoted to a higher tier, would then return to their initial starting tier. This type of movement was classified within the table below as remaining in the same tier. The majority of students within the cohort, 56%, were categorized consistently as Tier 1 (benchmark) across third, fourth, and fifth-grade based on their
DIBELS data and RTI placement. 15% of students within the cohort remained within Tier 2 (strategic) interventions across multiple years, while 10% of the students remained categorized within the most intensive level of the RTI model (Tier 3). Across time, 14% of students had increased from Tier 2 to Tier 1, while 5% progressed from Tier 3 to Tier 2.

Table 7

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<tr>
<th>RTI Tier Movement across 3rd-5th grades based on DIBELS</th>
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<tr>
<td>Benchmark 56%</td>
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<tr>
<td>Intensive 10%</td>
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<tr>
<td>Intensive to Strategic 5%</td>
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<tr>
<td>Strategic 15%</td>
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<td>Strategic to Benchmark 14%</td>
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**RTI and State Achievement Test Gap.** The Pennsylvania Department of Education requires public schools to administer standardized assessments in ELA and math beginning in the third-grade. The results of these assessments can be examined by state, school district, and individual school on the Pennsylvania Department of Education’s website. The information is broken down by year and by grade level. Unfortunately, I was not able to attain the individual scores of students in the cohort. As the cohort represented the majority of the grade level each year though, the scores were likely comparable to the scores of the student cohort. Under this assumption, the percentages of students determined to be reading at grade-level, or benchmark, according to Hayes Elementary School’s RTI data collection could then be compared to the percentage of students scoring at or above proficiency on the state ELA test. Table 8, below,
reflects this comparison. In the spring of third-grade, 51% of the grade-level was considered to be reading on grade level according to RTI measures. State standardized assessments found 49% of students to be reading on grade level at proficient and advanced levels. In fourth-grade, 56% of students were found to be benchmark, or on grade-level, according to RTI. The ELA tests that year reflected a proficient and advanced rate of 49%, the same rate as the year before. While ELA scores had remained consistent across third and fourth-grade of the cohort, the school’s RTI data had shown seeming improvement. This is particularly true by fifth-grade, when RTI data reflected 66% of students reading at benchmark levels. This showed a 10% increase in students reading at benchmark. State ELA results for the fifth-grade year were not available at the time of the study.

Table 8

![DIBELS Benchmark Levels Compared to State ELA Proficiency](chart)

**Flexibility of Interventions.** A focus on the flexibility of the RTI model emerged during both individual and group interviews. When describing a perceived lack of flexibility, the
concept was referenced 19 times, mostly by classroom teachers. In contrast, instructional leadership team members tended to view the RTI model as demonstrating flexibility. In this perception, the concept was referenced 11 times. A review of the school’s RTI records allowed for further insight.

By focusing on the cohort of current fifth-grade students, it was possible to document the number of interventions each student had received within the school’s RTI model across the third, fourth, and fifth grades. This analysis focused on students who were categorized as intensive or strategic at the time of the study, and reviewed the tiers and interventions they had been assigned throughout the prior two grade levels. From this exploration, it was evident that three programs were used as interventions for students categorized as strategic. These programs included Houghton Mifflin’s Soar to Success, Comprehension Toolkit, and Read Naturally. Similarly, three programs were documented for use at the intensive level. Students who were classified as Tier 3 received some combination of My Sidewalks on Scott Foresman Reading Street, Leveled Literacy, Fountas and Pinnell’s Leveled Literacy, or McGraw Hill’s Corrective Reading. Within the 5th grade cohort, 12 students had remained within the same strategic or intensive tier throughout 3rd-5th grade. Six of these students had experienced two different reading interventions, five had received three different interventions, and one student had remained in the same intervention across all three grades. Each intervention focused on both reading fluency and comprehension.

A comparison of the amount of time the sample students spent within a given intervention at the intensive and strategic levels, reflected a typical span of 1 ½ years. Although this time was spent within the same program, a student may have received different levels of intervention within the program, as most interventions encompass multiple levels. For example,
My Sidewalks on Scott Foresman Street consists of five levels, A-E. Houghton Mifflin’s Soar to Success has at least seven levels available, K-6. As such, a student who experienced one or two program changes, may have been exposed to multiple levels within each intervention.

**Summary**

The perceptions of two educator groups, regarding the effectiveness of their school’s RTI model for reading, were explored in this case study. Using a program evaluation model, Stufflebeam’s (2007) CIPP framework, the perceptions of classroom teachers were compared to those of the school’s instructional leadership team. An analysis of individual interviews and two focus groups uncovered several differences amongst the perceptions of classroom teachers and instructional leadership team members. Additionally, a review of student achievement data derived from both the RTI model and standardized state ELA assessments allowed for a more complete program evaluation.

The data analysis and document reviews revealed three main findings: the realities of the RTI model differ from educators’ initial expectations, classroom teachers and instructional team members differ in their perceptions of the effectiveness of the RTI model, particularly in regards to the strengths and weaknesses of the model, and a general sense of distrust seems to exist between classroom teachers and instructional team members.
CHAPTER FIVE: DISCUSSION

Overview

The purpose of this case study and program evaluation was to describe the perceptions of two groups of educators, classroom teachers and instructional team members, in regards to the effectiveness of a school’s RTI model for reading. This chapter provides a discussion of three overarching findings, comparing the results of the current study to existing literature. Implications of the findings, as well as recommendations for future research, will also be included.

Several years ago, the majority of public schools across the United States implemented RTI models following the 2004 reauthorization of IDEA. The implementation and fidelity of these models was proven to vary across states and school districts (Zirkel & Thomas, 2010). Now that many of these instructional models have been in place for several years, questions have arisen regarding the effectiveness of these RTI models. Factors such as a lack of adequate professional development and confusion regarding the correlation between RTI and special education identification have been identified as potential barriers to the model’s effectiveness (Bineham, Shelby, Pazey, & Yates, 2014).

While several studies were conducted to analyze the implementation of RTI models in schools and districts, very few researchers have attempted to evaluate the effectiveness of these models after they have been in place for several years (Burns et al., 2005; Fagella-Luby & Frey, 2011; Fisher & Frey, 2011; Griffin & Hattendorf, 2010; Noltemeyer, Boone, & Sansosti, 2014; Robinson, Bursuck, & Sinclair, 2013; Shapiro et al., 2012; White, Polly, & Audette; 2012).

A review of student achievement across the United States, The Nation’s Report Card, has shown that 4th grade reading scores across the nation have not improved significantly within the
time frame that RTI has been in place. Only 36% of 4th grade students were found to be reading at proficient levels, while the reading ability and scores of 8th graders were found to have decreased within this span of time. These findings demonstrate the need to evaluate the effectiveness of widespread RTI models that were put into place with the purpose of improving student reading ability (“The Nation’s Report Card”, 2015).

This case study sought to analyze the effectiveness of an elementary school’s reading RTI model using a program evaluation framework. The purpose of this type of evaluation is to conduct an assessment of a specific program after a thorough exploration of its current context, the input of its stakeholders, and an examination of its products (Scheyer & Stake, 1976; Stufflebeam & Shinkfield, 2007). A program evaluation relies heavily on the experiences and perceptions of its stakeholders, but previous findings have suggested that the input of teachers has been lacking in existing research related to RTI (Wilcox, Murakami-Ramalho, & Urick, 2013). As such, the current case study sought to describe and compare the perceptions of both classroom teachers and instructional leadership team members regarding the effectiveness of a nearly decade-old RTI model for reading.

**Summary of the Findings**

The findings of the study were derived from data collected during ten individual interviews, two focus groups, and an analysis of three years of student achievement records related to the school’s RTI model and state ELA assessments. The interview and focus group data were hand-coded and analyzed in alignment with the recommendations of Glaser and Strauss (1967). A second analysis of the transcripts was additionally conducted using NVivo software.
From these analyses, 12 themes and 29 underlying categories emerged in response to the study’s four research questions. These themes and categories supported three overarching findings, the reality of the RTI model differs from educators’ initial expectations, classroom teachers and instructional leadership team members differ greatly in their perceptions of the effectiveness of the RTI model, and a general sense of mistrust exists between classroom teachers and instructional team members.

**Discussion**

An exploration of research question one, which focused on educators’ understanding of the objectives of RTI, offered similar perceptions between classroom teachers and instructional leadership team members. Both groups of educators perceived the intent of the RTI model as a means of collecting data to identify student needs, improve student reading ability, and close the achievement gaps of students reading below grade level. While the intent of the model was understood by participants, it was clear that the reality of the RTI model differs from educators’ initial expectations. This finding aligns with the work of both Bineham et al. (2014) and Manning (2016), where both classroom teachers and special education teachers experienced inconstancies between the expectations and realities of RTI implementation.

The participants in the current study had already experienced RTI implementation as part of a university-led RTI project. This effort, the MP3 (Monitoring Pennsylvania Pupil Progress) project, was led in part by Dr. Edward Shapiro, who conducted multiple studies and published several articles within the two-year implementation. All of the participating schools in the MP3 project instituted identical RTI models, with the study concluding that all components of these models were implemented with fidelity (Shapiro et al., 2012). According to Shapiro et al. (2012), all of the educators in the study were provided extensive training. This included three
trainings in the spring prior to implementation and a two day training at the start of the school year. The school district was found to be committed to the implementation of RTI across the entire school district (Shapiro et al., 2012).

At the time of the current study, several years later, the same participants expressed disappointment at a perceived lack of progress related to RTI. Educators believed that the numbers of intensive students had remained constant over time, rather than decreasing as they had initially expected. As Anna described, “And they showed slides at the beginning, like this is going to be like 10% of your population, then it is going to be 8%, then 6%, but the next year we still had the same number intensive, and then the next year and the next year” (Individual interview, 2016).

Betty voiced a similar frustration, “I was told, I think originally, that by the time students came to 4th grade, we wouldn’t have any intensive. . . because you would have caught those kids that had gaps in kindergarten and first-grade” (Individual interview, 2016).

An instructional leadership team members voiced a similar disappointment. Mary stated, “When you are devoting all of this time and resources to it, I would hope you would get a better result” (Individual interview, 2016).

However, one team member, Harriet, felt differently. She felt that it was necessary to look at each individual student’s rate of improvement, and to allow time for the model and interventions to work. “You know it is going to take time to close the gap, and people don’t get that. They just think that skills group (RTI intervention) is going to be a natural fix” (Individual interview, 2016).

An analysis of the school’s RTI data, focused on a cohort of students at Hayes Elementary School across multiple years, yielded mixed results. Of the cohort, 10% remained
intensive across three years, supporting the perception that the model was not moving students forward effectively. Of the cohort though, 5% had made an improvement from intensive intervention to a strategic intervention, illustrating some growth. These numbers were consistent with the conclusion of Thompson (2013), who projected that Tiers 2 and 3 would represent 10%-15% of the student population.

Classroom teachers expressed frustration at this lack of improvement. They also perceived a failure to evaluate these struggling students for special education efficiently. While special education rates will be discussed further in this chapter, it is important to note that a commonly reported concern of RTI is the lack of a clear definition of responsiveness. How little progress, and how much time, is sufficient to move a student who is reading below grade-level towards an evaluation? As Brown-Waesche et al. (2011) concluded, it would be difficult to truly understand and compare the rates of special education identification due to ambiguity in what constitutes responsiveness. Only a handful of states had attempted to define this concept at the introduction of RTI. It would seem that Hayes Elementary School, like many states and school districts across the country, lacked a clear definition of responsiveness. This lack of clarity would lend itself to inconsistencies concerning which students were referred or evaluated for special education, and would contribute to the classroom teachers’ perception that the school’s RTI model for reading was ineffective. The perceived lack of growth amongst intensive students demonstrated that the reality of the existing RTI model differed from classroom teachers’ initial expectations.

Expectations were also shown to differ from reality regarding the flexibility of an RTI model. Classroom teachers expressed frustration at a perceived lack of flexibility within Hayes Elementary School’s RTI model for reading. As Evie stated, “My understanding from the
beginning was that after 6 or 8 weeks, if they have tried an intervention and it hasn’t been successful…then it should be changed. We don’t do that” (Individual interview, 2016).

Diane offered a similar sentiment, “In some cases we don’t have many programs to choose from…so it is what it is, and I think the model says you are supposed to try for three weeks and if you are not seeing improvement in the data, you are supposed to change the program” (Individual interview, 2016).

While classroom teachers believed that interventions were not changed as frequently as they had expected, Harriet provided interesting information related to the flexibility of intervention programs. During the instructional leadership team focus group, Harriet referenced a new handbook for RTI, which is now referred to as a Multi-Tier System of Supports (MTSS), which had been released by the school district. She stated, “I was reading the new MTSS handbook they (school district administration) published. Did everyone get that? We had to make a few changes. One of the things it said is that a student needs to remain in a skills group for 12 weeks” (Focus group, 2016).

At the time of the study, teachers had been unaware that new guidelines existed. Their statements reflected the expectation that students failing to make adequate progress should experience a change in reading interventions after six to eight weeks.

When interventions were changed, both classroom teachers and instructional leadership team members agreed that available interventions were limited. A review of the school’s RTI records identified three interventions being used at the intensive level across three years of data. Similarly, three interventions were used at the strategic tier. Perhaps due to the small number of resources available, students tended to remain in the same interventions across multiple marking periods and semesters. From the review of RTI records, one student was found to have remained
within the same program across third, fourth, and fifth-grades, with the majority of students in these tiers being exposed to two or three interventions. Typically, students at the intensive or strategic level would remain in a specific intervention program for 1 ½ years according to these records. These findings would tend to support the classroom teachers’ perceptions that interventions and student placements were not flexible.

The lack of flexibility reflected in the school’s RTI model for reading was perceived by teachers as a gradual decrease in the fidelity of Hayes Elementary School’s RTI model over time. The participants included in the research of Burns et al. (2005), perceived the opposite, theorizing that over time the success of field-based RTI models would increase. “These increased effects may reflect refining of the RTI process at these sites over this extended period and could suggest that implementation and refinement over a period of years could increase the likelihood of success” (Burns, Appleton, & Stehouwer, 2005, p.388).

Burns et al. had examined the differences in student achievement between field-based and models implemented by universities, finding that field-based models reflected higher rates of student growth. Hayes Elementary School had initially participated in a university-based model led by Dr. Shapiro of Lehigh University. Perhaps this reliance on the initial training and implementation of the researchers had resulted in a fixed mindset. Rather than experimenting within the components of the RTI model to find unique ways to improve student learning and achievement within their school, it would seem that the instructional support team limited themselves to the practices and resources that had been put in place nearly a decade ago. The finding that only three interventions were in use at the intensive and strategic levels, across three years of record analysis, would support the conclusion that Hayes Elementary School’s RTI model for reading was static, rather than dynamic and innovative.
Like the classroom teachers in the current study, Bineham et al. (2014) and Manning (2016) also found that the initial expectations of educators differs from the realities experienced within an RTI model. Bineham et al. (2014) attributed the “disconnect between theory and actual practice” (p. 246) to a lack of ownership and empowerment perceived by classroom teachers. Classroom teachers in this study believed that they did not have the ability to be innovative in the approaches they offered struggling students.

Manning (2016) stated, “It is my belief that theory for implementing RTI in the classroom is disconnected from actual practice. In order to bridge the gap, it is important that theory become more applicable to current practice” (p. 106). Manning (2016) implied that the perceived disconnect between the initial expectations and then the realities that educators experience may arise from educators’ lack of efficacy. Classroom teachers in this study believed that they lacked the ability to select the interventions they feel would make the most difference for struggling students. They were not even the educators administering these interventions. Frequently throughout this study, classroom teachers voiced the perceptions that their opinions were not valued and that decisions were made without their input. These decisions were related to both student placements and the use of interventions. While instructional team members differed in this perception, a pervading sense of distrust was evident amongst both participant groups. These feelings of distrust will be explored later in the chapter.

This study also found a significant difference between classroom teachers and the instructional support team in regards to the effectiveness of the school’s RTI model for reading. While classroom teachers unanimously agreed that the model was largely ineffective, citing insufficient movement between tiers, student growth, flexibility, and student engagement, the instructional support team reached a different conclusion. While individual interviews of team
members raised some concerns, the team had agreed by the end of the focus group that Hayes Elementary School embodied an effective RTI model.

While Lesh (2014) found that a disparity existed between how well special educators and administrators understand and value RTI in comparison to classroom teachers, this study found that both groups of educators embodied similar understanding of the process and its objectives. Both groups of educators saw value in RTI and could explain the components and intentions of the model. Lesh (2014) found that classroom teachers embodied a fixed mindset which negatively affected the success of RTI in the building, and that teachers often blamed the students themselves for a lack of progress. Not one of the classroom teachers in the current study pinpointed students themselves as a problem. Instead, teachers identified the school’s approach to components of the RTI model as the causes of its perceived ineffectiveness.

Classroom teachers consistently identified the available evidence-based intervention programs that were used at the intensive and strategic tiers as a weakness to the school’s RTI model for reading. Teachers felt that the school had a very limited availability of resources, that these programs were not changed frequently enough, and that they were not well suited to the needs of the students. As Catherine stated, “But it seems like they are married to those programs, and they (the students) are going to fit into these programs. Well if you have a group that is not succeeding, try something else” (Individual interview, 2016). Betty reiterated this concern:

I don’t think we are picking programs here to suit the kids. I think we just do the same programs every year. Usually there are a couple of choices for each level, and we haven’t changed those much. I know I have tried to ask for other programs, what else is out there (Individual interview, 2016).
During the individual interview, Diane reached the same conclusion:

Maybe one of the problems I see is that we have a lot of the same programs that we use year after year. And we don’t really match the program to the needs of the group. We sort of look at what group they are in and say let’s do this program. But different strategic groups can have different needs, for example. So I think we need to choose wisely when we are choosing programs and look at the needs of the group more carefully than we do. And we need a variety of programs, we don’t have enough to choose from here (Individual interview, 2016).

Thompson (2013) also found that the intervention programs used within an RTI model could lead to disagreements and divisions amongst teachers and team members. In Thompson’s (2013) work, tension existed between team members who felt that only district-provided programs could be used when teaching small groups of students. Teachers felt that student needs were not met by these programs, and that the RTI model should not rely entirely on packaged interventions. The school in Thompson’s study ultimately concluded student needs were more important than the fidelity of its RTI model, and allowed teachers to deviate from specific district-approved interventions.

Thompson’s (2013) finding differed from Hayes Elementary, the site school in the current study, which relied on a limited number of interventions that had been in place for several years. Teachers frequently commented negatively on these packaged programs, finding that they often did not meet student needs. As Anna stated:

I think we could at more possibilities of interventions, whether it is types of programs. I think we get very narrowed and focused on it has to be, and I understand it has to be, a research based program….just because it is not research based does not mean it won’t be
successful. So [I would like to see] a little more flexibility in what we can do (Individual interview, 2016).

The decision of the site school not to vary its interventions, nor to deviate from the use of packaged programs, led to an overall sense of frustration by classroom teachers. The classroom teachers’ perceptions that the reliance on specific intervention programs was detrimental to the school’s model aligned with the findings of Doughterty-Stahl et al. (2012), who concluded that, “the weakness of the pilot RTI framework in this district seemed to be an emphasis on program rather than process…voices were left out of the collaboration and school faculty often lost sight of the individual child, resorting instead to generalized solutions” (p. 373).

The frustration that the classroom teachers in this study felt regarding their school’s RTI model was also found in the work of Greenfield et al. (2010). Different from the current study, Greenfield et al.’s (2010) found that classroom teachers experienced “optimistic frustration” regarding their school’s RTI model for reading (p. 55). The classroom teachers in the current study did not reflect hopeful frustration; rather, the participants projected helplessness in terms of their ability to make decisions and changes within the RTI process.

The differences in frustration experienced between Greenfield et al.’s (2010) study and the current study is likely due to the variant nature of RTI models. While some schools, such as the one in Greenfield et al.’s 2010 study, implemented RTI within each individual classroom, the current study’s model was a schoolwide structure wherein all students in the grade level participated in a scheduled RTI class period. Students were assigned various educators throughout the building, typically a different teacher than their classroom teacher, as well as a specific reading intervention program. Teachers perceived of the instructional leadership team as the body responsible for the decisions made regarding student placements and programs.
Conversely, Greenfield et al. (2010) found that classroom teachers perceived of themselves as the primary, independent agents of RTI.

The second group of participants in the current study, members of the instructional leadership team, tended to feel differently than the classroom teachers about both the interventions in place and the RTI model in general. Ian felt that there was adequate discussion and input taken into consideration as students were placed into specific groups and interventions. Harriet felt similarly, “Our placement team does a really good job of figuring out how we are going to divide the kids up based on their needs….and what intervention would be the best” (Individual interview, 2016).

Although there was less confidence in the RTI model’s effectiveness during their individual interviews, within the focus group setting, there was a much stronger agreement that Hayes Elementary School’s RTI model was working successfully. Francine originally felt that a lack of communication between classroom teachers and instructional team members impacted student success. During the individual interview, she explained:

I don’t know that it would be that effective. I think that sometimes there is a lack of communication between the team and general education teachers. Sometimes the process is not clear so people get confused and frustrated. Sometimes students don’t get referred that need referred. I think we definitely need to work on that as a whole school. We need to work on our communication and a common goal. We are in this to help students and think we could become more effective (Individual interview, 2016).

Grace also questioned the effectiveness of the model during the individual interview, expecting a greater reduction in the number of students at the strategic and intensive levels. “I would say I would give it a C or a C minus, because when we look at the data on the DIS [data and
instruction] team, we are always looking at that. We are looking at student needs and students who are not making progress or we have concerns about…” (Individual interview, 2016).

By the end of the focus group interview though, this perception had changed. “If you say effective compared to staying true to the model, sure I give it a higher grade. I am always looking at kids to be as close to reading at grade-level as possible.”

Mary was initially unsure of the model’s effectiveness prior to the focus group interview as well, discussing a lack of progress for certain students:

I actually am not sure. I think for some students it is really helpful. But I think that, like most things we try to do educationally, there are expectations that you are going to have more movement than we do. I think that we do not always look at the right information (Individual interview, 2016).

By the end of the focus group discussion, there seemed to be a shift in perceptions of effectiveness. Rather than looking at student growth as a measure of success, team members tended to compare the current RTI model to what was put in place during the initial implementation. Through this lens, instructional team members changed their overall perception of effectiveness. The conclusions of the instructional leadership team’s focus group seemed best represented by the closing comments of Harriet:

When I look at effective, I would need to look at every aspect. Everything we talked about. In that respect, I would say that we are highly effective. Despite our differences, despite our human flaws, I think that we have done a good job of staying true to the model through the years (Focus group, 2016).

Lastly, a disparity existed between the perceptions of classroom teachers and instructional team members regarding special education identification. Teachers held the perception that struggling
students were not being appropriately identified for special education, and that the use of RTI was prolonging the evaluation of these students to the point that their academics and personal well-being were negatively impacted. Members of the instructional leadership team felt differently, viewing the reduction in the number of students being identified for services as an indication of the existing RTI model’s effectiveness. As Francine found:

I think if we look at special education identification, and reducing that rate. Have we done that? Absolutely. To the point that we are down to one learning support teacher here because the case load is so low. That is a success (Focus group, 2016).

A further analysis of state-issued district performance profiles found that 8.52% of students at Hayes Elementary School were identified for special education services. This rate was the third lowest of the district’s 13 elementary schools. The district average for special education rates at the elementary school level was significantly higher, at 12.42%. Conversely, the district’s average for economic disadvantage at the elementary school level, 45.25%, was drastically lower than the disadvantaged population within the site school, 58.52%. It is obvious that the special education rate of the site school is worth studying in the future, particularly when considering the socioeconomic status of its population.

The differences of perceptions found between classroom teachers and instructional leadership team members in the current study was also evident in the work of Zola (2011), who found an inverse correlation between perceptions of teachers and school leaders on the ways in which a school’s leadership responsibilities affect the success of RTI. Zola (2011) concluded that the greater the number of differences between the perceptions of teachers and school leaders, the less likely an RTI model will prove successful.
The differences in perceptions expressed by the two participant groups in the current study contributed to a division between classroom teachers and instructional leadership team members. This conclusion was also reached by Wilcox, Murakami-Ramalho, and Urick (2013) who found that the implementation of an RTI model could lead to deep divisions between groups of educators. Ochieng-Sande (2013) similarly found that, “as much as individual ideologies played a role in implementation efforts, the school culture had a much greater impact in implementation efforts” (p. 205). The evident division between classroom teachers and instructional team members, particularly when left unaddressed for several years, seemed to have negatively influenced the school culture and lessened the effectiveness of its RTI model for reading.

The final finding of the current study centered on the division and a pervasive sense of distrust the two participant groups expressed towards each another. Classroom teachers in the current study did not feel as though instructional team members valued their opinions. As Diane explained, “Sometimes we are questioned as to why we want to this [make a change within RTI], but you know I think our opinion does matter and I think we should have more of a voice in that” (Individual interview, 2016).

Diane went on to recommend that classroom teachers be included in meetings about individual students in their classes, rather than being given notes after these meetings have taken place. Anna voiced a similar sentiment, stating that she would like to see the input of classroom teachers being considered when looking at data, making instructional changes, and discussing the interventions being used within the RTI model.

Beyond feeling as though their ideas and opinions were not being included, classroom teachers also felt that their experiences in the classroom and with the students were not valued,
even though the professional experience of participants in the study averaged 30.4 years for classroom teachers, compared to 9.6 years for members of the instructional leadership team. Anna felt, “I don’t think sometimes that teachers get enough credit for knowing what will work. Just because it is not research based, does not mean it won’t be successful” (Individual interview, 2016).

The work of Shapiro et al. (2012) emphasized the importance of including classroom teachers in a successful RTI model. It is interesting to note that Hayes Elementary was one of the pilot schools in Shapiro et al.’s work, particularly when Shapiro et. al (2012) concluded:

An additional and often ignored data source is the judgment offered by teachers as a function of their ongoing, formative, and informal observation of instruction. During the course of team decision making, teachers provide broad perceptions about student performance and behavior. Although teacher judgment may appear to be subjective, it is directly based in the objective and ongoing instructional process. The key to effective data-based decision making is to integrate teacher judgment with the objectively collected standardized assessment data, which together off a rich and valued contribution to the data decision-making process (p. 336).

Teachers in the current study believed their ideas and experiences were undervalued, and they also expressed distrust of members of the instructional leadership team. Unlike Hahn (2015), whose work found that classroom teachers experienced feelings of empowerment and trust in their school leadership throughout RTI implementation, the classroom teachers in the current study questioned the instructional support team’s decision making. Throughout individual interviews and the focus group discussion, classroom teachers questioned whether decisions were being made based on the easiest solutions available (e.g. prolonging student
evaluation, relying solely on a few available interventions, and grouping kids together for convenience rather than need), and whether instructional team members were being effective in fostering student growth at the strategic and intensive tiers.

Betty stated, “I think there are some teachers that just don’t push. They haven’t been in a regular classroom to see where everybody is, to know that when you think they are making progress, you look at their classmates and they are not” (Individual interview, 2016).

Diane offered the suggestion that classroom teachers be considered for these intensive and strategic groups of students. When asked what improvements could be made to the RTI model, she suggested:

Possibly just look at having classroom teachers teach intensive groups every so often. I do not know if that is something that is allowed in the process or in the model. We have never done that here, but I think it would be interesting to see. The classroom teachers know the kids best, their needs the best. And those intensive kids, you usually really know their needs the best. So I think that would be beneficial at times to switch up the groups a bit (Individual interview, 2016).

Equally, members of the instructional leadership team expressed a distrust in the attitudes and abilities of classroom teachers. Two team members attributed the lack of student growth to the instruction happening in the regular classroom. As Francine stated, “We are not looking at core. Core instruction needs to be differentiated as well. It is not just what intervention group they are in, and sometimes I think that gets forgotten and it is a very important piece” (Individual interview, 2016).
Harriet offered a similar perception:

It is the whole ownership of how. They think skills group [RTI intervention] is there to fix them, and they are just to teach the general classroom without having to differentiate.

And not needing to change how they do things (Individual interview, 2016).

During the instructional leadership team’s focus group, each of the team members agreed that a mistrust between the classroom teachers and the specialists existed in the building. Grace felt as though Hayes Elementary School was unique in this divide between classroom teachers and instructional leadership team members, while Ian felt it was a more pervasive problem across the district. “Team versus teachers? Every school” (Focus group, 2016).

This distrust the instructional leadership team members expressed towards classroom teachers paralleled the work of Lesh (2013), who found that administrators and special education teachers often perceived of classroom teachers as lacking understanding and exhibiting a fixed mindset towards an RTI model.

The lack of trust between groups of educators has likely impacted the effectiveness of the RTI model at Hayes Elementary School. Thompson (2013) asserted that conflict between even two members of a school’s instructional leadership team had an impact on the success of RTI interventions and negatively affects student success. As Thompson (2013) stated, “The unhealthy conflict left unaddressed created discord and impacted any intervention that would have been used. Due to avoidance, this conflict had spilled into their decision making process and needed to be resolved immediately” (p. 54).

One of the major factors leading to this distrust and divide amongst the two participant groups appeared to be a lack of time for collaborative discussion. Classroom teachers felt that their voices were not being heard, or were not valued, largely because they were not included in
RTI and data meetings that occurred during school hours. There were complaints that intervention and student placement decisions and discussions were happening during team member meetings, when classroom teachers were not included. This lack of collaboration and meeting occurred as a gradual change from when RTI was first introduced and implemented by the MP3 project. Both teachers and team members alike referenced the consistent meetings and discussions during the first few years of the RTI program. As Harriet explained:

That in itself is a problem, it is not enough time. But we used to actually have a team called a data team that included classroom teachers and specialists. They were voluntary. We would meet separately at a separate time, and that is when we would look at global issues specifically on the RTI data. And we would make general statements about what we needed to do to make changes to improve that. So the data team could say, this is what we noticed about your grade. So the grade level would look at the data and we say we can pick out these students, these are the ones that may be skewing the data. So we need to do X, Y, and Z to help those students and push them to the next level. Or maybe we are losing kids out of the benchmark group more than we want to, so why? Let’s look at those individual students’ data and see what is happening. We lost that (Individual interview, 2016).

While the implementation of RTI had initially improved communication between groups of educators, it was too difficult to maintain this regularly scheduled time for collaboration between the teachers and team members. Robinson, Bursuck, and Sinclair (2013), also found that classroom teachers were not allotted sufficient time to communicate with their colleagues within the context and needs of an RTI model.
Regardless of the difficulty of finding this time for collaboration, the communication between classroom teachers and members of the instructional leadership team is crucial to the success of any whole school educational reform or endeavor. Ochieng-Sande (2013) concluded that collaboration and communication between all stakeholders would be essential for improved student outcomes in an RTI model. Manning (2016) similarly found that collaboration between regular education and special education teachers were critical to the success of RTI, recommending that these opportunities to collaborate become a school’s priority. When communication is not a priority, and voices of groups of stakeholders are left out of the RTI model, Dougherty-Stahl et al. (2012) concluded that decision-making may favor broad solutions rather than focusing on the needs of individual students.

Hayes Elementary School would do well to confront the lack of communication and trust between the two participant groups in this study, classroom teachers and instructional leadership team members. In order optimize the effectiveness of an RTI model, school leaders need to work with teachers to create common goals and to incorporate the input of classroom teachers into the decision-making process (Stuart, Rinaldi, & Higgins-Averill, 2011). Fisher and Frey (2012) believed the effectiveness of an RTI model would be possible without the commitment of collaboration, “we question whether the successes at Carver could have been realized had the faculty been fractured or disinterested in collaboration. This is an important point that deserves additional research attention” (p. 111).

In the current study, Francine made an insightful suggestion when asked how to improve the effectiveness of the RTI model at Hayes Elementary School:

Definitely the communication. I think maybe more training, or retraining, to reset the commitment to the process. To go back to this is why we do this. We are not two teams
against each other, we are all here for the common goal to help kids. And this is what research says about RTI and how it is beneficial. Sometimes we need to take it back to that baseline (Focus group, 2016).

**Implications**

The current study was conducted in an attempt to address a gap in the literature on the effectiveness of RTI models that have been maintained across several years. While numerous studies have explored the initial implementation of RTI models, few have focused on existing programs. Additionally, this case study was unique in its use of a program evaluation framework that incorporated the perceptions of classroom teachers and instructional leadership team members and examined the school’s RTI and student achievement records.

Mellard, Frey, and Woods (2012) had concluded that the validity of RTI had not yet been proven by evidence of its impact on student achievement. Perhaps because of a lack of ability to measure the success of an RTI model, both groups of educators in the current study had difficulty evaluating the effectiveness of Hayes Elementary School’s RTI model for reading. In order to truly evaluate a program, there must be a clear understanding of its intended outcomes and how to measure these outcomes.

There was confusion amongst participants on how to judge the RTI model’s effectiveness, and what data sources would to be examined. As Ball and Christ (2012) stated, “districts must ensure collection of sufficient data to allow examination of patterns and trends across all students and key subgroups within the population” (p. 239). While several sources of data were collected by the site school at benchmarks throughout the year, and used to make student placement decisions, there was no evidence that the data were being examined across subgroups of students or across multiple years. Perhaps as Karcher (2014) found, without...
thorough training and an understanding of how to truly analyze patterns, the data may be isolated, disconnected, and ineffective.

To improve the way in which it analyzes and uses its RTI data, Hayes Elementary School needs to develop a clear structure for monitoring and measuring the success of its overall model, including a way in which to evaluate the effectiveness of each of its intervention programs. Once these criteria have been developed, as Ochieng-Sande (2013) suggested, it should be clearly communicated with each of the stakeholders in the RTI model.

This study illustrated that once implemented, an RTI model may gradually lose effectiveness due to the lack of a cohesive vision and a weakening of both commitment and collaboration between groups of educators in a school. Additionally, some loss of the model’s effectiveness may have resulted from a lack of dynamic thinking and innovation. Each of the classroom teachers, and two instructional team members, implied that the school’s interventions were limited, repetitive, and stagnant. Participants expressed the desire for new resources and approaches to RTI. As Christ and Ball (2012) recommended, best practice within an RTI model should include the active pursuit of new knowledge related to RTI interventions and assessments. Christ and Ball (2012) suggested acquiring current literature on RTI, participating in conferences, and encouraging educators to join professional organizations.

Similar to the recommendation to engage in continued learning, Byrd (2015) concluded that, “while the original professional development provided may have been appropriate for the implementation of RTI, there was little or no follow up training for RTI” (p. 70). The lack of maintained professional development in this study, may be indicative of a waning commitment to RTI across the site school and its school district as a whole. To maintain a strong commitment
to any far reaching education program, school leaders should encourage all stakeholders to participate in the process of evaluating the model and making improvements where necessary.

**Delimitations and Limitations**

This study, like all qualitative case studies, embodies several limitations. The perceptions of the current study’s participants may be unique to Hayes Elementary, as RTI models have been shown to vary across buildings, school districts, and states. RTI models are structured differently to accommodate for the unique set of resources and student populations they serve. As such, there is a lack of ability for this study to be widely generalized.

Participants in the current study were recruited purposefully, either by their position on the instructional leadership team or by a combination of the grade-levels they taught and their participation in the school’s initial RTI implementation. The perceptions of classroom teachers in younger grade levels, or teachers who had not experienced the initial RTI implementation, would likely have differed from the participants recruited in this study. Although I had hoped the demographics of my participant group would represent diversity, the participants in this study were nearly all female (90%), and were Caucasian (100%). While this lack of diversity was unintentional the experiences and perceptions of educators of differing demographic groups may have provided a wider range of insight.

Another limitation involved this study’s reliance on participant and focus group interviews. While records related to RTI and student achievement were included and discussed, the majority of data analysis in this study centered on my interpretation of participant transcripts. These interview responses were already subjective to the participants’ experiences and perceptions, and there was a noted difference between team members’ individual interviews and their focus group discussion. It is also possible that the interpretation of the data were influenced
by researcher bias, as I am currently a classroom teacher and was previously a member of a
different elementary school’s instructional leadership team.

**Recommendations for Future Research**

Throughout the data analysis in this study, specific areas of need for future research
endeavors became evident. The first centered on the need for literature to continue to explore
aging RTI models. It is necessary to understand how effectiveness is understood and measured
across time, particularly when the data sources that are used in the same model may evolve. For
instance, in the case of Hayes Elementary School, the state standardized assessments had
changed drastically in the years since the initial implementation of RTI. The later assessments
were more rigorous and student test scores dropped across the state, making it more difficult to
compare student achievement across years. Additionally a different set of curriculum-based
measures was adopted to conduct universal screenings and progress monitoring. Research is
needed that can analyze the differences in the student outcomes of RTI models across multiple
years. Research should also explore how differences of opinions held between groups of
educators, such as those in this study, impacts the success of instructional models such as RTI.

In the current study, a difference of perceptions emerged between classroom teachers and
instructional leadership team members regarding special education identification. Classroom
teachers felt that students with potential learning disabilities were not being identified for support
services, while team members perceived the decrease in special education rates as a measure of
the RTI model’s effectiveness. An analysis of school district records reflected a lower
percentage of special education students at the site school, 8.52%, than in comparable schools
across the district. The difference was also evident when compared to the overall district’s
average of 12.42%. This lower rate of special education was in contrast to the school’s higher
rate of economically disadvantaged population students, 58.52%, when compared to the district’s overall average of 45.25%. Would the same student at Hayes Elementary School be more likely to be identified for special education services in a more economically advantaged school?

As Doughterty-Stahl et al. (2012) suggested, there seems to be a vague understanding of the special education evaluation process and requirements within an RTI model. The federal recommendation to use RTI to reduce the over-identification of economically disadvantaged minority populations for special education, but could it be possible that these same groups are now being under-identified? How do the post-RTI implementation rates of minority and economically disadvantaged groups now compare to other racial and socioeconomic groups? The current study would agree with the recommendation of Karcher (2014) that extensive research must be conducted on the effectiveness of special education identification within RTI models.

A final recommendation for future exploration centers on student engagement. The classroom teachers in this study expressed the perception that the interventions used in intensive and strategic groups were routine and scripted, and that these programs negatively affected student engagement. The instructional leadership team members who were responsible for using these programs with small groups of struggling students felt differently. They offered the perception that students enjoyed participating in the scripted intervention programs at these lower levels. Student engagement, while outside the scope of this study, has long been known to lead to student learning and growth. As such, student engagement within an RTI model needs further examination. It would also be beneficial to explore student engagement within specific reading interventions. Likely, this needed future research should include the perceptions of the students themselves.
Summary

My professional experiences as a classroom teacher, from first being introduced to RTI by Dr. Shapiro and the MP3 project, then later as a member of an elementary school’s instructional leadership team, led me to question the effectiveness of individual RTI models. With the substantial investment of time, money, and resources being allocated for RTI, I wondered why school districts rarely, if ever, stopped to evaluate these models beyond the initial implementation phase. While many studies had been conducted to explore implementation of RTI models, few researchers had gone back to these programs after they had been in place for several years.

Throughout the individual interviews and focus groups of both of my participant groups, classroom teachers and instructional leadership team members, I found myself identifying with each of the differing perceptions. I tended to side more often with the classroom teachers, due to my own experiences in both professional positions. I had worked as an instructional leadership team member for a single year, but I had requested to return to a classroom position. Even though my experience was aligned more closely to the classroom teachers in the study, because I had held both types of positions in the district and had attended the same professional development trainings, I could relate to both participant groups. I was cognizant of my own biases throughout the research, and I believe that the data analysis and conclusions I reached will provide greater insight beyond the current body of literature on existing RTI models.

The experiences and perceptions of the participants, along with the discussion of the school’s student achievement and special education rates, provide a valuable resource for administrators who may want to question and evaluate the effectiveness of their own RTI models. Besides questioning whether an existing program is truly effective and working as
intended, school leaders should realize the need to examine the relationships between groups of educators in their schools. As found between the classroom teachers and instructional leadership team members in this study, is there a divide between faculty members that is negatively impacting student learning and growth? Could this divide be remediated by a renewed priority on improved communication and collaboration? As this study found, time that had previously been devoted to collaboration had been replaced by other district initiatives. Teams, such as the data team mentioned in this study, that were initially put in place to ensure that classroom teachers were included in the decision-making process, had also fallen by the wayside.

This study suggests that an analysis of reading intervention may be long overdue. The scripted programs that had been introduced during the implementation of RTI at Hayes Elementary School were still being used routinely for nearly a decade. In several cases, struggling students remained in these programs for an entire school year. There was no evidence that innovative practices or resources were being actively pursued. During individual interviews, specialists who used these programs had difficulty assessing the effectiveness of the school’s RTI model. Additionally, the disagreements regarding student engagement within these interventions, would further indicate a need for future research.

Additionally, this study calls for an in-depth exploration of student evaluation for special education. The rates at Hayes Elementary School had gone down significantly after the introduction of RTI, so drastically that the number of learning support teachers had been reduced. Is the RTI model, which participants had trouble evaluating, truly this successful at reducing the need for special education, or are students being denied evaluation and services until middle school, where special education rates were shown to increase significantly?
The use of a program evaluation framework within this qualitative case study allowed for an examination of a variety of components to an RTI model. Using the CIPP model recommended by Stufflebeam (2007), I was able to explore the context, input, process, and products of Hayes Elementary School’s RTI model for reading. The perceptions and experience of two participant groups, along with the inclusion of the school’s demographic, RTI, and student achievement records, allowed for a breadth of discussion that was missing from previous literature on existing RTI models. Program evaluations have historically been employed as a way of assessing educational programs (Scheyer & Stake, 1976). It is my opinion that these evaluations are not conducted frequently or thoroughly enough. The initial implementation of new educational reforms or initiatives, such as RTI, are met with enthusiasm and oversight. It would seem though, that after the initial introduction, and over several years, these programs become routine and lose momentum. With the majority of schools across the United States utilizing RTI, investing instructional time and staff to the use of these models, it would be beneficial to routinely involve its stakeholders in discussions that seek to evaluate its effectiveness.
REFERENCES


https://store.extension.iastate.edu/Product/pm1969b-pdf


8/4/2016

Jeremy W. Brumfield
IRB Approval 2582.080416: Evaluating a Reading Response to Intervention Model: A Case Study of Elementary Educators

Dear Jeremy W. Brumfield,

We are pleased to inform you that your study has been approved by the Liberty IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

Liberty University | Training Champions for Christ since 1971
Appendix B

CONSENT FORM

Evaluating a Response to Intervention Model: A Case Study of Elementary Educators

Jeremy W. Brumfield
Liberty University
School of Education

You are invited to participate in a research study evaluating the effectiveness of a Response to Intervention (RTI) instructional model. You were selected as a possible participant because of your position as an educator at the site of the study, and your experience working within an RTI model of instruction. I ask that you read this form and ask any questions you may have before agreeing to participate in the study.

This study is being conducted by Jeremy Brumfield, a doctoral student in the School of Education at Liberty University.

Background Information:

The purpose of this study is use a program evaluation model to evaluate the effectiveness of the RTI model at the site school, examining the perceptions of classroom teachers and the school leadership team, as well as student progress and achievement data.

Procedures:

If you agree to be in this study, I would ask you to do the following things:

- Participate in one focus group of approximately five educators, in a discussion of your experience and perceptions regarding the RTI model. This focus group will be audio-recorded and transcribed and may take between one and two hours.
- Participate in one individual interview describing your perceptions of the success of the RTI model. This interview will be audio-recorded and transcribed, although your anonymity will be maintained and protected.

**Risks and Benefits of being in the Study:**

The study has potential, but minimal risks. These risks may include an experience of disagreement or tension amongst members of the focus group. While your anonymity will be protected by the researcher, there is a risk that other members of the focus group will share your responses outside of the study.

The benefits to participation are the opportunity to critically evaluate an integral component of your job. The study could provide valuable information to various school and district leaders regarding the effectiveness of an RTI model.

**Compensation:**

During the focus group, food and beverages will be provided. As a thank you for your participation in the study, you will receive a $25 gift card following your individual interview.

**Confidentiality:**

The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records. The audio recordings from the focus groups and individual interviews will be stored on a password protected computer where only the researcher has access. They will be transcribed by the researcher, using pseudonyms for each participant. Once the recordings have been transcribed, analyzed, and coded by the researcher, the audio recordings will be deleted upon completion of the study.
Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Central Dauphin School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Jeremy Brumfield. You may contact him at any time with questions or concerns. If you would like to talk to someone other than the researcher, you are encouraged to contact the Instructional Review Board of Liberty University at 1971 University Blvd, Suite 1837, Lynchburg, VA 24502 or email at irb@liberty.edu. You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ By checking this box, I give my consent to be audio recorded during my participation in the focus group and individual interview.

Signature: ____________________________________________ Date: ________________

Signature of Investigator:_______________________________ Date: ________________

IRB Code Numbers: 2582.080416

IRB Expiration Date: 08/04/2017
Appendix C

Individual Interview Questions:

1. What do you perceive as the intended goals or objectives of the reading RTI model at Hayes Elementary School?
2. What aspects of the reading RTI model are strengths?
3. What aspects of the model are weaknesses?
4. How effective is the reading RTI model at Hayes Elementary School?
5. What could be done to improve the RTI model at Hayes Elementary School?
6. Is there anything else you would like to mention about the RTI model at your school?
Appendix D

Potential Focus Group Questions:

1. What are the objectives of the reading Response to Intervention (RTI) model at this school?

2. How would you describe your role in this RTI model?

3. How does the reading RTI model at Hayes Elementary School impact students?

4. How does the model impact reading instruction?

5. How has RTI impacted student achievement in reading?

6. What aspects of the reading RTI model are strengths?

7. What aspects of the model are weaknesses?

8. How effective is the RTI model at Hayes Elementary?