RESPONSE TO INTERVENTION:

KNOWLEDGE AND BELIEFS DURING IMPLEMENTATION

A Dissertation

Presented to the

Faculty of

California State Polytechnic University, Pomona

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

In

Educational Leadership

By

June J. Sakaue

Summer 2016
SIGNATURE PAGE

DISSERTATION: RESPONSE TO INTERVENTION: KNOWLEDGE AND BELIEFS DURING IMPLEMENTATION

AUTHOR: June J. Sakaue

DATE SUBMITTED: Summer 2016
College of Education and Integrative Studies

Dr. Nancy Sanders
Dissertation Committee Chair
Faculty Member
Department of Education

Dr. Jann Pataray-Ching
Faculty Member
Department of Education

Dr. Brian Huff
Director of Instructional Support
Rowland Unified School District
DEDICATION

I dedicate this dissertation to my incredible family. Thank you to my mother and father who have worked so hard to provide me the opportunity to succeed. My parents have instilled the values and beliefs that I hold true that have guided me in all I do. Thank you for your unconditional love, all you have sacrificed, and your unwavering support to make sure I was able to fulfill my dreams and achieve my goals. This doctorate is for you. To mom and dad: *Iro iro ima made osewa ni narimashita. Kokoro kara totemo kansha shite imasu. Korekara mo gambatte iki masu. Arigato gozai masu.* To Amy, Kay, Joyce, Nathan, and Jared: Keep learning and working hard, never give up, and know anything is possible!
ACKNOWLEDGMENTS

I would like to extend my gratitude to Dr. Nancy Sanders, who has served as the Chair of this study. For the past three years, Dr. Sanders has provided encouragement and guidance through every step of the dissertation process. I thank her for always being available to discuss my study and confirming that I was on the right path, giving me the confidence to keep moving forward. I especially enjoyed our conversations and the questions she posed that always made me think a little deeper. I am so grateful for her support, her kindness, and her positive attitude that lifted me up when I needed it the most. Thank you, Dr. Sanders, for being an amazing mentor.

Thank you to Dr. Brian Huff for accepting to be a part of my committee. He was an integral part of this study as he provided great advice and thoughtful recommendations. His background and expertise in instruction and interventions was critical in helping me find a successful path to completing this dissertation. Thank you, Brian, for your incredible support.

Thank you to Dr. Jann Pataray-Ching for serving on my committee. Her friendly approach and insightful feedback was a tremendous help. Her experience in instruction and research added depth to our discussions to create an amazing dynamic within the dissertation committee.

Lastly, I would like to say thank you to my cohort colleagues: Dr. Marci Chavez, Dr. Rosa Gomez, Dr. Kevin Despard, Dr. Mikara Gallegos, and Dr. Celia Mungia. The past three years have been an incredible journey, and I am so fortunate to have worked with an amazing group of educational leaders that have become my life-long friends.
ABSTRACT

The purpose of this study was to investigate the interrelationships between principal’s RTI implementation approach, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. This study presents how school principal’s knowledge and experiences influence RTI implementation and how teachers make sense of RTI. Through the perspective of a sensemaking framework, this study shows the impact of sensemaking on implementation, knowledge, and beliefs of RTI, which can ultimately affect student achievement. The research was conducted through a mixed methods study that included quantitative (e.g., survey data) and qualitative (e.g., semi-structured interviews) methods to examine RTI implementation and teachers’ knowledge and beliefs.
# TABLE OF CONTENTS

SIGNATURE PAGE ................................................................................................................ ii

DEDICATION ........................................................................................................................ iii

ACKNOWLEDGMENTS ......................................................................................................... iv

ABSTRACT ............................................................................................................................ v

LIST OF TABLES ................................................................................................................ xii

LIST OF FIGURES ............................................................................................................. xiii

Chapter 1: Introduction ......................................................................................................... 1
  Response to Intervention (RTI) ..................................................................................... 1
  Background to the Problem ......................................................................................... 7
    Criticism of the discrepancy model .......................................................... 7
  Response to Criticism of the Discrepancy Model .................................................... 8
  Problem with RTI .................................................................................................. 10
  Purpose of Study ................................................................................................. 10
  Sensemaking .......................................................................................................... 10
  Theoretical Framework ......................................................................................... 11
  Significance of the Study ................................................................................... 13
  Research Questions ............................................................................................. 14
  Overview of Methodology ...................................................................................... 15
    Type of research design .................................................................................... 15
    Type of study .................................................................................................... 15
    Site and participants ......................................................................................... 16
Roles. .................................................................................................................................41
Critique of Literature ........................................................................................................42
Factors that impact RTI. ..................................................................................................42
Gaps in the literature.......................................................................................................47
Summary ..........................................................................................................................47

Chapter 3: Methodology ....................................................................................................49
Research Questions .........................................................................................................49
Research Design ...............................................................................................................50
Research Method ............................................................................................................50
Setting ...............................................................................................................................51
   District selection .............................................................................................................51
   School selection .............................................................................................................52
Data Collection and Sources ..........................................................................................52
   Qualitative data ............................................................................................................52
   Quantitative data ..........................................................................................................53
Protection of Participants ...............................................................................................55
Data Analysis ...................................................................................................................55
Role of Researcher ...........................................................................................................56
Limitations .......................................................................................................................56
Summary ..........................................................................................................................57

Chapter 4: Research Findings ............................................................................................59
Research Questions .........................................................................................................59
Participants for Interviews ..............................................................................................60
<table>
<thead>
<tr>
<th>Findings for Research Question One</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student success team</td>
<td>64</td>
</tr>
<tr>
<td>Referral process</td>
<td>65</td>
</tr>
<tr>
<td>Data driven</td>
<td>66</td>
</tr>
<tr>
<td>Structure</td>
<td>67</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings for Research Question Two</th>
<th>70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain view elementary</td>
<td>71</td>
</tr>
<tr>
<td>Wood creek elementary</td>
<td>74</td>
</tr>
<tr>
<td>Pine hill elementary</td>
<td>77</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings for Research Question Three</th>
<th>79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tiers of RTI</td>
<td>79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings for Research Question Four</th>
<th>82</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td>82</td>
</tr>
<tr>
<td>Growth mindset</td>
<td>83</td>
</tr>
<tr>
<td>Positive relationships</td>
<td>85</td>
</tr>
</tbody>
</table>

| Participants Taking Teacher Knowledge and Beliefs Survey | 87 |

<table>
<thead>
<tr>
<th>Findings for Research Question Five</th>
<th>88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of RTI</td>
<td>88</td>
</tr>
<tr>
<td>Progress monitoring</td>
<td>91</td>
</tr>
<tr>
<td>Accessing RTI</td>
<td>95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Findings for Research Question Six</th>
<th>97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>97</td>
</tr>
</tbody>
</table>
References ........................................................................................................................123

Appendix A: Interview Protocol for Principal Interview ..................................................131

Appendix B: Teacher Beliefs and Knowledge Survey .......................................................132

Appendix C: Beliefs about Behavior Survey - 4th Edition ..............................................134

Appendix D: Beliefs Survey ............................................................................................136
LIST OF TABLES

Table 1. Teacher Knowledge and Belief Survey, Section 1: Knowledge of RTI .......... 89
Table 2. Teacher Knowledge and Belief Survey, Section 2: Progress Monitoring .......... 92
Table 3. Teacher Knowledge and Belief Survey, Section 3: Accessing RTI ............... 95
Table 4. Teacher Knowledge and Belief Survey, Section 4: Instruction ................... 99
Table 5. Teacher Knowledge and Belief Survey, Section 5: Students ...................... 102
Table 6. Teacher Knowledge and Belief Survey, Section 6: Teacher Roles ............... 103
LIST OF FIGURES

Figure 1. RTI Three-Tiered Model. .................................................................................... 3
Figure 2. Traditional View of Learning. ............................................................................... 5
Figure 3. A New View of Learning. .................................................................................... 6
Figure 4. Statement 1 results ............................................................................................... 90
Figure 5. Statement 2 results ............................................................................................... 90
Figure 6. Statement 8 results .............................................................................................. 93
Figure 7. Statement 10 results ............................................................................................ 94
Figure 8. Statement 11 results ............................................................................................ 94
Chapter 1: Introduction

Public school educators face the daily challenge of increasing student achievement and meeting the needs of all students (Swindlehurst, Shepherd, Salembier, & Hurley, 2015). Low achievement among minority groups and special education students and disproportionate representation of minority groups in special education pose serious achievement gaps that must be addressed in an equitable and just society (Zhang & Katsiyannis, 2002). Benner, Kutash, Nelson, and Fisher (2013) insist that, “closing the achievement gap begins with closing the opportunity gap, or the gap in access to primary, secondary, and tertiary prevention systems” (p. 17).

Addressing the needs of struggling students to close the opportunity gap begins with providing access to multi-tiered systems of academic prevention (Benner et al., 2013). Response to Intervention (RTI) is a system of utilizing data to support instructional practices and monitor outcomes. In RTI, teachers evaluate learners’ needs and their responses to evidenced-based intervention strategies. Student responses to the interventions guide teachers in how to proceed with instruction and interventions that students need to be successful. The key to helping all children learn is to believe in their ability to learn and guide their learning through targeted interventions and supports (Fisher & Frey, 2010).

Response to Intervention (RTI)

Response to Intervention (RTI) is a multi-tiered intervention model that provides a framework for evidence-based instruction and interventions that align with individual student needs. RTI focuses on ensuring access to high-quality instruction to all students and support for struggling learners.
The RTI process begins with high-quality instruction and universal screening of all children in the general education classroom. Struggling learners are provided with interventions at increasing levels of intensity to accelerate their rate of learning. These services may be provided by a variety of personnel, including general education teachers, special educators, and specialists. Progress is closely monitored to assess both the learning rate and level of performance of individual students. Educational decisions about the intensity and duration of interventions are based on individual student's response to instruction. RTI is designed for use when making decisions in both general education and special education, creating a well-integrated system of instruction and intervention guided by child outcome data. (RTI Action Network, 2015, p. 1)

Universal screening, progress monitoring, targeted interventions, and data-informed decision making are essential components of RTI models (Erickson, Noonan, & Jenson, 2012).

RTI is intended to support schools to close the achievement gap by helping students who are struggling in school through early detection and prevention. The primary focus of RTI is to distinguish students who have particular learning difficulties and then target those difficulties with effective instructional strategies so that small learning errors do not become major learning problems.

Most common RTI practice involves a three-tiered system as illustrated in Figure 1. The level of intensity and duration of instruction and interventions increases with each tier based on learner needs (Hoover & Love, 2011). Tier 1 refers to the implementation of the core curriculum and access to high-quality, developmentally appropriate
instruction in the general education classroom (Guskey & Jung, 2011; Hoover & Love, 2011). Tier 2 refers to “supplemental instruction to support specific needs that surface within Tier 1 instruction” (Hoover & Love, 2011, p. 40). In Tier 2, students who show learning difficulties are given skill-specific interventions. Typically, Tier 2 interventions involve small-group instruction on targeted skills and individualized assistance for students at risk (Guskey & Jung, 2011). According to Guskey and Jung (2011), “Well-planned and implemented Tier 2 interventions are likely to remedy the learning difficulties of most students and allow them to return to the group-based instructional activities of Tier 1” (p. 250). Hoover and Love (2011) add, “Between 90% and 95% of all learners are expected to be successfully educated through Tier 1 and Tier 2 instruction” (p. 40).

![RTI three-tiered model](image)

*Figure 1.* RTI three-tiered model.

When learning difficulties persist, Tier 3 provides more intensive interventions. These interventions may take place in the general education classroom or in an alternative setting. Tier 3 is reserved for the small population of students whose needs are
intense and designed to meet their individualized learning needs through specialized interventions. Mellard, McKnight, and Jordan (2010) estimate that five to seven percent of a school’s student population would be candidates for Tier 3.

The RTI framework was developed not only as a model to increase student achievement and improve equity and access to learning but also to decrease unnecessary special education referrals (Fuchs & Fuchs, 2006). Guskey and Jung (2011) explain that, “Response to Intervention represents a movement initiated by special educators to provide a systematic, tiered instructional process for students who are struggling in school but may not yet be identified for special education services” (p. 249). RTI models focus on providing all students with quality instruction and interventions in a general education setting prior to identifying whether a student has special needs. This allows intervention supports to be provided to all students regardless of student labels. The RTI model is needed to ensure that equal access to learning is available for every child (Fisher & Frey, 2010).

In many schools, the type of instruction and the amount of time on instruction are constant and do not vary on a student-by-student basis. When instruction and time are constant, student learning varies (Buffum, Mattos, & Weber, 2009). Some students will excel and others will struggle if the teacher does not differentiate based on the students’ needs. Fisher and Frey (2010) state, “RTI was designed as a way to encourage teachers to vary instruction and time to create a constant level of learning” (p. 15). With this view of learning, if instruction and time varies, the outcome is that student learning is more consistent (Buffum, Mattos, & Weber, 2009).
The underlying belief of RTI is that if time and instruction vary based on the needs of the student, using data to inform decision making, then fewer students will fall behind. However, if children are to receive different types of instruction, deciding how to distribute resources and support equitably so all students get what they need can be difficult to determine if a system is not in place. Figures 2 and 3 illustrate these concepts.

Figure 2. Traditional view of learning. Adapted from *Simplifying Response to Intervention: Four Essential Guiding Principles*, by Buffum, et al., 2009, Bloomington, IN: Solution Tree Press.
A New View of Learning

*When time and instruction are variable…*

… *learning is held constant.*

---

*Figure 3.* A new view of learning. Adapted from *Simplifying Response to Intervention: Four Essential Guiding Principles*, by Buffum, et al., 2009, Bloomington, IN: Solution Tree Press.

Schools that lack a systematic approach to providing and monitoring student support may implement interventions without fidelity or may not support the needs of students when most needed (Swindlehurst et al., 2015). Lack of appropriate, effective, and timely interventions results in unnecessary student referrals for special education evaluation. A student may be referred for a suspected learning disability before teachers differentiate instruction or exhaust all strategies to help students with needs. Without effective core instruction and targeted interventions, students fail to learn in the classroom and are often recommended to special education testing from teachers who are looking for more support. If a student does not qualify for special education services, students who struggle remain in general education classes and often do not receive the
additional supports needed to be successful (Fuchs & Fuchs, 2006; Swindlehurst et al., 2015).

RTI models hold promise to help all students succeed. Guskey and Jung (2011) claim, “through this three-tiered approach, it is believed that struggling students can be identified early and provided with appropriate instructional interventions that enhance their chances of success in the general education environment” (p. 250).

**Background to the Problem**

Since the passage of the Education for All Handicapped Children Act (1975), *specific learning disability* (SLD) has been a recognized type of disability for which students can be eligible for special education services (Hauerwas, Brown, & Scott, 2013). In 1977, the U.S. Office of Education formalized *severe discrepancy* as the primary criterion for SLD (Kavale & Spaulding, 2008). Students perceived as struggling in general education classrooms were often referred for evaluation for special education services. Learning disabilities were identified using a discrepancy model, examining the discrepancy between the students’ cognitive abilities and their levels of achievement. As a result of implementing the severe discrepancy model, the SLD population increased dramatically, over 200 percent since 1975 (Kavale & Spaulding, 2008).

**Criticism of the discrepancy model.** Kavale and Spaulding (2008) explain that the discrepancy model has been widely criticized for the following:

- Variability in the size of discrepancy used for eligibility decision making;
- Students with SLD go unidentified until discrepancy becomes significant, promoting a “wait to fail” attitude;
- Overrepresentation of minority students in special education;
• Concern of misdiagnosis such as the failure to reliably differentiate students with a true learning disability from those without; and
• Providing limited information that is relevant to assist educators to plan interventions and remediation.

When using a discrepancy model to identify students with specific learning disabilities, the focus is on the underachievement of the student rather than the appropriateness and effectiveness of classroom instruction for student success. If a student does not meet eligibility for special education services based on severe discrepancy, without any instructional support provided, the student may continue to struggle and fail. Furthermore, the use of the discrepancy model may inaccurately identify students as having a learning disability because timely, effective interventions in instruction were not provided.

Response to Criticism of the Discrepancy Model

Due to significant concerns about accurately identifying students for special education programs, educational policy about the identification criterion for students with specific learning disabilities was amended. In 2006, the Individuals With Disabilities Education Improvement Act (IDEA, 2006) was updated to include, “Additional Procedures for Identifying Children With Specific Learning Disabilities” that provided detailed information on how to determine if a student has an SLD (Hauerwas et al., 2013). Hauerwas et al. (2013) noted the changes in how to identify students with SLD as:

• States cannot require the use of an IQ-achievement discrepancy;
• States must permit the use of a response to intervention (RTI) process; and
• States may allow an alternative research-based procedure.
Currently, all 50 states have regulations for how local education agencies identify students with SLD (Hauerwas et al., 2013).

Hoover and Love (2011) explain, “To address the educational flexibility IDEA allows, states and schools systems nationwide are (or have begun) transitioning away from the previous pre-referral intervention model to some form of response to intervention” (p. 40). Prior to the RTI model, if a student was struggling academically, schools would utilize a Student Study Team (SST) consisting of the general education teacher, administrator, parents, student, and additional school personnel to discuss areas of concern and student progress. The purpose of Student Study Team meetings was to determine an action plan to support the student. These meetings were considered part of the pre-referral process that occurred before students were recommended for special education testing.

However, this pre-referral process was seen as problematic because it was not timely or particularly helpful. Fisher and Frey (2010) argue, “By the time a case made it to the Student Study Team, the teacher and student were already in crisis, and the team usually didn’t offer any guidance that moved beyond stopgap solutions” (p. 16).

Response to Intervention was designed to allow schools to engage in early detection, prevention and support for students who were struggling in school, avoiding unnecessary referrals to special education. As referenced in IDEA 2004, RTI is recognized as a diagnostic tool for evaluating and identifying students with specific learning disabilities. RTI can replace the pre-referral process that occurred before students were recommended for special education testing by a Student Success Team.
(Fisher & Frey, 2010) and be used as an alternative to the ability/achievement discrepancy model in determining students for SLD (Zirkel & Krohn, 2008).

**Problem with RTI**

Although RTI models hold potential, the lack of specificity on how and why RTI is used has resulted in variability in its implementation. Hauerwas et al. (2013) states, “Despite the availability of many resources about RTI implementation, there does not appear to be one clear national definition of what specific RTI data a local multidisciplinary team must have in hand in order to make a determination of SLD” (p. 102). Furthermore, Hauerwas et al. (2013) conclude, “There are striking variations in how the term RTI is being used in education generally” (p. 102). Such variation leaves limited research on effectiveness of RTI due to the lack of implementation and fidelity.

**Purpose of Study**

The purpose of this study was to investigate the interrelationships between principal’s RTI implementation approach, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. School principal’s knowledge and approach to providing support for struggling learners can influence how teachers make sense of RTI and impact their experiences, knowledge, and beliefs during RTI implementation. This information can contribute to existing research on RTI and inform districts about implementation strategies.

**Sensemaking**

The literature on implementation describes the complexity of introducing and implementing new policies and practices, focusing recently on the importance of supporting implementers to make sense of new ideas and ways of working. Matsumura
and Wang (2014) state, “Over the past decade, numerous studies have emerged that show that the implementation of instructional reforms is strongly influenced by individuals’ understanding of these reforms and the context in which these reforms are implemented” (p. 3). Teachers’ responses to reforms differ based on their preexisting knowledge and exposure to policy messages (Matsumura & Wang, 2014).

Implementers interpret policy messages through the lens of their prior knowledge and experience. This approach is termed sensemaking and involves the assumption that people act based on what has meaning for them.

**Theoretical Framework**

The theoretical framework that will be used in this study is the concept of sensemaking. Maitlis and Christianson (2014) define sensemaking as, “the process through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way violate expectations” (p. 57). Sensemaking is triggered when people experience events, issues, and actions that are somehow confusing, surprising, or discrepant in which the meaning is ambiguous and/or outcomes are uncertain (Maitlis & Christianson, 2014). When these events occur, it causes a need for an explanation, and people seek to make sense of the situation. Maitlis and Christianson (2014) explain, sensemaking occurs when “the discrepancy between what one expects and what one experiences is great enough, and important enough, to cause individuals or groups to ask what is going on, and what they should do next” (p. 70).

People also engage in sensemaking when they experience a threat to their identity and the intense negative emotions that is attached. Maitlis and Christianson (2014) state that sensemaking can be triggered by “an experience or event that undermines people’s
ability to do work that is central to their identity” (p. 73). Furthermore, sensemaking can also be triggered by events that are planned changed interventions. Change interventions frequently violate expectations and generate uncertainty, ambiguity and confusion for those involved. These situations motivate people to search for new meanings.

Individuals construct meanings different from one another due to their different positions, interests, and backgrounds. When meaning is constructed in an organization, the collective effort to make sense is highly contested and often negotiated among individuals with differing views. Sensemaking occurs within individuals, then a collective meaning is developed as individuals advocate for a particular view and engage in practices that influence and shape others’ understandings (Maitlis & Christianson, 2014). In contrast, sensemaking can also develop between individuals when “meaning is constructed through a more mutually co-constituted process, as members jointly engage with an issue and build their understanding of it together” (Maitlis & Christianson, 2014, p. 78).

Maitlis and Christianson (2014) identify four different forms of sensemaking in organizations based on the roles of both leaders and organizational stakeholders. The relative influence of leaders and other groups determines the process of sensemaking. Maitlis and Christianson (2014) describe the four forms of sensemaking,

“Guided” sensemaking occurs when leaders are very energetic in constructing and promoting understanding and explanation of events, and stakeholders are also actively engaged in attempting to shape beliefs about certain elements of the issues. “Fragmented” sensemaking processes emerge when stakeholders raise issues, generate accounts of a situation, and argue for potential solutions in the
context of leaders who do not try to organize or control discussions. “Restricted” sensemaking results from leaders promoting overarching accounts of issues they encounter which stakeholders tend to accept with relatively few attempts to provide alternative understandings; and “minimal” sensemaking occurs when both leaders and stakeholders await others’ interpretations of and reactions to an issue, which typically come in response to some external trigger. (p. 79)

Sensemaking can have powerful effects on strategic change. Maitlis and Christianson (2014) state:

When leaders are successful in influencing the sensemaking of organizational members, these individuals are motivated to make changes in their own roles and practices; they are also able to help others by explaining the vision and co-constructing ways of working that are consistent with it. (p. 89)

Sensemaking is used to create new meanings and visions for organizations to support change initiatives. However, when there are deterrents of sensemaking such as deeply embedded practices and beliefs, organizations struggle to engage a lasting change process.

**Significance of the Study**

Addressing the needs of struggling learners and closing the achievement gap is necessary to provide all students with an opportunity to succeed. Response to Intervention has been identified as a way to provide early intervention and positively impact the quality of education for all students. The school principal’s approach and process of RTI can be related to how teachers make sense of RTI and their understanding. Furthermore, lacking knowledge of the process or having beliefs that do not align to RTI
can threaten the impact interventions have on student success. The results of this study will provide information on the relationships between principals’ approach and process of RTI and teachers’ knowledge and beliefs during RTI implementation.

Educational leaders who want to address injustices in the distribution of educational opportunities for historically underserved students will benefit from this research. District leaders and site principals can use this research to be informed of the strategies for implementation.

**Research Questions**

The overarching research question for this study was: What are the relationships between principal’s approach to RTI implementation, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school?

Specific research questions that were used to gain a greater understanding were:

1. What is the RTI process that is used at the site?
2. What types of RTI interventions are implemented?
3. What knowledge do principals feel is important for teachers to have in order to implement RTI?
4. What beliefs do principals feel is important for teachers to have in order to implement RTI?
5. What knowledge do teachers have about RTI implementation?
6. What are teachers’ beliefs about supporting students who are struggling in school?
Overview of Methodology

The overview of methodology includes a brief summary of the type of research design, type of study, site and participants, and data collection methods.

**Type of research design.** This study was conducted using a mixed methods design. Qualitative and quantitative research was used to answer the research questions. Creswell (2012) states, “A mixed methods research design is a procedure for collecting, analyzing, and ‘mixing’ both quantitative and qualitative methods in a single study or a series of studies to understand a research problem” (p. 535). The combination of using both forms of data provides a better understanding of the research problem than using just one form by itself (Creswell, 2012).

**Type of study.** The research was conducted through a mixed methods study that included quantitative (e.g., survey data) and qualitative (e.g., semi-structured interviews) methods to examine RTI implementation and teachers’ knowledge and beliefs. The study used a convergent parallel design where quantitative and qualitative data were collected simultaneously, merged, and the results were used to understand the research problem (Creswell, 2012).

In quantitative research, “the investigator identifies a research problem based on trends in the field or on the need to explain why something occurs” (Creswell, 2012, p. 13). Through the use of quantitative research, research problems can be answered when the researcher establishes the overall tendency of responses from individuals and shows how this tendency varies among people (Creswell, 2012). Qualitative research focuses on understanding the meaning people have constructed and how people make sense of their experiences (Merriam, 2009). By combining quantitative and qualitative data, a
deeper understanding of a complex picture of a social phenomenon can be developed (Creswell, 2012). Using mixed methods, this study aimed to investigate the interrelationships between teachers’ knowledge and beliefs about RTI and implementation of RTI interventions.

**Site and participants.** The study took place within one suburban district in Southern California. The district serves an estimated student population of 15,000 students at eleven K-6 elementary schools, three K-8 Academies, two Intermediate schools, two High Schools, one Continuation High School as well as a Community Day School. The district includes three elementary schools piloting academic reading intervention programs. The participants of the study were principals and teachers from selected schools.

**Data collection methods.** Multiple sources of information were used for data collection. The researcher conducted interviews with principals and requested data from the school site as needed. The researcher also conducted a belief and knowledge survey from teachers who were implementing the district initiated interventions. Multiple sources provided the researcher with a greater perspective and understanding, creating a richer description of the schools.

**Organization of the Study**

Chapter 1 introduced the study by focusing on the problem and purpose of the study. This study investigates site RTI implementation approach and model, teachers’ RTI knowledge, and their beliefs of supporting struggling students.

Chapter 2 establishes a theoretical framework. This chapter also contains a review of literature focusing on the background and history of RTI, RTI policy, the
process of RTI, potential benefits and concerns of RTI, and the factors that impact RTI implementation. The literature review identifies a gap in the research which provides basis for the purpose of this study.

Chapter 3 outlines the methodology of the study along with the discussion of data used in the design. The rationale for selection of the research method will be explained. This section will describe the participants, setting, data collection methods, and data collection procedures.

Chapter 4 will review results and outcomes. Key findings of the study will be discussed and supported by references to the data. The findings will address the research questions of the study.

Chapter 5 will provide a summary of the study, a review of the data, and conclusions based on the findings. The final chapter will also state implications, limitations, and recommendations for future research.
Chapter 2: Review of the Literature

Response to Intervention (RTI) is a model aimed at evaluating and addressing the educational needs of all students. RTI is a multi-tiered intervention model that provides intensive early intervention for students who show signs of learning difficulties prior to being referred to special education evaluation. The intent of RTI is to provide evidence-based interventions that align with individual student needs through the use of universal screening, progress monitoring, targeted interventions, and data-informed decision making. Furthermore, RTI is recognized as a diagnostic tool for evaluating and identifying students with specific learning disabilities.

Response to Intervention can serve two purposes. First, RTI is a model to improve the academic achievement of all students by assuring that high-quality instruction and interventions are applied in general education settings. Second, RTI is recognized as a method for evaluating and identifying students with specific learning disabilities (SLD). The lack of specificity on how and why RTI is used has caused variability in its implementation.

The topic of Response to Intervention has gained much attention as RTI models have been adopted across states and districts as a criterion to identify students with specific learning disabilities. Although the RTI process can be used for special education eligibility, the core components of RTI models begin in the general education classrooms. Therefore, the topic of RTI is significant in both special education and general education settings. Understanding the background and purpose of RTI and having knowledge on the process and challenges of RTI can help educational leaders focus on leadership to apply RTI research into effective practice.
Theoretical Framework

Due to the ambiguity of how and why RTI should be implemented in school sites and the need to understand the factors that affect teachers’ implementation of RTI, sensemaking is used as the theoretical framework of this study. There are a variety of definitions of sensemaking. However, the basic foundation of what sensemaking means is literally found its name. In its most basic form, sensemaking means making of sense.

Maitlis and Christianson (2014) define sensemaking as, “the process through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way violate expectations” (p. 57). Hill and Levenhagen (1995) state, “To cope with the uncertainties, the entrepreneur must develop a ‘vision’ or mental mode of how the environment works (sensemaking) and then be able to communicate to others and gain their support (sensegiving)” (p. 1057). Sensemaking attempts to help individuals interpret and explain reality by engaging in retrospective and prospective thinking (Weick, 1995). Maitlis (2005) concludes, “sensemaking is a fundamentally social process: organization members interpret their environment in and through interactions with others, constructing accounts that allow them to comprehend the world and act collectively” (p. 21). Sensemaking provides the framework for the study, focusing on the how organizations make sense of how RTI is used to increase student achievement and how teachers make sense of how to implement RTI in their classrooms.

Organization of Review

This literature review examines the history, process, promises, and concerns of RTI. Factors that impact RTI implementation also emerge through the review of
literature. Identifying critical areas for implementation will be beneficial for educational leaders who are striving to improve academic achievement in all students.

The review of the literature is organized by topics pertinent to the issue of Response to Intervention. The review will begin with discussing long-standing concerns in special education regarding identifying students with specific learning disabilities (SLD). Next, the educational reform efforts that occurred in response to the concerns of SLD identification will be discussed. Following will be a review of the current policy on SLD identification and the Response to Intervention process that emerged as a way to improve identification of SLD students. Potential benefits and concerns of the RTI model will be examined. Furthermore, the literature review will examine the factors that impact the implementation of RTI and current challenges educators face with applying RTI theory into practice. In conclusion, a critique of the gap in the literature will identify areas for further research.

**Concerns Identifying Students for Special Education**

Concerns regarding identifying students for special education are evident in the literature. The themes that show these concerns include: minority representation, cultural variables, language proficiency, and the discrepancy model.

**Minority representation.** The disproportionate placement of some minority groups in special education continues to be a significant problem in the field of education. In 1968, Dunn found that 60-80% of students in special education were minorities or from lower socio-economic backgrounds (Dunn, 1968). More than 40 years later, Guiberson (2009) claims the disproportionate representation still persists. Disproportionate representation of minority students in special education programs is
defined as, “either a higher or lower percentage of students from a particular ethnic group in special education than is found in the general population” (De Valenzuela, Copeland, Qi, & Park, 2006, p. 426). The inaccurate placement of minority students in special education programs can be in the form of overrepresentation, underrepresentation, or misidentification. Although there is an overall disproportionate representation of minority students in special education, differing patterns of minority representation have been identified.

Cross and Donovan (2002) reported through the National Research Council that the categories with the highest incidence of disproportionate minority-group placement are those based on clinical judgment. These categories included: Educable Mental Retardation, Emotional/Behavioral Disorders, and Learning Disability. Across the United States, African American students were represented in the Educable Mental Retardation category, twice the rate of their White peers. In the Emotional/Behavioral Disorders category, African American students were represented 1.5 times the rate of their White peers. Zhang and Katsiyannis (2002) also found that African American students were disproportionately referred to and placed in the high-incidence special education categories. Furthermore, once labeled as having a disability and placed in special education program, African American students have lower achievement gains and exit special education at a lower rate than that of White students (Blanchett, 2006).

In 2006, De Valenzuela et al. (2006) conducted a study to examine the relationship between student ethnicity and language proficiency status with type of disability labels and access to the least restrictive environment. The study took place using data from a large southwestern school district. According to the results of their
2006 study, De Valenzuela et al. found that “Minority students and English language learners were disproportionately enrolled in special education and placed in more segregated settings” (p. 425). The major findings of the study include: “(a) African American students were identified under more disability categories than compared to White students, (b) Minority and ELL students were disproportionately represented in most special education categories, and (c) African American, Hispanic, Native American, and ELL students were placed in more segregated settings than White, Asian/Pacific Islander” (De Valenzuela et al., 2006, p. 435). The data from this study confirm that disproportionate representation of minority students in special education is a significant problem that affects students’ access to appropriate learning opportunities.

**Cultural variables.** Gravois and Rosenfield (2006) identify cultural variables as factors that affect the initial referral of minority students for special education. They reported cultural differences can impact teacher perceptions and practices related to minority students. Hosp and Reschly (2003) conducted a study to investigate referral rates of students from different racial backgrounds. The findings from the study reflect that Hispanic students were being over-referred for special education assessment; however, the rate of Hispanic children who qualified for special education programs was less than European American children. Guiberson (2009) claims the variance in referral rates could be due to cultural differences. He states, “It is possible that general educators—83% or more of whom are European American—have difficulty understanding Hispanic cultural and language differences and thus tend to refer these students more frequently” (Guiberson, 2009, p. 169). Teachers and educators may lack the knowledge in how to best support students of diverse populations, as they may have
Language proficiency. Language proficiency may affect the rate at which English Language Learners (ELLs) are referred to special education. A study by Artiles, Rueda, Salazar, and Higareda (2005) collected data from 11 urban districts in California to study the impact of language proficiency on ELLs’ placement in special education. The ELLs in Artiles et al. (2005)’s study were more than 90% Hispanic. The findings of the study revealed that ELL students were underrepresented in special education in Grades K-5 and overrepresented in Grades 6-12. Furthermore, students who were limited English were overrepresented as learning-disabled, speech-disabled, and language-disabled. At the secondary level, limited English students were overrepresented as mentally retarded (Artiles et al., 2005). According to Rueda and Windmueller (2006), ELLs were 27% more likely to be eligible for special education and almost 50% more likely to be placed in special education in secondary grades. These findings confirm the challenges educators face in accurately assessing and identifying students with disabilities. The concern that linguistic and cultural differences may “mask, mimic, or be mistaken for symptoms or characteristics of a specific disorder” (Guiberson, 2009, p. 170) is evident in the research. The concern of disproportionate representation of minority students in special education is well documented in the literature and provides valid reason for criticism on how students are identified for special education programs.

Discrepancy model. Starting in 1977, the U.S. Office of Education formalized severe discrepancy as the primary criterion for specific learning disabilities (SLD) which has been maintained until recently (Kavale & Spaulding, 2008). Learning disabilities
have been identified using a discrepancy model, where students were identified when there was a significant discrepancy between a student’s ability and their achievement. As a result of implementing the discrepancy model, the SLD population increased dramatically, over 200 percent since 1975 (Kavale & Spaulding, 2008). Concerns about overidentification and unequal distribution of SLD across settings arose. By 2009, over 6.5 million youth in the United States were receiving special education services. Almost half of these students were identified with some type of specific learning disability (Sullivan & Castro-Villarreal, 2013).

With each state in control of setting its own regulations for severe discrepancy, lack of consistency in the implementation of SLD identification procedures emerged as a major concern. Kavale and Spaulding (2008) explain that the discrepancy model has been widely criticized for the following:

- Variability in the size of discrepancy used for eligibility decision making
- Students with SLD go unidentified until discrepancy becomes significant, promoting a “wait to fail” attitude
- Overrepresentation of minority students in special education
- Concern of misdiagnosis such as the failure to reliably differentiate students with a true learning disability from those without
- Providing limited information that is relevant to assist educators to plan interventions and remediation.

When using a discrepancy model to identify students with specific learning disabilities, the focus is on the underachievement of the student rather than classroom instruction. If a student does not meet eligibility for special education services based on
severe discrepancy, the student may continue to struggle and fail without any instructional support provided. Furthermore, the use of the discrepancy model may inaccurately identify students having a learning disability due to the fact that students failed to learn in a classroom that did not provide individualized, culturally responsive instruction.

Vaughn and Fuchs (2006) argue there is little compelling evidence to support the continued use of the discrepancy model. They describe the challenges of the discrepancy model as including the lack of adequate differentiation between academically low-performing students with and without discrepancies (Stuebing et al., 2002) and little connection between data from the IQ-achievement discrepancy assessment and instruction (Elliot & Fuchs, 1997). However, Kavale and Spaulding (2008) argue that the discrepancy model is probably no better or worse than any other measurement tool in special education.

Although the discrepancy model is primarily criticized for not providing reliable and valid information, Kavale and Spaulding (2008) state that the discrepancy criterion is psychometrically defensible. The primary problem with discrepancy is the lack of rigor in its implementation rather than being a psychometric problem. Misidentification of SLD students using the discrepancy model may be attributed to inconsistencies in its implementation rather than caused by using an aptitude/achievement discrepancy tool as an indicator of SLD. Due to the significant concerns of accurately identifying students for special education programs, efforts to reform educational policy regarding the identification criterion for students with specific learning disabilities were enacted.
Policy Reform Efforts

In 2000, the U.S. Office of Special Education (OSEP) developed a plan to discuss issues associated with identification of learning disabilities. A committee consisting of researchers, parents, trainers, local education agencies, state education agencies, advocates, and policy makers met to participate in the LD Initiative (Bradley & Danielson, 2004, p. 187). The activities of the LD Initiative included the assignment of writing nine papers addressing key issues, partaking in a two-day summit in Washington, DC to highlight the papers, and structured discussions about these critical issues with key stakeholders (Bradley & Danielson, 2004).

Following the LD Summit, a consensus intended to improve procedures for SLD identification was reached on the following: “(a) the validity of the SLD construct, (b) the long-standing ability-achievement discrepancy was neither necessary nor sufficient for SLD identification, and (c) response to quality intervention appears to be a promising alternative for enhancing SLD identification” (Kavale & Spaulding, 2008, p. 169). The LD Summit consensus statements reported:

There should be alternative ways to identify individuals with LD in addition to achievement testing, history, and observations of the child. Response to scientifically valid and generally effective intervention is the most promising method of alternative identification and can both promote effective practices in schools and help to close the gap between identification and treatment. (Bradley & Danielson, 2004, p. 188)
Furthermore, the LD Summit concluded, “IQ/achievement discrepancy is neither necessary nor sufficient for identifying individuals with SLD” (Bradley, Danielson, & Hallahan, 2002, p. 796).

In 2002, under President George W. Bush, the President’s Commission on Excellence in Special Education recommended that schools should no longer use the ability-achievement discrepancy as part of the diagnostic process for learning disabilities due to the lack of evidence (Sullivan & Castro-Villarreal, 2013). Instead, the Commission suggested the use of Response to Intervention approaches in the process of identifying specific learning disabilities.

Although the Commission recommended eliminating the discrepancy criterion from SLD identification procedures, current regulations continue to permit its use. The discrepancy model could not be discredited completely. Though RTI is perceived to be beneficial for all students, it has not been found to be better than a comprehensive psychoeducational assessment for the diagnosis of learning disabilities (Kavale & Spaulding, 2008; Sullivan & Castro-Villarreal, 2013). Rather, policy makers amended the criterion to add alternative approaches to identify students with SLD to address prior concerns.

**Current Policy**

In 2004, the reauthorized Individuals with Disabilities Education Act (IDEA) was signed into law by President George W. Bush. The final regulations were published and enacted in 2006. Prior to this regulation, the U.S. Office of Education stated that a severe discrepancy between student IQ and achievement should be used as the main criteria for determining SLD (Kavale & Spaulding, 2008). However, the discrepancy model faced
many concerns which led to the emergence of the RTI model as an alternative means to identifying students with SLD.

The amendments in the regulations required each state to adopt criteria for determining whether a child has a specific learning disability (SLD). Current policy now allows states to permit Response to Intervention as a way to determine SLD eligibility rather than requiring the sole use of the discrepancy model (Zirkel & Krohn, 2008; IDEA, 2004). The regulations do not define RTI beyond the description of being a scientific research-based procedure.

The federal regulations at 34 CFR §300.307 (IDEA, 2004), state that:

- A State must adopt criteria for determining whether a child has a specific learning disability (SLD) and public agencies must use the State-adopted criteria
- The criteria adopted by the State:
  1. Must not require the use of a severe discrepancy between intellectual ability and achievement for determining whether a child has a specific learning disability;
  2. Must permit the use of a process based on a child's response to scientific research-based procedures for determining whether a child has a learning disability;
  3. May permit the use of other alternative research-based procedures for determining whether a child has a learning disability.

Each state now has the right and responsibility to choose its SLD eligibility criteria among the options stated in IDEA (2004) regulations.

The reauthorization of the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) recognizes the use of a Response to Intervention (RTI) model as an acceptable means to identify students with specific learning disability (SLD). The
National Research Center on Learning Disabilities (NRCLD) defines RTI as “student-centered assessment models that uses problem solving and research-based methods to identify and address learning difficulties in children” (Berkeley, Bender, Peaster, & Saunders, 2009, p. 86). RTI meets IDEA (2004) requirements by being a scientifically researched-based system.

Core components of RTI models include: (a) multiple tiers of scientific, research-based interventions, (b) continuous progress monitoring, and (c) use of data to inform instructional decisions (Kavale & Spaulding, 2008). Not only can RTI be used as a way to alternatively identify students with SLD, the Response to Intervention model serves as an effort to improve the academic achievement of at-risk students and to ensure that quality instruction and interventions that are applied in general education classrooms to meet the instructional needs of all students.

The 2004 reauthorization of IDEA emphasizes the need for early intervention in the general education setting prior to consideration for special education. The highest quality of instruction in the classroom must be assured prior to placing the responsibility for failure on the student. The initiative is intended to meet a wide range of individual student needs through the expectation of high-quality classroom instruction, administering universal screening, providing research-based interventions with fidelity, and continuous use of data to inform instructional decisions.

The reauthorized IDEA regulations of 2004 allow for states to permit the use of a student’s response to research-based interventions in determining eligibility for special education. Using RTI, if a student continues to struggle after receiving high-quality instruction and research-based interventions with fidelity within the general education
setting, this could be evidence of a learning disability and warrant a referral for special education assessment.

If RTI is chosen as an eligibility criteria, the mandates require that the eligibility evaluation report must include statements on the instructional strategies used, data collection, and documentation of parent notification (IDEA, 2004, 34 CFR §300.311; Zirkel & Krohn, 2008). It is critical that the RTI process is implemented with fidelity in order to acquire information required for special education evaluation.

Although RTI may be used for special education program eligibility, the process of RTI implementation begins in the general education setting. Therefore, RTI becomes a shared responsibility and practice of both special education and general education. The fundamental components of RTI rely heavily on the general education teacher. In the general education setting, RTI becomes a practice to help all students and uses targeted interventions to help any student at-risk of failure with or without a special education label.

**The Definition and Process of RTI**

Response to Intervention models are multi-tiered systems designed to identify students at-risk of academic failure and/or behavioral challenges in need of more intensive instruction and interventions. The process of RTI can involve the general education classroom teachers, special education teachers, administrative personnel from school and district levels, educational specialists, and parents to help meet the needs of individual students. The purpose of RTI is to provide students with the help they need to be successful as early as possible in their school career.
The classroom teacher plays a fundamental role in the RTI process. RTI begins in the general education setting with classroom teachers expected to provide high-quality instruction. In addition, positive classroom management and proactive skills are utilized in Tier 1 instruction. Teachers conduct a universal screening to gather data and identify potential students in need of more support. Frequent progress monitoring provides data to examine student performance. Instructional decisions are made based on how a student responds to specific interventions. Analysis of the data determines whether the students need more intensive interventions in Tier 2 and Tier 3. The goal of RTI is to use a range of tools and strategies to help students with or without specific learning disabilities through a process of screening, interventions, data collection, and evaluations.

**RTI models.** Berkeley et al. (2009) describe two major approaches to RTI models. In the problem-solving model, research-based interventions are implemented in order to address a student’s difficulties. The interventions are specifically designed for specific needs of an individual student. Decision making is shared amongst a team, typically consisting of teachers, administrators, school psychologists, and parents. In this approach, a four-step process is commonly practiced. This process involves, “(a) defining a problem, (b) plan an intervention, (c) implement the intervention, and (d) evaluate the student’s progress” (Berkeley et al., 2009, p. 86).

In the standard protocol model, research-proven interventions are provided to students with similar difficulties. These interventions are chosen from a bank of research-based interventions available at the school that have been standardized and proven effective for students with similar types of difficulties. For example, a standard
protocol model could be used to select a specific research-proven reading intervention program for students who have problems with reading fluency.

Although there is currently no universally accepted or mandated model of RTI, core components of all RTI models include:

(a) application of scientifically based interventions of increasing intensity specifically targeted to the needs of individual students; (b) continuous monitoring to ensure that student progress is well documented; (c) the presentation of good opportunities for students to respond to instruction; (d) required monitoring of the integrity of the intervention, referred to as instructional fidelity. (Berkeley et al., 2009, p. 86)

Nonetheless, with state and local control of how RTI is implemented, models can differ in a number of ways. According to Berkeley et al. (2009), RTI models can vary in the number of tiers, the persons responsible for delivering and implementing interventions, whether the process must be implemented prior to special education assessments for eligibility of services, or if the process itself takes the place of eligibility evaluations.

**Tiers of intervention.** Most common RTI practice involves a three-tiered system. However, models can vary depending on individual needs or interpretations of the model. Although some students may find success after a single intervention period, others may need increased time, intensity, or access to other resources or expertise. The multi-tiered system of interventions provides a path to increase the levels of intensity in order to prevent academic and behavioral challenges.

**Tier 1.** Tier 1 of RTI is universal classroom instruction for all students and is usually referred to as the preventive tier (Berkeley et al., 2009). Tier 1 encompasses the
foundations of RTI systems’ success. In this tier, the general education teacher focuses on providing high-quality teaching and is responsible for “assessing, instructing, and diagnosing learning difficulties” (Fisher & Frey, 2010, p. 23). According to Fisher and Frey (2010), Tier 1 involves a system of universal screening that measures students’ baseline academic and/or behavioral performance and progress. The needs of approximately 80% of students are usually met through the core instruction of Tier 1 (Berkeley et al., 2009). After implementing systems and providing quality core instruction, teachers can determine which students respond to the universal instruction and which students do not.

**Tier 2.** Tier 2 of RTI is referred to as supplemental instruction (Sullivan & Castro-Villarreal, 2013). Students who show signs of falling behind and are not responding to Tier 1 instruction with success as determined by universal screening are provided Tier 2 intervention, approximately 10-15 percent of the student population (Berkeley et al., 2009; Fisher & Frey, 2010). This phase can occur either in the regular classroom or in a different setting. These students may work in small groups within the classroom, individually with a specialist, or be pulled out for targeted support. Students receive Tier 1 core instruction in addition to Tier 2 intervention. Progress is more frequently monitored to gauge responsiveness and to inform decisions for next steps. Berkeley et al. (2009) state, “Here, students who are at risk are served with more intensive, research-based interventions with close progress monitoring in addition to the primary instruction received by all students” (p. 86).

**Tier 3.** Tier 3 involves individualized instruction and intensive intervention (Fisher & Frey, 2010; Sullivan & Castro-Villarreal, 2013). According to Sullivan and
Castro-Villarreal (2013), “Students who do not respond to Tier 2 intervention require Tier 3 intervention and/or a comprehensive psychoeducational evaluation” (p. 182). Fisher and Frey (2010) inform that five to 10 percent of students will require Tier 3 interventions because they do not respond positively to supplementary interventions in Tier 2. Tier 3 includes an intensive approach with more time, a lower student-teacher ratio, targeted individualized lessons, and various assessment tools to monitor progress (Fisher & Frey, 2010). In addition, educational experts are typically utilized within this tier, such as, administrators, curriculum specialists, instructional coaches, program specialists, school counselors, special education personnel, speech-language pathologists, and school psychologists.

Tier 3 provides further information and data from progress monitoring or evaluations to determine the best educational plan for the student and possible eligibility for special education. Data from students’ response to the scientific, research-based interventions can be used for identifying a specific learning disability or provide valid reason to refer a student for a comprehensive special education evaluation. Sullivan and Castro-Villarreal (2013) claim if the student is eligible for services, RTI data can be used to inform instructional planning for a student’s individual education plan (IEP). In addition, the use of the RTI system can rule out the lack of exposure to quality instruction and research-based intervention as possible reasons for academic failure and/or behavioral difficulties. If a student is not eligible for special education services, the data from interventions can still inform the student’s education plan within the general education setting.
Theoretically, the multi-tiered intervention system of RTI is logical. Instructional practices or interventions at each tier should be determined by the data of student progress to ensure the best learning opportunities for each student. It is designed to predict at-risk students and to intervene with any students who have academic or behavioral difficulties prior to special education referral. Although RTI holds promise to improve the academic potential of all students and improve the accuracy of SLD determination, both potential benefits and concerns of RTI are found in the literature.

**Potential Benefits of RTI**

The Response to Intervention model provides potential benefits which includes the impact of early intervention on student achievement for struggling students and support for all students.

**Early intervention.** RTI emphasizes early evidence-based intervention for struggling students through a tiered system of support. RTI’s multi-tiered system holds promise as it is intended to detect early and provide support for students at-risk of failing. Instead of the “Wait-to-Fail” approach, RTI regulations require schools to screen students early for signs of difficulty and provide targeted intensive and individualized instruction in needed areas without applying a special education label (Harry & Klingner, 2007).

The benefit of RTI’s early intervention is evident in Al Otaiba et al. (2014)’s experimental study that found RTI implementation increased reading skills in first grade students. Due to the lack of specificity in RTI policy and research guidance in RTI implementation, this study focused on comparing two models of RTI. The first model followed a typical RTI model that waits to assess student progress after eight weeks of Tier 1 instruction. The second RTI model provided Tier 2 and Tier 3 interventions.
immediately according to their initial universal screening results. Findings from Al Otaiba et al. (2014) showed, “immediately providing Tier 2 and 3 interventions to students who qualify led to generally stronger reading outcomes by the end of first grade” (p. 25). Although there may be variations to how RTI is implemented, this study supports that early intervention is a fundamental component in the impact of RTI on students’ academic success.

**Support for all students.** The RTI model creates the expectation of supporting all students with quality core instruction and meeting the individualized educational needs of all struggling students. The RTI approach focuses on student outcomes and may increase accountability for all learners within general education, whether or not they are considered for special education. Kashi (2008) states, “RTI provides a more flexible, mainstream approach that adapts well to the different cognitive and cultural learning styles inherent in minority students whether or not underperforming” (p. 38). With emphasis on high-quality instruction for all students and early interventions for struggling students, RTI holds potential to reduce overrepresentation of minority students in special education resulting from inadequate classroom instruction rather than actual disabilities.

The RTI process shows promise to meet the educational needs of a diverse student population. Kashi (2008) reports how Kenai Peninsula Borough School District (KPBSD), a large rural school district in Alaska with varied minority populations, described positive experiences with implementation of RTI. After full implementation of RTI by the staff, which involved general education teachers implementing tiers of instruction and intervention while special education teachers ensured the integrity of RTI with students being identified as possible candidates for special education, the District
noticed gains in their standards based assessment and met Annual Yearly Progress goals. The District’s standards based assessment data showed Language Arts scores went up 6% and Mathematic scores went up 8%. The improvements in student achievement can be attributed to the District adopting and implementing scientifically proven, research-based programs for reading and math and the utilizing the RTI model of tiered interventions.

**Concerns of RTI**

Concerns of the RTI model emerge throughout the literature and is discussed in the following themes: lack of specificity, minority representation, fidelity, teacher capacity, and roles.

**Lack of specificity.** Although the models of RTI have consistencies in core components and theoretical concepts of how tiered interventions will support at-risk students and improve accurate determination of students with specific learning disabilities, Berkeley et al. (2009) state significant variability exists in how RTI is being implemented. Barrio and Combes (2014) claim, “There is a lack of uniformity in the implementation of RTI, as school districts and states are often confused about the manner in which RTI should be implemented” (p. 2). The lack of specificity in high-quality instruction, assessment, interventions, and selection of research-based practices cause concern in the consistency of the identification process for SLD eligibility and RTI implementation. Furthermore, local level leaders and teachers face ambiguity when policies do not provide a clear definition or identify research that shows what counts as research-based. Since the policy does not clearly identify how RTI will be implemented, states, districts, and school sites are left to decide on their own, which causes high levels of variance.
Concern for the lack of the specifics regarding implementation of RTI is evident in the literature. Vaughn and Fuchs (2006) express concerns and note that inadequate research is available on how to implement, sustain, and spread the application of RTI from research to practice. Kavale and Spaulding (2008) argue that, “suggested regulations appear more concerned with adequate instruction than accurate SLD identification” (p.171). Furthermore, Fuchs and Vaughn (2012) report the progress of RTI a decade after it first emerged, stating, “issues persist related to implementation and effective use of data sources, procedures, and practices for decision making around these data, as well as viable strategies for differentiating general education classroom instruction and validated methods for intervention” (p. 195).

Kavale and Spaulding (2008) further add to concerns stating:
Noticeably lacking are descriptions about how RTI might function as an SLD identification procedure. The neglect of information about RTI as a diagnostic process suggests that SLD identification may not be primarily a policy focus even though originally offered in the context of SLD identification. (p. 175)

Although RTI promises to improve the accurate identification of the SLD population, Kavale and Spaulding (2008) point out a critical gap, the lack of information of how states and districts will use the RTI model as a diagnostic process. Without specificity in RTI regulations, variation in implementation can occur. Though IDEA regulations (2004) recognize the use of the RTI process as an alternative way to identify students with SLD, Kavale and Spaulding (2008) argue, “RTI cannot stand alone as a self-contained diagnostic process; RTI is best viewed as a screening procedure that identified generalized learning problems with SLD determination requiring more in-depth
evaluations” (p. 176). This view gives reason for further research on how RTI is used as a diagnostic tool, since prior literature on RTI emphasizes remediation and prevention rather than SLD diagnosis and determination of special education.

** Minority representation.** Although benefits of RTI have been reported to improve student achievement in schools with high minority populations, such as in the case of KPBSD of Alaska, a five-year longitudinal study by Zhang et al. (2014) found that minority overrepresentation in special education continues to remain a challenge. After analyzing the data for overall racial representation by disability categories from 2004 to 2008 collected under IDEA requirements, Zhang, Katsiyannis, Ju, and Roberts (2014) stated, “it seems that nothing has changed in the past 10 years with regard to the overall representation in special education” (p. 124). Despite the policy of RTI which is intended to improve student’s opportunities and supports, Greenfield, Rinaldi, Proctor, and Cardarelli (2010) claim that research about RTI has “not sufficiently evidenced reduction in disproportionality or delivery of high-quality instruction and evidence-based interventions to underrepresented racial and linguistic groups” (p. 288).

** Fidelity.** Despite the existing and potential promises of the RTI model, Sullivan and Castro-Villarreal (2013) state another major challenge with RTI is implementing interventions with fidelity, referred to as intervention integrity. It is difficult to determine whether high-quality instruction is actually occurring and whether interventions are researched-based and implemented the way they are intended. The lack of RTI implementation fidelity and intervention integrity could be a reason why students do not make adequate progress. If the RTI process is implemented haphazardly or uses
inappropriate interventions, data could be inaccurate and cause disparities to remain in academic improvement and special education rates across different populations.

This concern is evident in Thorius, Maxcy, Macey, and Cox (2014)’s study which found educators had minimal knowledge on central features of RTI such as the process, how to select interventions, and progress monitoring. When asked how interventions were selected during a group interview, one teacher responded, “We pull interventions out of the air” (Thorius et al., 2014, p. 293). Although the study took place at a Midwestern, urban public school that was recommended by District leaders as the most advanced RTI implementation site, Thorius et al. (2014) found, “educators’ capacity to intervene significantly limited interventions selected and carried out; interventions were spontaneously generated based on largely intuitive ideas about appropriate supports for struggling students” (p. 293). This study confirms the concern of validity when implementing RTI and also shows the need for more teacher preparation.

Teacher capacity. The increased responsibility and expectations of general education teachers has increased the amount of work and pressure. In order for an RTI process to succeed, a strong Tier 1 is needed. General education teachers must be responsible for the delivery of high quality instruction, research-based interventions, identification of students who are at-risk of failing, and the differentiation of curriculum for the needs of individual students. Barrio and Combes (2014) suggest that teachers are concerned about their lack of knowledge regarding the implementation of research-based interventions. According to Berkeley et al. (2009), “General educators do not currently have the background knowledge or skills needed to implement an RTI model” (p. 94). Although main stakeholders of RTI, teachers feel inadequately prepared to implement the
necessary components properly. Without support and professional development, teachers can have difficulty implementing Tier 1 universal core instruction and Tier 2 and III interventions accurately and with fidelity.

**Roles.** The confusion between the roles of general education and special education teachers is another concern of the RTI process. Prior to RTI and other practices such as inclusion, the special education teacher had the primary responsibility of screening, teaching, and assessing students with SLD. With the implementation of RTI, especially in Tier 3, the roles of general education and special education teachers have started to intertwine. This can be attributed to the adoption of RTI making the SLD diagnostic decision-making more complicated. Not all states are implementing Tier 3 in the same way. Tier 3 implementation causes confusion as some states use it as a way to prevent the need for special education, while others use it as a way to determine eligibility for special education. Berkeley et al. (2009) state, “It is especially unclear when the special education process begins and what special education services consist of for students for whom general education is the least restrictive environment” (p. 93).

These concerns are important to all members involved in the implementation process of RTI, including teachers, administrators, educational personnel, and parents. Without accurate or effective implementation of RTI, disparities will continue to remain across groups and at-risk students will be impacted the most. The concerns point to a need for educational leaders to realize these challenges and understand the factors that impact RTI implementation at the local level. Educational leaders can use this knowledge to focus their leadership on how to best support RTI implementation at the local stage.
Critique of Literature

**Factors that impact RTI.** In reviewing the literature on RTI, several themes emerged as factors that impact RTI efforts. These themes include: teacher mindsets, collaboration, culturally responsive instruction, and professional development.

**Teacher mindsets.** Findings from Thorius et al. (2014)’s study highlights the challenges with RTI implementation at the local level. One challenge was the power of deep-rooted traditions of sorting students by perceived ability, and therefore RTI meetings replicated instead of replaced traditional pre-existing special education processes (Thorius et al., 2014). Furthermore, the study described how the teachers’ perceptions and beliefs about students and families shaped how RTI was carried out. Thorius et al. (2014) state, “The majority of White female teachers, principal, and school psychologist revealed through interviews and throughout meetings, their assumptions that families were to blame for concerns teachers voice about students’ academics and behavior” (p. 294). Deficit assumptions were placed on students and families who were primarily from low-income households and of racial/ethnic minority backgrounds.

The deficit model is the process of blaming the student, with the perspective that academic failure is caused by deficiencies that exist in the lives of children, such as in their home life, home culture, or socioeconomic status (Dray & Wisneski, 2011). The deficit thinking model attempts to understand student difficulties and challenges by focusing on the inadequacies of the student (Smit, 2012). The theory of the deficit focuses on the student as the major problem, placing blame on the lack of academic and cultural resources that are necessary for success, instead of looking within the education system or the instructional practices in the classroom. The deficit thinking model is used
to explain academic failure, especially for economically disadvantaged ethnic minority students. Valencia (2012) stresses that minority students have been and continue to be substantially overrepresented among those who experience academic problems and school failure, being targets of the deficit thinking discourse and schooling interventions. This unexamined prejudice, often directed towards students of color or low socio-economic backgrounds, causes potentially harmful assumptions and ill-informed understanding of the students.

When a student experiences continued difficulty of mastering skills, too often educators’ first concern is if the student has a learning disability. The poor academic performance of minority students is not explained as a linguistic, cultural, or socio-economic status difference, but rather as a cognitive, learning, or cultural deficiency which puts these students at high risk for referral to special education (Cartledge, 2005). The deficit model supports the notion that children who come to school without preparation, most often low-income minority students, are fundamentally deficient and need to be fixed. Too quickly, these students become candidates for suspected disabilities. Harry and Klingner (2007) found that “school personnel were always ready to blame the students’ home contexts but seldom examined the school context” (p. 20).

Employing a deficit mindset will only perpetuate stereotypes and support fixed mindsets of learning. Kaser and Halbert (2009) emphasize that educational leaders must transform schools from a sorting system to a learning system. This requires all educators to shift from a fixed to a growth mindset, which involves the belief that all students have the ability to learn. Although students have academic, social, and cultural differences,
educational leaders must ensure that these differences are not interpreted as deficiencies and rather focus on quality education for all.

**Collaboration.** In Dulaney’s (2013) qualitative case study examining one middle-school’s use of RTI to sustain systemic improvement, findings show collaboration as one of the main factors that promote school-wide implementation. Professional learning communities (PLCs) have been promoted and supported by the school district since 2002. The school used a collaborative process where teams discussed data and used shared decision making to decide what RTI tiered structure would best meet the needs of their students (Dulaney, 2013).

In another qualitative study of RTI school reform at an urban elementary school, Greenfield et al. (2010) found that there were benefits to greater collaboration and communication. Teachers felt that collaboration could allow for more informed decisions to be made about students (Greenfield et al., 2010). Teachers also reported that the increased communication and collaboration between general education teachers, special education teachers, and other resource specialists could provide additional support to meet the individual needs of students.

A fundamental process that impacts RTI implementation is collaboration and working in teams. Therefore, the idea of teaming and working in professional learning communities is critical to the success of RTI efforts. Drago-Severson (2009) names teaming as an effective approach to professional learning as it opens communication, decreases isolation, builds interdependent relationships, creates a shared responsibility, and supports skill development (Drago-Severson, 2009, p. 71). According to DuFour, DuFour, and Eaker (2009), a collaborative culture with a focus on learning is one of the
key characteristics of a professional learning community (PLC). In a PLC, “collaboration is a systematic process in which teachers work together, interdependently, to analyze and impact professional practice in order to improve results for their students, their team, and their school” (DuFour et al., 2009, p. 90).

Working as a collaborative team, teachers and educators can learn and grow professionally as they share knowledge, best practices and instructional strategies, monitor students’ learning on a timely basis, analyze student work and data, and plan targeted interventions. Using the evidence of student results from progress monitoring informs team members of their instructional practice and helps make informed decisions of how to best support their students.

Educational leaders must emphasize collaboration between stakeholders. Establishing the belief that the success or failure of a student is a shared responsibility is critical to creating a culture that supports RTI. The collaboration of general education and special education teachers can increase instructional planning to share knowledge and best practices to support the individual needs of students. In addition, the increased communication can improve the clarification of roles and responsibilities of all teachers involved in the RTI process.

**Culturally responsive RTI.** Culturally responsive teaching ensures that cultural relevance is included and “informs classroom management and discipline procedures, instructional strategies and methods, classroom environment, student-teacher and parent-teacher relationships, and curricular content” (Johnson & Bush, 2005, p. 275). Using culturally responsive teaching strategies recognizes and addresses the different backgrounds and learning styles of students. Xu and Drame (2008) state, “Children’s
home culture, language, and acculturation should be considered when educators design and implement an intervention or refer a student for special education evaluation” (p. 309). Knowledge and awareness of cultural diversity, and understanding differing learning styles and behaviors is emphasized to help reduce the misinterpretation of different characteristics in students.

The continuous concern of misidentification and misplacement of minority students in special education creates a need for educational leaders to value and promote culturally responsive techniques and instructional strategies in schools. Although the concept of culturally responsive RTI is heavily discussed in the literature as a factor that impacts students’ experiences with RTI, studies on the effectiveness of this practice on the academic progress of culturally and linguistically diverse students is limited and is an area for further research.

**Professional development.** Thorius et al. (2014) found that there was lack of technical understanding of the core features of RTI such as the selection of research-based interventions, process, and progress monitoring. To address this concern, the need for professional development is suggested throughout the literature to provide teachers the background knowledge and skills necessary to help understand the purpose and process of RTI. The benefit of professional development is described through one teacher’s comment, “Suggestions for doable strategies were given, so I felt comfortable trying them in my classroom the next day with the curriculum that I already had planned” (Dulaney, 2013, p. 69). Professional development can provide knowledge and information on research-based interventions and increase the efficacy of teachers implementing RTI strategies in the classroom.
**Gaps in the literature.** Each of the factors that impact RTI can be influenced by educational leadership. An educational leader focused on creating a culture that values the belief that all students can learn and deserve quality instruction and intervention opportunities can impact teacher mindsets. Educational leaders can provide support to stakeholders who are directly impacting the students and actively involved in the process of RTI implementation through collaboration. In order to improve the lack of specificity in expected instruction, interventions, and practices, educational leaders can focus on building capacity by providing professional development to staff.

Although there may be a large variation from state to state in whether RTI is implemented and how it is interpreted, educational leaders can provide consistency at the district and site levels to ensure effective implementation by providing leadership focused on building capacity and creating a culture of helping all students. However, research on educational leadership on the impact of RTI is limited. If factors that impact RTI implementation can be influenced by site leadership, it is important to study how educational leaders can impact effective implementation of RTI at the local level. Further research can be conducted on what types of leadership best supports RTI and what factors of leadership influence successful implementation of RTI.

**Summary**

The process of Response to Intervention promises to provide all students with high quality instruction and targeted interventions to meet the individual needs of students. RTI is promoted as a way to improve the identification process of students with specific learning disabilities and reduce the disproportionality of minority population in special education programs. However, many concerns exist regarding the challenges of
RTI implementation in real practice, as well as how RTI serves to identify a specific learning disability eligible for special education.

Examining the history, process, and potential benefits and concerns of RTI can be beneficial for educational leaders who are planning to implement RTI at various levels. Understanding the factors that impact RTI can help educational leaders focus their leadership efforts in areas that will best support the success of RTI implementation. Therefore, investigating teachers’ experiences and understanding of RTI can provide educational leaders with valuable insight and is an area for further research.
Chapter 3: Methodology

The purpose of this study was to investigate site RTI implementation approach and process, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. This research explored interrelationships and patterns between these critical areas that can impact RTI implementation. This chapter identifies the research questions that guided the study, presents the research design, and describes the setting, method of data collection and data analysis.

Research Questions

The overarching research question for the study was: What are the relationships between the principal’s approach to RTI implementation, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school?

Specific research questions that were used to gain a greater understanding were:

1. What is the RTI process that is used at the site?
2. What types of RTI interventions are implemented?
3. What knowledge do principals feel is important for teachers to have in order to implement RTI?
4. What beliefs do principals feel is important for teachers to have in order to implement RTI?
5. What knowledge do teachers have about RTI implementation?
6. What are teachers’ beliefs about supporting students who are struggling in school?
**Research Design**

The study included quantitative and qualitative methods to examine RTI implementation process, knowledge, and beliefs. The study used a convergent parallel mixed methods design where quantitative and qualitative data was collected simultaneously. According to Creswell (2012), the process of a convergent study involves the following steps:

- The researcher gathers both quantitative and qualitative data simultaneously;
- Analyzes both datasets separately;
- Compares the results from the analysis of both datasets; and
- Makes an interpretation as whether the results support or contradict each other. (p. 540)

In a convergent parallel design, equal priority is given to both quantitative and qualitative data. Each type of data collected adds a layer to the complexity of the study. The convergent parallel design allows the researcher to analyze multiples sources to provide a deeper understanding of the research problem. Creswell (2012) states, “A basic rationale for this design is that one data collection form supplies strengths to offset the weaknesses of the other form, and that a more complete understanding of a research problem results from collecting both quantitative and qualitative data” (p. 540).

**Research Method**

This study was conducted using mixed methods. Qualitative and quantitative research were used to investigate the interrelationships between site’s RTI implementation process, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. Creswell (2012) states, “A mixed methods
research design is a procedure for collecting, analyzing, and ‘mixing’ both quantitative and qualitative methods in a single study or a series of studies to understand a research problem” (p. 535). The combination of using both forms of data provides a better understanding of the research problem than using just one form by itself (Creswell, 2012). In a mixed methods study, data is mixed by “merging, integrating, linking, or embedding” both qualitative and quantitative methods (Creswell, 2012, p. 535).

By combining quantitative and qualitative data, a deeper understanding of a complex picture of a social phenomenon can be developed (Creswell, 2012). Using mixed methods, this study aimed to find interrelationships between site RTI implementation process, teachers’ RTI knowledge and beliefs.

Setting

This study took place within one K-12 suburban district in Southern California. The district serves an estimated student population of 15,000 students at eleven K-6 elementary schools, three K-8 Academies, two Intermediate schools, two High Schools, one Continuation High School as well as a Community Day School.

District selection. The district selected for the study introduced Response to Intervention with initial introductory trainings in 2007-2008. Although the District has had an initial introduction to RTI, changes in District and site leadership in recent years has impacted RTI implementation across school sites. The approach to district initiatives had become largely decentralized. Site administrators at each school determined their approach and school process to RTI implementation. Recognizing the need to provide a more consistent RTI approach across schools, the District has made efforts to centralize RTI initiatives. The last four years, the District has implemented a common universal
screener to determine students’ academic needs for reading. This year, the District implemented a universal screener for math. Furthermore, the District is piloting three academic reading intervention programs at three elementary school sites.

**School selection.** The schools that were purposefully selected to participate in this study were the schools that have implemented a district initiated academic reading intervention in a pilot program. Purposeful selection and sampling is used when the “researcher intentionally select individuals and sites to learn or understand the central phenomenon” (Creswell, 2012, p. 206). In order to learn about the processes, knowledge, and beliefs of teachers implementing an RTI intervention, the school site and participants were purposefully selected. The selection was based on the criterion that the school has participated and implemented a district initiated academic intervention program.

**Data Collection and Sources**

The research was conducted through a mixed methods study that included quantitative (e.g., survey) and qualitative (e.g., semi-structured interviews) methods to collect data.

**Qualitative data.** Data from principal interviews were collected for qualitative data. Interviewing involves a process in which a conversation focused on questions related to a research study occurs between the researcher and participant (Merriam, 2009). The main purpose of an interview is to obtain information from someone else’s perspective. Merriam (2009) states, “Interviewing is necessary when we cannot observe behavior, feelings or how people interpret the world around them. It is also necessary to interview when we are interested in past events that are impossible to replicate” (p. 88). The researcher conducted interviews to gain information from the three schools
implementing an RTI academic intervention. The researcher interviewed the school principals from Mountain View Elementary, Wood Creek Elementary, and Pine Hill Elementary.

To understand the background and history of RTI implementation in the district and each school site, the researcher interviewed the principal of the schools piloting and implementing a RTI academic reading intervention program. The researcher requested an interview from the principal by e-mail or telephone. An informed consent form was provided and explained to the interviewee. Informed consent must be provided in order to gain approval to conduct the interview by the Institutional Review Board (IRB). The researcher also provided the principals with the interview protocol (see Appendix A) which is “a form designed by the researcher that contains instruction for the process of the interview, the questions to be asked, and space to take notes of responses from the interviewee” (Creswell, 2012, p. 225). The interviews were semi-structured where questions were pre-determined with an opportunity to follow up based on the interviewee’s responses. The interview was audio recorded with the consent of the interviewee.

**Quantitative data.** In quantitative research, “the investigator identified a research problem based on trends in the field or on the need to explain why something occurs” (Creswell, 2012, p. 13). Through the use of quantitative techniques, research problems can be answered when the researcher establishes the overall tendency of responses from individuals and shows how this tendency varies among people (Creswell, 2012).

A teacher knowledge and belief surveys was used as a quantitative data source for this study. Fink (2013) states, “Surveys are used to collect information from or about
people to describe, compare, or explain their knowledge, feelings, values, and behavior” (p. 1). A survey with questions about knowledge of RTI and beliefs about behaviors was sent to teachers who were participating in the district academic intervention pilot program. Survey data were used to identify trends and patterns in teachers’ RTI knowledge and beliefs about behavior.

**RTI knowledge and beliefs survey.** The survey used for this study (see Appendix B) was created by combining and adapting two existing surveys: *Beliefs About Behavior Survey - 4th Edition* (Browning Wright & Cook, 2012; see Appendix C) and *Beliefs Survey* (Tumolo Zarabba, 2010; see Appendix D). The survey was conducted through Google Forms. Principals forwarded an e-mail to teachers at their site who were participating in the district intervention pilot programs. The e-mail included a link to take the survey. The Google Form survey included information regarding informed consent and participants were required to give consent prior to taking the survey. The survey was anonymous and involved 37 items on components of RTI and beliefs about RTI. The survey was piloted by educators who have knowledge of RTI models and feedback was provided on the survey. Respondents selected whether they Strongly Disagree, Disagree, are Neutral, Agree, or Strongly Agree with each statement. The data were analyzed and then used to determine themes and relationships between teacher knowledge, beliefs, and school RTI processes.

The survey (see Appendix B) was organized into six sections. Sections 1-3 measured teachers’ knowledge of RTI components. Sections 4-6 measured teachers’ beliefs that align to RTI implementation, including beliefs on instruction, students, and teacher roles.
Protection of Participants

The researcher obtained Institutional Review Board (IRB) approval before conducting the study to ensure protection of human subjects from harm. The researcher then requested and obtained permission to conduct research in schools from the selected district. The researcher maintained confidentiality of participants and their responses by protecting each person’s privacy and ensured that information will be used only with the person’s knowledge and for clearly stated purposes. According to Fink (2013), “Confidentiality refers to the safeguarding of any information about one person that is known by another” (p. 17). The district, school, and participants were given pseudonyms, and identifiable information was removed from documents. All participants were over the age of 18 and participated voluntarily in the study by giving informed consent. All electronic documents were kept secure by the researcher in a password-accessible file and will be deleted after one year. All printed or written documents will be kept in locked files and destroyed after one year.

Data Analysis

The process of parallel convergent design involves qualitative and quantitative data to be analyzed separately, merged, compared or related, then interpreted to use for findings. To analyze and interpret qualitative data, the researcher used a process described by Creswell (2012). Creswell (2012) identifies the steps in this process as:

- Prepare and organize the data;
- Explore and code the data;
- Code to build description and themes;
- Represent and report findings;
• Interpret the findings; and

• Validate the accuracy of the findings.

The interviews were audio-recorded and transcribed. Data were coded to identify themes. Creswell (2012) explains, “Coding is the process of segmenting and labeling text to form descriptions and broad themes in the data” (p. 243).

Quantitative data were analyzed after *RTI Knowledge and Beliefs* survey data were conducted. The researcher analyzed the data to determine trends and patterns of teachers’ knowledge and beliefs about RTI.

Once qualitative and quantitative data were analyzed separately, the researcher consolidated the data in an exploratory process to compare or relate the data to interpret findings to answer the research questions.

**Role of Researcher**

The role of the researcher shifted during the study. During the quantitative phase of the study, the researcher’s main role was to analyze data. The researcher’s role shifted as the primary instrument of data collection and analysis during the qualitative data collection. In qualitative research, the researcher collects data, gathers information, view settings, and construct realities through the researchers’ eyes and ears (Lichtman, 2014). Descriptions, understandings, and interpretations were based on the data the researcher collected and her ability to make these elements meaningful.

**Limitations**

Since the study involved a small sample of only three schools in one district, findings cannot be generalized to other schools or districts.
Summary

Educators face the daily challenge to increase student achievement and meeting the needs of all students (Swindlehurst et al., 2015). Addressing the needs of struggling students to close the opportunity gap begins with providing access to multi-tiered systems of academic prevention such as RTI models (Benner et al., 2013).

RTI focuses on ensuring access to high-quality instruction to all students and support for struggling learners. Although RTI models hold potential, the lack of specificity on how and why RTI is used has resulted in variability in its implementation.

The literature on implementation describes the complexity of introducing and implementing new policies and practices such as RTI, where implementers interpret policy messages through the lens of their prior knowledge and experience. Therefore, the purpose of this study was to investigate how principals have made sense of Response to Intervention and examine the processes that influenced teachers’ experiences and beliefs during implementation of RTI at their sites. Understanding relationships between implementation processes and teacher knowledge and beliefs can help administrators identify key factors and areas of focus when looking to improve the implementation of RTI at their sites.

This study used a parallel convergent design, using a mixed methods data collection. A survey was conducted to collect data on teacher knowledge and beliefs. Interviews with principals were conducted to gather qualitative data. Combining both data sources allowed the researcher to focus on patterns and trends regarding knowledge and beliefs about RTI. Data also provided in-depth understanding of the complex nature of principals’ RTI approach to implementation. Investigating these areas provided the
researcher with information on the factors that have influenced implementation of
Response to Intervention at the sample schools.

Chapter 4 will discuss the findings of the study. Themes that emerged from the
data will be presented to answer the research questions.
Chapter 4: Research Findings

The purpose of this study was to investigate the interrelationships between principals’ RTI implementation approach, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. A literature review highlighted research that focused on the potential benefits and concerns of RTI implementation on student achievement and quality of education for all students. Identifying principals’ knowledge and their approach to RTI can help provide understanding of teachers’ knowledge and beliefs during implementation. The knowledge and beliefs of teachers can ultimately impact the quality of instruction and success of interventions for student achievement.

The outcomes of this study serve to inform district and site educational leaders about the relationships between site RTI processes and teachers’ experiences with RTI implementation. The themes that emerged in this study may be used to inform educators and current principals of factors that impact implementation and teachers’ understanding of RTI.

This research is important for any administrator or teacher who is interested in understanding the relationships between site RTI processes and teacher experiences. In particular, those who will benefit the most from this research are leaders who want to support struggling learners and improve the knowledge base and beliefs of educators in order to improve the academic and behavioral success of all students.

Research Questions

The overarching research question for this study was: What are the interrelationships between principals’ approach to RTI implementation, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school?
Specific research questions used to gain a greater understanding were:

1. What is the RTI process that is used at the site?
2. What types of RTI interventions are implemented?
3. What knowledge do principals feel is important for teachers to have in order to implement RTI?
4. What beliefs do principals feel is important for teachers to have in order to implement RTI?
5. What knowledge do teachers have about RTI implementation?
6. What are teachers’ beliefs about supporting students who are struggling in school?

Participants for Interviews

Participants were selected based on pre-determined criteria and purposeful sampling (Lichtman, 2012). Three school sites were selected based on the criteria of implementing a district initiated intervention program. Interviews were conducted with each of the three site principals. Once the interviews were concluded, the information was transcribed and coded. After coding concluded, emergent themes arose from the study.

Sofia, principal at Mountain View Elementary, has been in the District since 2004. She started her career in education as a classroom teacher. She has been the principal at Mountain View for the past three years, and prior to that, she was also the Assistant Principal at the school. Mountain View Elementary serves over 530 students in grades Pre-K through sixth grade, where 90% of students are in the Free and Reduced Lunch program and 70% of students are English Learners.
Lauren is the principal of Pine Hill Elementary. She has been in the field of education for 34 years and ten years in the District. Her experience consists of being a bilingual instructional aide, classroom teacher, assistant principal, site principal, and director of English Learners/Bilingual Education. The student population of Pine Hill Elementary includes 79% Free and Reduced Lunch students and 37% English Learners.

The principal of Wood Creek Elementary is Andrea who has served in this position for the past three years. Prior to her principalship, Andrea was a classroom teacher for ten years, a literacy coach for two years, and an assistant principal for four years. As a literacy coach, she had prior experience with creating her own intervention program working with high-risk and at-risk students. She developed a reading lab for her school, worked with teachers on reading interventions, and modeled lessons based on research from her Master’s program.

**Background of Principals**

Interviews with principals were conducted to collect data on the RTI process at each of the school sites. All three principals demonstrated strong understanding and knowledge of Response to Intervention, however all principals reported that they have had limited training on RTI and most of the knowledge they have acquired has come from learning from their own research of reading on the topic.

Sofia, the principal at Mountain View, stated, “Whatever I know it’s my own training, I guess through reading articles and manuals, especially as I became a principal and I started learning more because I consistently attending the SST (Student Success Team) meetings.” She also added that the one training she had on RTI was very brief and did not go in depth of what RTI really means. She shared:
We did have a training once with one of the principals I’ve worked under but it was basically just, you know, that little RTI triangle and Tier 1, Tier 2, Tier 3, and that’s about it. It was just one of the many professional develop trainings teachers were involved in.

Andrea, the principal at Wood Creek, shared she gained knowledge of RTI while working as a literacy coach at a school involved in a High Priority School Grant Program (HPSGP). The HPSGP grant was given to Program Improvement schools who had a high percentage of high-risk students. There she created a reading lab and developed her own reading intervention program. When asked if she received any formal training, she stated, “It was based on my own research for my Masters. I created the program.” Andrea also shared that there was some RTI training by the District when she was an assistant principal, but there has been no recent trainings.

Lauren, principal of Pine Hill, stated how there has been no formal RTI training for her or her teachers in recent years. Furthermore, she expressed that how RTI looks now is different than the RTI model that was originally created. She explained:

How Response to Intervention Squared looked maybe in 2007-2008, and prior to that being Response to Intervention only, looks really different now in 2016. I think that’s one of the things that I find frustrating about RTI. When we’re talking about it, we are talking about it in the old paradigm when that was really created. But really, response to teaching and response to intervention now, it has to be multi-faceted.

Although RTI has been introduced by the District, there has not been on-going comprehensive RTI trainings for administrators to develop a common understanding of
Site principals have had to make sense of RTI, each in their own way, from their own learning and research. Maitlis and Christianson (2014) describe sensemaking as the process through which people work to understand issues or events that are ambiguous or confusing. From the sensemaking framework, principals have had to interpret RTI through the lens of their prior knowledge and experience. The findings from this study reflect the principals’ approach and process of RTI implementation based on what has meaning for them.

The findings for research questions one through four were identified based on the data collected from the principal interviews. A 30 – 45 minute interview was conducted with each principal to explore their understanding of RTI and how they have conceptualized an approach to RTI at their sites. The interviews provided rich descriptive data on the RTI process and interventions at each site, as well as captured what knowledge and beliefs the principals felt were most important for teachers to have in order for RTI to be effective for student growth. Below you will find the results of the research questions and a summary of the findings that were most pertinent to this study.

**Findings for Research Question One**

Research Question One: *What is the RTI process that is used at the site?* The main theme that emerged from all three sites was the use of a Student Success Team, or also known as Student Study Team (SST). Two school sites had very similar approaches in implementing SSTs, while one site had a different approach. Additional themes that emerged from the two schools with similar SST approaches were: referral process, data-driven, and structure.
**Student success team.** The purpose of a SST meeting is to identify at-risk students, discuss their strengths and areas of concern, share strategies to help the student, and create an action plan to support the child. SST meetings typically included the classroom teacher of the referred student, the principal or administrator, a SST lead teacher, and the parent. Depending on the needs of the student, additional support staff attended the SST meeting such as the school psychologist, resource specialist teacher, speech pathologist, community liaison, or the school nurse. Based on student data and progress monitoring, the SST team would discuss how to support the child and create an action plan with responsibilities delegated to the members of the team to hold everyone accountable. The teacher would generally receive suggested interventions or strategies to implement in the classroom and the SST would follow up after a 6-8 week period to discuss student progress. Based on the data collected from progress monitoring, next steps would be decided. Principals identified RTI core components such as using a universal screener, progress monitoring, targeted interventions, and data driven decision making which are discussed at the SST meetings. At all sites, the principals stated that the SST process would occur before any referrals to special education assessments to ensure that all general education interventions have been exhausted.

The use of a Student Success Team is an example of one of the two major approaches to RTI models described in the literature. Berkeley et al. (2009) identifies two major RTI approaches: the problem-solving model and the standard protocol model. The SST process involves components of the problem-solving model where decision making on the needs of a student is shared amongst a team. Berkeley et al. (2009) describes the process of the problem-solving approach to include the following steps: define a problem,
plan an intervention, implement the intervention, and evaluate student progress. The SST process used in the schools is reflective of the problem-solving approach to RTI.

Andrea from Wood Creek described the general SST process at her site:

There’s a process that we need to follow, and we as a team need to follow that process. There’s a Tier 1, there’s a Tier 2, and there’s a Tier 3 meeting. Once we hit that Tier 3 meeting and we have exhausted every single intervention, then we call the school psychologist into this meeting as well as the school nurse if necessary and together as a team, we make the determination as to whether we’re going to test or not. By the time we hit that Tier 3 meeting or 4, it’s time to test.

Although SST meetings were used at each of the sites, the number of SSTs held varied from site to site. This was due to the referral process at each school. Mountain View and Wood Creek had a systematic referral process. Pine Hill held SSTs for only the highest risk students that the principal was aware of from the year before.

**Referral process.** At Mountain View and Wood Creek, the RTI process started with teachers submitting a referral form to hold a Student Success Team (SST) meeting for students who were identified at-risk in academics and/or behavior. Requesting an SST meeting for a student was not limited to just classroom teachers; any staff member, parent or administrator concerned about a student was able to submit a referral for a struggling student.

Both sites created their own SST referral form to include detailed and data driven information needed in order to make informed decisions. Teachers are expected to submit completed forms which include student assessment data, current interventions implemented in the classroom, and any modifications and accommodations provided to
the student. The teacher also identifies student strengths and specific areas of concern to
discuss at the SST meeting. At Wood Creek, Andrea shared:

We have a very comprehensive form which we always begin with what the
student’s areas of strength because that’s what parents want to hear first. They
need to hear that first and then the SST form is designed so you’re not leaving
anything to chance. It’s all database.

The referral forms at both Wood Creek and Mountain View have been created to focus
on student data.

From the SST process, students were identified to participate in the District
academic reading intervention pilot programs at Mountain View and Wood Creek.
However, the SST process was not the only way students were identified to participate.
Both principals stated that teachers used additional data measures to identify at-risk
students such as the District universal screening data using the STAR Reading
Assessment. Additional measures included class reading assessments, intervention
program assessments, and teacher recommendation.

**Data driven.** Referral forms require teachers to include data from the District
universal screening and progress monitoring system, STAR assessments. These
assessments include STAR Early Literacy, STAR Reading, and STAR Math. The
purpose of the STAR assessments is to provide information to teachers about student
growth and achievement. Students take the assessment, and it is scored automatically by
a computer software. Forms also included scores for CAASPP (California Assessment of
Student Performance and Progress) in English Language Arts and Math for students in
grades 4-6, CELDT scores (California English Language Development Test) for English
Learners, intervention data, and classroom data. Having student data identified on the referral form prior to the SST meeting has helped teachers come prepared to discuss student progress objectively during focused data-driven discussions. Andrea stated, “By the time we hit our first meeting, this [referral] is in place. We walk into the meeting with this data prepared to go, and then the meeting notes are taken.” She added further, “If you’re looking at your data and if you understand the circumstances around that child, then I think we can do a better job of intervening for them.”

Sofia from Mountain View also supported the importance of data for SST meetings. She shared:

If you come into an SST meeting, you need to bring data. You need to bring what interventions you’ve tried. During the meeting, we ask them like, what interventions did you try? What did you use? What did you do? Did you meet with your team? Did you test? When did you test? How long did you wait to test again? How do you know they’re not improving? Where’s the data? Some of the teachers are confused with that. So that’s what we’re finding out. This year, some of the teachers were really good in bringing this growth data. Like, if they submit their SST paperwork in November and then they’d bring data to the SST meeting. They bring 6-8 weeks of data on how the student was doing and then we set up another meeting let’s say in February, and then they’d bring more data, so some teachers are really good with that.

**Structure.** Another similarity in Sofia’s and Andrea’s approach to RTI implementation was structuring time during the school day for interventions to occur. Sofia stated, “If you don't do [interventions] religiously, it's not going to work.” Andrea is
also known for her planning skills and she stated, “If we don't have a fixed schedule, if it's not written, it doesn't happen." In order to ensure interventions are provided consistently, both principals have established a designated time during the school day to focus on interventions. Sofia and Andrea’s emphasis on creating structures for implementation is an effort to address one of the concerns of RTI identified in the literature, intervention fidelity and integrity (Sullivan & Castro-Villarreal, 2013). Details on how interventions are structured at the school sites will be further explained in the next section. Furthermore, Sofia scheduled designated times reserved to hold SST meetings every week so the SST members knew exactly when the meetings would be.

While the RTI implementation at Mountain View and Wood Creek was similar in approach through the use of the SST referral process, the principal at Pine Hill shared her approach to RTI. Lauren focused her work based on the District School Leadership Team (DSLT). The DSLT meets as teams, grade levels, or whole staff to look at data and identify the focus of the school. Through the DSLT model, Pine Hill focused on establishing learning objectives and checking for understanding which supports RTI tier 1 of core instruction. She explained:

[Establishing learning objectives] helped with the teaching part of RTI because it supported the teacher in really knowing what am I teaching, how do I know they got it, and then how do I know whether to reteach or move on, which kids I need to reteach or which kids I need to move on. The second thing DSLT supported our RTI work is we focused on checking for understanding. Again, how do we know the student learned it? How well did they learn it? How well can they apply it and do I have to go back and reteach or can I move on to the next piece?
For Lauren, the focus remains on good teaching in the classroom. Lauren supports Tier 1 components of RTI. Fisher and Frey (2010) describe how in Tier 1, the general education teacher focuses on providing high-quality teaching and is responsible for assessing and instructing students. Lauren emphasized, “You got to know how the student learns. You got to know their data and the teacher needs to know what they’re teaching.” She added teachers need to be prepared and supporting students is multi-faceted:

It has to be a combination of teacher driven technology, incorporating thinking time, and talking about their thinking so the kids can connect in that. And then, if you have a student with social or emotional needs, you have to take care of that or attendance, you have to take care of those things first.

Lauren’s past experiences with SSTs have also shaped her opinions about the SST process. She shared how in the past, the habit of some teachers would be to refer a struggling student to SST and then feel that it was no longer their responsibility or worry to support the child because the student was going to receive an SST meeting. This year, she only held SSTs for the highest risk students who were not responding to interventions. She stated, “Part of RTI is that you’re going to have just that small, small percentage that’s going to get tested and if we’ve done it right, they’ll qualify.” At Pine Hill, only four students had an SST meeting in the 2015-2016 school year, and three of those students qualified for Special Education.

Although she is aware that some teachers might feel that students are not succeeding because they did not have enough SSTs, she holds a different perspective. She explained how the daily work of teachers involves what occurs during an SST:
In my opinion, grade level teams is an SST in a sense that they’ve got to be talking to each other about a student that is having difficulty learning in their room or the way they’re designing the lessons if the student is gifted because that’s part of SST. SSTs, the true essence of SSTs is to give suggestions to the teacher from a team of how to work with that child, right?...SSTs would only be for those kids that are really not making progress after a lot of intervention has been tried and first good teaching has been tried in the classroom.

The differences between principals’ approaches to RTI support how individuals make sense of situations based on their prior knowledge and experiences. Sensemaking influenced how principals’ focused on implementing RTI at their sites. These findings support how RTI models can vary in a number of ways (Berkeley et al., 2009). While Mountain View and Wood Creek placed a strong emphasis on the referral process for SSTs and structuring time for interventions, Pine Hill focused on Tier 1 instructional practices in the classroom. However, all sites implemented SSTs and stressed the use of data driven decision making to support a student’s specific needs.

**Findings for Research Question Two**

Research Question Two: What types of RTI interventions are implemented? All three sites implemented the District initiated pilot intervention programs: iRead for grades K-2 and System 44 for grades 3-5. These intervention programs focused on foundational reading skills. Although the District intervention programs were the same at all sites, how the programs were implemented differed at each school. Through the interview discussions, principals also acknowledged other interventions provided at their schools. The findings for Research Question Two are presented by school site.
Mountain view elementary. At Mountain View, Sofia focused on establishing a structure in which interventions could occur during the school day. She called this structured time, *Intervention Mode*. Every grade level was expected to implement *Intervention Mode* to provide opportunities so that teachers could try everything they can in the classroom before students are recommended to receive interventions outside the classroom. She described:

K through 2nd is a little better in structuring their intervention mode where let’s say first grade after recess they go into intervention mode, and that’s where they implement the iRead, and that’s where the teacher has five or six groups going at the same time. She’s meeting with the students that need help, and that’s where she’s providing SST teams with data on how the students are growing and how the students are doing. In the upper grades, we still need to tighten up intervention mode because they have more students so what they’re doing is, they’re pulling students, small group or individually, and that’s how they’re meeting their needs.

In her description, Sofia focused on classroom teachers providing interventions to students. She stated:

Students are provided interventions in the classroom, many interventions, before they can even be provided interventions outside of the classroom. We need to make sure that teachers are providing the interventions prior to Read 180 which is more reading comprehension for upper grades, System 44 which is more phonics for upper grades, and we have iRead for K through 2nd grade which is more I’m learning how to read, phonics for lower grade.
In addition to the District intervention pilot programs, iRead and System 44, Mountain View has invested in purchasing and implementing the Read 180 program, a reading comprehension program for upper grade students. Mountain View has implemented these intervention programs for two years with positive success. To implement the program with fidelity, Sofia explains how Read 180 requires about 90 minutes per session, System 44 takes about an hour and 15 minutes, and iRead is done in small groups by the classroom teacher, usually 20-30 minutes each rotation. For Read 180 and System 44, which are reading interventions for students in grades 3-5, students are pulled out during intervention mode to receive targeted support.

To support the implementation of interventions at her school, Sofia hired an Impact teacher. Impact teachers are part-time teachers, usually hired by school sites to provide pull-out intervention and supports to at-risk students. However, instead of using the Impact teacher to implement the intervention programs, Sofia reversed the structure so that the classroom teacher taught the targeted intervention program while the Impact teacher taught the general classroom during this time. She explained her reasoning behind this structure:

It’s not a program where it’s taking away the responsibility of the home teacher, it’s not. And that’s one thing that was wrong with the Impact program that was happening during the school day- it was taking away the teacher’s responsibility. So, if a student was low and needed the extra additional reading support or math support, the Impact teacher was to take care of it, not the homeroom teacher.

In order to help teachers understand that it was their responsibility to provide interventions to their students, she reversed the Impact program model so that classroom
teachers became more knowledgeable about the needs of their students and how to support them.

Sofia also discussed behavioral interventions her school utilized. She emphasized the implementation of Positive Behavior Interventions and Support (PBIS), a school-wide positive behavior system that teaches students expected behaviors for student success. At Mountain View, every student knows the school expectations: be respectful, be responsible, and be ready to learn. Teachers always refer to these expectations when correcting and reinforcing behaviors. Although Mountain View is in its first year of PBIS and in the beginning stages of implementation, they have seen positive effects of PBIS with zero suspensions this school year.

Furthermore, if there is a student with a behavioral concern, they can be referred to an SST meeting. Teachers are expected to keep student logs to document student behavior incidents and communication with parents. This log serves as student data at the SST. Teachers log the date, behavior incident that occurred, what the teacher did, and how the teacher communicated with parents. This log is submitted with the SST referral so the principal can see the behavioral history of the student. Sofia feels that behavioral issues are minimal at her school due to the expectation that teachers communicate with parents. She expressed:

We had one suspension last year, and this year we have no suspensions, and I believe it’s because the teachers are really good with communicating with the parents. There’s just a lot of communication with the parents, and we don’t have big behavior problems and if we do, we have an SST for them. We go through the process. We invite the parent. Usually, the parents are good with- we give them
interventions for home, and they’re good with following up with that. I have four students on the behavioral plan right now and we don’t tell them that, you know, you’re always going to get a consequence. We also give them rewards for positive behavior.

An additional behavioral support that Mountain View reaches out to is the District’s Family Resource Center (FRC). The FRC provides health and social supports to students and families in the district. They also staff community liaisons who work closely with schools that do home visits to provide that extra support and create a link between schools and families.

**Wood creek elementary.** At Wood Creek, in addition to implementing the District pilot intervention programs, Andrea has established an intervention program of her own to support a target subgroup of fifth- and sixth-grade Long Term English Learners (LTELs). Over the years, Andrea had observed that it was a challenge for fifth- and sixth-grade teachers to teach foundational reading skills to students who were struggling readers. Andrea believes, “We are all teachers of reading regardless of the grade level that you teach.” Therefore, she focused on creating a fifth-sixth reading intervention program for students who are LTELs or at-risk of becoming LTELs. She described how she supports these students:

What we have been doing for our LTELs and our students who are at-risk of becoming LTELs is number one, identifying them. Number two, indicating to our teachers who these students are. And then number three, the TOSA (Teacher on Special Assignment) is counseling with each LTEL. And the reason she’s counseling with each LTEL and our reclassified students that are not making
adequate yearly progress as well is because that’s our commitment when we reclassify.

Andrea is committed to supporting English Learners’ achievement. Her support plan includes the TOSA conducting conferences with the students, documenting the talks, and keeping track of data. She stated, “And we continue to meet with the child every trimester so that we can make certain that the right interventions are in place for her.” In addition, she shared:

Our TOSA goes into the classroom now and works with the teacher and with the student. So, what we’re trying to do now is find the disconnect within the classroom or why that student is struggling…So there’s coaching for teachers, coaching for students.

Like Sofia at Mountain View, Andrea also focuses on structuring time for interventions during the day. She described a nonnegotiable item that teachers are committed to at Wood Creek, and that is guided reading time. Using the District universal screening data from the STAR assessments to identify levels of students, teachers provide small group instruction for guided reading. She explained:

You must see your Intervention or Urgent Intervention students a minimum of three times a week. You can see your Benchmark and At/Above Benchmark students a minimum of two times a week. So, teachers have created schedules and have turned them into me relative to the committed time that they are meeting with their children in primary, and this is grades K through 2.
During this small group instruction time, the teacher works with guided reading groups while students move through the District intervention program, iRead, as a center activity.

System 44, another District intervention pilot program was implemented to support upper grade students. At Wood Creek, the TOSA pulls the students who are identified as needing foundational reading skills to participate in the program.

Another block of time that is structured during the day is ELD instruction. Andrea stated:

Another intervention, of course, is ELD, if you will, and this is how we implement ELD here. We implement ELD first thing in the morning from 8:00 to 8:45. And we do that because every teacher has their differentiated group. And they focus on a content standard from ELA, and then they embed the language standard so that every child on the Wood Creek campus is receiving language instruction that is going to support and front-load them during the ELA block.

While the English Learners are receiving their designated ELD instruction, all students are in differentiated groups to receive language support.

Andrea also described how some of her teachers have taken it upon themselves to create Tier 2 interventions after analyzing their student data. The third grade team, concerned about their students’ progress, decided to team together to designate 45 minutes for reading intervention. One teacher, trained and certified in Reading Recovery, pulled a small group of students to work on reading recovery skills, while the TOSA pulled another small group to work on a reading fluency program called Read Naturally. The rest of the students remained with the other two teachers to be challenged in the area
of reading. The small groups meet for 20 minutes then they flip flop. Andrea shared, “We’ve seen excellent growth in that regard, too, because they’re getting the foundational skills that might be missing, and then they’re getting the reading practice from Read Naturally.” Andrea also shared another example of teachers in fifth grade who are providing Tier 2 interventions using the same model.

Lastly, Andrea mentioned how additional supports are utilized such as the health office staff conducting vision and hearing tests, support from the School Psychologist, Family Resource Center, and from the hearing officer for the deputy. At Wood Creek, the hearing officer comes to the school to help monitor student attendance and have meetings with parents. This process is viewed as a critical intervention for behavior modifications. Andrea explained:

If our children aren’t here, they are not learning, and you know with Common Core State Standards and curriculum now, you miss one day, you miss a lot, and there is no packet in the world that’s going to catch you up or give you what a teacher could possibly give you in a given day.

**Pine hill elementary.** At Pine Hill, District intervention pilot programs were also implemented. Kindergarten through second grade teachers implemented iRead in their classrooms. To implement the Systems 44 program, Lauren hired a credentialed Impact teacher who also had a Master’s degree in reading. She shared:

A critical piece I think that when you do get to Tier 2 of that model and you’re going to pull out, you have to have a high-quality person doing that research-based program, and I think we saw significance this year with the same person
because she is an experienced teacher with the full credential with a Master’s degree in reading, so she knows.

This model was similar to Wood Creek’s where an outside teacher implemented the intervention by pulling groups of students out.

When discussing RTI, Lauren’s main focus was geared towards Tier 1 core instruction. Some of the critical areas she focused on school-wide were learning objectives and knowing what standards were being taught, checking for understanding, incorporating 21st century skills and technology, student collaboration and communication, developing a writing pedagogy, and using formative assessment and analyzing data to drive instruction. She also discussed the importance of formal observations and teacher evaluations.

Another area that was emphasized by Lauren was the use of outside supports. She stated that when supporting students, it has to be multi-faceted. RTI is not just academics, but it also includes providing social, emotional, and health supports. For this, she often called on and utilized supports from the Family Resource Center (FRC). The school paired up with FRC and offered an after school homework technology club for fourth- and fifth-grade students. Furthermore, if a student had behavioral or social concerns, any staff member could refer the student directly to FRC to receive help, and the school would always invite FRC staff to the SST meeting. Lauren shared:

Here, RTI Squared, or RTI Instruction and Intervention, now becomes this, with all these other connectors. We have to have their social needs and behavioral needs met, bringing in outside agencies, meeting with the parents, really honing in on instructional time in the classroom with the teacher because that’s where it
happens, with the credential teacher who knows the students, who knows instruction.

At Pine Hill, Lauren stressed interventions done in the classroom by the classroom teacher, and having teachers collaborate, share best practices, and discuss how to best support students who are struggling. Early release days were meant for teachers to provide help to each other.

Although all sites used District intervention pilot programs, implementation varied at each school site based on the school’s focus and how the principal felt interventions would work best at their site. Furthermore, principals identified and described additional interventions provided at their site as well as outside supports that were often utilized. There does not appear to be a common set of Tier 1, Tier 2, and Tier 3 instruction and interventions across all schools, as each school, grade level, or teacher creates or uses interventions that they believe work the best for their students.

**Findings for Research Question Three**

Research Questions Three: *What knowledge do principals feel is important for teachers to have in order to implement RTI?* The main theme that emerged from the study was teachers need to know more about the tiers of RTI.

**Tiers of RTI.** Across schools, the principals stated that their teachers need more knowledge of the RTI tiers. This finding is reflective of the literature, supporting Thorius et al. (2014) who found that educators had minimal knowledge on central features of RTI. Each school has their way of providing interventions to struggling students, however, most teachers have had limited to no formal professional development trainings on the RTI model, specifically, the tiers of the model.
Sofia, from Mountain View, shared that although they are great at having SSTs and having a systems and structures in place, they do not have an RTI tiered model that is written down which describes strategies and interventions at each tier. Her goal is to do this work next year. When asked what knowledge teachers should have in order to implement RTI, she responded, “First of all, not just what it is but also what every tier entails and especially the Tier 1 where it’s their opportunity to create and to implement strategies and intervention programs.”

Andrea, from Wood Creek, also shared the same idea. She stated, “I would really love us to be able to precisely go through the tiers again.” When Andrea first became a principal at Wood Creek three years ago, the transition to Common Core and supporting teachers through that process was the main focus. Currently, a focus of the school is getting Future Ready, working towards integrating 21st century skills. In regards to all initiatives, Andrea explained how she presents each one as they come up and tries to help her teachers make connections between them all. From her perspective, she sees that everyone is at different places on a continuum. She shared, “We’re all at different places relative to things, but we have to continuously move forward,” and her goal is to continue moving her staff forward with RTI and continue supporting students with needs. Andrea also added:

I think the way my teachers have received knowledge on RTI is because of my Master’s degree, my understanding of RTI, and I think RTI will vary at every school based on the needs of your children. You have to look at your data, for sure, and then you have to be creative with how you implement that RTI because
we have instructional minutes that we’re being held to as well as state mandates that we have to comply with.

Andrea has had to use sensemaking for RTI, and through her knowledge and experiences, she has shared what she feels as most important to her teachers and has implemented RTI the way she feels works best at her school.

Lauren, at Pine Hill, also shared similar comments. Her teachers also have not received any formal training on RTI, and the information provided to her staff has been delivered in “bits and pieces.” She stated, “I don’t think we talk enough about the components of RTI because there are definite components. You know, you need to know how students learn. You need to know their data, and teachers need to know what they’re teaching.” She added further, “It’s the first good teaching that is critical and that every minute in the classroom is critical for instruction.” For Response to Intervention to work, instruction cannot be all teacher talk. She expressed other critical areas for instruction which included focusing on 21st century skills, foundational reading skills, and technology.

The emergent theme for Research Question Three was that principals felt teachers should have more knowledge about the RTI model and tiers. All site principals noted that professional development on RTI has been minimal, and what has been presented to staff has been based on what principals felt was most important for their school. Specifically, the principals all placed an emphasis on the importance of Tier 1 core instruction and strong instruction in the classroom.
Findings for Research Question Four

Research Question Four: What beliefs do principals feel is important for teachers to have in order to implement RTI? The following themes emerged from the study: professionalism, growth mindset, and positive relationships.

Professionalism. The principals viewed teachers as professionals who craft, create, plan, collaborate, and deliver instruction and interventions based on the students’ needs. They felt that teachers should hold these beliefs about their role and responsibility as a teacher. This includes teachers reflecting on their teaching and always striving to improve their instructional practice.

Lauren at Pine Hill shared how it is important for teachers to know and believe that RTI is part of their work. She stated, “I think there are people who still believe that RTI is somebody else’s job to do.” In order to improve Response to Instruction and therefore have less Response to Intervention, Lauren explained that teachers need to be involved in the practice of analyzing data, reflecting on instructional practices, and collaborating with others:

We need to know the data of our students and then look at it through the lens of how do I tweak my teaching or my lesson design, how do I go to the principal and say I need X, Y, or Z to help me, how do I go to a colleague and share a lesson or share something that was done in the classroom and get feedback from them on how could I rework it?

Lauren emphasized the belief that it is a shared responsibility to help all students, “Everybody’s got to look at the students as we’re sharing these students, and it’s not just
somebody else’s job.” Regardless of student labels, general education teachers need to work collaboratively with Special Education teachers to support all students.

Sofia also stated the importance of teachers’ professional work with RTI. She used the powerful analogy of doctors helping their patients with medicine compared to teachers helping their students with interventions. Her example is meant to show the importance of the teacher’s responsibility to exhaust all possible interventions in order to accurately identify student needs. She described, “I tell the teachers, you guys are the doctors. This is your career. You’re testing students. If this doesn’t work, then you have to give them another medicine.” Just like a doctor who diagnoses their patients, she stated, “You don’t want to give [students] the wrong medicine. You don’t want to diagnose a person with cancer when they don’t have cancer.” Sofia places a focus on teachers needing to use different strategies and the understanding that if a student is mislabeled from the lack of trying multiple interventions, they’ll be placed in a group they don’t belong in, like giving the wrong medicine to a patient.

**Growth mindset.** Another belief that emerged from this study is that teachers should have a growth mindset, a perspective based on the belief that “your basic qualities are things you can cultivate from your efforts” (Dweck, 2006, p. 7), as compared to a fixed mindset, a belief that qualities are carved in stone (Dweck, 2006). In a growth mindset, a person’s talents, aptitudes, interests, and temperaments can change and grow through application and experience (Dweck, 2006). This belief that students have the ability to improve if given the proper support is at the foundation of Response to Intervention.
Sofia, from Mountain View, expressed the beliefs she feels teachers should hold in order to implement RTI. She stated:

What beliefs do I feel that teachers should have? That every student is capable of learning, that every student can do better, that they need to try to service this child. I’ve seen and I’ve heard that this child cannot learn, this child doesn’t learn. Oh, this child is like this because his brother was like this, and his brother is in Special Education, so this child is the same. Or do you see the parents? The parents, the apple doesn’t fall far from the tree. So all those comments that I hear, you know judging already the child, and I think it’s kind of like a mind shift. If teachers believe that students can learn, then they’ll do everything possible to have that child learn. Now, if the child really has a learning disability, then we can see it, but after we, after we do whatever we can to have that child learn.

Andrea, from Wood Creek, was also very passionate about her response to question four. As a young girl, Andrea remembers being a struggling reader and having a challenging time in school. The feeling she remembers of being a struggling student has never left her, which has influenced her work and her passion to help children and her passion for learning and teaching. She stated, “I see, feel, and know what it’s like for students who struggle and how it’s not their fault.” Her experiences have helped her and in turn, her staff to understand the belief, “We are here to serve the children that come to us. It’s not the other way around.” Andrea has made efforts to support a shift in mindset with her staff. She no longer allows her teachers to say, “That child is low.” She feels that this statement tells her nothing, “Low, there’s no place to go.” Instead, she focuses on the student data and creating a plan of action through SSTs.
Positive relationships. The last theme that emerged from the study of the beliefs that principals felt teachers should have in order to implement RTI was the importance of creating positive relationships. This includes relationships with all stakeholders: students, parents, teachers, administrators, support staff, and outside organizations.

Sofia shared that it is important to celebrate successes. It is important to look at the data and celebrate student growth. Meeting and speaking to students to go over their data is a powerful tool for motivation. She stated, “They could see how much they grew, and they see how much they read, and I could see how proud they were of themselves.” She also stated that it’s important to communicate and share success with parents. When student success is celebrated, positive relationships are created with students and parents, and Sofia stated she saw differences in the way students saw and carried themselves. She recalled one student in the Read 180 intervention program who she would often see being sent to detention for not doing homework or skateboarding late at night on campus. After speaking to him about his success of making the largest growth in the reading intervention program, she stated, “We saw a shift with him, not just the way he dressed, but also on his confidence level. He no longer plays around. He’s not perfect, but if he comes to the office, he always has a book in hand”.

Andrea also concluded her discussion with the importance of building relationships. Like Sofia, she gave an example of affecting change in students. She shared:

I have five boys who were fifth graders who were really naughty last year, really, really naughty so they ended up having to spend a lot of time here with me at lunch. Well, it turned out, they don’t want to go away. They’re six graders now,
and they still come in every day. The boys say, “We don’t want to get in trouble and that’s why we’re here.” So they still have lunch with me. Building those relationships is so important. Sometimes interventions don’t work because of the relationships that those who are providing them aren’t as strong or the commitment to the process isn’t quite as strong, and so building relationships with your teachers, with your students, and with outside sources like the hearing officer for the deputy and parents, all those are important.

Andrea highlighted the need to be aware of the human aspect of teaching and supporting students. It is not just solely based on processes, programs, meetings, etc., but sometimes what can make the greatest impact is the relationship you build with others. Andrea closed with, “I think it’s being open to building those relationships because you can have all kinds of plans, but if the foundation of your plan isn’t built on trust and relationships that you have with others, then it’s not going to work.”

Principals were passionate about what they believed and what they felt teachers should believe in order to support RTI with their students. These beliefs stemmed from their personal and professional experiences. Findings show that teachers should hold the belief that it is their role to serve all students, believe that students can learn and grow if given support, and the human aspect of building trust and relationships is critical when motivating change.

The interviews provided descriptive data on the RTI processes and interventions that are implemented at the school sites, as well as what principals felt teachers should know and believe in order to implement RTI. The next section will show the findings from the anonymous survey given to teachers. The results for Research Question Five
and Six are based on the data collected and analyzed from the teachers’ knowledge and beliefs survey.

**Participants Taking Teacher Knowledge and Beliefs Survey**

A knowledge and beliefs survey was given to teachers implementing district initiated interventions to measure teachers’ knowledge and beliefs during implementation. Teachers were selected to participate in the survey if they participated in a district intervention pilot program. The school principal identified these teachers and forwarded an e-mail request from the researcher to take the anonymous survey.

At Wood Creek Elementary School, of the ten teachers implementing district interventions, nine completed the survey with a response rate of 90%. At Mountain View Elementary School, seven out of fourteen teachers implementing interventions participated in the survey, with a response rate of 50%. At Pine Hill Elementary, five out of twelve teachers responded to the survey, with a response rate of 42%. A total of twenty-one teachers in the District completed the knowledge and beliefs survey. The overall response rate for the study was 58%.

The survey collected data on the knowledge teachers have of Response to Intervention and their beliefs about their role in supporting struggling students. The survey was divided into sections to code knowledge and beliefs. Sections that pertained to teacher knowledge included: Knowledge about RTI, Access, and Progress Monitoring. Sections that pertained to teacher beliefs included: Instruction, Students, and Roles. The findings for research questions five and six were collected from the teacher knowledge and beliefs survey. Below you will find the results of the survey questions of this study.
Findings for Research Question Five

Research Question Five asked: What knowledge do teachers have about RTI implementation? Sections 1 through 3 of the teacher survey focused on collecting data on teacher knowledge of RTI such as intervention tiers, progress monitoring, and accessing interventions. Teachers reported to what extent they agreed or disagreed to the knowledge statements based on a 5-point Likert Scale. Below are the overall findings for each of the sections from all participants. The findings were also disaggregated by school site. This analysis was completed to see if there were any patterns between participants from the same site.

Knowledge of RTI. The findings for Section 1, Knowledge of RTI, are illustrated in Table 1. For Statement 1, the results showed 66% of teachers strongly agreed or agreed to have an RTI approach at their school sites. For Statement 2: I am implementing RTI with my students, 5% of teachers strongly agreed and 43% agreed. These findings show that although teachers may be implementing interventions for students in their class, they may not have the knowledge to identify their work as part of Response to Intervention. Further analyses of these two statements were conducted by disaggregating responses by school sites as shown in Figure 4 and Figure 5.
Table 1

*Teacher Knowledge and Belief Survey, Section 1: Knowledge of RTI, n =21*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.) My school has a RTI approach to support students.</td>
<td>14%</td>
<td>52%</td>
<td>19%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>2.) I am implementing RTI with my students.</td>
<td>5%</td>
<td>43%</td>
<td>33%</td>
<td>10%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>3.) I can describe Tier 1 core instruction.</td>
<td>14%</td>
<td>19%</td>
<td>38%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4.) RTI provides steps to meet student needs by exhausting all available</td>
<td>33%</td>
<td>38%</td>
<td>24%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>interventions prior to Special Education referral.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.) I know the difference between Tier 2 and Tier 3 interventions.</td>
<td>14%</td>
<td>24%</td>
<td>19%</td>
<td>33%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>6.) If one intervention is not effective, I find and implement another</td>
<td>19%</td>
<td>62%</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>intervention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4 shows disaggregated data for Statement 1 with 86% of teachers at Mountain View stating they strongly agreed or agreed to have an RTI approach at their site. At Wood Creek, 67% of teachers strongly agree or agree. At Pine Hill, 40% of teachers agree and 40% of teachers disagree. This shows that schools with higher implementation of SSTs and a more specific SST referral process have higher rates of teachers who state that there is a RTI approach at their schools.
Statement 1: My school has a RTI approach to support students.

![Bar chart showing teacher responses to Statement 1.]

- **Mountain View, n = 7**: 14% Strongly Agree, 72% Agree, 0% Neutral, 14% Disagree, 0% Strongly Disagree.
- **Pine Hill, n=5**: 0% Strongly Agree, 40% Agree, 20% Neutral, 40% Disagree, 0% Strongly Disagree.
- **Wood Creek, n=9**: 22% Strongly Agree, 45% Agree, 33% Neutral, 0% Disagree, 0% Strongly Disagree.

*Figure 4. Statement 1 results.*

Statement 2: I am implementing RTI with my students.

![Bar chart showing teacher responses to Statement 2.]

- **Mountain View, n = 7**: 0% Strongly Agree, 86% Agree, 14% Neutral, 0% Disagree, 0% Strongly Disagree, 0% NA or Don't Know.
- **Pine Hill, n=5**: 0% Strongly Agree, 0% Agree, 60% Neutral, 20% Disagree, 0% Strongly Disagree, 0% NA or Don't Know.
- **Wood Creek, n=9**: 22% Strongly Agree, 45% Agree, 33% Neutral, 0% Disagree, 0% Strongly Disagree, 0% NA or Don't Know.

*Figure 5. Statement 2 results.*
Figure 5 shows disaggregated data for Statement 2 with 86% of teachers at Mountain View stated they agreed to implement RTI with their students. At Wood Creek, 67% of teachers strongly agreed or agreed with Statement 2. At Pine Hill, 0% of teachers agreed, while 60% responded neutral, 20% disagreed, and 20% stated NA or don’t know. From these data, schools with principals who emphasized designated intervention times scheduled during the school day have higher rates of teachers who stated that they agreed to implement RTI with their students.

Data from Section 1 also shows the level of teacher knowledge of tiered interventions was inconsistent. The results from Statement 3 and 4 illustrate the variance in the level of teacher knowledge regarding the tiers of RTI. Out of 21 respondents, only seven teachers agreed or strongly agreed that they could describe Tier 1 core instruction. Furthermore, only eight teachers responded that they knew the difference between Tier 2 and Tier 3 interventions. This result shows that there may be a need for teachers to receive more information and training on the different tiers of a RTI model.

A highlight of Section 1 is the results for Statement 6: *If one intervention is not effective, I find and implement another intervention.* Findings show that 81% of teachers agreed or strongly agreed to this statement. At Mountain View, 100% of teachers stated they agreed. Although the data illustrate how teacher knowledge of tiered interventions is inconsistent, the majority of teachers are aware of the basic RTI principal of the need to keep trying other interventions and ways to support a student if one way is not working.

**Progress monitoring.** The results from Section 2 of the survey, Progress Monitoring, are displayed below in Table 2. This section included statements regarding teachers’ knowledge of the importance of progress monitoring.
Table 2

*Teacher Knowledge and Belief Survey, Section 2: Progress Monitoring, n = 21*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.) When I implement an intervention, the student’s progress is documented.</td>
<td>29%</td>
<td>62%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>8.) I know how to use Universal Screening data to identify students who are at-risk in ELA and Math.</td>
<td>38%</td>
<td>48%</td>
<td>0%</td>
<td>10%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>9.) I know how to access the data necessary to determine the percent of students in core instruction who are achieving benchmarks.</td>
<td>29%</td>
<td>48%</td>
<td>14%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>10.) I know how to use progress monitoring data to make decisions about the degree to which a student is responding to intervention.</td>
<td>24%</td>
<td>43%</td>
<td>24%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>11.) I know how to use data to define the current level of performance of the target student.</td>
<td>19%</td>
<td>57%</td>
<td>10%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>12.) I am able to be consistent with implementing and documenting interventions.</td>
<td>10%</td>
<td>43%</td>
<td>33%</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

When analyzing the data from Section 2, Progress Monitoring, the pattern of responses was similar across the different scales for each statement. When combining the responses from all progress monitoring statements in this section, the average response was 25% strongly agreed, 50% agreed, 14% neutral, 10% disagree, and 1% strongly disagree. This shows that a majority of teachers either strongly agreed or agreed to know
how to use universal screening, how to access data, and how to document and monitor student progress in order to make informed decisions.

A deeper analysis was conducted when data was disaggregated by school site. For Statement 8, overall data showed 86% of teachers agreed or strongly agreed to have knowledge of how to use Universal Screening data to identify students who are at-risk in ELA and Math. Disaggregated data in Figure 6 showed Mountain View had 100% of teachers who strongly agreed or agreed, Wood Creek had 89%, and Pine Hill had 60%. Schools with principals who required student data for SST referrals had a higher percentage of teachers who agreed to this statement.

![Figure 6. Statement 8 results.](image)

The disaggregated data from Statement 10 (see Figure 7) and Statement 11 (see Figure 8) show similar results. Schools with higher implementation of SSTs also show higher percentage of teachers who agree to these progress monitoring statements.
Figure 7. Statement 10 results.

Statement 10: I know how to use progress monitoring data to make decisions about the degree to which a student is responding to intervention.

Teacher Responses

<table>
<thead>
<tr>
<th></th>
<th>Mountain View, n = 7</th>
<th>Pine Hill, n=5</th>
<th>Wood Creek, n=9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>29%</td>
<td>0%</td>
<td>33%</td>
</tr>
<tr>
<td>Agree</td>
<td>42%</td>
<td>40%</td>
<td>45%</td>
</tr>
<tr>
<td>Neutral</td>
<td>29%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0%</td>
<td>40%</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 8. Statement 11 results.

Statement 11: I know how to use data to define the current level of performance of the target student.

Teacher Responses

<table>
<thead>
<tr>
<th></th>
<th>Mountain View, n = 7</th>
<th>Pine Hill, n=5</th>
<th>Wood Creek, n=9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>14%</td>
<td>0%</td>
<td>33%</td>
</tr>
<tr>
<td>Agree</td>
<td>57%</td>
<td>40%</td>
<td>67%</td>
</tr>
<tr>
<td>Neutral</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0%</td>
<td>60%</td>
<td>0%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Accessing RTI. The results from Section 3 of the survey, Accessing RTI, are displayed below in Table 3. This section included statements regarding teachers’ knowledge of accessing interventions, resources, and supports at their school site.

Table 3

*Teacher Knowledge and Belief Survey, Section 3: Accessing RTI, n = 21*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.) I know how to access Tier 2 interventions to support students who are not responding to Tier 1 core instruction.</td>
<td>10%</td>
<td>19%</td>
<td>29%</td>
<td>38%</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>14.) I know what interventions are available for at-risk students at my site.</td>
<td>10%</td>
<td>43%</td>
<td>29%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>15.) I know the steps to take to support a student with academic or behavioral needs after I have tried a variety of intervention strategies.</td>
<td>5%</td>
<td>67%</td>
<td>10%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>16.) I know how to identify the appropriate supplemental intervention in my school for a student identified as at-risk.</td>
<td>10%</td>
<td>38%</td>
<td>24%</td>
<td>28%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>17.) I know how to find sources for research-based interventions.</td>
<td>5%</td>
<td>43%</td>
<td>33%</td>
<td>19%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>18.) I know who I can ask for support regarding students who are academically and behaviorally at-risk.</td>
<td>24%</td>
<td>48%</td>
<td>10%</td>
<td>18%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

The findings to the statements in Section 3, Accessing RTI, show inconsistent results. For Statement 15, 72% of overall respondents strongly agreed or agreed to know the steps to take to support a student with academic or behavioral needs. At Wood Creek, 89% of teachers reported knowing the steps to take to support students after interventions.
have been tried. At Mountain View, 71% agreed to know the steps, while at Pine Hill, 40% of teachers agreed. For Statement 18, 72% of teachers also strongly agreed or agreed to know who they can ask for support regarding an at-risk student. Findings for Statements 15 and 18 show that schools with higher implementation of SSTs also have a higher percentage of teachers who have knowledge of the steps to take to support a struggling student and know who to ask for support, if needed.

Although teachers overall knew what steps to take to support a student at-risk and knew who to ask for support at their sites, the responses for knowing how to access interventions and resources at their site were inconsistent and varied. For Statement 13: *I know how to access Tier 2 interventions to support students who are not responding to Tier 1 core instruction*, only 29% of teachers strongly agreed or agreed, while 29% were neutral, and 38% disagreed. Responses also varied for Statements 14, 16, and 17, which were all related to knowing how to identify or access interventions.

The results from Sections 1 through 3 of the teacher survey show teachers are knowledgeable in understanding the need to keep supporting students and trying new interventions if one intervention is not effective. The survey also shows teachers know the importance of progress monitoring and using student data to make decisions. Furthermore, teachers are also knowledgeable about the steps to take to support a student at-risk.

However, the survey findings express areas in which teachers may need more information and knowledge. These areas include: knowing and describing the different tiers of the RTI model and knowing how to identify and access interventions.
When findings were disaggregated by school sites, trends emerged between the two schools that had high implementation of SSTs. These schools had a higher percentage of teachers responding strongly agreed or agreed to survey statements in Sections 1 through 3.

The next section will discuss teacher beliefs of instructional practices, supporting students, and their role as a teacher.

**Findings for Research Question Six**

Research Question Six asked: *What are teachers’ beliefs about supporting students who are struggling in school?* Sections 4 through 6 of the teacher survey focused on collecting data on teacher beliefs in areas pertinent to RTI and supporting struggling students. Teachers reported to what extent they agreed or disagreed to the question based on a 5-point Likert Scale. Below are the overall findings from all respondents. The findings were also disaggregated by school site.

**Instruction.** The findings for Section 4, Instruction, are illustrated in Table 4. The results for Statements 20, 21 and 22 shows over 80% of teachers hold beliefs that align with RTI by either responding strongly agree or agree to these statements. For Statement 20: *Prevention activities and early intervention strategies in schools would result in fewer referrals to Student Success Teams and placements in Special Education*, 81% of teachers strongly agreed or agreed to this belief. At Pine Hill, 100% of teachers shared the belief that prevention activities and early intervention strategies in schools would result in fewer referrals to SST and special education, despite 40% of teachers agreeing that their school had an RTI approach and 0% of teachers stating they are implementing RTI with their students.
For Statement 22: *General education teachers should implement differentiated instruction to address the needs of a more diverse student body*, 91% of teachers strongly agreed or agreed to this statement. Although 91% of teachers believed that differentiated instruction is needed, Statement 23 shows 91% of teachers also believed that differentiated and flexible interventions would be implemented more if there was additional staff support.
Table 4

*Teacher Knowledge and Belief Survey, Section 4: Instruction, n = 21*

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.) Prevention activities and early intervention strategies in schools would result in fewer referrals to Student Success Teams and placements in Special Education.</td>
<td>29%</td>
<td>52%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>21.) Core instruction should be effective enough to result in 80% of the students achieving benchmarks in reading and math.</td>
<td>33%</td>
<td>48%</td>
<td>5%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>22.) General education teachers should implement differentiated instruction to address the needs of a more diverse student body.</td>
<td>48%</td>
<td>43%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>23.) General education classroom teachers would be able to implement more differentiated and flexible interventions if they had additional staff support.</td>
<td>67%</td>
<td>24%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>24.) Using data to determine intervention effectiveness is more accurate than using “teacher judgment.”</td>
<td>29%</td>
<td>29%</td>
<td>29%</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>25.) Resources should be given first to students who are not reaching benchmarks before resources are given to students who are at or above benchmark.</td>
<td>38%</td>
<td>29%</td>
<td>24%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>26.) It is easier for me to make decisions about student performance and needed interventions when the student data are graphed.</td>
<td>24%</td>
<td>48%</td>
<td>19%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
Students. The survey findings for Section 5, Students, are displayed in Table 5. Section 5 included statements regarding beliefs about students. In this section, statements were either positively or negatively aligned to support RTI. Positive statements were Statements 27, 28, 30 and 32. Negative statements were Statements 29, 31, 33 and 34. Teachers who agreed to positive statements and disagreed to negative statements held beliefs that supported RTI implementation.

The positive statements with the highest percentage of teachers agreeing were Statement 28: *The use of additional interventions in the general education classroom would result in success for more students* and Statement 32: *Fairness is not every student getting the same treatment. Instead fairness is everyone getting what they need to be successful in school.* Teachers responded with 86% strongly agree or agree to both of these beliefs.

The negative statement with the highest percentage of teachers disagreeing was Statement 33: *If the student isn’t succeeding, lack of motivation or laziness is likely to be the problem.* The percentage of teachers who disagreed to this belief was 85%.

The other three negative statements had lower rates of teachers that disagreed. For Statement 29: *Students should behave and study to learn grade-level standards and skills. This is their responsibility, not mine,* 62% of teachers disagreed, 19% remained neutral, 14% agreed, and 5% strongly agreed. For Statement 34: *For students who do not do their homework, punitive discipline is effective at changing their behavior (e.g., reprimand or detention),* 57% of teachers strongly disagreed or disagreed, 29% remained neutral, and 14% agreed. For Statement 31: *The primary reason students misbehave in school is their
lack of parent support, 38% of teacher either strongly disagreed or disagreed, 38% were neutral, 19% agreed, and 5% strongly agreed.

The data from Section 5 shows that although most teachers hold beliefs about students that support RTI by agreeing with positively aligned beliefs and disagreeing with negatively aligned beliefs, there are still some teachers who hold beliefs that support a deficit model of thinking (Dray & Wisneski, 2011).
Table 5

*Teacher Knowledge and Belief Survey, Section 5: Students, n = 21*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.) All students can achieve grade-level benchmarks if they have sufficient support.</td>
<td>10%</td>
<td>43%</td>
<td>19%</td>
<td>29%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>28.) The use of additional interventions in the general education classroom would result in success for more students.</td>
<td>19%</td>
<td>67%</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>29.) Students should behave and study to learn grade-level standards and skills. This is their responsibility, not mine.</td>
<td>5%</td>
<td>14%</td>
<td>19%</td>
<td>43%</td>
<td>19%</td>
<td>0%</td>
</tr>
<tr>
<td>30.) Fairness is not every student getting the same treatment. Instead fairness is everyone getting what they need to be successful in school.</td>
<td>43%</td>
<td>43%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>31.) The primary reason students misbehave in school is their lack of parent support.</td>
<td>5%</td>
<td>19%</td>
<td>38%</td>
<td>33%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>32.) The mission of a school should be to teach both academic and social emotional skills that lead to student success.</td>
<td>38%</td>
<td>43%</td>
<td>5%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>33.) If the student isn’t succeeding, lack of motivation or laziness is likely to be the problem.</td>
<td>0%</td>
<td>10%</td>
<td>5%</td>
<td>71%</td>
<td>14%</td>
<td>0%</td>
</tr>
<tr>
<td>34.) For students who do not do their homework, punitive discipline is effective at changing their behavior (e.g., reprimand or detention).</td>
<td>0%</td>
<td>14%</td>
<td>29%</td>
<td>33%</td>
<td>24%</td>
<td>0%</td>
</tr>
</tbody>
</table>
**Teacher roles.** The findings for the last section of the survey are displayed in Table 6. Section 6, Teacher Roles, included statements regarding teacher roles and responsibilities. Again for this section, there were positive and negative statements.

Statement 35: *My main responsibility is to teach academics, not to teach students how to behave,* was a negative statement with 71% of teachers who strongly disagreed or disagreed to this belief. Statements 36 and 37 were both positive statements. Statement 36 shows 85% of teachers hold the belief that it is their responsibility to implement individual interventions for students struggling academically. This belief is critical to teachers implementing RTI. For Statement 37, fewer teachers agreed to the statement with 76% of teachers who believe that it is their responsibility to implement individual interventions or behavior plans for students who engage in behavioral problems.

Table 6

*Teacher Knowledge and Belief Survey, Section 6: Teacher Roles, n = 21*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>NA or Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.) My main responsibility is to teach academics, not to teach students how to behave.</td>
<td>5%</td>
<td>10%</td>
<td>14%</td>
<td>38%</td>
<td>33%</td>
<td>0%</td>
</tr>
<tr>
<td>36.) It is my responsibility to implement individual interventions for students struggling academically.</td>
<td>14%</td>
<td>71%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>37.) It is my responsibility to implement individual interventions or behavior plans for students who engage in behavioral problems.</td>
<td>19%</td>
<td>57%</td>
<td>19%</td>
<td>5%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>
The results from Sections 4 through 6 of the teacher survey show teachers’ beliefs that align to RTI implementation and supporting struggling students. The findings support that most respondents hold beliefs that support RTI such as: teachers should implement differentiated instruction to address the needs of students; fairness is everyone getting what they need to be successful in school; and early intervention strategies would result in fewer referrals to Student Success Teams and placements in Special Education. Although many teachers believe that student learning is part of the responsibility being a teacher, there are still some teachers who believe that student learning and behavior is the student’s responsibility, not the teachers. Educational leaders must also face the challenge of shifting mindsets to ensure all students have a fair opportunity to succeed.

Summary

This chapter discussed the results of the data collection and analysis. Major themes were presented in this chapter based on an analysis of the qualitative and quantitative data collected. Qualitative data were analyzed to identify schools’ approach to RTI implementation. The themes that emerged from the qualitative data showed the impact of principals’ sensemaking of RTI and on the implementation approach at their school sites. Quantitative data were analyzed to gain insight on teachers’ knowledge and beliefs of RTI. Teacher responses varied, but patterns emerged from schools with high implementation of SSTs. Chapter 5 will present the conclusions, implications and recommendations of this study.
Chapter 5: Conclusions and Recommendations

Chapter 5 will present the following sections: summary of the study, conclusions, recommendations, and a final reflection. The summary of the study includes the purpose of the study, a review of the methodology, a restatement of the specific research questions, and an overview of the findings. The second section presents a discussion of conclusions. The next sections discuss the implications of the major findings and suggest recommendations for future practice and research. The chapter will conclude with reflections on the study.

Summary of the Study

The following section provides a brief summary of the study and its findings.

Purpose of the study. The purpose of this study was to investigate the interrelationships between principal’s RTI implementation approach, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school. The problem addressed in this study was that although RTI models hold potential, the lack of specificity on how and why RTI is used has resulted in variability in its implementation (Hauerwas et al., 2013). This study presents how school principal’s knowledge and experiences influence RTI implementation and how teachers make sense of RTI. Through the perspective of a sensemaking framework, this study shows the impact of sensemaking on implementation, knowledge, and beliefs of RTI, which can ultimately affect student achievement.

Methodology. This study was conducted using a mixed methods design. The researcher combined qualitative and quantitative data which provided a better understanding of the research problem than using just one form by itself (Creswell,
School sites and participants were gathered based on pre-determined criteria of implementing a District initiated intervention pilot program. Three school sites were selected to participate. The researcher conducted semi-structured interviews with each of the site principals and conducted an anonymous knowledge and beliefs survey with teachers at the sites.

The principal interviews and the teacher knowledge and belief survey were conducted on a voluntary basis. The survey was sent to teachers participating in the District initiated intervention programs. A total of twenty-one teachers completed the survey. Interviews were transcribed and coded for themes. The quantitative data from the survey were analyzed to determine common themes that emerged from all the information gathered to answer the research questions.

**Research questions.** The overarching research question for this study was: What are the interrelationships between principal’s approach to RTI implementation, teachers’ RTI knowledge, and their beliefs of supporting students who are struggling in school?

Specific research questions used to gain a greater understanding were:

1. What is the RTI process that is used at the site?
2. What types of RTI interventions are implemented?
3. What knowledge do principals feel is important for teachers to have in order to implement RTI?
4. What beliefs do principals feel is important for teachers to have in order to implement RTI?
5. What knowledge do teachers have about RTI implementation?
6. What are teachers’ beliefs about supporting students who are struggling in school?

Findings. The overall findings are presented in alignment with the research questions. The research questions were answered by themes that emerged from principal interview data and teacher knowledge and belief survey which were reported in Chapter Four.

Research Question One: What is the RTI process that is used at the site?

RTI implementation varied at each school site based on the school’s focus and how the principal thought interventions would work best at their site. Principal’s decisions on how to implement interventions were influenced by their own experiences, learning, and prior knowledge. At all sites, principals stated that although there have not been many formal trainings on RTI for administrators or teachers, they have implemented what they considered were important parts of RTI in a way that worked best at their schools in order to support their students.

For Question One, a common theme at all sites was the use of a Student Success Team (SST). Through the use of SST meetings, teams identified at-risk students, discussed specific strengths and areas of concern, shared strategies, suggested interventions, and created an action plan to support the student.

The themes that emerged from two schools that approached SSTs using a similar process were: referral process, data driven, and structure. For most cases, the first step to providing additional support to struggling students started with identifying students based on data and submitting a referral form to hold an SST meeting. The form requires the teacher to include detailed information such as student assessment data, current
interventions used, and any modifications or accommodations provided to the student. Second, in order to have meaningful SST meetings, discussions were data driven. Teachers were expected to have and bring student data from multiple measures including universal screeners, state and local assessments, and classroom assessments. Based on progress monitoring data of how the student was doing with current interventions, the team would suggest and decide an action plan to further support the student, which could include the teacher implementing a new intervention in the classroom or the student participating in a pull-out intervention program. The last theme that emerged was the importance of structure to ensure that interventions were provided consistently. The principals stated that intervention must be carefully scheduled and planned. At the schools that had designated times for interventions during the school day, more teachers stated that their school had an approach to RTI, and more teachers reported implementing RTI with students.

Research Question Two: What types of RTI interventions are implemented?

All three sites implemented the District initiated pilot intervention programs: iRead for grades K-2 and System 44 for grades 3-5. These intervention programs focused on foundational reading skills. Although the District intervention programs were the same at all sites, how the programs were implemented differed at each school. All sites hired an outside teacher, such as a TOSA or an Impact teacher to support with providing interventions. At two sites, the outside teacher taught the pull-out intervention groups for the upper grades. However, at another site, the principal used a reverse model where the Impact teacher taught the general classroom while the classroom teacher taught the pull-out intervention group for upper grades. This model was used because the principal
thought that the classroom teacher had the most experience and expertise to support their at-risk students, and it provided the classroom teacher more opportunities to take ownership and responsibility for the progress of their students.

Through the interview discussions, principals also acknowledged other interventions provided at their schools. At each site, principals highlighted different areas of focus. Based on the school focus, principals identified and described additional interventions provided at their site as well as outside supports that were often utilized. For example, while one school focused the implementation of Positive Behavior Interventions and Support (PBIS), another school focused on supporting Long Term English Learners (LTELs), while another school focused on helping the few highest-risk students and using the Family Resource Center as a support.

The discussion of RTI and interventions illustrates the complexity of what is involved in RTI implementation. There does not appear to be a common set of Tier 1, Tier 2, and Tier 3 instruction and interventions across all schools, as each school, grade level, or teacher creates or uses interventions that they believe work the best for their students. Furthermore, while supporting at-risk students is a priority, principals have had to balance and figure out the best way to implement RTI at their sites while keeping their focus in areas such as Common Core instruction, 21st century learning, and integration of technology. All schools have stated that there has been limited professional development regarding RTI for administrators and for teachers, which demonstrates the possible need for more professional development specific to understanding the RTI model or how to best implement RTI at the school site.
Research Question Three: What knowledge do principals feel is important for teachers to have in order to implement RTI?

Across schools, the principals stated that their teachers needed more knowledge of the RTI tiers. Each school has their way of providing interventions to struggling students; however, most teachers have had limited to no formal professional development trainings on the RTI model, specifically, the tiers of the model.

Research Question Four: What beliefs do principals feel is important for teachers to have in order to implement RTI?

The following themes emerged from the study: professionalism, growth mindset, and positive relationships. Principals viewed teachers as professionals and felt teachers should believe that professionalism in this field includes crafting, creating, planning, collaborating, reflecting, and delivering quality instruction and interventions to all students. Principals expressed that teachers need to hold the belief that it is their role and responsibility as a teacher to support all students and to not pass a struggling student off to someone else to deal with. The second theme that emerged was having a growth mindset. In order to implement RTI effectively, principals thought it was important for teachers to believe that all students can learn and grow. The belief that students have the ability to improve if given the proper support is at the foundation of RTI. The final theme that emerged was believing in the importance of positive relationships. Principals emphasized that a powerful way to enact change in students was showing that you cared for students, taking time to speak to them, celebrate successes, and recognize their efforts and growth. Principals spoke of first hand experiences of how building relationships shifted the actions and academic progress of their students in a positive way.
Research Question Five: What knowledge do teachers have about RTI implementation?

The teacher survey supported that teachers are knowledgeable in understanding the need to keep supporting students and trying new interventions if one intervention is not effective. The survey results also supported that teachers know the importance of progress monitoring and using student data to make decisions. Furthermore, teachers are also knowledgeable about the steps to take to support a student at-risk.

However, the survey findings express areas in which teachers may need more information and knowledge. These areas include: knowing and describing the different tiers of the RTI model and knowing how to identify and access interventions.

Research Question Six: What are teachers’ beliefs about supporting students who are struggling in school?

The findings supported that most respondents hold beliefs that align with RTI such as: teachers should implement differentiated instruction to address the needs of students; fairness is everyone getting what they need to be successful in school; and early intervention strategies would result in fewer referrals to Student Success Teams and placements in Special Education. Although many teachers believe that student learning is part of the responsibility being a teacher, there are still some teachers who believe that student learning and behavior is the student’s responsibility, not the teachers.

Conclusions

Based on the findings of interview and survey data, conclusions were reached in the following three major areas: a) sensemaking and RTI, b) professional development and c) collaboration.
**Sensemaking and RTI.** The first conclusion is that sensemaking impacts understanding, experiences, and implementation of RTI. Maitlis and Christianson (2014) define sensemaking as the process through which people work to understand issues or events that are confusing or ambiguous, and it involves the assumption that people act based on what has meaning for them. Individuals construct meanings different from one another due to their different positions, interests, and backgrounds (Maitlis & Christianson, 2014). This theory was reflected in the interviews with the principals.

The principals’ prior knowledge and experience shaped how they interpreted and conceptualized RTI which impacted their approached to RTI at their site. All principals stated that the majority of their understanding of RTI stemmed from their own experiences, learning and research. Principals had their own vision of how to best support their at-risk students and figured out how to best implement the components of RTI at their school. Hill and Levenhagen (1995) discuss how in order to cope with uncertainties, people must develop a vision of how the environment works best, and this is referred to as sensemaking. Sensegiving is the ability to communicate the vision to others and gain their support (Hill & Levenhagen, 1995). Principals had to first make sense of RTI, figure out how to best implement at their sites, and then deliver information and knowledge to their staff. Due to each principal’s own sensemaking, there was variation in interpretations of RTI and how it was implemented at the sites.

Furthermore, principals’ sensemaking may have influenced teachers’ understanding and experiences with RTI. Sensemaking is also a social process, as the principals’ individual interpretations were shared with others and a collective meaning was developed as teachers engaged in practices that influence and shaped their
understandings. Results of teachers’ knowledge and beliefs survey showed patterns in
teacher responses from schools with principals who discussed high implementation of
SSTs. By emphasizing the steps to take to help a student through the process of SSTs,
principals may have helped construct what RTI means for teachers.

Without a common understanding of RTI, each site leader may interpret and
implement RTI in the way that works the best for their school. This creates a complex
and challenging situation for district level and site level educators when organizing and
leading implementation of initiatives such as RTI. It is important to understand
sensemaking when implementing new policies or practices. When reforms are unclear,
ambiguous, or confusing, those who implement the change will need to make sense of the
situation and figure out the best way to do it. For RTI, the lack of uniformity and
specificity of how it should be implemented has raised concerns (Barrio & Combes,
2014). In addition, this variation causes concern in the consistency of the identification
process for special education eligibility (Barrio & Combes, 2014). The findings from the
study support how lack of uniformity has caused variations in site implementation.
District and site leaders can help create more consistency in RTI implementation by
involving stakeholders to establish common understandings and practices.

Professional development. The second conclusion derived from the findings is
the need to have professional development. Thorius et al. (2014) found that there was
lack of technical understanding of core features of RTI, and the findings from this study
are similar. Both principals and teachers reported that there was a lack of knowledge
regarding the specific tiers of RTI and how to identify and access interventions to support
their students.
One way to establish common knowledge and practices of RTI is to provide professional development for all stakeholders: district personnel, site administrators, teachers, instructional support staff, and student services personnel. Professional development can build capacity of educators by providing background knowledge and skills necessary to help understand the purpose and process of RTI. It is important to include all stakeholders in order to arrive at a consensus regarding the importance of RTI implementation and commit to its use and sustainability. Professional development sessions also provide an opportunity to discuss beliefs and assumptions about teaching and student learning, and emphasize the need for RTI practices. When there is common knowledge and understandings from all stakeholders, planning committees can establish a common vision, create common understandings and practices, and ultimately decrease the ambiguity of implementation and increase consistency across sites.

**Collaboration.** The last conclusion that emerged from the findings was that collaboration is necessary for effective implementation. Dulaney (2013) found that collaboration was an important factor to sustain systematic improvement of school-wide RTI implementation. RTI is very complex, and there are many factors that are involved in implementation. In order to promote implementation, all factors must be considered and improvements can occur though collaboration.

One of the factors that principals discussed was the need for structuring and scheduling intervention during the school day. By including teachers in this discussion, they are able to collaborate on how to best structure this intervention time. Working together in teams, teachers can provide input on the best way to create an infrastructure to support RTI.
Another important factor was use of Student Success Teams. This involves a collaborative process where a team discusses data and uses shared decision making to decide what interventions or strategies would best meet the needs of students. The SST meeting also provides an opportunity to collaborate with parents and establish relationships between school and home.

The findings from the teacher knowledge and belief survey showed inconsistent data. Some teachers were more knowledgeable than others in RTI. Collaboration among teachers can help improve knowledge of the process and skills for implementation. Teachers can meet in professional learning communities to discuss student data and create action plans, or they can meet informally and share interventions that have been successful in their classrooms. Collaboration and working in teams opens communication, build interdependent relationships, supports skill development, and creates a shared responsibility (Drago-Severson, 2009). Establishing a shared responsibility for student learning can also reinforce beliefs that support RTI.

The survey findings also showed that teachers were inconsistent on beliefs about student learning. Collaboration between teachers can impact a shift in mindset and culture. Collaboration includes planning lessons together, sharing strategies, discussing interventions, creating action plans, and reviewing student data and progress. Through these collaborative activities, those who hold beliefs that align with RTI can emphasize a shared responsibility for student learning. Collaborative efforts can impact school culture and may influence those with different mindsets to try something new and shift their way of thinking.
Lastly, findings from the study indicated the importance of the support provided to students by outside sources. All principals shared that an important factor involved in supporting students was utilizing supports such as the health office, Family Resource Center, school psychologist, special education or resource specialists, speech pathologist, and the hearing officer for the deputy. Greater collaboration with experts in various fields allows for more informed decisions to be made about students (Greenfield et al., 2010).

**Implications**

Based on the findings and conclusions presented in this study, there are several implications that can be drawn. This study was limited to the experiences of three schools in one district. Therefore, due to the nature of this small scale study, the implications cannot be generalized. However, implications for the field of RTI and for educators working with RTI will be discussed.

**Implications for the field of RTI.** Response to Intervention is accepted as necessary, but it is not sufficient by itself. The researcher investigated the relationships in RTI, and findings showed RTI implementation in schools is complex and does not occur in isolation. RTI implementation relies on the collaborative efforts between stakeholders, including administrators, teachers, parents, and student. In addition, the study showed schools often involved outside staff to provide better support to their students. This suggests that districts should consider Response to Intervention as part of a larger comprehensive framework, Multi-Tier System of Supports (MTSS).

MTSS is a comprehensive framework that presents RTI and other supports in an integrated tiered model that addresses the academic, social, emotional and behavioral development of students (Averill & Rinaldi, 2011). MTSS is rooted in the data-informed
practices of RTI and offers a multi-tiered approach to provide intensive and increasingly individualized interventions. Although similar to RTI, MTSS acknowledges that contextual issues, not just instruction, could be the reason why students are not learning (Averill & Rinaldi, 2011). The MTSS approach integrates a continuum of supports to build home-school-community relationships. The framework brings together partners from education, mental health, family, social service, medical, juvenile justice, recreation, and cultural organizations. Averill and Rinaldi (2011) state, “These collaborations, together with educational leadership at the district and school levels, promote the foundation of wrap-around structures, supports and practices to help students succeed in school” (p. 92). Principals from the study shared the importance of collaborating with some of these outside sources when describing their current approach in supporting their students.

Like RTI, the framework for MTSS is not specifically written in educational policy. Since the 2004 reauthorization of the Individuals with Disabilities Education Improvement Act (IDEIA) and its mandate to prohibit the sole use of the discrepancy model to identify students with specific learning disabilities, states have been encouraged to use research-based approaches such as RTI. When policy allows for states to determine their approach without specificity, interpretations will vary and cause ambiguity. Furthermore, local level leaders and teachers face ambiguity when policies do not provide a clear definition or identify research that shows what counts as research-based. Therefore, regardless of which approach is used, it will be up to states and districts to provide direction on implementation and practice.
Implications for educators. There is a need for educators to understand the impact of sensemaking when implementing new reform. One’s experiences and prior knowledge impacts how they interpret and create meaning of new situations and ideas. As a result, sensemaking can cause variation in implementation. Variations in RTI implementation causes concern as it is difficult to determine if students are supported and identified for special education in a consistent manner. Therefore, educators must understand that in order to build consistency and increase fidelity, common understandings and practices must be created and shared. This could be achieved through on-going professional development for all educators.

Educators must also be aware that effective RTI implementation is a collaborative effort. The complexities of RTI involve many factors. At the district level, RTI implementation must be viewed as a shared responsibility among various departments: Curriculum and Instruction, Special Education, Pupil Services, Assessment and Technology. It is important to develop capacity in educators in each of these areas to arrive at a consensus for the need to implement RTI within the framework of MTSS. Recommendations for practice and research will be presented in the next section.

Recommendations

Based on the implications drawn from this study, the following are the recommendations for practice.

Stakeholder involvement. It is important to involve stakeholders from all district departments and arrive at a consensus on implementing RTI under the MTSS framework. Providing professional development on MTSS and RTI to district leaders, administrators, teachers, and support staff will help build capacity of all educators, as well as develop
common understandings so all stakeholders can have the knowledge to contribute to
decision making and planning.

**Professional development.** Providing on-going professional development on the
RTI model and MTSS framework for leadership teams, administrators, teachers, and
support staff is critical in establishing common knowledge, practices, and language.
District-wide professional development opportunities are needed so all educators have
similar experiences to build consistency in sensemaking of RTI implementation.

**Alignment.** Align district policies, procedures, and initiatives to promote
common understanding and application of MTSS framework with a focus on RTI
implementation fidelity. Establishing a vision is essential in the alignment of district
priorities. It requires mapping out how to connect the major district initiatives to focus on
a few main overarching goals. The work involved in Response to Intervention aligns with
the most important educational goal, student achievement and support.

**Leadership.** Establish a district leadership team that includes teachers,
administrators and stakeholders from different departments to focus on planning,
implementation, and ongoing evaluation. Provide administrators and teachers with
implementation support by a district leadership team.

**Collaboration.** Structure time for collaborative opportunities for teams to discuss
implementation, strategies, interventions, and infrastructure. Provide opportunities to visit
other sites and districts to foster collaboration and learn from others. Conduct learning
walks to reflect on and improve current practices.

These recommendations were developed through careful consideration of the
conclusions from the study that implementation of RTI is affected by sensemaking,
professional development is an important factor in developing common understandings, and implementation of RTI is a collaborative effort.

**Recommendations for Future Research**

The scope of this study was limited to the experiences of three schools within one district which included three principals and 21 teachers. Expanding the study with a larger sample size would be of interest to investigate relationships further. After concluding this study, questions for future research still remain:

- How do educational leaders conceptualize RTI and determine implementation practices?
- How does RTI impact student achievement? Does student achievement differ between high implementation RTI schools and low implementation RTI schools?
- Is there a difference in students identified for special education in schools with high implementation of RTI versus low implementation of RTI?

Possibilities for future research studies are listed below:

- Conduct a case study of a high implementation district or school to investigate how educational leaders conceptualize RTI and determine implementation practices.
- Conduct a comparative study, comparing student achievement data from high RTI implementation schools and low RTI implementation schools.
- Conduct a longitudinal study to follow students receiving interventions through the tiers of RTI to find what support systems are used to help students.
• Study the special education identification rates between schools with high RTI implementation and low RTI implementation.

These recommendations for future research can address the questions that still remain and provide more insight on RTI implementation and its effect on student achievement.

**Reflection**

Public schools have an obligation to provide high quality education to all children in our country. A high quality education includes providing strong core instruction, targeted interventions, and increasing intensity for individualized interventions to support struggling students. A multi-tiered model of Response to Intervention is often adopted; however, schools and districts are left to determine how to use this approach at their sites. Educational leaders face the challenges and the complexities of implementing RTI as a means to increase student achievement and meet the needs of all students. Therefore, it is important for educators to understand the interrelationships of RTI to improve implementation and fidelity to ensure that all students receive what they need to be successful.

This study demonstrated that there are many factors that impact RTI implementation. First, the implementation approach was determined by how the principal interpreted and conceptualized RTI. Principals acted and implemented components of RTI in a way that worked best for their school while keeping the focus on various other initiatives. Two schools utilized Student Success Teams with high implementation. The study showed that schools with higher implementation of SST had a higher percentage of teachers who viewed their school had an RTI approach. Principals’ approach, implementation processes, and emphasis could influence teachers’ experiences,
knowledge, and beliefs of RTI. Sensemaking can cause variation in RTI implementation, and, therefore, can cause variation in experiences for teachers, which ultimately impacts the students.

Fully addressing the needs of struggling students cannot be provided in isolation. The study shows that using RTI to support students is a collaborative effort that involves many stakeholders. In order to improve consistency and fidelity, it is important to build the capacity of all educators by providing professional development. Professional development can help build a common understanding so stakeholders can arrive at a consensus on the importance of implementing RTI with students. Leadership teams can be created to decide how to best implement common practices and provide on-going support to schools. Implementing reforms such as RTI is no easy task; however, improvements can be made if educators come together and take on a shared responsibility to help all students receive the support they need.
References


Appendix A: Interview Protocol for Principal Interview

Project Title: Response to Intervention: Knowledge and Beliefs during Implementation,

The purpose of this study is to investigate how teachers have made sense of Response to Intervention and examine the experiences and beliefs that influenced teachers’ implementation of RTI at their school site. Understanding what has impacted implementation of RTI from the teachers’ perspective can help administrators identify key factors and areas of focus when looking to improve the implementation of RTI at their sites.

**Principal Professional Experience**

1. What is your professional experience?
2. How many years have you been the principal at the school?
3. What is your experience with RTI training? When? Who was involved?

**Site RTI Process**

4. How was RTI introduced to your staff? When? Who was involved?
5. Does your school have an RTI tiered model? Do you use PBIS?
6. What is the process of RTI at your school?
7. How do you identify students with academic or behavioral needs?
8. What RTI interventions or programs are provided at your school? How long?

**RTI Training and Support for Teachers**

9. What RTI training has been provided to your staff?
10. What kind and how much RTI support is provided? By who?

**RTI Knowledge and Beliefs**

11. What knowledge do you feel teachers should know about RTI?
12. What beliefs do you feel teachers should have about RTI?
13. How would you evaluate progress of RTI in the school so far? What are your next steps?
Appendix B: Teacher Beliefs and Knowledge Survey

Adapted from Browning Wright & Cook (2012) and Tumolo Zarabba (2010)

Participant responses are based on a 5 point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree). Survey was conducted through Google Forms.

<table>
<thead>
<tr>
<th>Knowledge about RTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My school has an RTI approach to support students.</td>
</tr>
<tr>
<td>2. I am implementing RTI with my students.</td>
</tr>
<tr>
<td>3. I can describe Tier 1 core instruction.</td>
</tr>
<tr>
<td>4. I know that RTI provides steps to meet student needs by exhausting all available interventions prior to Special Education referral.</td>
</tr>
<tr>
<td>5. I know the difference between Tier 2 and Tier 3 interventions.</td>
</tr>
<tr>
<td>6. If one intervention is not effective, I find and implement another intervention.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Progress Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. When I implement an intervention, the student’s progress is documented.</td>
</tr>
<tr>
<td>8. I know how to use Universal Screening data to identify students who are at-risk in ELA and Math.</td>
</tr>
<tr>
<td>9. I know how to access the data necessary to determine the percent of students in core instruction who are achieving benchmarks.</td>
</tr>
<tr>
<td>10. I know how to use progress monitoring data to make decisions about the degree to which a student is responding to intervention.</td>
</tr>
<tr>
<td>11. I know how to use data to define the current level of performance of the target student.</td>
</tr>
<tr>
<td>12. I am able to be consistent with implementing and documenting interventions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Access to RTI</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. I know how to access Tier 2 interventions to support students who are not responding to Tier 1 core instruction.</td>
</tr>
<tr>
<td>14. I know what interventions are available for at-risk students at my site.</td>
</tr>
<tr>
<td>15. I know the steps to take to support a student with academic or behavioral needs after I have tried a variety of intervention strategies.</td>
</tr>
<tr>
<td>16. I know how to identify the appropriate supplemental intervention in my school for a student identified as at-risk.</td>
</tr>
<tr>
<td>17. I know how to find sources for research-based interventions.</td>
</tr>
<tr>
<td>18. I know who I can ask for support regarding students who are academically and behaviorally at-risk.</td>
</tr>
</tbody>
</table>
### Instruction and RTI

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prevention activities and early intervention strategies in schools would result in fewer referrals to Student Success Teams and placements in special education.</td>
</tr>
<tr>
<td>2.</td>
<td>Core instruction should be effective enough to result in 80% of the students achieving benchmarks in reading and math.</td>
</tr>
<tr>
<td>3.</td>
<td>General education teachers should implement more differentiated and flexible curricula to address the needs of a more diverse student body.</td>
</tr>
<tr>
<td>4.</td>
<td>General education classroom teachers would be able to implement more differentiated and flexible interventions if they had additional staff support.</td>
</tr>
<tr>
<td>5.</td>
<td>Using student-based data to determine intervention effectiveness is more accurate than using “teacher judgment.”</td>
</tr>
<tr>
<td>6.</td>
<td>Time and resources should be given first to students who are not reaching benchmarks before significant time and resources are directed to students who are at or above benchmark.</td>
</tr>
<tr>
<td>7.</td>
<td>It is easier for me to make decisions about student performance and needed interventions when the student data are graphed.</td>
</tr>
</tbody>
</table>

### Students and RTI

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>All students can achieve grade-level benchmarks if they have sufficient support.</td>
</tr>
<tr>
<td>9.</td>
<td>The use of additional interventions in the general education classroom would result in success for more students.</td>
</tr>
<tr>
<td>10.</td>
<td>Students should behave and study to learn the material. This is their responsibility, not mine.</td>
</tr>
<tr>
<td>11.</td>
<td>Fairness is not every student getting the same treatment. Instead fairness is everyone getting what they need to be successful in school.</td>
</tr>
<tr>
<td>12.</td>
<td>The primary reason students misbehave in school is their lack of parent support.</td>
</tr>
<tr>
<td>13.</td>
<td>The mission of a school should be to teach both academic and social emotional skills that lead to success in life.</td>
</tr>
<tr>
<td>14.</td>
<td>If the student isn’t succeeding, lack of motivation or laziness is likely to be the problem.</td>
</tr>
<tr>
<td>15.</td>
<td>For students who do not do their homework, punitive discipline is effective at changing their behavior (e.g., reprimand or detention)</td>
</tr>
</tbody>
</table>

### Teacher Roles

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td>My main responsibility is to teach academics, not to teach students how to behave.</td>
</tr>
<tr>
<td>17.</td>
<td>It is my responsibility to implement individual interventions for students struggling academically.</td>
</tr>
<tr>
<td>18.</td>
<td>It is my responsibility to implement individual interventions or behavior plans for students who engage in behavioral problems.</td>
</tr>
<tr>
<td>19.</td>
<td>Students who do not improve after classroom interventions are implemented probably have a learning disability.</td>
</tr>
</tbody>
</table>
Appendix C: Beliefs about Behavior Survey - 4th Edition

From Browning Wright & Cook (2012)

**BELIEFS ABOUT BEHAVIOR – 4th Edition**
Diana Browning Wright and Clayton R. Cook, 3/2012

This is an anonymous survey designed to look at one’s beliefs with regard to behavior.
(Please respond by marking the box that applies to how you honestly feel about the statement)

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. My main responsibility is to teach academics, not to teach students how to behave.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. A school team should assist teachers in providing and monitoring interventions for students in my class who are identified by the team as emotionally or behaviorally at risk.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. My students must respect me before I can show respect to them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. If the student isn’t succeeding, lack of motivation or laziness is likely to be the problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I can prevent most behavior problems by posting expectations, teaching those expectations and rewarding students when they exhibit those expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How students behave in my class is primarily related to my classroom management strategies and the relationships I have with each student.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. For students who don’t behave well in my class, punitive discipline is effective at changing their behavior (e.g., reprimand, office referral, detention or suspension)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Students should know how to behave and be ready to learn—I should not have to teach these behaviors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. If a student has repeated behavior problems, I should refer him/her to a team meeting to consider whether special education services are needed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Praise and positive recognition are powerful tools to get students to behave well in school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. If I use effective behavior support strategies in my classroom, I can get 80%-90% of my students to meet behavioral expectations and maintain engagement in learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Schools are responsible for teaching academics, whereas parents and the students themselves are responsible teaching and learning behaviors.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. It is unfair if some students receive individual incentives and rewards, while others do not.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Students who lack social skills and/or the ability to manage their emotions, should be taught these skills in school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Students should behave and study to learn the material. This is their responsibility, not mine.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
<td>---------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16. Students who do not respond well to basic classroom management should receive evidence based interventions to address their behavior before evaluation for special education or more restrictive placements is considered.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17. Even without parental involvement and support, schools can effectively teach students' behavioral expectations and social skills.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18. All my students are entitled to positive interactions with me, regardless of whether they have behavior problems that disrupt my teaching.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19. Proactive, positive behavioral interventions and strategies produce longer lasting behavioral change than punishment based strategies.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>20. Only students with IEPs are entitled to function-based behavior plans.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>21. Students with emotional and behavior disabilities should be educated outside of general education classes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>22. I do not have the time to implement individual interventions or behavior plans for students who engage in behavior problems.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>23. Adolescent students with emotional and behavioral problems can respond well to school-based supports.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24. The primary reason students misbehave in school is their lack of parent support.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25. An incentive program is an important component to building an effective behavior support program, so students can be provided or earn access to items, activities, and/or privileges when they engage in desired behaviors.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26. Fairness is not every student getting the same treatment. Instead fairness is everyone getting what they need to be successful in school.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27. Motivational systems that provide extrinsic rewards harm intrinsic motivation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28. Just like we teach academics, schools should set aside time to teach all students important social-emotional skills, such as managing one’s emotions, demonstrating care and concern for others, and problem-solving interpersonal conflicts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29. Collecting and reporting data to a school team on students’ behavior is important and I believe it is worth the time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30. The mission of a school should be to teach both academic and social emotional skills that lead to success in life.</td>
</tr>
</tbody>
</table>
Appendix D: Beliefs Survey

From Tumolo-Zarabba (2010)

Beliefs Survey
(Adapted from the Florida Problem Solving/Response to Intervention Statewide Project)
Form A

Directions: For items 1-4 below, please place a check mark next to the response option that best represents your answer.

1. Job Description:
☐ Teacher-General Education ☐ Teacher-Special Education ☐ Reading Specialist/Instructional Support
Other (Please specify):

2. Years of Experience in Education:
☐ Less than 1 year ☐ 1 – 4 years ☐ 5-9 years ☐ 10 – 14 years ☐ 15-19 years ☐ 20-24 years
☐ 25 or more years ☐ Not applicable

3. What percentage of your students receive special education services:
☐ Less than 5% ☐ 6 –15% ☐ 16-25% ☐ 26-50% ☐ more than 50%

4. Highest Degree Earned:
☐ B.A./B.S. ☐ M.A./M.S. ☐ Ed.S. ☐ Ph.D./Ed.D. Other (Please specify):

5. Year Highest Degree was Attained: ______________

Directions: Using the scale below, please indicate your level of agreement or disagreement with each of the following statements by shading in the circle that best represents your response.

1 = Strongly Disagree (SD)
2 = Disagree (D)
3 = Neutral (N)
4 = Agree (A)
5 = Strongly Agree (SA)

<table>
<thead>
<tr>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
</table>

6. I believe in the philosophy of No Child Left Behind (NCLB) even if I disagree with some of the requirements. ☐ 2 ☐ 3 ☐ 4 ☐ 5

7. Core instruction should be effective enough to result in 80% of the students achieving benchmarks in
7.a. reading ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
7.b. math ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

8. The primary function of supplemental instruction is to ensure that students meet grade-level benchmarks in
8.a. reading ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
8.b. math ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

9. The majority of students with learning disabilities achieve grade-level benchmarks in
9.a. reading ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
9.b. math ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
10. The majority of students with behavioral problems (Emotional Disturbance) achieve grade-level benchmarks in
   10.a. reading  1  2  3  4  5
   10.b. math  1  2  3  4  5

11. Students with high-incidence disabilities (e.g. Specific Learning Disability; Emotional Disturbance) who are receiving special education services are capable of achieving grade-level benchmarks (i.e., general education standards) in
   11.a. reading  1  2  3  4  5
   11.b. math  1  2  3  4  5

12. General education classroom teachers should implement more differentiated and flexible instructional practices to address the needs of a more diverse student body.  1  2  3  4  5

13. General education classroom teachers would be able to implement more differentiated and flexible interventions if they had additional staff support.  1  2  3  4  5

14. The use of additional interventions in the general education classroom would result in success for more students.  1  2  3  4  5

15. Prevention activities and early intervention strategies in schools would result in fewer referrals to problem-solving teams and placements in special education.  1  2  3  4  5

16. The “severity” of a student’s academic problem is determined not by how far behind the student is in terms of his/her academic performance but by how quickly the student responds to intervention.  1  2  3  4  5

17. The “severity” of a student’s behavioral problem is determined not by how inappropriate a student is in terms of his/her behavioral performance but by how quickly the student responds to intervention.  1  2  3  4  5

18. The results of IQ and achievement testing can be used to identify effective interventions for students with learning and behavior problems.  1  2  3  4  5

19. Many students currently identified as “LD” do not have a disability, rather they came to school “not ready” to learn or fell too far behind academically for the available interventions to close the gap sufficiently.  1  2  3  4  5

20. Using student-based data to determine intervention effectiveness is more accurate than using only “teacher judgment.”  1  2  3  4  5
21. Evaluating a student’s response to interventions is a more effective way of determining what a student is capable of achieving than using scores from "tests" (e.g., IQ/Achievement test).

22. Additional time and resources should be allocated first to students who are not reaching benchmarks (i.e., general education standards) before significant time and resources are directed to students who are at or above benchmarks.

23. Graphing student data makes it easier for one to make decisions about student performance and needed interventions.

24. A student’s parents (guardian) should be involved in the problem solving process as soon as a teacher has a concern about the student.

25. Students respond better to interventions when their parent (guardian) is involved in the development and implementation of those interventions.

26. All students can achieve grade-level benchmarks if they have sufficient support.

27. The goal of assessment is to generate and measure effectiveness of instruction/intervention.

28. Response to Intervention is an effective method for helping *all* students achieve basic skills in reading and math.

29. Response to Intervention offers benefits for average students.

30. Response to Intervention offers benefits for advanced students.

31. Response to Intervention offers benefits for struggling students.

32. I have had comprehensive training in and use differentiated instruction to teach students with diverse learning needs.

33. I have access to professional development activities that are needed to implement Response to Intervention.

34. I have access to support needed to implement new skills following professional development activities.