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# Collective Sensemaking About the Implementation of Two Multi-Tiered Systems of Support: A Comparative Case Study of Two Selected Elementary School Teams

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COLLECTIVE SENSEMAKING ABOUT THE IMPLEMENTATION OF THE  
MULTI-TIERED SYSTEMS OF SUPPORT: A COMPARATIVE  
CASE STUDY OF TWO SELECTED  
ELEMENTARY SCHOOL TEAMS

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A Dissertation  
Presented to  
the Graduate School of  
Clemson University

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy  
Educational Leadership

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by  
Ellen M. Hampshire  
May 2016

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## ABSTRACT

Positive Behavior Interventions and Supports (PBIS) and Response to Intervention (RTI) provide two examples of multi-tiered systems of support (MTSS). Over several decades, MTSS developed as policy-based initiatives intended to increase equity, access, and quality of education. These initiatives integrate school and classroom practices for improving academic and social/behavioral development for all students. However, studies indicate continued implementation problems within each system across all levels of intervention. Such results signal concerns about implementation capacity for the intent of both MTSS policies' regarding educational access, equity and quality.

Literature indicates that policy intent is converted at the micro, or school, level into models and practices. As school teams are charged with implementing RTI and PBIS, questions arise concerning how these teams make sense of the two initiatives. This study utilized a multiple case study method to examine the collective sensemaking of RTI and PBIS team members within two selected elementary schools. Both schools' faculty defined RTI and PBIS only through Tiers 1 and 2, likely as a result of district structures and resources. The two cases provide similar interpretations of multiple, disparate teams for addressing academic versus behavioral needs. Thus, each school implemented two separate teams. One school's RTI and PBIS teams employed frequent opportunities for distributed cognition and leadership through communities of practice, further supporting a continuum of student needs in Tiers 1 and 2. This school's teams supported a databased decision-making approach, but only one of the other school's teams espoused and demonstrated data literacy for making decisions.

## DEDICATION

This dissertation is dedicated to my incredible network of family, and friends. I am so very grateful for my husband, Lyle, who has shown an incredible belief in me and support and patience in my efforts regardless of the crazy and difficult paths I pursue. To my daughters, London and Sydney, son, Lincoln, and their partners, Anne and Lauren, who inspire me and fill my heart constantly. I dedicate this to the beautiful late Mary Joan, my mother, and my father, Jerry, my very first supporters and models of love. I appreciate the many women who have surrounded me in my life and demonstrate such strength, yet balanced with such kindness - my sister, Julie, my constant confidant and cheerleader, as well as my amazing friends. I also am blessed with a large family of brothers, sisters, nieces, and nephews who serve as constant reminders of life's treasures.

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## CHAPTER ONE

### INTRODUCTION

For some time now, we have recognized that implementation is a crucial link between the objectives and outcomes of policies, programs, and practices... It is fraught with uncertainty and unpredictability. It is a process that is difficult to control and prone to failure. (Smylie & Evans, 2006, p. 187)

Rather than interpreting policy implementation as futile, Smylie and Evans (2006) emphasized the substantial complexity inherent in the policy implementation process. Researchers of implementation policy investigated multiple, complex and interacting constructs linking policy, program, and practice (Coburn, 2001; Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; McLaughlin, 1987, 1990; Smylie & Evans, 2006; Spillane, 2000; Spillane, Reiser, & Gomez, 2006). Policy implementation research revealed U.S. educational policy as a representation of macro-level pressures to influence meso-level and micro-level (or site-based) changes (Datnow, 2006; Spillane & Kenney, 2012). Investigations of policy implementation must recognize the embedded nature of, and multiple influences on, micro-level decisions. As pressures rise to influence societal change, the intention of more recent policy has shifted to significant systemic change including increasing system capacity (Cohen, Moffitt, & Goldin, 2007; Honig, 2006). Systems change requires increased interaction of micro-political agents through team-based implementation (Bush, 2011; Saito & Atencio, 2013). In order to understand the implications for multiple implementation agents, investigation should occur at the level of practice (Wenger, 1998). Honig (2006) further validated the need for attention to

practices at an investigative level indicating: “contemporary researchers...aim to uncover how particular policies, people, and places interact to produce results and they seek to accumulate knowledge about these contingencies” (Honig, 2006, p. 20). Therefore, examination of micro-level meaning and implementation-based interactions forges the link between policy, program, and practice (Cohen et al., 2007; Datnow, 2006; Dee, Jacob, & Schwartz, 2012; Honig 2008, 2012; Olsen & Sexton, 2009).

Policymakers first enacted the Every Student Succeeds Act (ESSA) (Public Law 114-95) in 1965 as the Elementary and Secondary Education Act (ESEA) and have reauthorized the act periodically since then. Recently though, the 2001 version, known as the No Child Left Behind (NCLB) Act (Public Law 107-110) survived through 2015 upon reauthorization in the bill known as the Every Student Succeeds Act (ESSA) (P.L. 114-95). Changes to ESSA, have yet to be regulated or researched and therefore, this study references the ESEA version known as NCLB (P.L. 107-110). Policymakers signed the Individuals with Disabilities Education Act (IDEA) into law in 1975 and this study primarily references the 2004 reauthorization version’s (P.L. 108-446) regulations and guidance documents. Both ESEA, in all its versions, and the multiple versions of IDEA remain U.S. federal policies, which promote significant systemic shifts in schooling (Cohen et al., 2007; Sansosti & Noltemeyer, 2008; Spillane & Kenney, 2012; Yell, Shriner, & Katsiyannis, 2006). From the beginning, both statutes required the states’ educational systems to ensure access, equity, and quality for all students. From the early 2000s, these policies tightened language about access, equity, and quality for all regardless of social-economic status, race, ethnicity, or ability (P.L. 107-110; P.L. 108-

446). NCLB and IDEA spurred the need for district-wide and school interventions, integrated with classroom level practices (Cohen et al., 2007; Sansosti & Noltemeyer, 2008; Spillane & Kenney, 2012; Yell et al., 2006).

Among strategies associated with the multiple versions of ESEA and IDEA are two multi-tiered systems of support (MTSS) programs: (a) Positive Behavior Interventions and Supports (PBIS) and (b) Response to Intervention (RTI) (Barnes & Harlacher, 2008; Barnett, Daly, Jones, & Lentz, 2004; Fuchs & Fuchs, 2006; Sugai & Horner, 2008). PBIS and RTI embody ESEA's and IDEA's policy constructs of access, equity, and quality (Barnes & Harlacher, 2008; Barnett et al., 2004; Fuchs & Fuchs, 2006; Sugai & Horner, 2008). Both PBIS and RTI were created to address the many social/behavioral and academic needs of all students through a poly-staged process known as multi-tiered support systems (MTSS) (Barnes & Harlacher, 2008; Barnett et al., 2004; Daly, Martens, Barnett, Witt, & Olson, 2007; Fuchs & Fuchs, 2006; Sugai & Horner, 2008). Such multi-tiered systems involve strategic intervention and monitoring of student progress, along with educators' changes in knowledge, skills, and beliefs (Danielson, Doolittle, & Bradley, 2007; Glover & DiPerna, 2007; Murawski & Hughes, 2009; National Association of State Directors of Special Education -NASDSE, 2007).

Daly et al. (2007) conveyed concerns about MTSS implementation as they observed that “selecting, organizing, and delivering intervention programs to meet the needs of all students requiring assistance may be the most formidable challenges faced by schools” (p. 575). Others also remarked on the dearth of evidence indicating full MTSS implementation (Balu et al., 2015; Kretlow & Helf, 2013; Lane & Menzies, 2003;

Nelson, Martella, & Marchand-Martella, 2002, Reinke, Stormont, Herman, Puri, & Goel, 2011; Stewart, Benner, Martella, & Marchand-Martella, 2007; White, Polly, & Audette, 2012). These studies noted how schools and/or districts: (a) have either struggled to provide either PBIS and/or RTI for all grade levels or (b) found it difficult to include all evidence-based components (Balu et al., 2015; Kretlow & Helf, 2013; Lane & Menzies, 2003; Nelson et al., 2002, Reinke et al., 2011; Stewart et al., 2007; White et al., 2012).

Implementation studies depicted how school personnel struggled continually with systems-level and classroom-based practices needed for implementing *either* PBIS or RTI and for meeting all students' needs (Keller-Margulis, 2012; Stewart et al., 2007; White et al., 2012). As a result, capacity to implement *both* systems, especially, is problematic (Lane & Menzies, 2003; Stewart et al., 2007). Given the complexity of implementing dual MTSS, questions remain relating to educators' understanding about the meaning of macro-level mandated MTSS with associated, appropriate practices at the micro- or school-based level of practice (Sansosti & Noltemeyer, 2008).

This study is an inquiry regarding the situated cognition (Cobb & Jackson, 2012; Horn, 2005) of site-based school teams as they implement multi-tiered school decision-making frameworks integrating federal policy components. Specifically, the study examined the way teams interpret the *what* (meaning), *why* (purpose), and *how* (processes) of executing both PBIS and RTI systems (Cobb & Jackson, 2012; Coburn, 2001, 2006; Spillane, 2000; Spillane & Kenney, 2012; Spillane et al., 2006). Throughout the study, I employed a framework of situated cognition (Cobb & Jackson, 2012; Coburn, 2001, 2006; Olsen & Sexton, 2009; Spillane, 2000; Spillane & Kenney, 2012) to

investigate the conversion of IDEA's and ESEA's promotion of access, equity, and quality for all children.

This chapter is organized into seven sections. First, I contextualize the problem, explaining the policy background and evidence of implementation. Connected to the background, I provide definitions of key terms in the study in the second section. Third, I specify the problem statement and key issues surrounding the problem. In the fourth section, I introduce the theoretical framework of the study. I then indicate the purpose of and research question posed in the study, delineating how it relates to the problem through the theoretical framework lens. In the sixth section, I discuss the limitations, delimitations, and assumptions within the study. Finally, I explain how this study contributes to the field of education.

### **Background of the Study**

Two federal policies: The Elementary and Secondary Education Act (ESEA) (P.L. 107-110) and the Individuals with Disabilities Education Act (IDEA) (P.L. 108-446) form a policy context for investigating the macro- to micro-level impact on elementary and secondary school educators' understanding and practices (Datnow, 2006; Malen, 2006). For the purposes of this study, this section delineates (a) origins of key policies inciting significant changes in educational practice, (b) critical components of key policies, and (c) interpretation of policy and implementation of initiatives.

A clear and significant demand for high quality equitable systems for all students has stimulated federal attention through policy development and funding (Sansosti & Noltemeyer, 2008; Yell et al., 2006). Such policies as ESEA, in its NCLB version (P.L.

107-110) and IDEA (P.L. 108-446), emphasized macro-level messages around high-functioning equitable and accessible systems for each and every pupil (Cohen et al., 2007; McLaughlin, 1987; Olsen & Sexton, 2009). Both policies essentially challenged all who are invested in public educational processes to formulate a single system for educating all students (Sansosti & Noltemeyer, 2008; Spillane & Kenney, 2012).

### **Policy: Goals of ESEA and IDEA**

The Elementary and Secondary Education Act (ESEA), reauthorized as the No Child Left Behind Act of 2001 (P.L. 107-110) was defined as “an act to close the achievement gap with accountability, flexibility and choice, so that no child is left behind” (P.L. 107-110, § 1). Beyond the act’s No Child Left Behind (NCLB) catchphrase, this statement set a high standard for schools to interrupt systemic inequities so that all children could access and achieve in a high quality education (Cohen et al., 2007; Sansosti & Noltemeyer, 2008; Yell et al., 2006). ESEA’s 2001 version stipulated funding connected to the promotion of students’ rights through a host of goals, with the following especially pertinent to this study: “Closing the achievement gap between privileged students and students marginalized due to race, English-language acquisition, disabilities and poverty” (P.L. 107-110).

According to Yell and Katsiyannis (2004), the Individuals with Disabilities Education Act (IDEA) reauthorizations of 1990 (P.L. 101-476), 1997 (P.L. 105-517), and 2004 (P.L. 108-446) constructed similar goals regarding equity in education, primarily promoting access to and achievement in education for students with disabilities. The concepts of both a Free and Appropriate Education (FAPE) and the Least Restrictive



Environment (LRE) existed with the initial version of the law in 1975 (Yell & Katsiyannis, 2004). The IDEA 1990 reauthorization re-emphasized educating students with disabilities in the general education classroom to the maximum conceivable extent (Yell & Katsiyannis, 2004). The subsequent reauthorizations of IDEA in 1997 (P.L. 105-517) and 2004 (P.L. 108-446) impacted equitable access further with initiatives regulating discipline and academic and behavior intervention (Yell & Katsiyannis, 2004).

With changes in 2004 and 2007, the federal initiatives in IDEA aligned strategically with ESEA (e.g., U.S. Department of Education, 2007). Through these legislated initiatives, federal policy intended changes in states' educational systems and classroom practices to overcome ineffective and inequitable results from previous decades (McLaughlin, 2010).

### **Critical Components of ESEA and IDEA**

ESEA, as NCLB, and IDEA promoted, with funding incentives, prevention and reform through improving school-wide evidence-based practices (P.L. 107-110; P.L. 108-446). Additionally, NCLB highlighted accountability measures, making assessment essential to the operation of educational systems (Linn, Baker, & Betebenner, 2002; Herman & Baker, 2009). Through the NCLB policy, assessment via *adequate yearly progress* (AYP) became the driving force behind determining equity for previously marginalized students (Linn et al., 2002; Simpson, Lacava, & Graner, 2004). Therefore, this focus on data required school personnel to have a firm grasp on what comprises assessment and data analysis (Yell et al., 2006). Furthermore, according to the NCLB version of ESEA, failure to meet AYP required implementation of scientifically-based

practices (Linn et al., 2002; Tilly, 2008). Such practices required teachers to find, learn and deliver scientifically-defined, valid, and reliable interventions in a manner consistent with the respective research (Liston, Whitcomb, & Borko, 2007; Yell et al., 2006).

IDEA (P.L. 105-517; P.L. 108-446) highlighted multiple elements for practice regarding student rights under schools' and districts' discipline and behavior policies, aspects foundational to the history of MTSS. The IDEA reauthorization of 1997 (P.L. 105-517), sustained since then in 2004 (P.L. 108-446, section 615), outlined rights in reference to discipline for students with disabilities, incorporating principles of behavior intervention plans and limits in discipline timelines.

Given these principles, school practitioners needed to recognize fundamental educational, legal, and ethical problems with previous commonly used disciplinary tactics (Carr et al., 2002; Sugai & Horner, 2008, 2009). IDEA's 2004 (P.L. 108-446) reauthorization furthered such principles through requirements for evidence-based and *positive* behavior interventions (Sugai & Horner, 2008; Yell et al., 2006). Policymakers aimed to replace reactive punitive consequences, affecting social and behavioral development, with preventative interventions for students with identified disabilities (Sugai & Horner, 2008; Yell et al., 2006). For many U.S. schools, this policy provision has been implemented under an evolving series of names and acronyms often commonly known as Positive Behavior Intervention System (PBIS) (Sugai et al., 2000; Sugai & Horner, 2008).

Beyond its continuing focus on equitable disciplinary practices, the 2004 reauthorization of IDEA intensified specifications of academic, scientifically-based, and

equitable practices (Fuchs & Fuchs, 2006; Fuchs, Fuchs, & Stecker, 2010; Yell et al., 2006). The reauthorization of 2004 stipulated a new means for local agencies, school districts, to use in evaluation and eligibility determination of learning disabilities to diminish over-identification and ineffective wait-to-fail tactics (Fuchs & Fuchs, 2006; NASDSE, 2007). IDEA 2004 (P.L. 108-446 § 614, p. 118 STAT 2706 (6)) stipulated:

1. “a local educational agency shall not be required to take into consideration whether a child has a severe discrepancy between achievement and intellectual ability” (A)
2. “a local educational agency may use a process that determines if the child responds to scientific, research-based intervention as part of the evaluation procedures” (B)

The decades-old, traditional discrepancy formula resulted in an unreliable decision-making framework due to overrepresentation of false positives and false negatives (Fuchs & Fuchs, 2006; Daly et al., 2007; NASDSE, 2007; Yell et al., 2006). This discrepancy method of determining eligibility became known as the wait-to-fail model in which many students did not qualify for special education support until around third grade or later (Barnes & Harlacher, 2008; Fuchs & Fuchs, 2006; White et al., 2012; Yell et al., 2006). The wait-to-fail model delayed academic services until student performance sank enough for a discrepancy. That delay created a lag far below peer performance to the extent that most remediation strategies also failed (Daly et al., 2007; Good & Kaminski, 1996; Yell et al., 2006). The wait-to-fail tactics surrounding IDEA caused significant negative student outcomes and exacerbated achievement gaps as

defined in the NCLB version (P.L. 107-110) of ESEA (Good & Kaminski, 1996; Yell et al., 2006). Wait-to-fail also yielded a disproportionate representation of poor and minority student groups within special education (Hosp & Reschly, 2004). Therefore, IDEA's 2004 version included introduction of an alternative intervention model that served dual functions (Daly et al, 2007; Fuchs & Fuchs, 2006; Sansosti & Noltemeyer, 2008; Yell et al., 2006).

The first function served to give school teams additional data to make more reliable high-stakes decisions regarding special education eligibility (Daly et al., 2007; Fuchs & Fuchs, 2006). The second aim was to afford students early access to necessary interventions in hopes to prevent achievement gaps with subsequent academic and social consequences (Yell et al., 2006). IDEA 2004 reinforced the notion of access, quality, and equity for both behavior and academic practices (Yell et al., 2006). Since 2004, many U.S. states, districts and schools adopted and adapted this 2004 academic provision as Response to Intervention (RTI) (Barnes & Harlacher, 2008; Fuchs et al., 2010; Tilly, 2008).

Through these multiple policies, federal and state departments of education, along with education policy analysts, moved to package a set of workable models of practice deliverable at the school level (Daly et al., 2007; Sansosti & Noltemeyer, 2008; Tilly, 2008). PBIS and RTI emerged as models for enhancing social, emotional, and academic outcomes by aligning "MTSS" tiered levels of support to intensity of student needs (NASDSE, 2007; Sansosti & Noltemeyer, 2008; Sugai & Horner, 2009; Tilly, 2008).

## **Definition of Terms**

This study focuses on MTSS as a policy implementation issue with associated theories of practitioner's micro-level sensemaking, situated cognition, and communities of practice. MTSS initiatives embody a variety of constructs and terms, both in what constitutes the initiative and in how to implement and sustain practices. Therefore, definition of terms helps to clarify all elements of both theory and MTSS constructs.

### **Capacity**

Newman, King, and Young (2000) discussed capacity as the potential ability of a product or organization to achieve a purpose. A school's capacity is complex, with three main indicators: a) individual attitudes, skills, and knowledge, b) social resources, and c) "program coherence" (Newman et al., 2000, p. 263) or sustained coordination with learning goals (Newman et al., 2000).

### **Collaborative problem solving**

Collaborative problem solving provides a structure to: a) define the problem in measurable terms, b) analyze factors pertaining to the problem, c) determine possible evidence-based solutions connected to the analysis and d) evaluate outcomes of strategies based on data (Tilly, 2008). Collaborative problem solving highlights the incorporation of all stakeholders in decision-making (Barnes & Harlacher, 2008; Lewis, Barrett, Sugai, & Horner, 2010; Sugai & Horner, 2008).

### **Collective sensemaking**

Collective sensemaking is the ongoing and shared interpretation of policy among colleagues as they discuss incorporation of policy into practice (Coburn, 2001).

### **Communities of practice**

Communities of practice are “groups of people informally bound together by shared expertise and passion for a joint enterprise” (Wenger & Snyder, 2000, p. 139) and who are deliberate about persisting issues of practice to reach improved consequences (Wenger, 1998).

### **Databased decision making**

Databased decision making constitutes a systematic and organized databased method of making decisions for individuals, classes, schools, and districts (Barnes & Harlacher, 2008; Good & Kaminski, 1996; Scott, Alter, Rosenberg, & Borgmeier, 2010; Tilly, 2008). Universal screening and progress monitoring assessments are examples of MTSS data instruments both of which should be psychometrically sound (Barnes & Harlacher, 2008; Tilly, 2008).

### **Distributed Cognition**

Distributed cognition involves shared learning and cognition across multiple individuals as a means of improving task outcomes (Putnam & Borko, 2000).

### **Emotional Geographies**

Emotional geographies (a) pertain to the emotional aspects of schooling and (b) “identify the supports for and threats to the basic emotional bonds” within educator relationships (Hargreaves, 2001b, p. 508).

### **Evidence-based practices**

Scientifically-based or evidence-based research is defined in ESEA (P.L. 107-110) as rigorous, systematic, objective methods to examine and validate instructional approaches. IDEA, 2004 (P.L. 108-446) includes the peer-reviewed terminology requiring that the practices and interventions are based on research within peer-reviewed journals (Yell et al., 2006).

### **Fidelity**

The MTSS literature and guidelines emphasize fidelity and systemic changes to build capacity for MTSS effectiveness and to overcome issues with implementation (Keller-Margulis, 2012). For evaluation purposes, the American Institutes for Research (AIR) (n.d.a) and PBIS (Horner, Lewis-Palmer, Sugai, & Todd, 2005) provided fidelity rubrics to help schools. However, policy analysts suggest that fidelity may range from highly constrained compliance (Olsen & Sexton, 2009) to adaptive implementation that recognizes complexity and accentuates professional decision-making (Bryk, Gomez, Grunow & LeMahieu, 2015).

### **MTSS**

The term *MTSS* has surfaced recently as a term applied to the integration of behavioral and academic systems into a singular integrated framework or a Multi-Tiered System of Supports (NASDSE, 2013, para. 1). Previously, though, PBIS and RTI represented the term MTSS as two separate multi-tiered systems of support. The focus of this investigation is on the earlier use of multi-tiered systems of support (MTSS) through PBIS and RTI. These systems of support (MTSS) are defined as empirically-based,

school-wide continua (e.g. *tiers of support*) of *evidence-based* practices matching service provision to intensity of student academic and behavioral needs (Fallon, McCarthy, & Hagermoser-Sanetti, 2014; Fuchs & Fuchs, 2006; Lane, 2007; McIntosh, Chard, Boland, & Horner, 2006; Sugai & Horner, 2009).

### **Positive Behavior and Intervention Supports (PBIS)**

PBIS is a multi-tiered prevention and intervention framework for student behavior (Lewis et al., 2010; Scott et al., 2010; Sugai et al., 2000; Sugai & Horner, 2008). PBIS originally began as Positive Behavior Supports (PBS) then became PBIS and later, often referred to as School-Wide Positive Behavior Intervention and Supports (SWPBIS) (Sugai & Horner, 2008). For the purposes of this study's context-based collective sense-making, the acronym, PBIS, fits local, micro-use.

### **Progress monitoring**

Progress monitoring tools provide data regarding student response to intervention(s). Educators use these tools to improve decision-making when making changes to a student's educational program. Progress monitoring tools include Curriculum-Based Measurement (CBM) for academic assessment and interviews, observations, and various social/behavior monitoring data including types, locations, and triggers for various discipline infractions (Fuchs et al., 2010; Barnes & Harlacher, 2008; Sugai & Horner, 2008, 2009).

### **Response to Intervention (RTI)**

Response to Intervention constitutes the framework for determining student response to primarily academic prevention and intervention programs (Barnes & Harlacher, 2008;



Fuchs et al., 2010; Tilly, 2008). Historically, RTI has its root in academics, but its processes may be applicable to social and behavioral issues (Fuchs et al., 2010; NASDSE, 2006, 2007). A student's lack of response to intervention or a response to only intensive intervention can serve as evidence within an evaluation of a learning disability (Fuchs et al., 2010).

### **Sensemaking**

Spillane (2000) applied the term sensemaking from cognitive theory as the beliefs, experiences, situations, and knowledge to policy implementation. Other researchers note how educators link new policies with existing beliefs, experiences, and knowledge regarding *what* practices substantiate those policies, *how* to support such practices, and rationale (*why of implementation*) for choosing such supports (Cobb & Jackson, 2012).

### **Situated cognition**

Similar to the sensemaking literature, situated cognition applies a cognitive framework of knowledge, indicating learning as situated within contexts of varying environments and relationships (Horn, 2005; Olsen & Sexton, 2009). Therefore, context influences *what* practices practitioners/leaders focus on, *how* they determine methods for supporting those practices, and rationale for making such decisions (*why of implementation*) (Cobb & Jackson, 2012).

### **Multi Tiered Systems of Support**

MTSS usually is depicted as a three-tiered continuum of support. The primary, or base, tier comprises an evidence-based academic curriculum and behavioral prevention program intended for all students within the school (Fuchs & Fuchs, 2006; Glover &

DiPerna, 2007; Kincaid, Childs, Blase, & Wallace, 2007; Lane, 2007). The secondary tier provides evidence-based interventions as a supplement to initial or base tier programs, with a focus on students who demonstrate at-risk skills or behaviors (Horner, Sugai, & Anderson, 2010; Hughes & Dexter, 2011; Molloy, Moore, Trail, Van Epps, & Hopfer, 2013; Tilly, 2008). Those students who are not making sufficient academic or behavioral progress within the primary or secondary tiers move into the tertiary tier for more intensive and individualized services (Lewis et al., 2010; McIntosh et al., 2006a; Scott et al., 2010; Tilly, 2008).

### **Universal screening**

Universal screening is a term applied to measures administered to all students to determine performance and make decisions regarding progress of individuals, classes, schools, and districts (Sugai & Horner, 2008). These measures should have evidence of predictive validity, for they are used to identify (i.e. predict) which students need additional intervention (Glover & DiPerna, 2007; McIntosh, Horner, Chard, Boland, & Good, 2006).

### **The Literature on MTSS Implementation**

Available research specifically examining extent of MTSS delivery indicates two problems: (a) schools are not implementing PBIS *or* RTI in all three tiers and (b) few schools are implementing *both* PBIS and RTI (Balu et al., 2015; Lane & Menzies, 2003; McIntosh et al., 2006a; Nelson et al., 2002; Stewart et al., 2007). The majority of studies examining the rigor and outcomes of either PBIS and/or RTI indicated limited

implementation of all intended factors and at all levels (Balu et al., 2015; Lane, 2008; Lane & Menzies, 2003; McIntosh et al., 2006a; Nelson et al., 2002; Stewart et al., 2007).

Stewart et al.'s (2007) meta-analysis inspecting research about MTSS implementation showed that few school systems delivered both PBIS and RTI systems. The researchers used 17 studies that met the following criteria: (a) peer-reviewed and (b) focused on a three-tiered model in reading and/or behavior and reading and/or behavior outcomes (Stewart et al., 2007). Five of the studies implemented reading interventions, seven implemented behavior interventions, and four were integrated intervention practices (Stewart et al., 2007). Among the 17 studies, only four studies included all three tiers of intervention, with one of the four mentioning an integrated focus (Stewart et al., 2007). Eleven of the studies focused on only one level of intervention (Stewart et al., 2007).

In fact, most studies reported substantial focus on either Tier 1 or Tier 2, with little attention to Tier 3, the students who are most needy (Stewart et al., 2007; Nelson et al., 2002, Lane & Menzies, 2003). Other studies focused on Tier 3 components, yet not in relation to the other tiers or systems-level (Lucyshyn et al., 2007; Newcomer & Lewis, 2004; Preciado, Horner, & Baker, 2009). Even the PBIS website, a key source of information on PBIS, indicates that “the research has not at this time assessed the interaction effects associated with implementation of elements at all three tiers in the SWPBS prevention framework” (U.S. Department of Education’s Office of Special Education Programs (OSEP), 2014, pbis website, Tertiary prevention section, para. 2).

Another recent study (Balu et al., 2015) indicated problems contributing to overall implementation at several levels. In examining implementation across multiple states, Balu et al. (2015) identified 56% of schools implementing RTI fully for grades one to three among 13 reference states, based on a school administrator survey. One area of implementation deficiency related to data collection, a key feature substantiating evidence-based strategies and databased decision making for determining intervention needs. Fifty-nine percent of the schools in the 13 states conducted universal screening assessments (Balu et al., 2015). When examining, what the researchers termed, *impact schools*, those implementing for at least three years and using universal screening, tiered support, and progress monitoring, only 30% of the schools were implementing behavioral or math interventions (Balu et al., 2015). Finally, even in the schools with full implementation, results indicated negative statistically significant effects for students just below the universal screening cut score (Balu et al., 2015).

Tier 1 issues with PBIS persist across positive behavioral prevention practices. Lane and Menzies (2003) demonstrated that schools with so-termed, *high fidelity*, on the School-Wide Evaluation Tool (SET) (Horner et al., 2005) used an inordinate amount of negative redirections rather than positive prevention techniques. Reinke, Herman, and Stormont (2013) indicated similar findings with observations indicating more negative than positive interactions. When measuring social and behavioral student outcomes, PBIS assessments often are not sensitive to subtle changes in behavior nor representative of influences from climate or teacher action (Reinke et al., 2013). For example, school personnel may fail to address the needs of students experiencing anxiety or depression if

these needs do not manifest in disruptive or externalizing behaviors. Therefore, PBIS interventions and assessments indicated bias toward extinguishing problem behaviors, which may overlook internalizing behaviors and social/emotional indicators (Reinke et al., 2013). Internalized social/emotional indicators can be indicative of more serious mental health problems, sometimes not expressed externally until later in life (Christ, Riley-Tillman, & Chafouleas, 2009; Coplan, Hughes, Bosacki, & Rose-Krasnor, 2011; Dill, Redding, Smith, Surette, & Cornell, 2011).

Despite the aforementioned limitations, academic interventionists applied the PBIS model of multi-tiered methods in a process titled Response to Intervention (Sugai et al., 2000). Unfortunately, similar problems have arisen within RTI implementation. Examination of tiered implementation revealed school systems have not implemented RTI Tier 1 with fidelity in adhering to scientifically-based curricula or instructional practices (Cunningham, Perry, Stanovich, & Stanovich, 2004; Keller-Margulis, 2012; Kretlow & Helf, 2013). Problems with accurate implementation at Tier 1 are significant for multiple reasons. Specific curricula, teacher knowledge and instructional practices used in Tier 1 impact student-reading outcomes (Fuchs et al., 2008; Piasta, Connor, Fishman, & Morrison, 2009). However, teachers continue to lack essential knowledge of literacy (e.g. children's literature, phonics, and phonemic awareness) or teachers fail to adhere to recommended practices (Cunningham et al., 2004; Lyon & Weiser, 2009).

In the area of assessment, multiple studies examined efficacy of decision rules and the validity of constructed fidelity measurements in PBIS and RTI (Ardoin, Christ, Morena, Cormier, & Klingbeil, 2013; Fuchs & Fuchs, 2006; Fuchs, Fuchs, & Compton,

2012; Lane & Menzies, 2003). PBIS provides multiple measures for estimating schools' fidelity of implementation (Horner et al., 2005; Sugai, Horner, Lewis-Palmer, & Rosetto Dickey, 2012). However, these measures rarely correlate to observations of teacher practices (Lane & Menzies, 2003; Reinke et al., 2013). For RTI, researchers continue to explore potency of decision rules at each tier (Ardoin et al., 2013; Fuchs et al., 2012). For example, an ongoing concern is whether multiple or single screening measures are needed to reduce type I or type II errors when determining which students require intervention and at what intensity (Balu et al., 2015).

These multiple studies' findings about failure to validate MTSS practices raise ongoing issues with schools, which scored well on the so-called *fidelity* measures. Such issues relate to how policy-makers define fidelity. For example, the recent study by Balu et al. (2015) raised questions about implementation in finding negative results among students despite their schools' *full RTI implementation* status. Does the term, *full implementation*, imply *fidelity* of implementation? On the other hand, given the complexity of collaborative and databased decision making, are measures of implementation fidelity nuanced enough? For example, do such fidelity measures represent Cobb and Jackson's (2012) questions regarding the *what*, *how*, and *why* of policy implementation? Policy-makers and school and district leaders may be determining success or failure based on such modifiers (e.g. fidelity or full implementation) without measures sensitive to complexities of schooling for groups or individuals (Bryk et al., 2015; Honig, 2006). Furthermore, school and district leaders demand excellence, creativity, *and* policy implementation adherence might conflict with

practitioners' professionalism and beliefs. Ball (2003) and others have noted that high-demand, constraining policies generate performative and emotional responses among educators (Beatty, 2000; Hargreaves, 2001a; 2001b).

Such questions and concerns parallel insight as to the inherent complexities of implementation raised in policy implementation literature, such as Honig's (2006) warning surrounding *implementable* versus *successful* implementation. Implementation researchers and practitioners must conceive of implementation beyond checklists and simple definitions of fidelity. Given findings of inconsistent use of universal screening instruments, questions remain about what components of MTSS demonstrate better student outcomes. Perhaps, these studies' results suggest moving from highly refined fidelity operationalization to exploration of local school teams' MTSS application into different contexts in order to attain reliable improved outcomes (Bryk et al., 2015; pp. 208-209).

In reviewing the RTI literature, significant research inspecting RTI implementation occurred between 2002 and 2007 (Barnett et al., 2004; Daly et al., 2007; Glover & DiPerna, 2007; Hoagwood et al., 2007; Lane & Menzies, 2003; McIntosh et al., 2006a, 2006b; Nelson et al., 2002; Stewart et al., 2007). Since that time, much of the research in both PBIS and RTI consists of a) opinions regarding the process or b) continuing investigation of individual components (Barnes & Harlacher, 2008; Fuchs et al., 2010; Fuchs et al., 2012; Murawski & Hughes, 2009; Reynolds & Shaywitz, 2009; Sansosti & Noltemeyer, 2008; Scott et al., 2010; Tilly, 2008). Of the few studies examining system-wide implementation, the focus has been on existing barriers, which

included time, resources, support, and training (Reinke et al., 2011; Williams, Horvath, & Wei, 2007).

Since the inception of MTSS frameworks, practitioners have experienced substantial issues with delivering the multi-faceted aspects of PBIS and/or RTI (Reinke et al., 2011; Stewart et al., 2007; Williams et al., 2007). However, state and federal departments and investigators have made substantial additions to the level and types of information provided to practitioners concerning implementation (Hauerwas, Brown, & Scott, 2013). Given these iterations of implementation messages, macro, meso and micro-level agents continue to redefine Cobb and Jackson's (2012) policy implementation terms, *what*, *how* and *why*, as applied to the PBIS and RTI initiatives (Ardoin et al., 2013; Fuchs et al., 2012).

### **Providing Dual or Integrated MTSS**

Integrated PBIS and RTI implementation has emerged as an under examined change in the MTSS literature. Balu et al.'s (2015) recent study revealed only 30% of schools (across 13 states) implementing both academic and behavioral intervention processes. Balu et al. did not examine whether schools were implementing the two systems as separate or integrated processes. Although proponents of PBIS and RTI recommended application of both systems, more recently, they emphasize need for such delivery with a more intentional, integrated manner (Atkins, Hoagwood, Kutash, & Seidman, 2010; Domitrovich et al., 2010; Lewis et al., 2010; Sugai & Horner, 2009). The two systems overlap in underlying constructs (i.e. tiered interventions) and processes (i.e. progress monitoring), which might align in one MTSS approach (Sugai & Horner, 2009).



Studies that demonstrated provision of both social/emotional/behavioral and academic programs in a systems approach are not common, yet a few indicated the need to integrate such systems (McIntosh et al., 2006a; Stewart et al., 2007). Stewart and colleagues (2007) reviewed multiple studies with a focus on literacy and behavioral interventions. They indicated increases in student reading performance on multiple measures, along with decreases in disciplinary measures, negative office referrals, and problem behaviors (Stewart et al., 2007). McIntosh with associates (2006b) found significant links between indicators of academic and behavioral issues within schools implementing both systems.

Within an integrated system, schools can work more effectively at both systems and individual levels (Amatea & Clark, 2005; Atkins et al., 2010; Frey & George-Nichols, 2003; Shriberg, 2007). Schools can use mental health personnel as leaders and contributors to planning and implementation (Amatea & Clark, 2005; Frey & George-Nichols, 2003; Shriberg, 2007). School personnel might save time and resources by allocating resources toward one overarching vision of implementation rather than dual systems (Atkins et al., 2010). Finally, an integrated system can address the multiple needs of individual students who often have both academic and social/emotional difficulties (McIntosh et al., 2006a; Stewart et al., 2007).

An integrated approach may address some of the concerns and issues raised about limited delivery of the individual PBIS and RTI initiatives. However, of those studies examining implementation of behavioral and academic school-wide programs, only a select few examine combined delivery of the initiatives (McIntosh et al., 2006a; Stewart

et al., 2007). Therefore, district and school leaders have little information regarding implementation of both PBIS and RTI systems, such a lack of knowledge can be connected to schools' capacity to meet IDEA (P.L. 108-446) and ESEA (P.L. 107-110) purposes of access, equity, and quality for all students.

Decades of federal policies have yet to manifest in sufficient change and educators continue to struggle with meeting the goals of equity, access, and quality. Educators need evidence and a clear understanding of essential methods to close the gap between policy and practice. An in-depth look into schools implementing both systems may glean pertinent information regarding the beliefs and processes underlying successes and limitations.

### **Theoretical Framework**

In order to establish a consistent and coherent structure connecting the investigation of policy implementation, I utilized a theoretical framework combining concepts of sensemaking, situated cognition, and communities of practice (Cobb & Jackson, 2012; Coburn, 2001, 2006; Honig, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; Lave, 1991; Olsen & Sexton, 2009; Spillane, 2000; Wenger, 2010a, 2010b). Sensemaking research has evolved in application to teachers' and to school and district leaders' understanding and subsequent implementation of educational policy, typically regarding changes in instructional practices (Cobb & Jackson, 2012; Coburn, 2001, 2006; Honig, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; Spillane, 2000). The sensemaking approach depicted policy implementation as an interplay among many participants constructing meaning from the macro-level to micro-level (Datnow, 2006).

The sensemaking approach attended to the ways that local actors attach meaning through practice. As a practical matter, policy must be realized at the school level, but often policy definitions and expectations have not been well-specified by policy makers (Spillane et al., 2006).

Spillane (2000) demonstrated how practitioners imbue policy implementation with meaning through their experiences and practices. Furthermore, practitioners contextualize policies within their current environments based on previous experiences and beliefs, which other theorists define as situated cognition (Coburn & Russell, 2008; Honig & Ikemoto, 2008; Spillane, 2000; Spillane, Reiser, & Reimer, 2002). Situated cognition theorists also recognize that practitioners have shared experiences (Lave, 1991; Wenger & Snyder, 2000). This shared contextualization suggests a learning process where new policy initiatives intertwine with, rather than replace, previous knowledge (Coburn, 2004; Honig & Ikemoto, 2008; Spillane, 2000; Spillane et al., 2002).

Coburn (2001) further indicated how environmental messages influence three aspects of practical situated understanding: (a) daily practices, (b) worldviews (i.e. theoretical beliefs), and (c) shared understandings or collective sensemaking. For example, teachers apply new skills and information to the teaching and learning process and continue to determine meaning of the initiatives collectively (Coburn, 2001, 2006; Spillane, 2000). Finally, comprehension of policy mingles new information with previous knowledge and existing paradigms as an iterative and reciprocal process (Coburn, 2001, 2006; Honig, 2008, 2012; Olsen & Sexton, 2009; Spillane & Kelley, 2012). School-level

components, such as norms and school culture, influence the interpretation processes (Olsen & Sexton, 2009).

Remarkably, Coburn's (2001, 2006) and Spillane's (2000) sensemaking definitions share similarities with Lave's (1991) description of situated cognition among communities of practice. Interpersonal communication with peers and leaders engaged in system-level practice, especially in highly collaborative school environments, also create changes in meaning (Honig, 2008; 2012). Further work by Honig (Honig 2008; 2012; Honig & Ikemoto, 2008) also implicated the shared understandings in schools necessary to implement policy. Honig (2008, 2012) further probed the role that school districts may play in supporting school personnel's situated cognition and thus, their subsequent changes in practices. Sensemaking and situated cognition found in communities of practice afford significant insight into the complexities and interpretations of school personnel engaged in implementing policy initiatives (Cobb & Jackson, 2012; Coburn, 2001, 2006; Honig, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; Olsen & Sexton, 2009; Spillane, 2000; Spillane et al., 2002; Wenger & Snyder, 2000). In turn, such an understanding of sensemaking about policies assists district and school leaders with creating messages, supports, and learning opportunities aligned with successful delivery (Honig, 2008, 2012).

Situated cognition is the theory of how professionals make sense of their practices in the contexts in which they practice (Cobb & Jackson, 2012; Horn, 2005; Honig, 2008, 2012). Policy design occurs beyond the realities of practices and their contexts (Cohen et al., 2007). Evidence suggests that two policy mechanisms, RTI and PBIS, seem difficult

to implement fully either in isolation or in tandem and even with evaluation instruments designed to measure fidelity (Lane & Menzies; 2003 Stewart et al., 2007). Nevertheless, researchers persist in defining some schools as high fidelity implementers (McIntosh et al., 2006a). These contradictory findings about the gaps in implementation in the face of MTSS component measures of high fidelity beg for an exploratory examination of local sensemaking concerning MTSS practices.

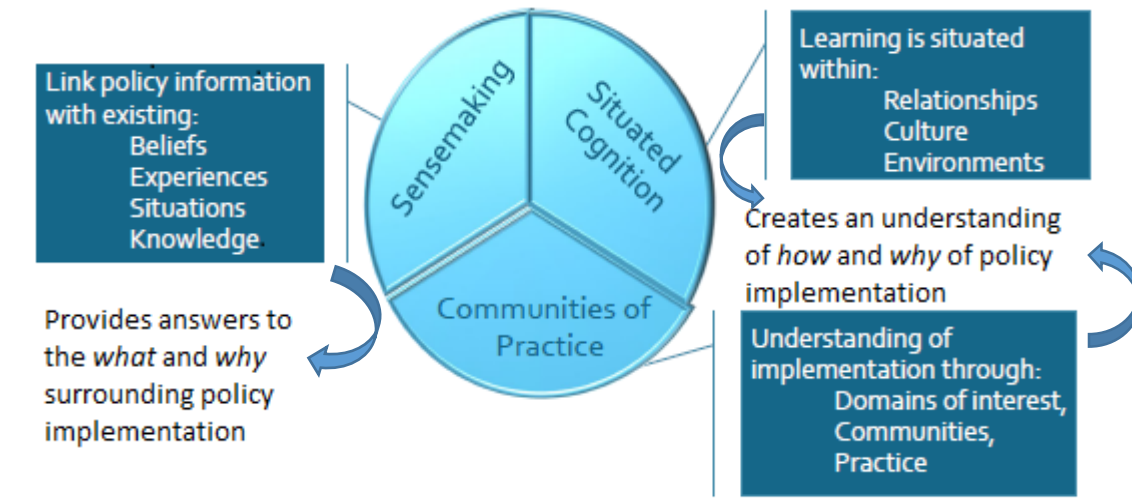


Figure 1.1 A theoretical framework for guiding investigation of local sensemaking surrounding MTSS implementation practices.

In Figure 1.1, the combination of sensemaking, situated cognition, and communities of practice serves as a lens for examining meaning of MTSS among school-based teams (Coburn, 2001; Honig, 2008, 2012; Lave, 1991; Spillane, 2000; Wenger, 2010a, 2010b). Furthermore, the figure connects the three theoretical frameworks to Cobb and Jackson’s (2012) *what*, *why*, and *how* of policy implementation. Participant understanding (as seen through their beliefs, experience and knowledge of the policy)

constitutes what the policy or initiative means to them as practitioners and team members (Cobb & Jackson, 2012; Coburn, 2001, 2004; Honig & Ikemoto, 2008; Spillane, 2000; Spillane et al., 2002). Practitioners use experiences and beliefs to explain *why* certain components are important along with reasons *why* they chose such within their schools or districts (Cobb & Jackson, 2012; Coburn, 2001; Honig, 2008, 2012; Horn, 2005; Lave, 1991).

Practitioners' cognition of policy-based initiatives varies due to multiple factors and contexts (Cobb & Jackson, 2012; Horn, 2005; Honig, 2006, 2008, 2012). District and school leaders can better support such practitioners through thorough investigation of such situated cognition (Cobb & Jackson, 2012; Horn, 2005; Honig, 2006, 2008, 2012). The connection of situated cognition (Honig, 2008, 2012; Horn, 2005), communities of practice (Lave, 1991; Wenger, 1998, 2010a, 2010b), and collective sensemaking (Coburn, 2001, 2004; Honig & Ikemoto, 2008; Spillane, 2000; Spillane et al., 2002) at the MTSS team level supports the purpose and research questions in this current study. School-based team members' practical understandings regarding MTSS can extend knowledge about effective systems-level mechanisms for student success. Therefore, this study focused on two elementary school cases with multiple years of experience implementing both RTI and PBIS systems.

### **Purpose of the Study**

The purpose of this study was to examine the sensemaking and situated cognition of key educators affecting MTSS implementation at the school level (Coburn, 2001, 2006; Honig, 2008, 2012; Horn, 2005, Spillane, 2000, Spillane et al., 2002). First, this

examination delves into collective sensemaking about delivering policy-based initiatives within a school-level team leadership context and within daily practice. Second, the study delved into the deeper constructs and skills necessary for evidence-based practice and databased decision making while negotiating the complex components of system-wide delivery. Finally, data collected for the study provided evidence regarding contextual elements interfering or supporting the MTSS framework through examination of two sites and their respective environments.

### **Research Question**

*What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?*

### **Limitations**

This study has limitations found in most case studies, including the setting and the timeframe of the study. Both cases came from the same state and same district, and implemented the two initiatives for several years. Such limitations reduce generalizability to other districts and states. The timeframe for the cases covered the first three months of the school year, per the school district's limitations on permission for data collection. Although this period represents nearly a third of an academic calendar, some aspects of team participant attitudes and team meeting plans, methods for implementation, and overall sensemaking may have altered at the middle or end of the same year.

### **Delimitations**

I imposed delimitations in order to delve into the sensemaking of RTI and PBIS leadership teams within multiple schools attempting to sustain RTI and PBIS efforts.

Therefore, I placed boundaries on case selection, choosing schools which have implemented both practices for at least three years. The second boundary was on participant selection, choosing only participants serving on one or both RTI and PBIs teams and representing various educator roles.

### **Assumptions**

While conducting this study, I made certain assumptions as follows: (a) the participants honestly conveyed their perceptions and understood the questions asked, (b) the interview questions and observation protocols provided valid assessments of sensemaking, (c) data analysis correctly revealed participant perceptions, and (d) my previous role in the district may have impacted multiple aspects of the study, including how participants' responded.

### **Significance of Study**

Multiple policy makers recommend that states and districts transmute PBIS and RTI into an integrated and unified framework of MTSS (Kansas State Department of Education Special Education Services, 2012; South Dakota Department of Education, 2014). Multiple educator roles and perspectives converge within MTSS teams to interpret school and classroom screening and intensifying intervention implementation practices. Such convergence evokes shared understanding around implementation (Coburn, 2001; Wenger, 1998; Honig, 2008, 2012). How PBIS and RTI teams experience and apply this confluence of ideas generates new information to this field of study. Such information provides further insight into the elements that support effective equity in access and achievement for all students (Honig, 2006, 2008, 2012; Sansosti & Noltemeyer, 2008).



This study also serves to extend and connect to findings in sensemaking literature regarding other policy initiatives (Coburn, 2001, 2006; Horn, 2005; Honig, 2008, 2012; Spillane, 2000; Spillane & Kenney, 2012).

### **Conclusion**

The purpose of this chapter was to introduce the ongoing issues with implementing two multi-tiered systems of support, PBIS and RTI, specific educational strategies derived from federal-level educational policies. PBIS and RTI offer a means to deliver federal education policies intended to increase all students' access to high quality education in an equitable manner. The chapter introduced policy implementation literature and a synopsis of MTSS. Specifically, the chapter explicated the extant literature pertaining to provision of both academic and behavioral MTSS in graduated components of progress monitoring and interventions. Given conflicting reports of high fidelity, yet incomplete implementation of MTSS, I proposed a study using a framework of situated cognition and sensemaking within communities of practice. Based on the sensemaking framework, this study may lead to an explanation of educators' understandings of MTSS components concerning, borrowing from Cobb and Jackson (2012), *what* they do, *why* they do it, and *how* those practices extend implementation knowledge about MTSS.

Chapter Two synthesizes existing literature describing MTSS components and underlying theories, problems purported within literature on MTSS, research examining situated cognition in application to policy, and current literature approximating this study's purpose. Chapter Three explains the conceptual method for the study, along with

procedures and plans for analysis. Chapter Four elucidates results from each of the two cases of examination. Chapter Five provides a cross-case analysis to illustrate the commonalities and variations of situated understandings of MTSS policy initiatives. Finally, Chapter Six situates the results within recommendations, limitations, and further areas of investigation.

## CHAPTER TWO

### REVIEW OF THE LITERATURE

#### **Introduction**

The purpose of this chapter is to examine research about multi-tiered systems of support (MTSS) from the macro to meso to micro-levels of policy (Bush, 2011; Datnow, 2006; Saito & Atencio, 2013 Spillane & Kenney, 2012). The following steps organize this examination. First, policy-to-practice literature shows a means of investigating sensemaking of MTSS. Second, using this framework, I synthesize literature and documents regarding MTSS definition and guidance for implementation at the a) federal level (macro), b) state (meso) level and c) district and school, or micro, level (Bush, 2011; Datnow, 2006; Saito & Atencio, 2013 Spillane & Kenney, 2012). Then, I present the rationale for investigating the sensemaking among those school personnel charged with MTSS implementation (Cobb & Jackson, 2012; Coburn, 2001; Spillane, 2000).

#### **Sources of Evidence**

Sources of information within this literature review included inspection of policy documents, professional literature, governmental websites, inquiry to state departments, and theoretical and empirical literature. The databases used for the literature review were *EBSCOhost* and *Google Scholar*. The following search terms were used to identify key literature: systems of support, response to intervention, positive behavior interventions, academic intervention, school-wide intervention programs, communities of practice, three-tiered intervention or school-wide models, multi-tiered systems of support, MTSS, Individuals with Disabilities Act, No Child Left Behind, academic and/or behavioral

prevention/intervention programs, social/emotional school-wide programs, social-cognitive theory, situated cognition, sensemaking of reading/math initiatives, and educational policy implementation.

### **Sensemaking in the Policy Interpretation Process**

Cognitive theories of sensemaking and situated cognition (Cobb & Jackson, 2012; Coburn, 2001, 2006; Honig, 2008, 2012; Horn, 2005; Olsen & Sexton, 2009; Spillane, 2000) proffer a lens for understanding the MTSS initiative. MTSS, historically, served to meet intentions of access, equity and quality promoted in federal policies of the Elementary and Secondary Education Act (ESEA) (P.L. 107-110, the 2001 No Child Left Behind-NCLB- reauthorization) and Individuals with Disabilities Education Act (IDEA) (P.L. 108-446, 2004 reauthorization). These intentions enumerate the complexities of policy-to-practice interpretation and the need to understand such complexities.

Policy does not cause change to happen, and often, policy is not implemented as policymakers intend (Coburn, 2001, 2006; Datnow, 2006; Honig, 2006; Malen, 2006; McLaughlin, 1987, 1990; Spillane, 2000; Spillane et al., 2006). Many intervening factors influence policy implementation, as revealed in a substantial literature defining these factors (Coburn, 2001, 2006; Datnow, 2006; Honig, 2006; Malen, 2006; McLaughlin, 1987, 1990; Spillane, 2000; Spillane et al., 2006). The literature on policy interpretation and implementation provides leaders and policymakers with information regarding which features are conducive to successful delivery of reform initiatives (Coburn, 2001, 2006; Datnow, 2006; Honig, 2006; Malen, 2006; McLaughlin, 1987, 1990; Spillane, 2000; Spillane et al., 2006).

One critical idea within the policy implementation literature (Coburn, 2001; Spillane, 2000) explains that the devolution of policy to practice is *co-constructed* and *multi-directional* (Datnow, 2006, p. 107). Datnow (2006) claimed that education policy interpretation, *co-constructed* for policy meaning, emerges with interpretation by multiple key participants (Coburn, 2001, 2006; Coburn & Stein, 2006; Hall & McGinty, 1997). These multiple participants are not limited to policymakers and include private educational companies, professional associations, pre-service institutions, district and school leaders, parents, teachers, and students (Datnow, 2006; Olsen & Sexton, 2009; Spillane, 2000). Each participant is situated in different environments with varying influences, which may promote different valued aspects or interpretations of the policy accordingly (Datnow, 2006). As Spillane (2000) observed, “the successful implementation of recent instructional reforms also depends in some measure on the broader policy environment in which classrooms are nested” (p. 142).

Spillane (2000) defined policy environments as federal, state, or district guidelines that convey certain messages and connote culture. Therefore, educators find meaning for policies along with others situated within several levels of interpretation (Datnow, 2006; Honig & Ikemoto, 2008; Malen, 2006). Not only do educators make meaning of policy within their own communities of practice (Lave, 1991; Wenger, 2010a, 2010b; Honig, 2012), other levels of the educational system generate meaning as well (Honig, 2008, 2012; Honig & Ikemoto, 2008). These levels of interpretation represent macro, meso, and micro environmental systems.

The marble layer cake analogy (Grodzins, 1966; Sabatier, 1973) affords a framework for understanding the multiple intersections and interpretations of policy-based initiatives. This analogy explicates a co-mingling of federal, state, and district policies integrated with micro level practices. The policy process begins at the federal level, where policymakers identify needed educational change and subsequently create macro-level approaches for shaping and producing such changes (Spillane et al., 2006).

Among U.S. examples, the policy histories of Elementary and Secondary Education Act (ESEA) (P.L. 114-095, the 2015 reauthorization, known as Every Student Success Act, or ESSA), and IDEA (P.L. 108-446, the 2004 reauthorization) indicate an aim to increase equity, access, and quality. The iteration of ESEA known as the No Child Left Behind (NCLB) Act (2001, P. L. 107-110) included significant definitions of school and student success. These definitions depend on test score analysis to ensure achievement of groups with historic lower performance, i.e., students with disabilities, students whose first language differed from U.S. English, students in poverty, and traditional minorities (P.L. 107-110). Federal-level IDEA 2007 guidelines emphasized alignment with NCLB's expectations for closing achievement gaps among students with disabilities and their peers without identified disabilities (Yell et al., 2006). Thus, both federal statutes conveyed policy agenda for increasing students' equity beyond access to achievement, which depends on high quality instruction and evidence-based programs and practices (Cohen et al., 2007; Sansosti & Noltemeyer, 2008; Spillane & Kenney, 2012; Yell et al., 2006).

In order to accomplish goals of equity and access, both federal policies implicated schools in employing such constructs as evidence-based practice, positive and preventative behavior interventions, and provision of services in the least restrictive environment (Sansosti & Noltemeyer, 2008; Yell et al., 2006). However, these policy standards were vague, lacking definition or guidance regarding such practices (Olsen & Sexton, 2009). This loosely defined approach at the federal level was probably due to the U.S. Constitution's 10<sup>th</sup> Amendment enacting a firmly held national belief that educational control and decisions should be local (Olsen & Sexton, 2009). Contrasting with the vague notions stated in the laws, federal agencies have synthesized research and developed specific guidelines and processes in professional literature and on websites (e.g. American Institutes for Research [AIR], n.d.a; National Association of State Directors of Special Education [NASDSE], 2006, 2007; U.S. Department of Education's Office of Special Education Programs PBIS [OSEP], n.d.). Therefore, these guidelines add another level of interpretation and influence to practitioners.

The 10<sup>th</sup> Amendment of the U.S. Constitution (U.S. Constitution, 1791) reserves education to the jurisdiction of each U.S. state, and that fact complicates any federal education policy (Yell, Rogers, & Rogers, 1998). Therefore, federal policies filter through meso-level interpretation at the state level. For example, IDEA (P.L. 108-446) 2004's regulations necessitated state policymaker interpretation of federal intent when requiring states to provide criteria for identification of specific learning disabilities (SLD) (Yell et al., 2006). This IDEA 2004 requirement allowed local leaders to choose from multiple options of identification (Yell et al., 2006). State regulations stipulate specific

guidelines to district leaders and often require compliance through certain practices and reports, invoking another layer of interpretation (Olsen & Sexton, 2009; Sansosti & Noltemeyer, 2008). Additionally, state and federal policies can influence attitudes regarding policy (Olsen & Sexton, 2009). The positive constructs embedded in ESEA or IDEA may be under-emphasized or misinterpreted due to concerns regarding accountability (Olsen & Sexton, 2009). For example, Olsen and Sexton (2009) found pressures of accountability caused a tendency among teachers to adopt their administrators' views of reform with little room for their own critical or divergent thinking. Furthermore, the teachers felt a diminished sense of professionalism when faced with directives to adhere to strict guidelines for educating children (Olsen & Sexton, 2009).

As macro-level policies meet meso-level interpretation, micro-level district and school leaders have to contend with multiple influences (Honig, 2008, 2012; Honig & Ikemoto, 2008; Spillane, 2000; Spillane & Kenney, 2012). Honig and Ikemoto (2008) found that out-of-district facilities link district leaders to new ideas and tools. However, such facilities may also show bias in their training, highlighting some training elements or research over other critical constructs (Honig & Ikemoto, 2008). District leaders tend to choose to implement initiative constructs based on familiar concepts, current values, practices, and prior experiences already embedded in the local environment (Honig 2008, Honig & Ikemoto, 2008). Local leaders base evaluations and future planning mainly on positive outcomes, ignoring contradictory evidence and potentially helpful data (Honig, 2008). Peer networks and how they reinforce roles also critically influence change



(Honig, 2008, 2012), with consistent and positive peers yielding more positive change (Honig, 2012). At local levels, leaders must also factor in local agendas, resources, and recognize contextual influences among varying school populations (e.g. rural, urban) (Olsen & Sexton, 2009; Spillane, 2002).

Policy at the district level often includes professional development and determination of supports needed to meet policy goals, which Cobb and Jackson (2012) defined as the *what*, *how* and *why* of policy. The *what* of policy implementation pertains to school practices needed to meet targeted goals related to the policy (Cobb & Jackson, 2012). Schools and districts identify those practices then determine *how* to support adoption of such practices (Cobb & Jackson, 2012). For example, they provide professional learning opportunities for practitioners to obtain knowledge and skills related to the practices (Cobb & Jackson, 2012). This step also includes developing tools and resources needed to support changes in practice (Cobb & Jackson, 2012). Finally, the *why* of implementation planning involves providing a rationale for decisions made in the *how* of implementation (Cobb & Jackson, 2012). Cobb and Jackson (2012) indicated the need for school leaders to explicate the basis for decision-making in order to increase teachers' cognition of all aspects of implementation, rather than mere adherence to proscribed changes.

At the school level, principals must mitigate multiple issues when implementing policy, as those issues reveal varied interpretation (Honig, 2012; Olsen & Sexton, 2009; O'Laughlin & Lindle, 2014). District leaders play a significant role influencing the implementation of policy-based initiatives at the school level (Honig, 2012). For

example, district leaders have the ability to increase school administrators' access to resources and to withdraw competing demands, thereby enabling principals' development (Honig, 2012). However, relationships between principals with district leaders and principal readiness for change can also result in competing interpretations at both the district and school or classroom levels (Honig, 2012).

The culture and context of the school often has a significant influence regarding adoption (Olsen & Sexton, 2009). For example, hierarchical cultures limit communication, in turn, causing staff to misinterpret or feel threatened by policies with mixed or competing messages (Olsen & Sexton, 2009). Within hierarchical cultures, the principal makes decisions without input from staff members (Olsen & Sexton, 2009). In contrast, distributed leadership involves many participants as leaders or decision-makers and cultivates innovation (Harris, Leithwood, Day, Sammons, & Hopkins, 2007; Leithwood et al., 2009). As Olsen and Sexton (2009) discovered, hierarchical cultures do not create processes conducive for collegiality. When policies such as ESEA (P.L. 107-110) and IDEA (P.L. 108-446) emphasize combined equity and accountability purposes, hierarchical cultures may focus more on accountability and obfuscate any notions of equity or quality (Olsen & Sexton, 2009). That linear rigidity reduces implementation adaptation and limits local interpretation (Bryk et al., 2015). Policy implementation research indicated that many agents and layers involved in policymaking and implementation form co-construction of policy meaning (Datnow, 2006; Honig, 2008, 2012). However, this co-construction involves many intersections, rather than a linear process (Bryk et al., 2015; Datnow, 2006).

Another aspect of the flow of policy interpretation is that it is *multi-directional* (Datnow, 2006). This aspect of policy interpretation connotes an interplay between policy and practice (Malen, 2006; Spillane et al., 2006), for “multiple levels of educational systems may constrain or enable implementation and...implementation may affect those broader levels” (Datnow, 2006, p. 107). Understanding this interplay is important for it depicts policy interpretation through multiple and varied channels (Datnow, 2006; Malen, 2006). Identification of such fluid channels prompt such questions as: (a) who is involved in decision-making, (b) who are gatekeepers to critical resources, and (c) what are the perceived messages among educational organizations or practitioners?

Policy implementation literature recognizes that the dual process of creation and delivery of policy represent complex and sometimes very different realities (Coburn, 2001, 2006; Datnow, 2006; Honig, 2006; Malen, 2006; McLaughlin, 1990; Spillane, 2000; Spillane et al., 2006). For example, Honig (2006) discussed the heightened difficulties given increased diversity, which is central to the access, quality, and equity purposes of both ESEA (P.L. 107-110) and IDEA (P.L. 108-446):

Realities of schooling in diverse communities nationwide suggest that those interested in improving the quality of education policy implementation should focus not simply on what’s implementable and what works but rather investigate under what conditions, if any, various education policies get implemented and work. (Honig, 2006, p. 2)

Honig (2006, 2008, 2012) explained a theoretical lens contained within this statement. She indicated that policy implementation has been limited to two approaches,

each of which restricts widespread success for all students. The first approach pertains to finding alignment between practice and policy through *implementable* policy. This term applies to policies that proscribe uniform, easy to implement procedures, that while clear, often result in underwhelming results (Honig, 2006). Honig indicated that such policies miss the level of depth needed to make effective systemic change happen.

In contrast to *implementable* policy, *successful* policies attempt to produce significant positive outcomes for students, yet only certain settings realize the full policy intent (Honig, 2006). Successful policies seem limited in application while the literature includes scant evidence regarding why any success cannot be generalized (Honig, 2006). Unfortunately, policies have become more complex to meet persisting educational inequities and research indicates inconsistencies in implementation and outcomes (Datnow, 2006; Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; Olsen & Sexton, 2009; Stewart et al., 2007). Absent an appreciation of this complexity, many efforts to change schools merely add to their dysfunction when introducing interventions into different contexts (Bryk et al., 2015). These issues are as important to solve as the initial design and development of the intervention itself.

Ultimately, policymakers and practitioners have struggled to merge implementation capacity with successful outcomes (Cohen et al., 2007; Sansosti & Noltemeyer, 2008). Honig (2006) argued that the literature supports a shift to inspecting the delivery of policy at the micro-level. Such inspection enables identification of the contextual elements supporting implementation capacity *and* success (Honig, 2006).

## **Policy Implementation at the Meso and Micro Levels**

Policy implementation literature demands a deeper investigation of micro-level structures and meaning used by practitioners (Honig, 2006; Saito & Atencio, 2013; Wenger, 2010a, 2010b). Teachers and other practitioners expected to practice policy represent the micro-level of policy implementation (Bush, 2011; Saito & Atencio, 2013). School personnel formulate their understanding of policy, while performing it in application (Wenger, 1998). Thus, Weatherley and Lipsky (1977) coined the term, *street level bureaucrat*, to indicate policy actors who construct and apply policy interpretations in their daily practices and contexts.

Researchers studying site-based policy implementation negate previously held assumptions that lack of implementation is a function of resistance (Coburn, 2001, 2006; Cobb & Jackson, 2012; Horn, 2005; McLaughlin, 1987; Spillane, 2000, Spillane et al., 2006). Policy analysts hypothesized resistance as a signal of a gap between policy and practice (McLaughlin, 1987). At that point, researchers defined resistance as a choice to ignore or even sabotage policy, implying that policy drives practices as a matter of prompt and response (McLaughlin, 1987; Spillane, 2000). This understanding of policy implementation is reductive and overlooks the many factors involved in implementation (Cohen et al., 2007; McLaughlin, 1987; Spillane, 2000, Olsen & Sexton, 2009).

Arguably, such reductive understanding of policy implementation forms the basis for more highly specified policies with tighter definitions of fidelity associated with more policy mandates and sanctions on non-compliance to force practitioners to respond (Cohen et al., 2007; McLaughlin, 1987; Olsen & Sexton, 2009). For those policymakers

who still hold these views, policy design may emphasize compliance reporting, which may connote a lack of trust, causing resentment, emotional dissonance, and true resistance from those required to implement policy (Ball, 2003; Beatty, 2000; Hargreaves, 2001a; Olsen & Sexton, 2009).

Educational accountability policies may represent such compliance-oriented strategies. Performativity, as a phenomenon associated with accountability, surfaced as a possible product of educational accountability mandates and sanctions (Ball 1997, 2003). The unfortunate signals of performativity primarily include a routinized compliance with requirements that many educators report as stripping them of their professional identities (Ball, 2003; Olsen & Sexton, 2009). These reports reveal that over specificity in policy design squelches necessary micro-level interpretation and limits adaptation to local contexts (Ball, 2003; Bryk et al., 2015). Overly specified policy design reveals the conundrum Honig (2006) identified with her definition of *implementable* policy, which while easy to carry out, may not have much discernable effect. Honig's (2006) noted the mysteries embedded in *successful* policy and variability of effectiveness with less specificity. Performativity phenomena abound in the strictures of overly specified and implementable policy concepts (Ball, 1997, 2003; Bryk et al., 2015; Olsen & Sexton, 2009). Continued research on the complexities of policy implementation within varying contexts may enable stronger systems of support (Honig, 2006, 2008, 2012; Spillane, 2000; Spillane et al., 2002).

One method of investigation is through exploration of practitioner sensemaking. Policies and initiatives often carry messages regarding current issues in practice and

outcomes, belief systems, and new knowledge and skills, also known as sensemaking (Spillane et al., 2006). Any of these aspects could meld to create better outcomes (Spillane et al., 2006). When multiple facets are presented in policy, a tendency toward familiar knowledge and feasible applications influence integration of knowledge and transformation of practice (Honig, 2008; Spillane, 2000). This nexus of interpretation and practice relates to intermingling of thought and action (Honig, 2008; Spillane, 2000). This tendency toward familiarity causes omission of other facets of policy when moving toward delivery and may obscure policy intent (Honig, 2008; Honig & Ikemoto, 2008; Olsen & Sexton, 2009; Spillane, 2000). Therefore, further investigation at the level of practice may help to strengthen the policy intent to implementation to outcomes linkage.

### **Communities of Practice**

Research about communities of practice fosters understanding of policy-based implementation (Lave, 1991; Wenger, 1998, 2010a, 2010b). Wenger (2010a) defined communities of practice by three main elements: *domain*, *community*, and *practice*. A community of practice's *domain* pertains to a shared domain of interest (Wenger, 2010a). Membership, therefore, implies a commitment to the domain and requires certain competencies (Wenger, 2010a). Through this shared interest, members form *community* (Wenger, 2010a), establishing relationships, sharing interpretation, and communicating in a way that helps all members learn (Wenger, 2010a). Finally, Wenger (2010a, 2010b) distinguished these communities from others as shared learning becomes tacit through their practice. Learning through practice manifests in creation, hence generating new, shared, and enacted knowledge:

Through active and dynamic negotiation of meaning, practice is something that is produced over time by those who engage in it....No matter how much external effort is made to shape, dictate, or mandate practice, in the end it reflects the meanings arrived at by those engaged in it. (Wenger, 2010a, p. 2)

Learning within communities of practice means that these practitioners discuss, process, analyze, and apply new knowledge with their colleagues (Coburn, 2001; Honig, 2008, 2012; Lave, 1991; Wenger, 1998).

Wenger's definitions about communities of practice seem related to Horn's (2005) concepts about group learning. Horn (2005) revealed insight regarding types of groups and depth of learning. When heterogeneous groups (i.e. containing different backgrounds, experiences, and perspectives) discuss new knowledge and processes, this mix of individuals creates deeper understanding and enables significant shifts in beliefs or attitudes (Horn, 2005). In contrast, within homogeneous groups, less change occurs because like-individuals do not challenge each other (Horn, 2005).

MTSS requires extension of lessons about shared and combined knowledge with practice. Organizations need support to accomplish significant shifts and complex analysis (Olsen & Sexton, 2009). Because MTSS emphasizes incorporation and collaboration among different stakeholders, shared understanding could expand across the heterogeneous grouping of parents, teachers, mental health providers, and school administrators (Carr et al., 2002; Lewis et al., 2010; NASDSE, 2006, 2007). Each stakeholder has different perspectives, which leads to each to focus on different constructs and goals within the MTSS process (Olsen & Sexton, 2009; Sansosti &



Noltemeyer, 2008). Therefore, investigation of these heterogeneous groups, specifically in application to a micro systems-level MTSS process, may yield new insights into the policy implementation literature (Horn, 2005). Discoveries about whether and how MTSS teams share ideas and implement constructs into practice, potentially, garners insight specific to MTSS delivery and needed supports. The following information is a description of the policy constructs of MTSS, as seen through the multiple layers of situated cognition.

### **Macro-Level Meaning of MTSS**

The policy implementation literature provides a framework for investigating knowledge and practice pertaining to multi-tiered systems of support (MTSS) (Cobb & Jackson, 2012; Datnow, 2006). The federal level serves as the top of the marble layer cake of U.S. education policy, the macro-level (Grodzins, 1966; Sabatier, 1973). For MTSS's macro-level policy guidance, federal agencies developed websites providing research, description, and training information regarding PBIS and RTI, which can be aligned with Cobb & Jackson's (2012) *what, how, and why of implementation* support (AIR, 2010; NASDSE, n.d.; Technical Assistance Center on Positive Behavioral Interventions and Supports, established by the U.S. Department of Education's Office of Special Education Programs [OSEP], 2014). For the purposes of the current study, three of these websites yielded samples of federal, that is, macro level definitions of MTSS:

- Office of Special Education Programs' (OSEP) Positive Behavior Interventions and Supports (PBIS) homepage - [pbis.org](http://pbis.org),

- The Center for Response to Intervention at the American Institutes for Research homepage - [rti4success.org](http://rti4success.org), and
- The National Association of State Directors of Special Education's main website on Multi-tiered Systems of Support - [nasdse.org/Projects/Multi-TieredSystemsofSupportMTSS](http://nasdse.org/Projects/Multi-TieredSystemsofSupportMTSS)

These websites include documents or subpages based on policy and research about MTSS implementation (i.e. the *why* of policy implementation (Cobb & Jackson, 2012)). Such macro-level information constitutes an official interpretation linking RTI/PBIS initiatives to specific historic statutory-based policies about access and equity in high quality practices: (a) ESEA, (P. L. 107-110) and (b) IDEA (P.L. 108-446). For example, a document, *Response to Intervention: Research for Practice* (2007) resides as an attachment on the National Association of State Directors of Special Education (NASDSE) website. That document included explicit citations of both statutes, ESEA (P. L. 107-110) and IDEA (P.L. 108-446), regarding quality instruction, an alternative eligibility framework for special education and evidence-based practices. As another example of macro-level policy interpretation, one of the subpages on the website for [pbis.org](http://pbis.org) references both IDEA reauthorizations in 1997 and 2004. These statutory references substantiate the PBIS website's guidance for positive behavior interventions and functional behavior assessments. All three national websites use research studies to define policy meaning for various constructs (i.e. *what*) and training (i.e. *how*) of implementation (Cobb & Jackson, 2012) and illustrate specific MTSS macro-level policy interpretation.

## **Defining the Constructs (*What*) of MTSS Implementation**

The macro-level sources define MTSS as a system-wide approach to providing evidence-based prevention and intervention practices (supports) to address the varying degrees (tiers) and types of student academic, social and behavioral needs (Lewis et al., 2010; NASDSE, 2006, 2007; Sugai & Horner, 2008, 2009). The term, *system-wide*, refers to the school as an organization, a micro-system, rather than a more complex vertical system stretching from the macro- to the meso- to the micro-level (NASDSE, 2006, 2007; Sugai et al., 2000). The term, *evidence-based*, means that empirical evidence, rather than inspiration or intuition, drives practices for positive student outcomes (Yell et al., 2006). The historical origins of Positive Behavior and Intervention Supports (PBIS) as an empirically-based, multi-tiered system supported the emergence of the curriculum based, multi-tiered system, Response to Intervention (RTI) with common underlying constructs enfolded in the MTSS approach (Barnes & Harlacher, 2008; Sugai & Horner, 2008).

Sugai and Horner (2008) indicated that PBIS literature has roots in behavioral research around prevention beginning in the 1960s, and at the school-wide level beginning in the 1980s. These origins began with Functional Behavioral Assessments of students with social and emotional disabilities (Sugai et al., 2000), but among the environmental influences on such students, school culture played a role affecting all students (Gunter, Denny, Jack, Shores & Nelson, 1993; Rutherford & Nelson, 1995). PBIS offered an empirical base for addressing intensified services, such as the functional behavior assessment (FBA) or behavior intervention plan (BIP) process (Scott et al.,

2010; Sugai & Horner, 2008, 2009). The term RTI was first used in 2001, yet the core constructs, such as curriculum-based measures (CBM) were embedded in research on differentiation and accommodation for instructing students for several decades (NASDSE, 2006, 2007). RTI utilizes measures to demonstrate student responses, or lack of response, to instructional interventions. These measures serve to substantiate student need for more intense services, and for the most serious lack of response, sometimes these data provide evidence for special education (Fuchs et al., 2010). Both PBIS and RTI have strong roots in behavioral science, providing researchers and practitioners scientifically based behavioral practices, with a strong connection to observable, measurable student outcomes (Sugai & Horner, 2008). PBIS and RTI implementation require substantial capacity building within the school, eliciting both systems and team approaches to access a variety of professionals' specific skills and knowledge to meet the needs of all students (Kincaid et al., 2007; White et al., 2012).

The necessary expertise for teams pertain to collaborative problem solving, databased decision-making, and evidence-based instructional practices and academic/social/behavioral interventions (Barnes & Harlacher, 2008; Lewis et al., 2010; Sugai & Horner, 2008; Tilly, 2008). Collaborative problem solving employs a systematic method of identifying and solving problems incorporating all school and family members involved in supporting the student (Barnes & Harlacher, 2008; Lewis et al., 2010; Sugai & Horner, 2008). Databased decision making uses psychometrically sound assessment tools and practices to make decisions about students (Scott et al., 2010).

Within MTSS, tiers of support represent a continuum of educational services, so that all students have access to appropriate services (Barnes & Harlacher, 2008). This continuum should encompass a fluid approach to accommodate timely interventions aligned with students' demonstrated needs (Barnes & Harlacher, 2008). In turn, if particular students show a lack of response to an intervention, teams enable access to intensifying services by incorporating more experts as appropriate to the identified concern (NASDSE, 2007; Tilly, 2008). A significant emphasis within MTSS is prevention and intervention at early ages as a contrast to traditional wait-to-fail strategies (Fuchs & Fuchs, 2006; Kincaid et al., 2007; Scott et al., 2010). The primary tier is a universal program of preventative screening with immediate interventions provided to all students (Kincaid et al., 2007; Lane, 2007; Stewart et al., 2007). Typically, at least two other tiers represent the levels of intensified interventions. Tier 2 operates with fluid services for groups and individuals, and Tier 3 provides individualized plans and services (Horner et al., 2010; Hughes & Dexter, 2011; Molloy et al., 2013; Tilly, 2008). At the starting end of the continuum of monitoring progress, interventions, and intensified services, PBIS and RTI utilize Tier 1, the primary tier of universal prevention.

**Primary behavioral program: PBIS.**

PBIS's Tier 1 requires the following specific characteristics in the school environment: (a) establishment of consistent, clear school rules, (b) teaching of behavioral expectations, (c) improved systems of rewards and discipline, and (d) a universal method of data collection (Lewis et al., 2010; Nelson et al., 2002; Reinke et al., 2013). Scott et al. (2010) indicated four hallmarks at all PBIS tiers including: (a)

classroom management, (b) positive teacher-student relationships, (c) effective instruction, and (d) interventions with demonstrated high-probability of success. From its inception, PBIS involved school-wide adoption of consistent classroom management strategies among all teachers. Studies (Chitiyo & Wheeler, 2009; Kincaid et al., 2007) indicated that individual teacher variations in the adoption of common classroom management strategies complicated Tier 1 interventions. For PBIS, Tier 1 is a universal, systemic initiative involving a common understanding of the requirements.

**Primary academic program: RTI.**

In RTI, Tier 1 consists of evidence-based curriculum and instructional practices, entailing whole classrooms' differentiation of instruction and provision of accommodations and/or short-term interventions (Tomlinson & Imbeau, 2010). This tier focuses on meeting all students' needs within the typical classroom by increasing amount or type of instruction, students' repetition of skill, with teacher monitoring and feedback (Barnes & Harlacher, 2008). Such differentiation may occur through flexible grouping including opportunities such as: (a) student centers, (b) partner reading or practice, or (c) teacher-led reading groups within the core curriculum (Tomlinson & Imbeau, 2010). RTI's initial tier of intervention requires screening all students with monitoring of individual student need with classroom-based instructional differentiation based on evidence of effectiveness or lack thereof (American Institutes for Research -AIR, 2010; NASDSE, 2007; Tilly, 2008).

### **Primary tier data collection.**

Although the National Technical Assistance Center for Positive Behavior Supports' Blueprint makes a reference to universal screening (Lewis et al., 2010), this term rarely appears in PBIS literature. PBIS's hallmark measures for monitoring Tier 1 include office discipline referrals (ODRs), with data regarding infractions and mapping of locations as a means of reconfiguring safety and supervision across the entire school site (Scott et al., 2010). PBIS organizations offer schools the web-based program School-Wide Information System (SWIS) or a district or school may data-mine its own discipline tracking system (Scott et al., 2010; Sugai & Horner, 2008, 2009). PBIS practices now include data on academic performance as an outcome of behavioral intervention implementation (Dolan, 2009; Illinois PBIS Network [IPBIS], 2009; Kincaid, George, & Childs, 2012; Missouri School-Wide PBS [MO SW-PBS], 2014; Pennsylvania Department of Education, 2013; Reynolds, Irwin, & Algozzine, 2010; State Education Resource Center, 2009; Vermont Positive Behavior Interventions and Supports [VPBiS], Wisconsin RTI Center, 2014).

For RTI practices, Tier 1 data is often called universal screening (AIR, n.d.c, Universal Screening, para. 1; Barnes & Harlacher, 2008). Universal screening measures often consist of Curriculum-Based Measures (CBM), which are brief assessments aligned with the curriculum and containing psychometric properties, that is, benchmarked for reliability and validity in the local context (Glover & DiPerna, 2007). These assessments are administered multiple times in the year (e.g. fall, winter, spring) in order to determine

needed changes in instructional practices keyed to the curriculum or determine if groups or individual students need specific intervention (AIR, 2010; Glover & DiPerna, 2007).

### **Secondary Tier**

In MTSS, school-level practitioners utilize pre-selected criteria (or decision rules) on *universal screening* instruments to identify students needing Tier 2 strategies (AIR, n.d.c, Universal Screening, para. 1; Fuchs et al., 2012; Tilly, 2008). Universal screening provides school teams with baseline performance data for all students and for any requiring intensified services. Two principles raise student intervention to Tier 2: (a) an insufficient response to the primary prevention program and/or (b) a score indicating high risk on the screening tool (Sugai & Horner, 2009). The second tier typically comprises small group or individualized behavioral practices or specific pre-packaged academic programs (AIR, n.d.b, Tools Chart: Academic Intervention; Barnes & Harlacher, 2008; Horner et al., 2008; Molloy et al., 2013; Tilly, 2008; Todd, Campbell, Meyer, & Horner, 2008). School teams determine interventions based on an analysis of the student's academic skills/performance or behavior and aim to match changes in the school environment or instructional strategies to student needs (Horner et al., 2010; Todd et al., 2008). Within the second tier, educators use *progress monitoring* tools to determine student response to changes (Barnes & Harlacher, 2008; Scott et al., 2010; Sugai & Horner, 2008; Tilly, 2008). The intensity of the concern propels an increase in progress monitoring frequency and depth (Ardoin et al., 2013; Scott et al., 2010; Tilly, 2008).



### **Secondary social/behavioral tier.**

At Tier 2, interventions consist of individualized methods addressing behavioral concerns in response to a mismatch between student's behavior function and the environment (Lewis et al., 2010). Suggested evidence-based interventions include check-in, check out (CICO), peer mentors, daily behavior report cards, and social skills groups (McIntosh et al., 2006a; Todd et al., 2008). Unlike academic interventions, Tier 2 behavioral interventions do not primarily consist of pre-packaged sequenced programs (Lewis et al., 2010; McIntosh et al., 2006a; Scott et al., 2010; Todd et al., 2008).

### **Secondary academic tier.**

Tier 2, for academic needs, may involve commercial programs designed to supplement individuals and small groups of students' learning beyond the core instructional practices (AIR, 2010; Tilly, 2008; Torgesen, 2004). Tier 2's academic interventions should increase the explicit nature of instruction and levels of support (e.g. scaffolding, intensity of direct instruction, opportunities for practice) (Torgesen, 2004). Many schools buy commercial packages emphasizing explicit instruction in a sequenced manner. Frequently, teachers must follow pre-packaged scripts to enhance reliability ensuring compliance with the vendors' requisites for guaranteed, research-based protocols of success (Coyne et al., 2013; Fuchs & Fuchs, 2006). The American Institutes for Research (AIR, n.d.b, Tools Chart, Academic Interventions) provides a list of intervention programs along with specifications for each: (a) research regarding each program, (b) recommended group size, and (c) daily intervention time. If applicable to the program, the list also includes a compliance protocol, often referred to as a fidelity

measure. Such programs' guidelines often suggest timing and group sizes, typically ranging from five to seven students per group lasting 30 to 45 minutes per day (AIR, 2010; Glover & DiPerna, 2007; Tilly, 2008).

### **Tertiary Tier**

Academic and social intervention models also indicate provision of Tier 3 services based solely on significant at-risk scores on universal screeners or from additional sources, such as insufficient progress in Tier 2's progress monitoring phases (Fuchs et al., 2012). For example, Fuchs et al. (2012) recommended the use of additional academic measures for better prediction of false negatives (i.e. students who will not respond adequately to Tier 2 and show immediate need of more intense, or Tier 3 services). Fuchs and colleagues indicate the immediacy of Tier 3 services as meant to match services to student needs, with close monitoring for a possible quick shift to less intrusive services (Fuchs et al., 2012). Typically Tier 3 addresses approximately 5% or less of the school population (Bruns, Walrath, Glass-Siegel, & Weist, 2004; Molloy et al., 2013; Stewart et al., 2007; Tilly, 2008). Even among these 5%, such services still supplement, not supplant, the core curriculum or prevention program (Barnes & Harlacher, 2008; Tilly, 2008).

### **Tertiary social/behavioral tier.**

PBIS's Tier 3 targets students whose behavior interferes with access, their own and others, to education or their quality of educational progress due to exclusion from school (based on suspensions, in or out-of-school) (Lewis et al., 2010; Scott et al., 2010). Tier 3 for behavior and social interventions employs an increase in individualized

interventions and behavior plans, along with wraparound services, which connect the student, and his/her family, to mental health services (Scott & Eber, 2003). At Tier 3, a *functional behavior assessment (FBA)* helps teams to analyze behavior to drive effective behavior plans (Lewis et al., 2010; Scott, Liaupsin, Nelson, & McIntyre, 2005; Scott et al., 2010). Social/behavioral progress monitoring tools include in-class frequency charts, antecedent-behavior-consequence charts, observation, interviews, record reviews, and other tools for assessing frequency and function of behavior (OSEP, 2014).

**Tertiary academic tier.**

The third academic tier often includes a change in the intervention program or an intensification of program delivery (Barnes & Harlacher, 2008; Sugai & Horner, 2008; Tilly, 2008). Some schools equate Tier 3 academically with special education services; yet most RTI guidelines do not demarcate it as such (Barnes & Harlacher, 2008; Tilly, 2008). In fact, the RTI model often requires sufficient evidence of lack of progress in Tier 3 before activating screening processes to identify any educational disabilities (Fuchs et al., 2010). Recent work suggests ongoing issues with sufficient implementation of Tier 3 (Balu et al., 2015).

Both systems require school teams to work toward socially valid outcomes for all stakeholders, students, family members, and school staff (Carr et al., 2002). A socially valid outcome means that meaningful changes have occurred regarding students' abilities to socialize or participate in school and community activities (Carr et al., 2002). A clear understanding of implementation as well as outcome data is necessary for practices targeted for students' needs along a continuum (Sugai & Horner, 2008, Tilly, 2008).

Within databased decision-making, MTSS incorporates the following three processes: (a) specific goals and concerns, (b) relevant assessment through multiple data sources, and (c) a method for monitoring outcomes (NASDSE, 2007). MTSS initiatives entail districts' and schools' use of commonly-shared assessment instruments with staff trained for accurate administration and analysis of such measures (Tilly, 2008).

### **Defining the How of MTSS Implementation**

Multiple advocates of multi-tiered systems have declared an imperative to target both social/behavioral and academic outcomes in a coordinated, rather than duplicative, approach (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Hoagwood et al., 2007; Lane & Menzies, 2003; Nelson et al., 2002; Stewart et al., 2007). In defining MTSS practice (e.g. *what* of MTSS; Cobb & Jackson, 2012) and ways to support or implement such practice (e.g. *how* of MTSS; Cobb & Jackson, 2012), each of the three federal websites recommend simultaneous provision of behavior and academic intervention (AIR, 2010; NADSE, 2006, 2007; OSEP, 2014). Yet, even the macro-level guidance depicts a fragmented approach, as two of the websites show primary emphasis on academics through RTI (AIR, 2010; NADSE, n.d.) and the third website (OSEP, 2014) only offers information pertaining to behavior. For example, the AIR website indicates use of an RTI model (when defined as multiple levels of prevention) in application to behavioral concerns. However, AIR's document, "Essential Components of Response to Intervention – A Closer Look at RTI", indicated only that (not how) practitioners could use the information in conjunction with information from pbis.org.

The U.S. Department of Education's Office of Special Education Program's PBIS website (OSEP, n.d.) indicated an intent "to define, develop, implement, and evaluate a multi-tiered approach, ...emphasis given to the impact of implementing PBIS on the social, emotional and academic outcomes for students with disabilities" (OSEP, n.d., para. 1). The pbis.org website (OSEP, n.d.) had 44 research articles pertaining to either primary, secondary or tertiary behavioral support with only two articles with titles indicating a reference to academics. One article reported provision of academic and behavior interventions (McIntosh et al., 2006a), and the other discussed the relationship between academic and behavioral outcomes (Horner et al., 2009). In addition, the website authors explain RTI as a framework for academic instruction following similar constructs as PBIS and cites The National Center on Response to Intervention (AIR, n.d.) and The National Association of State Directors of Special Education (NASDSE) as resources for further understanding. Authors of the NASDSE (n.d.) website merged the behavior and academic components more so than the first two sites. The NASDSE (n.d.) website authors listed unitary, rather than dual, MTSS as a project on its website and provided a video by "educators in Kansas and Michigan" (Brown, Davis, Nantais, & Stindt, 2013). On NASDSE's webpage, all documents have RTI in the title, with no documents yet listed as MTSS. However, the document, "RTI: Research for Practice" (NASDSE, 2007), included a section on the use of RTI for social/emotional behavioral interventions at Tier 3 and included six research articles regarding behavior. Based on these websites, national and federal organizations proffer a nascent state of meanings for the macro-level interpretation of the unitary, rather than dual, approach to MTSS.

Emerging macro-level guidance of a unified MTSS raise the commonalities among constructs for PBIS and RTI (Sugai & Horner, 2008). For example, authors of the three websites list five common processes: (a) a structured district and school-wide system to (b) provide evidence-based interventions and practices through (c) team-based planning, (d) databased decision making and (e) emphasis on use of implementation protocols, referenced as fidelity measures (AIR, n.d.; NASDSE, n.d.; Office of Special Education Programs Technical Assistance Center [OSEP], 2014). The sites' authors also discuss culturally responsive practices and describe a continuum of services with three levels of intensifying services in such terms as prevention (Tier 1), targeted (Tier 2) and intensive (Tier 3) intervention (AIR, n.d.; NASDSE, n.d.; OSEP, n.d.).

In order for schools to implement MTSS, school practitioners must recognize the many processes and structures needed for prevention, and if necessary, intensifying student services (Cobb & Jackson, 2012; O'connor & Freeman, 2012). The "Blueprint for School-Wide Positive Behavior Support [SWPBIS] Training and Professional Development" (Lewis et al., 2010) is a 31-page document providing guidance on SWPBIS indicating five phases of implementation. Lewis et al. (2010) listed the five phases as follows: (a) exploration and adoption, (b) installation, (c) initial implementation, (d) full implementation, and (e) innovation and sustainability, which implicitly confirm recommendations by Fixsen, Naoom, Blase, Friedman, and Wallace (2005).

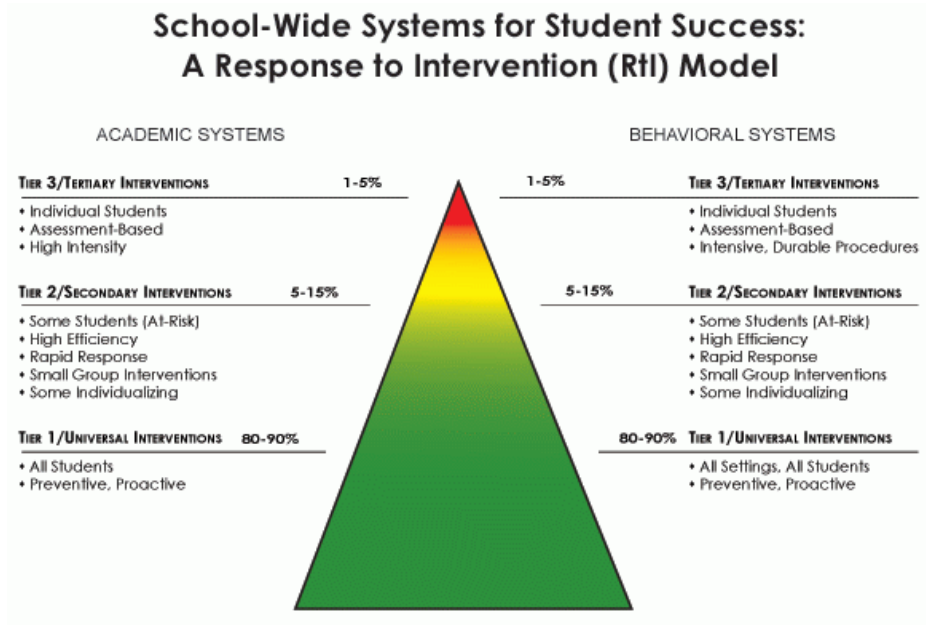
The "Response to Intervention Blueprints for Implementation" (2008) is a document on the NASDSE (n.d.) website. The document "is intended to take conceptual

material and make it concrete” and includes a 43-page chart detailing “critical implementation components, resources, and wisdom from the field” (NASDSE, 2010, p. 4). This statement raises questions akin to Honig’s (2006) concern with *implementable* policy by attempting to reduce complex constructs into simple processes, and surfaces potential for the downside in rigid compliance routines known as performativity (Ball, 1997, 2003). The sheer volume of these two documents demonstrates complexity of both initiatives, which promote the federal statutory policy intent of access and equity in high quality educational services found in both ESEA (P.L. 107-110) and IDEA (P.L. 108-446). Both initiatives represent the statutory macro-level policy intent to spark systems changes at the meso and micro-levels. Overall, instigating systems change across the macro through meso through micro-levels necessitates years of professional development, changes in infrastructure, and knowledge/skill-building (Fixsen et al., 2005). Furthermore, the translation of macro-level policy intent into micro-level policy implementation involves situated cognition, that is, shared sensemaking, in communities of practice (Coburn, 2001; Honig, 2008, 2012; Honig & Ikemoto, 2008; Olsen & Sexton, 2009; Spillane, 2000).

#### **Recent shifts in MTSS definition and implementation.**

Although MTSS has strong roots in research and best practice, prominent investigators and federal documents continue to challenge or redefine its processes and key elements to improve in meeting all students’ needs. For example, Fuchs et al. (2010) and Ardoin et al. (2013) raised questions regarding methods of decision-making and use of RTI for eligibility purposes. Federal documents also continue to develop guidance

materials for improved implementation. For example, depiction of RTI and PBIS has shifted as shown in the following figures.



*Figure 2.1.* Depiction of Traditional RTI and PBIS Framework. This graphic is on the former Illinois PBiS Network and is not a currently used model. Permission for use of graphic was granted on December 10, 2014 (Appendix A).

Figure 2.1 represents a common traditional depiction used at least since the mid-1990s when describing PBIS and RTI intervention intensity (e.g. Sugai et al., 2000). The graphic shows three tiers of support with behavior on one side and academics on the other. The next figure, Figure 2.2, indicates how macro-level conceptualization shifted to processes surrounding the approaches to all three tiers of support services.



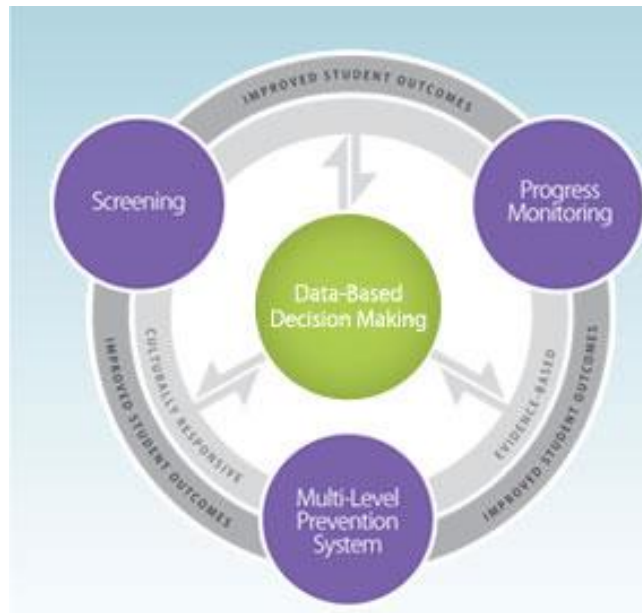


Figure 2.2. Current Depiction of MTSS (National Center on Response to Intervention) (March 2010). Permission to use graphic granted on December 12, 2014 (Appendix B).

Figure 2.2 represents more recent graphics used to depict MTSS, RTI or PBIS (AIR, 2010; OSEP, n.d.). The circular graphic differs from the triangle with its absence of tiers. The graphic simply indicates essential components among professional practices, the work of teams, for improved student outcomes. The emphasis focuses on processes for all students.

Macro-level agents' shift in their visual depiction of processes raises questions about previous approaches. For example, did the three-tiered triangle (Figure 2.2) simply reorient educators from two systems (general and special education) to three systems, each rigid? In doing so, did this perpetuate stratified systems, such as found notions and discourses about *regular* versus *special* education (O'Laughlin & Lindle, 2014)? Does the circular graphic convey a more fluid and inclusive approach to adults' teamwork effectively shifting focus from students' needed services? Additionally, the first graphic

(Figure 2.1) shows application of PBIS and RTI programs. However, this conceptualization may have been interpreted as dual parallel approaches, whereas the new graphic (Figure 2.2) may emphasize the integrated resources of time, personnel, and approaches to social/behavioral and academic supports.

The introduction of PBIS and RTI separately, and historically in a sequential fashion, may have perpetuated application of singular systems, as well. The use of the term MTSS is a more recent term and may further connote a change to more integrated implementation. As demonstrated through the illustrated changes in graphics and terms, federal macro-level agents are continuing to develop models focused on equitably addressing all students' access to curriculum with differentiated instruction and services to close achievement gaps and ensure learning (NASDSE, 2006, 2007, OSEP, n.d.).

### **Meso-Level Meaning of MTSS**

As federal messages and guidance documents filter through meso-level interpretation, state departments have varied considerably in their level of guidance for each of the PBIS and RTI initiatives. In 2010, members of the national technical assistance center for PBIS conducted a state implementation survey and posted the survey on its website, yet to date, have not reported survey results (OSEP, n.d.). However, there are documents on the website from nine states regarding PBIS implementation and outcomes within each state. Those documents are dated 2009 to 2014 (OSEP, n.d., Evaluation examples section). The documents ranged in content, with some states sharing a multi-page newsletter, including information such as regional highlights, whereas other states providing lengthy documents, as long (as 31-pages) including purpose, efficacy,

and in-depth data outcomes and analysis. I reviewed nine documents for the following aspects: a) promoted concepts in goals, headings, or graphics, b) evaluation data for consistency, or c) variation in type of assessment.

State documents displayed considerable variation in terms. These terms included: academic focus, capacity, proactive/prevention, social competence, culturally responsive, positive school climate, community-based, sustainability, college and career ready, student-centered, and family oriented. This variation in terms may be due to number of years of implementation; yet, substantiates the way in which interpretation can be iterative with adaption due to context (Coburn, 2001; Honig, 2008, 2012; Olsen & Sexton, 2009). For example, since 2013, three states' documents show an academic focus, perhaps representing a more recent shift from separate systems to an integrated MTSS. This variation in key terms signals variation in meso-level interpretation emphasis. Variation in meso-level interpretation may impact district implementation, especially if districts rely on state departments for professional development (Datnow, 2006).

These documents not only displayed varied interpretation, but also varied levels of implementation and means of evaluation. All of the nine states' documents showed a range of implementation from none to widespread implementation. Each state document provided outcome data showing how the state evaluates current PBIS performance in schools or districts, which can be used to determine needed areas of support (Dolan, 2009; IPBIS, 2009; Kincaid et al., 2012; MO SW-PBS, 2014; PA SWPBIS, 2013; Reynolds et al., 2010; SERC, 2009; VTPBis, 2014; Wisconsin RTI Center, 2014). More

consistent methods of PBIS evaluation were the Self Evaluation Tool (SET) and the Benchmarks of Quality (BOQ), along with office discipline referrals (ODRs), and out of school suspensions (OSS) (Dolan, 2009; IPBIS, 2009; Kincaid et al., 2012; MO SW-PBS, 2014; PA SWPBIS, 2013; Reynolds et al., 2010; SERC, 2009; VTPBis, 2014; Wisconsin RTI Center, 2014). Missing from this list is a method for measuring academic skills or social, emotional skills. Such variation across states indicates continued sensemaking and avenues for support within state agencies and among policymakers.

In examining state-level interpretation of RTI, themes emerged within two studies regarding variation in purpose and planning/delivery of RTI (Hauerwas et al., 2013; Hoover, Baca, Wexler-Love, & Saenz, 2008). States vary in addressing both purpose, the *why* of implementation (Cobb & Jackson, 2012) and delivery of MTSS, the *how* of implementation (Cobb & Jackson, 2012) (Hauerwas et al., 2013; Hoover et al., 2008).

In 2007, NASDSE and the Council of Administrators of Special Education (CASE) administered a survey to directors of special education in each of the state departments (including the District of Columbia) to determine state implementation of RTI (Hoover et al., 2008). Forty-four of 51 states (86%) completed the survey. When examining variation among states, Hoover et al. (2008) found that 28 states were implementing RTI at some level and 16 states were still in the planning stages. As for setting the policy purpose for using RTI, 15 states were “considering RTI for each of the three purposes of [first] making instructional decisions, [second] determining eligibility for special education services or placement, and [third] as a replacement for identifying learning disabilities (i.e. eliminating discrepancy emphasis)” (Hoover et al., 2008, p. 7).

Twenty-four of the states deliberated over use Hoover et al. (2008) first and second purposes. Finally, two states reported use of RTI for instructional decision-making and removal of prior discrepancy, or wait-to-fail model, while three states focused solely on using RTI for instructional purposes (Hoover et al., 2008).

The responding states showed less variation in developing training, with 41 states indicating that training development was underway or in progress, and three states indicating a complete absence of training or any plans for training (Hoover et al., 2008). One of the survey items addressed use of an RTI specialist to support districts (Hoover et al., 2008). Only four of 44 states' respondents indicated provision of an RTI specialist (Hoover et al., 2008). Finally, state respondents reported more emphasis on providing an RTI overview of key elements and practice, progress monitoring procedures, and data based decision making with significantly less attention to making instruction culturally responsive (Hoover et al., 2008).

Hauerwas et al. (2013) conducted a content analysis of state departments of education's websites, as a proxy for determining state-level sensemaking. These researchers concluded the variation among websites demonstrated significant inconsistencies among state guidelines. The first level of inconsistency related to the *why*: the purpose of RTI (Cobb & Jackson, 2012; Hauerwas et al., 2013). Thirteen states had RTI guidance documents for use in academic MTSS and eligibility for specific learning disabilities (SLD) identification, 16 for SLD identification only, and 25 for RTI alone (Hauerwas et al., 2013). Seventeen states showed a requirement of data collection and analysis through an academic MTSS (that is, RTI) when determining SLD

identification, with variation among the 17 regarding whether RTI could be used as the sole criterion (Hauerwas et al., 2013).

In terms of actual guidance around delivery, Cobb and Jackson's (2012) *how* of implementation, Hauerwas et al. (2013) reported that states varied considerably in terms of data collection guidelines, definitions of fidelity of implementation, and documentation of progress. Multiple states mentioned notions of implementation fidelity in guidelines, yet did not provide evaluation monitoring instruments or processes to those using such guidelines (Hauerwas et al., 2013). Among the few states with specific evaluation plans, Hauerwas et al. (2013) noted variation in among the evaluated components including: (a) types of measures, (b) length of students' intervention plans, and (c) frequency or duration of student progress monitoring.

These results further implicate concerns around how we define or use the term, *fidelity*, as a tool for compliance centered on concrete, *implementable* practices (Honig, 2006; Olsen & Sexton, 2009) versus an adaptive approach which may require variation among differing contexts with multiple needs (Bryk et al., 2015; Honig, 2006). Neither Hoover et al. (2008) nor Hauerwas et al. (2013) addressed whether RTI was applied to behavioral prevention and intervention. These studies expose how policymakers and researchers continue to grapple with defining and implementing each MTSS, without acknowledging possible complications for students who have both academic and behavioral needs.

For the context of the cases in this study, aspects of the state's education system provide insights about challenges to federal policy intent. This particular state has an

established history and political culture of school-based inequities concerning race, poverty, and disability (Truitt, 2009). S.C. state legislators have fought obligations of equitable schooling, setting constitutional standards of a *minimally adequate* education, to fighting a 21 year litigation battle around inequitable funding for poor and rural districts (Abbeville I, 1999, Truitt, 2009). In November of 2014, the Supreme Court determined that S.C. failed in their responsibility to provide equitable schooling and ordered a development plan to address educational disparities (Abbeville II, 2014, Truitt, 2009). Perhaps this lawsuit contributed to the state's development of a literacy act, Read to Succeed (2014), establishing funding for literacy specialists as a means of promoting student reading success.

According to the U. S. Department of Education Office of Civil Rights (OCR) (2014), the state was one of five states which reported male suspension rates higher than the nation for every racial/ethnic group (p. 11). The state had a disproportionate number of suspensions and expulsions among students of color, with Black students experiencing three times the rate of White students' exclusion from school based on behaviors (OCR, 2014, p. 13). In this state, the penalty rate for students with disabilities is twice as high as for students without disabilities (OCR, 2014, p. 15). The ratio of Black students' identification for intellectual disabilities is 2:1 (OCR, 2011). Additionally, Black students' ratio over Whites' identification for emotional disturbance is 5:4 (OCR, 2011).

At the time of the study, the state's Department of Education website did not depict any current data on districts or schools implementing either PBIS or RTI (SC Department of Education website, n.d.). This absence of evidence may indicate limited

attention or state resources for MTSS. The state agency's attention may be diverted to other initiatives, which can pose implementation challenges for local districts and schools in the implementation of MTSS.

### **Micro: District Level Meaning of MTSS**

Individual states investigated MTSS sensemaking and implementation by surveying local districts for PBIS implementation status. North Carolina's (2009) evaluation indicated that 93 of 115 districts had at least one school implementing PBIS (Reynolds et al., 2010). More recently, the Florida PBIS evaluation (Kincaid et al., 2012) provided a report of district implementation. Florida's results (Kincaid et al., 2012) indicated that 51 of 67 districts adopted and used PBIS, and approximately half of these schools reported interventions at Tiers 2 or 3. Florida's evaluation also included survey results regarding district leaders' satisfaction with professional learning, resources and technical support, along with perceptions of elements found to be most or least helpful (Kincaid et al., 2012).

NASDSE and CASE explored RTI practices among districts, conducting surveys regarding extent of district level implementation (Hoover et al., 2008). Seventeen state responders reported that less than 10% of their districts were implementing RTI, 11 responders reported between 10-25% district RTI implementation, and four indicated between 26-50% district RTI implementation. One state reported that over 75% of the state's districts used the RTI model. The 17 remaining states either did not answer or reported no knowledge concerning district implementation.



The American Association of School Administrators (AASA), CASE, NASDSE, the National Center for Learning Disabilities (NCLD), and Spectrum K12 administered a national web-based survey to K-12 district administrators in 2011 regarding RTI adoption and implementation (GlobalScholar/Spectrum K12, AASA, CASE, NASDSE, & RTI Action Network/NCLD, 2011). The survey elicited 1390 survey respondents and found:

- 94% of districts reported some level of implementation, mostly in reading
- Most school personnel recognize the need for RTI
- 24% of schools have reached full implementation

(GlobalScholar/Spectrum K12, AASA, CASE, NASDSE, & RTI Action Network/NCLD, 2011, para. 2).

The survey revealed that of the districts monitoring RTI data, eight in ten reported reduction in special education referrals. Therefore, for this 2011 study, districts self-reported increased awareness, if not implementation, with positive results (GlobalScholar/Spectrum K12, AASA, CASE, NASDSE, & RTI Action Network/NCLD, 2011). Nevertheless, the progress from awareness to implementation was limited (GlobalScholar/Spectrum K12, AASA, CASE, NASDSE, & RTI Action Network/NCLD, 2011).

Beyond information provided in state-level documents regarding district implementation, I found no further research specifically examining districts' policy interpretations of MTSS. However, Coburn, Honig, and Stein (2009) conducted a literature review (up to year 2005) in the area of district leader decision-making related to evidence-based practice. They found that “existing research on evidence use in district

central offices suggests that the process is much more complex than images of evidence use in recent policy would suggest” (Coburn et al., 2009; p. 3). Coburn et al. (2009) attributed process complexity to four problems revealed in the literature.

The first problem, according to Coburn et al. (2009), is that district leaders do not have access to the types of evidence needed for making decisions. When evidence is available, the second problem arises, the processes of evidence use “are mediated by individual and collective beliefs and worldviews” (Coburn et al., 2009, p. 3). Such preconceptions may cause district leaders to ignore some evidence (Coburn et al., 2009). Next, district leaders have an overwhelming number of roles and the amount of evidence-based decision-making in those roles surpasses policy-makers’ understanding of such roles (Coburn et al., 2009). Therefore, policymakers underestimate the roles of district leaders and their profuse use of evidence for a variety of different purposes (Coburn et al., 2009). Overall, the study indicated “organizational and political context” (p. 3) as critical influences on all aspects of practitioners’ understanding and processes for evidence use (Coburn et al., 2009).

### **Micro: School Level Meaning of MTSS**

Given that PBIS has operated in schools across multiple decades, while the implementation of RTI barely spans the last decade, PBIS studies overwhelm the available RTI implementation studies. Along with differences in volume of studies for both initiatives, even fewer studies exist that examine implementation of a combined, unitary school-wide behavioral (PBIS) and academic (RTI) MTSS.

Extant empirical research regarding meaning of PBIS at the school level describes effective teams at an in-depth level (George, White, & Schlaffer, 2007; Sansosti & Noltemeyer, 2008). U.S. Department of Education PBIS website, (OSEP, 2003) provided an assessment tool for measuring staff perceptions of status of behavior “Effective Behavior Support: Self-Assessment Survey (version 2.0)”. Pennsylvania state level agents used this survey to reveal that school staff members reported appropriate and consistent implementation of PBIS (Pennsylvania School-Wide Positive Behavioral Interventions & Supports: 2014 Executive Summary). The authors of the Pennsylvania document also revealed a decrease in risk factors and increase in protective factors among those schools (a) reporting full PBIS implementation over an extended length of time and (b) scoring high on the OSEP (2003) instrument (Pennsylvania Executive Summary, 2014).

Bradshaw, Koth, Bevans, Ialongo, and Leaf (2008) investigated PBIS impact on organizational health by surveying 37 schools in Maryland, using the Organization Health Inventory for Elementary Schools (Hoy & Feldman, 1987). They found a positive impact specifically on resource influence, which Bradshaw et al. (2008) defined as the school leader’s ability to garner district resources. Bradshaw et al. (2008) reported another high impact indicator as staff affiliation, which the researchers defined as positive interactions and feelings of trust. Bradshaw and colleagues listed information for school and district leaders, connecting PBIS to goals such as safe and healthy climates.

Finally, Fallon and colleagues (2014) also conducted survey research in 10 schools (in the second year or more of implementation) to examine staff perceptions of

PBIS implementation. Respondents in the study reported challenges in implementing practices of providing: (a) effective instruction and (b) consistent consequences (Fallon et al., 2014). The study authors did not provide further insight as to concerns or positive experiences (Fallon et al., 2014).

Systems level or organizational components also affect sustainability (George et al., 2007). PBIS sustainability necessitates: (a) shared recognition of needed change among stakeholders, (b) a unified vision for change, (c) committed administrative leadership, (d) autonomous teachers, (e) school psychologists as leaders, change agents, and consultants, and (f) committed financial resources (George et al., 2007). The necessity of teacher autonomy further precipitates attention to adaptability and complexity over performativity and compliance (Ball, 1997, 2003; Olsen & Sexton, 2009).

Kincaid et al. (2007) examined barriers to PBIS implementation and listed limited staff buy-in as most significant. Similar to findings by Reinke et al. (2013), insufficient time was a significant barrier (Kincaid et al., 2007). PBIS implementation requires time for educators to learn the processes and to determine ways to support and sustain implementation (George et al., 2007). The five barriers were as follows: (a) under-use of data, (b) inconsistent teacher implementation of prevention or intervention strategies, (c) increased staff turnover, (d) an inadequate reward system, and (e) philosophical differences among administrators and educators (Kincaid et al., 2007). Kincaid's study raises questions concerning the relationship between buy-in and such elements as autonomy, shared vision and committed leadership.

These findings by George et al. (2007) and Kincaid et al. (2007) create a heightened tension regarding Honig's (2006) concepts of *implementable* versus sustainable and *successful* initiatives. That is, at least two studies' findings (George et al., 2007; Kincaid et al., 2007) suggested a need for both (a) teacher autonomy *and* (b) alignment of philosophies among teachers and other professionals along with (c) ways to mediate philosophical differences. The findings also signified a clear need for capacity building, with heightened attention to culture (George et al., 2007; Kincaid et al., 2007). Additionally, district support was the most important facilitator enabling implementation, followed by factors such as PBIS project support, effective use of data, administrative support, and school-level/team trainings (Kincaid et al., 2007). Such findings situate educators' cognition and implementation practices within multiple realms and contexts (Cobb & Jackson, 2012; Horn, 2005; Olsen & Sexton, 2009). These findings also lend further support to Honig's (2006) discussion of *implementable* versus *successful* initiatives.

White and colleagues (2012) determined a gap in the literature pertaining to local school implementation of RTI policy. White et al., (2012) utilized a case study method to determine key features needed to enact such policy within a school piloting RTI as an early-adopter for a district. Information from such studies allows school and district leaders to determine a possible sequence of implementation and professional development events, as well as key factors enabling schools in implementation (White et al., 2012). White et al. (2012) identified contextual factors that contributed to and interfered with initial RTI implementation. Key positive factors included strong principal

leadership and team leadership that incorporated both teachers and related service providers (White et al., 2012). Other positive factors included a cooperative problem solving approach between district and schools, teacher buy-in, and a method of starting small, then scaling up (White et al., 2012).

Several obstacles emerged within the study by White et al. (2012), including practitioners' feelings of being overwhelmed in the beginning of implementation, with inadequate time to learn a new database resulting in delayed decision making. Additionally, some teachers failed to grasp the need for entering progress monitoring data in the database in a timely manner or were insulted by having to "take on administrative-type roles" (i.e. data entry) (White et al., 2012). Teachers also felt that they needed time and scheduling changes to afford opportunities to discuss interventions, including how to match specific strategies to children's needs (White et al., 2012). This study yielded context-dependent understanding of RTI complexities, yet was a single district evaluation pertaining to one elementary school staff's experience. Therefore, further similar studies would enable the development of themes among contextual factors (Yin, 2014).

The study by White et al. (2012) aligned with conceptual articles by Kratochwill, Volpiansky, Clements, and Ball (2007) and Danielson et al. (2007). These authors opined that much literature specifies professional development and administration support or principals' leadership as key factors in successful RTI implementation. Such robust findings begin to answer the implementation mysteries as identified by Honig (2006) concerning the contextual variation surrounding *successful* policy or the policy interpretation questions raised by Cobb and Jackson (2012) of *what, how, and why*.

Balu and colleagues (2015) provided insight regarding implementation of RTI and attempted to determine effective RTI practices across 13 states (with no explanation regarding choice or number of states). Among the 13 states, Balu and colleagues (2015) compared two types of schools: (a) *impact schools* and (b) *reference schools*. Balu and colleagues (2015) defined *impact schools* as those reporting implementation for at least three years using these three components: (1) universal screening, (2) tiered reading support and (3) progress monitoring. The *reference schools* consisted of 100 randomly selected elementary schools representing public, charter, and magnet schools serving students in grades one through three (Balu et al., 2015).

The authors of this study explained a shift from measuring fidelity, or compliance with a single design structure for RTI, to focusing on correlations of reading achievement with a variety of locally-developed, evidence-based practices (Balu et al., 2015). These local-developed approaches varied in terms of (a) number of benchmark assessments, (b) provision of intervention to all versus some students, (c) intervention during or outside of core curriculum, (d) percentage of students identified for intervention, and (d) behavioral application of RTI (Balu et al., 2015). The only statistically significant positive characteristic involved provision of intervention to a higher percentage of students (Balu et al., 2015). Students falling just below the benchmark/universal screening cut score performed lower than other similar peers if they were (a) on an Individual Education Plan (IEP), available to students with identified disabilities, or (b) were over-age (Balu et al., 2015). Such findings raise questions about the implementation of IEPs, effectively implicating problems with delivery of specialized educational services. Other questions

arise for students considered over-age from their peers, and for what reasons these students exceed their peer-group's ages. Did these students enter school later than others? Did educators retain students in a grade as opposed to providing the students with supplemental and accelerating instructional and intervention services? Was an incipient wait-to-fail strategy lingering despite the operationalization of the notion of *impact schools*?

Another important finding of Balu and colleagues' (2015) study indicated much higher applications of RTI to reading (56% in reference and 86% in impact schools) than to math and behavioral intervention (approximately 30% in both areas for both types of schools and only in grade one). The authors did not define RTI behavioral interventions, yet made a reference to PBIS as a possible framework. These results suggested that integrating academic and behavioral prevention and intervention strategies into a unitary, combined MTSS has yet to be adopted.

To date, there are few descriptive studies examining either PBIS or RTI and less, if any, exploring schools' implementation of *both* systems in parallel or as a unitary, combined MTSS within the same school. Additionally, we know little about two aspects of MTSS: (a) practitioners' understanding of policies, and (b) whether micro-level implementation or practice reflects policy goals. Therefore, future researchers should collect information about school teams' knowledge, skills, and beliefs regarding MTSS and what factors may be contributing to the sensemaking of such teams.



## **Conclusion**

A productive viewpoint for the next generation of implementation researchers would integrate lessons from implementation research with current ideas about learning systems and knowledge management to understand how enacting systems can learn as part of policy implementation. (McLaughlin, 2006, p. 227)

Policy implementation researchers have recognized the intersecting levels of interpretation and the multiple factors influencing implementation and subsequent positive student outcomes (Cohen et al., 2007; Datnow, 2006; Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Malen, 2006; McLaughlin, 2006; Spillane, 2000; Spillane et al., 2002). Authors of MTSS documents and research describe systemic approaches for implementation, including professional learning opportunities, collaboration, and evidence-based practice (Coburn et al., 2009; George et al., 2007; Kincaid et al., 2007; Reinke et al., 2013; White et al., 2012). Accordingly, MTSS represents a multi-faceted framework requiring (a) complex analysis among district and school practitioners and (b) varying supports for micro-level practices (Coburn et al., 2009; Cohen et al., 2007; Sansosti & Noltemeyer, 2008). There is extant literature and knowledge regarding dual implementation, especially through the lens of school team members.

The sensemaking, situated cognition framework yields information regarding multiple and complex contextual factors surrounding site-based implementation (Cobb & Jackson, 2012; Coburn, 2001, 2006; Horn, 2005; Honig, 2008, 2012; Honig & Ikemoto, 2008; Olsen & Sexton, 2009; Spillane, 2000). However, researchers have utilized sensemaking mostly in application to instruction or classroom practice (Coburn, 2001,

2006; Horn, 2005) or with investigations of district level interpretation and influence (Honig, 2008, 2012; Honig & Ikemoto, 2008; Spillane, 2000). Although MTSS involves instructional practices, it demands a broader, system-wide level of planning, analysis, and services beyond the classroom setting. That is, MTSS uses school level teams for decision-making, creating a new level of interpretation intersecting district and school-level leaders' interpretations with teachers' understanding and classroom practices.

By using the sensemaking framework to describe two elementary schools documented as implementing both PBIS and RTI, I intended to reveal contextual features pertaining to MTSS implementation. Specifically, I explored MTSS team members' beliefs and attitudes situated within varying roles and school contexts through the following research question:

*What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?*

Aspects of sensemaking may be specific to the MTSS process and/or overlap with themes derived from other sensemaking research, further contributing to this realm of research. The following figure illustrates the framework for this investigation of sensemaking.

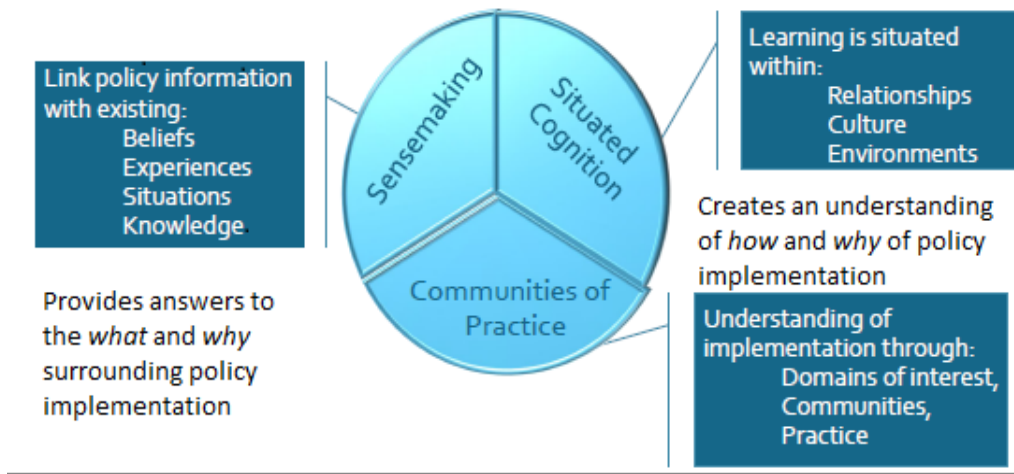


Figure 2.3 Understanding Sensemaking of Policy-Based Initiatives

Within this tri-partite lens, the MTSS policy interpretation by members of two school teams reveal how, what and why of their practices. The study contributes to concepts about sensemaking in the context of team implementation of federal policy at the micro-level. Results offer insights into the specific implication of MTSS for the policy intent of equitable access and achievement for all students.

This chapter provided a synthesis of the MTSS and policy implementation literature, and gaps therein. This synthesis substantiated a rationale for the purpose and research questions posed within this study. In Chapter Three, I will explain the research design, including data sources and methods of analysis.

## CHAPTER THREE

### STUDY DESIGN

#### **Introduction**

The purpose of this study was to examine RTI and PBIS team sensemaking across two selected cases through the following research question:

*What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?*

This chapter provides the details of this multiple case study design, which enabled examination of contexts specific to each selected case (Yin, 2006). The case study design is described in five sections: selection of participants, instrumentation, data collection, and data analysis.

#### **Selection of Cases and Participants**

To investigate MTSS team sensemaking, I used a two-stage process of purposive sampling (Drew, Hardman, & Hosp, 2007). The selection process featured the district and schools as key and instrumental cases (Stake, 1995; Thomas, 2011; Yin 2006, 2014). The following section describes district and school selection.

#### **District Selection**

The first stage of the selection process involved justification of selected district characteristics. The proposed district included the following characteristics salient to the case boundaries: (a) represented the state as the largest school district, ranking among the top 50 largest districts in the U.S. and (b) represented diverse student populations and geo-political micro-regions reflecting the state's demographics. The district is an

instrumental case boundary (Stake, 1995; Thomas, 2011; Yin, 2006, 2014) due to adoption of both MTSS initiatives.

### **Steps of Access**

Once I obtained IRB approval (Appendix C), I contacted the district, obtained approval for conducting the study (Appendix D), and followed the district's guidance about school contact. The first step involved meeting with the individual whom the district designated as the *district lead* to collaborate and determine a pool of schools for possible participation. As per the IRB protocol, I provided the district lead and all participants with the consent information form. Because the study required perceptions without personal identifying information, and fit a protocol exempt from protection of sensitive personal data or specimens, the consent process required only the conveyance of participants' awareness of their rights and the study procedures and did not require signatures.

### **School Selection**

The second stage of the selection process focused on identifying two elementary schools which had implemented PBIS and RTI, thus serving as instrumental cases of dual MTSS implementation bounded within the selected district and state (Stake, 1995; Thomas, 2011). I used multiple inclusion criteria to identify potential sites. First, I eliminated schools in which I served as a school psychologist, which ruled in 43 elementary schools. The second inclusion criteria for selection required evidence of both PBIS and RTI and implementation for at least three years for both programs (as a means of distinguishing from former studies regarding initial implementation).

Based on the above inclusion criteria, I met with the district lead and identified a pool of 11 possible schools. We then applied the next set of inclusion criteria. We examined the schools for representation in the following literature-supported distinguishing characteristics: (a) Title 1 and non-Title 1, a proxy for level of student poverty that also reveals variation in resources (George et al., 2007; Honig, 2006; Olsen & Sexton, 2009); (b) principal tenure (Kincaid et al., 2007; White et al., 2012); and (c) years of implementation (Fixsen et al., 2005; George et al., 2007; Reinke et al., 2011).

A number of schools in this district adopted an inclusion model on the continuum of special education services for the first time during the 2015-16 school year, the year of investigation. The district preferred to eliminate these schools from this study to avoid overburdening personnel faced with a substantial new initiative. The final list of criteria narrowed the pool to five possible schools. We identified two schools due to variations in principal tenure and MTSS implementation. Specifically, one school's principal had been principal for over 20 years, contrasting with staff/principal turnover in the second school. Secondly, the first school's staff implemented reading and math for RTI, whereas the second school's staff only implemented reading.

Given the district's conditions for participation, the district lead made initial contact with the principals within the pool of schools through a brief phone call, eliciting willingness to discuss possible participation with the researcher. Once the district lead obtained principals' permission, I contacted the principals, in accordance with the principal contact form (Appendix E) and established a date to discuss their possible participation and to determine possible participants within their schools. Next, the

principals emailed MTSS teams, notifying members about the study. Finally, after introducing myself to the respective teams, I contacted participants via email (Appendix F) to gain approval for participation and to determine an interview date.

### **Participant Selection**

After discussing feasibility of conducting this study with both principals, I worked with the principals to identify possible participants. One important aspect of the investigation pertained to studying communities of practice (Lave, 1991; Wenger, 1998; 2010) and therefore, I only included members of the PBIS and RTI teams. I collaborated with the principal to determine participants with the following initial inclusion criteria:

- a school administrator (principal, assistant principal, or instructional coach (IC),
- two general educators representing varying grades (one from each of the PBIS/RTI teams), and
- RTI interventionist (s).

I initially intended to include a special education teacher; however, because neither school included special education teachers on the MTSS teams, I did not interview any.

Another important aspect of the investigation pertained to general sensemaking (Spillane, 2000) of the initiatives. Therefore, I asked both principals to identify at least two people on the teams who were familiar with both RTI and PBIS. For both schools, the principals indicated that all personnel would be familiar with and could talk about PBIS as a school-wide initiative, whereas some members may have limited familiarity

with RTI, as it was limited to specific grades. Each principal recommended key personnel on each team in order to represent both PBIS and RTI sensemaking. So, at one school six participants among the following roles provided perspectives: (1) fifth grade teacher, (2) a first grade teacher, (3) Instructional Coach, (4) both literacy interventionists, (5), Literacy Specialist. At the second school, the list of participants included these six roles: (1) fourth grade teacher, (2) Guidance Counselor, (3), Instructional Coach, (4) kindergarten teacher, (5) Literacy Specialist, (6) school Principal, and (7) School Psychologist. There were fewer participants who currently serve on the PBIS teams for multiple participants on both teams were able to discuss the PBIS initiative, as both schools implement PBIS school-wide. Furthermore, I used saturation or to determine whether there was sufficient sampling (Corbin & Strauss, 2008). I examined all data, including artifacts, field notes, interviews, and observations for consistency of results across at least two sources. Concurrent collection and analysis of data allowed for investigation of limited evidence of new data, or saturation (Kolb, 2012). Based on the two principals' recommendations, I identified 13 participants, six from the first school and seven from the second. The principals notified the PBIS and RTI teams that I would be attending team meetings and contacting them by email to solicit their participation.

The principal notified lead members of the RTI and PBIS teams about the study and asked them to contact me about team meetings. Once contacted by four members, one from each team and site, I emailed the IRB-approved informed consent form (Appendix G) to those four members. During my initial meeting with the RTI and PBIS teams, I presented and discussed the consent forms further with all team members and



answered any questions or concerns regarding participation in the study. Finally, prior to beginning the interviews, I contacted potential interviewees, emailed the consent form and provided my information for inquiry about the requirements of the study. I reviewed the consent forms again at the commencement of each interview. All participants gave verbal consent, and none elected to drop from the study at any point.

### **Instrumentation**

The investigative question: *What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?* attended to sensemaking as constructed among professionals in a situated manner as communities of practice (Coburn, 2001; Honig, 2008, 2012; Horn, 2005; Lave, 1991; Olsen & Sexton, 2009; Spillane, 2000; Wenger, 1991, 2010). Interviews, observations, and inspection of (a) artifacts and (b) website information generated sources of evidence for answering the study question (Brenner, 2006; Creswell, Hanson, Plano-Clark, & Morales, 2007; Glesne, 2011; Yin, 2006, 2014). The sources of evidence constituted the combination of case evidence discussed by Yin (2014). Each source contains different types of information for the investigation and each encompasses strengths and weaknesses related to investigation (Yin, 2014).

### **Observation**

I first employed participant observations in order to: (a) document elements of school context, and (b) witness sensemaking during team meetings. Participant observations enhance the researcher's understanding of participants' experiences as the researcher becomes a member of the team, asking questions for clarification (Glesne,

2011). However, I only posed inquiries after the conclusion of the meetings. Therefore, I did not interfere with the flow of any meetings. In order to align with the theoretical framework and investigative question and to demonstrate validity, I constructed the observation protocol (Appendix H) incorporating elements of sensemaking, situated cognition, and communities of practice (Cobb & Jackson, 2012; Honig, 2008, 2012; Horn, 2005; Saldaña, 2013, Spillane, 2000). The observation protocol addressed team member roles, decision-making, data tools, and the tone of interactions along with any physical cues about emotions. I conducted initial observations at each school when meeting with each of the principals in July, during an initial meeting with a subgroup of RTI and PBIS representatives from the first school, during two RTI and PBIS meetings each in the first school, and one RTI and PBIS meeting each in the second school. I also followed a recommendation by the first school's subgroup to observe an RTI screening process. I used a labelling convention of the first initial of the school's pseudonym, followed by the letters OP for Observation Protocol, then the protocol number. During the PBIS meeting at Bright, the team planned to provide training to new teachers. I asked permission to attend this training (to which they readily agreed) and asked to be notified of the date once set; however, no one provided such notification. The number of observed meetings followed the two schools' scheduled meetings during the study timeframe.

### **Interviews**

The prominent instrument in my study was a semi-structured interview with 13 participants from the two schools. Interviews are “insightful — provides explanations as well as personal views” (Yin, 2014, p. 106). Semi-structured interviews provided a

balance of maintaining a framework connected with deeper understanding (Brenner, 2006; Glesne, 2011). I employed the following definition of a semi-structured interview: “an interview with the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena” (Brinkmann & Kvale, 2015; p. 6). Semi-structured interviews should also reflect a conversational tone, adhering to natural methods of communication (Brinkmann & Kvale, 2015). Such a framework structures data collection to align with research questions (Brenner, 2006; Brinkmann & Kvale, 2015). In order to ensure validity and to elicit participants’ meaning of MTSS within the tri-partite theoretical framework, I constructed the interview protocol based on the literature of sensemaking, situated cognition, and communities of practice (Cobb & Jackson, 2012; Honig, 2008, 2012; Spillane, 2000; Wenger, 2010a, 2010b) (Appendix I). These questions permitted an open structure, allowing the interviewer to probe further to determine full participant meaning (Brenner, 2006; Brinkmann & Kvale, 2015).

I began the interviews with an open-ended question through story telling – having each participant describe his or her role and elicited the history of how he or she decided to pursue these roles. I then inquired about situations or experiences that best represented what each of the two MTSS initiatives mean to them (Brinkmann & Kvale, 2015). I investigated beliefs or attitudes associated with MTSS, all of which addressed the investigative question regarding sensemaking (Brinkmann & Kvale, 2015; Honig, 2008, 2012; Spillane, 2000; Yin, 2014). In order to determine participants’ meaning as situated,

I asked several questions regarding their perceived role and interactions influenced by their role as a PBIS or RTI team member.

I recorded the interviews in order to engage in a more natural conversation format of interviewing, to ensure accuracy, and to attend to facial expressions (Brenner, 2006; Glesne, 2011). After each interview, I wrote field notes, based on the field notes form in Appendix J, on the interview protocol to reflect on the interview process, to note affective responses, such as facial expressions not recorded through audio, and to conduct analyses, keeping the questions and wording open to change (Glesne, 2011).

### **Review of Artifacts**

A final aspect of this study's procedures entailed inspection of artifacts (Yin, 2014). Review of documents allows the researcher to investigate without intrusion. Documents also contain stable information and can provide detailed information (Yin, 2014). I reviewed websites and documents related to state and district guidelines or accountability measures. I requested and reviewed the district RTI Implementation Plan along with six documents that were used during team meetings or produced as a result of team meetings to triangulate commonalities or differences among the interview and observation data (Yin, 2014).

### **Positionality**

In order to acknowledge my own influence as a research instrument (Peshkin, 1988; Pezalla, Pettigrew, & Miller-Day, 2012), I employed self-examination of my preconceived beliefs, emotions, or biases surrounding this subject (Saldaña, 2013). A clear recognition of positionality also serves to increase the validity of the study, by

acknowledging possible bias (documented through a field notes worksheet, Appendix J). The use of reflexivity or self-monitoring, along with data triangulation served to address such concerns and make the study robust (Peshkin, 1988; Pillow, 2010; Yin, 2006, 2014). I examined my positionality in regards to my pre-service training, career, and multiple roles related to RTI.

My pre-service training and the policy milieu of RTI and PBIS have deep roots in behavioral psychology. As such, they engender an inclination toward positivist thinking across my design conceptualization from the literature review to the data generation through analysis of the study.

Despite my roots in positivism, I fully embrace an understanding of the pluralism of knowledge (Kelly, 2006). Although Cobb and Jackson's (2012) framework resonated with me, creating an approach and boundaries for interpretation, the open-ended nature of their framework also permitted examination of context and offered location for multiple truths of interpretation. Cobb and Jackson's questions opened up multiple possibilities in answering their questions of a) how school practitioners make sense of what policy entails, b) how to support policy, and c) why these practitioners justify their promotion of such policy approaches.

Similarly, my analytic method of applying a set of initial, theoretically-based, start codes aligned with my positivistic inclination to create a foundation and rules for investigation. However, iterative and subsequent coding rounds using in vivo and affective coding extended my thinking to levels that respect participants' voices and enhance epistemic levels of interpretivism and collectivism (Creswell & Plano-Clark,

2011; Glesne, 2011; Guba & Lincoln, 1994; Jackson, Colquitt, Wesson, & Zapata-Phelan, 2006; Schwandt, 1988; Sipe & Constable, 1996; Triandis, 1995).

My positionality and a possible area of bias also relates to my career and relationship with the district under investigation. I was hired into the district in 2005 based on my RTI experiences in a different state and region of the U.S. I served as a school psychologist and as an RTI coordinator within this district, working closely with the Director of Psychological Services on all aspects of planning and district implementation of RTI since its inception in 2005 - 2012. My professional responsibilities for evaluation of implementation influences understanding of scholarly policy concepts concerning policy implementation, and tensions surrounding notions of fidelity, compliance, and performativity. These tensions required re-visitation of my positionality especially during the analysis processes, as well as the writing processes associated with reporting both cases, the cross-case analysis, and recognizing the study's implications for not only research and practice in general, but that of my own career path.

Although I once occupied a district-level leadership role for RTI, my position was considered parallel to the teachers and other personnel involved in RTI implementation. Therefore, my role was never supervisory and I explicitly indicated a role of support throughout my interactions in that role. During the time of the study, I was contracted to provide professional development (PD) in the beginning of the year regarding RTI implementation and data collection. I also provided general problem solving assistance for educators using the reading data website for RTI. Three of the participants attended my beginning of the year PD. These participants may have

demonstrated a positively skewed representation of RTI and I therefore monitored their responses closely for such tendencies. During the investigation, I attempted to compartmentalize my experiences through reflection and ongoing checking of assumptions and biases. Also, I used field notes (Appendix J) to monitor my reactions to the data collection phase as described in the instrumentation for this study.

My reflection process about RTI has evolved through my career. Therefore, this process commenced prior to my enrollment in the Doctoral Program and has extended throughout participation in the program and within this study. I have examined RTI through varying lenses, refining and re-determining my focus of interest through various courses. Due to my extensive professional experience with RTI implementation in four different districts, I had to check my own observations and ideas as I framed the problem, reviewed pertinent literature, designed the research questions, and analyzed the data. For example, I have a strong understanding of the *what* and *how* of implementation (Cobb & Jackson, 2012), yet rather than relying on my own experience and knowledge, I returned to the literature for definitions and implementation practices. A similar experience occurred with the sensemaking literature (Coburn, 2001; Honig, 2008, 2012; Spillane, 2000). I formed my own interpretation of MTSS practice and implementation based on experiences, and held strong opinions regarding the role MTSS can play in supporting students. I had to question and monitor for equal representation of PBIS and RTI. For example, when identifying themes, I often found myself looking to the RTI data and developing themes particular to this data. Therefore, I constantly questioned whether the evidence ran across both RTI and PBIS. I had to re-examine and change themes with this

additional examination. While conducting interviews, I recognized the need to explicitly state my role as investigator as a doctoral candidate rather than as an evaluator of the process. I also began each interview with an explanation of intent of the study - to explicate the participants' MTSS sensemaking, including challenges and issues.

In my role as a school psychologist and in leading the RTI initiative, I have recognized the multiple factors influencing and perpetuating inequities in the school system and influencing practice in education. I have observed introduction of new practices with insufficient support (e.g., training, resources, time, etc.). I have also witnessed and experienced perpetually overwhelming responsibilities with insufficient time and resources. I provided RTI leadership while continuing school psychology services to three large schools with only slight reductions in caseload. I also believe students' experiences occur within those systems and view systemic change as supporting student outcomes. Therefore, I focus my efforts on enacting systemic change to faulty and taxing educational systems.

Another aspect of my role as investigator relates to professional skills specific to my role as a school psychologist. While working with students, their families, and teachers in my career, I constantly employed interviewing and observation techniques. Therefore, I have expertise in these interactive processes and feel that I am fluent in such skills associated with case study research. These skills aided my researcher as an instrument position in this study, for the data collection process relied heavily on interviewing and observation. On the other hand, I was aware that my previous skills could negatively influence my role as a researcher. For example, as a practitioner, I



carried a heightened awareness of the constraints of time and therefore conducted full problem solving meetings in short periods. As a researcher, I monitored my pace, ensuring wait time to allow the interviewees ample time to explain their answers.

### **Data Collection**

Inspection of team participants’ sensemaking of MTSS drove the data collection process. I began the process by establishing a protocol, which provided a systematic plan for the data collection schedule and analysis (Yin, 2014). The protocol (Table 3.1) structured the sequence of events.

Table 3.1

Case Study Protocol

Activity	Schedule
Met with district lead to: discuss study and determine a pool of schools	Prior to the start of the 2015/16 school year.
Met with each school principal to discuss investigation and schedule and to identify potential participants.	Prior to start of 2015/16 school year.
Conducted school observations of both schools, noting environment, signs, and bulletin boards.	During initial school visit with principal and within weeks three and four of the 2015-16 school year.
Attended PBIS and RTI meetings to review the study and discuss interviews and observations. Observed RTI and PBIS meetings and documented with observation protocols. Reviewed PBIS/RTI documents.	One month period
Observed School A’s PBIS and RTI meetings, introduced myself to remaining team members and wrote field notes. Also observed administration of benchmark assessments. Reviewed PBIS/RTI Documents	Three months (based on scheduling of meetings)

Activity	Schedule
Conducted semi-structured interviews with RTI and PBIS team members	Two months, one week (concurrent with previous step)

Table 3.1 shows the case study protocol, which involved participant observations, review of artifacts, and interviews. The observations began before the interviews to obtain a sense of the context of the two schools. These observations also informed the establishment of rapport and the individual interview sessions.

In order to examine the context, participant meaning, processes, and practices of implementing MTSS in a natural manner, I first became familiar with the environment. My initial contact with each of the principals occurred prior to the beginning of the school year and allowed for an open discussion of: (a) the study and (b) possible participants. This contact also enabled me to establish rapport with each principal. My next step was to familiarize myself with the RTI and PBIS teams and participants. This contact occurred prior to requesting consent for an interview. I introduced myself in two different ways with each of the two schools. In the first school, the Instructional Coach contacted me and asked me to meet with representatives from the RTI and PBIS teams in order for me to explain the study to them. Two school interventionists, the Literacy Specialist, the school’s PBIS leader, and Instructional Coach attended this meeting. During the 45 minute meeting, I (a) established rapport, (b) discussed the study, (c) asked for dates, times, and locations of RTI and PBIS team meetings, and (d) obtained recommendations for observations.

The second school's principal sent notification of the study to the school's RTI and PBIS teams by email. She suggested that I follow up through email regarding scheduling of interviews. The principal indicated I was welcome at any time to observe. I attended one PBIS/RTI meeting, prior to contacting participants, in order to introduce myself, establish rapport and explain the study to the team.

My next step in the process was to conduct observations of the school environment, writing notes on the observation protocol (SOP2, August 26, 2015; BOP2, September 4, 2015). I noted descriptions of each school including school appearance, and signs or bulletin boards in the school halls in reference to either initiative. I observed any additional RTI and PBIS meetings scheduled concurrent with the interview timeframe, September through November. I conducted interviews (Appendix I) to glean additional information of participant meaning of implementation and to understand their perspectives as situated within roles and varying contexts.

### **Data Analysis**

Organization and planning of data analysis began at the point of the literature review (Yin, 2014). Analysis occurred concurrent with data collection and continued through multiple stages (Glesne, 2011; Yin, 2014). One portion of analysis centered on context. I incorporated: (a) demographic data on the district's website, (b) information of district professional development, and (c) district documents to provide the district micro context. I analyzed observations of the school environment, discussion of the history of each initiative, and any interview answers pertaining to the RTI and PBIS structure to provide a description of school context.

In order to employ affective analysis throughout the process (Saldaña, 2013), I transcribed the interviews signifying (a) change in tone through highlighting and making comments in the margins and (b) emphasized words or phrases with the use of upper case. At the end of analysis, selected quotes illustrate tone and emotion with words in italics and with square bracket editorial insertions. After transcribing, I created field notes, reflecting my understanding of the interview and any possible concepts or ideas emerging. I also noted possible follow-up questions after scouring answers for thoroughness. After completing all observations and interviews, I uploaded the interview transcriptions, observations, and field notes into NVivo10 (QSR, 2012), separating the data according to each school site.

### **Coding Cycles**

My sequence of analysis began with application of start codes for interviews, observations, artifacts, and field notes from each of the two schools. I oriented the study around the collective sensemaking of communities of practice. Therefore, I analyzed member responses across PBIS and RTI teams, along with information in the observations and artifacts. During my second wave of coding, I used In Vivo coding (Saldaña, 2013) to determine nodes or emergent themes across the two start codes within the NVivo10 (QSR, 2012) program. I identified excerpts across all of the data and placed them according to emergent nodes. As I discovered nodes, I created analytic code memos, capturing my thoughts as I interacted with and analyzed the data, including possible emergent themes and connection of themes to interview quotes or field notes. This process was iterative. I first identified nodes based on prominent concepts and ideas.

As analysis proceeded, I analyzed for congruence with nodes to ascertain themes. I then re-read initially coded excerpts to determine congruence with themes. I processed the second school's data through the same sequence: coding by start codes then employed In Vivo coding with analytic memos to determine nodes or themes across start codes.

**Coding cycle one.** I first employed deductive reasoning through provisional coding (Saldaña, 2013), concentrating on elements aligning with previous policy implementation literature (Glesne, 2011; Saldaña, 2013; Honig, 2006; Coburn, 2001; Spillane, 2000; Horn, 2005). Use of provisional coding is applicable to studies confirming or extending previous literature (Saldaña, 2013). The creation of start codes allowed me to frame or create boundaries for initial analysis and to situate interpretation within the policy implementation framework.

Sensemaking (Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Spillane, 2000) and situated cognition (Cobb & Jackson, 2012; Coburn, 2001, 2006; Horn, 2005; Olsen & Sexton, 2009) literatures served as sources of start codes or provisional coding (Saldaña, 2013) for analysis. As I reviewed all documents (transcriptions, field notes, observations, artifacts), I coded items in alignment with specified definitions for each of the start codes. I centered the start codes on Spillane's (2000) description of sensemaking as the *beliefs* and *experiences* pertaining to MTSS.

I applied a start code of *belief* for any discussion or answers regarding the interviewees' belief system regarding PBIS, RTI or elements involved in either initiative (including discipline, rewards, intervention, educator roles, and statements referencing core beliefs of each initiative). The start code of *experience* included answers describing

specific experiences as a team member or in individual practice related to RTI or PBIS. Experience statements pertained to changes occurring, implementation or practice of the initiative, and decision-making. Although knowledge is another key word emphasized within the sensemaking literature, I excluded knowledge as a start code for one main reason. My investigation was not intended as a test of the knowledge associated with MTSS. Mere recitation of terms connotes concrete sensemaking of initiatives, negating inherent complexities (Honig, 2006; Olsen & Sexton, 2009). Rather, the research, interview questions, and subsequent start codes purposely concentrated on the notions of belief and practical or applicable experience of MTSS members.

The situated cognition literature provided two additional start codes of *role* and *culture* (Cobb & Jackson, 2012; Coburn, 2001, 2006; Horn, 2005; Olsen & Sexton, 2009). I based my choice of these two start codes on my initial analysis during data collection. Prominent themes consisted of role and culture. The start code *role* focused on participants' discussion of their roles in their daily practices related to MTSS. I employed this start code of *role* with MTSS to therefore investigate participants' situated cognition of MTSS (Coburn, 2001, 2006; Horn, 2005). Finally, I used the start code *culture* to address cognition as situated within the school context or culture (Cobb & Jackson, 2012; Olsen & Sexton, 2009).

The following chart shows alignment of research questions, theoretical framework, start codes, and data sources.

Table 3.2

Methods for Investigating Sensemaking

<b>Research Question</b>	<b>Theoretical Framework</b>	<b>Start Codes</b>	<b>Data Sources/ Interview Question</b>
What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?	Sensemaking	Beliefs	IQ # 3, # 4, # 8, # 9, # 10
		Experiences	IQ # 1, #2, # 4, # 6, # 7 Observation of team meetings.
	Situated Cognition	Beliefs Experience Roles Culture	IQ # 1, # 3, # 5, # 6, # 7 Field Notes # 1, # 2, # 3
	Communities of Practice	Experience Role Culture	IQ # 2, # 3, # 6, # 7 Observation of team meetings.

Table 3.2 indicates alignment of the research question, the theoretical frameworks, identified provisional or start codes for analysis, and sources of evidence. I created the start codes of beliefs, experience, role, and culture.

**Coding cycle two.** In order to understand various context and multiple interpretations of policy through an interpretivist lens, I employed *In Vivo* coding (Saldaña, 2013). *In Vivo* coding focuses on words or phrases within participant quotes to capture participants’ meaning of MTSS (Saldaña, 2013). I examined interviews for salient vocabulary or emphasis. Salient vocabulary applies to “evocative word choices” (Saldaña, 2013, p. 92) and phrases which capture meaning among participants. Through *In Vivo* coding, I was able to employ inductive reasoning and therefore generate thematic codes regarding MTSS sensemaking (Glesne, 2011; Saldaña, 2013).

**Coding cycle three.** Affective or values coding served as my third wave of coding to enable exploration of participant emotions, beliefs and attitudes surrounding implementation (Saldaña, 2013). Value coding is applicable to studies examining “intrapersonal and interpersonal participant experiences and actions” (Saldaña, 2013, p. 111). Therefore, I applied affective coding to the data analyzed in cycles one and two. I created separate themes as I analyzed the data and refined the excerpts for use in report-writing. I scanned quotes and field notes for emphasis of such words as: *enamored*, *mesmerized*, *revolutionized*, *transformed* and *team*. I signaled emphasis in the quotes with the words *emphasis added*. I examined quotes for altered tone or emotion associated with specific answers, as described on the interview protocol. Finally, I inspected quotes signaling participant values, such as the words: *important* and *believe*. I also reviewed observation protocols for affective discussion and scanned the provided artifacts for emphasis of certain topics. While analyzing the data through this cycle, I examined the data for broader concepts or themes and with a specified intention of synthesizing themes or eliminating codes lacking function or evidence (Saldaña, 2013). The final analysis provided an inclusion of non-examples, unexpected results or disconfirming evidence (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005).

The protocol for analysis was as follows:

- Start code analysis of interviews, observations, artifacts and field notes for each of the two school sites.
- In Vivo coding -identification of nodes across the start codes reflecting emergent themes within each of the two school sites.



- Created code memos concurrent with creation of nodes and subsequent themes.
- Affective or value coding - synthesizing coding strands into broader themes for each of the two sites.

The final step of the analysis process entailed cross-case analysis. Within the cross-case analysis, I compared the two schools' results within the emergent themes. I also analyzed the resulting data set, determining and substantiating relationships across themes and to context between the two schools.

### **Conclusion**

This chapter provided a rationale and depiction of the comparative case method design, case and participant selection, instrumentation, data collection, and data analysis. Investigative questions regarding: a) collective sensemaking and b) situated cognition within MTSS teams framed the case study protocol, instrumentation, and data collection (Cobb & Jackson, 2012; Coburn, 2001; Spillane, 2000).

Chapter Four provides the cases' descriptions for each of the two schools sites of investigation. Chapter Five delves into the cross-case analysis, identifying relationships among themes through the lens of dual sites of implementation. Chapter Six provides an explanation of implication for practice, limitations, and recommendations for future research.

## CHAPTER FOUR

### FINDING OF TWO SELECTED CASES

#### **Introduction**

This chapter presents the answer to the research question within two selected elementary schools through five sections. A study overview introduces the investigation by framing the research question. The second section describes district context bounding the two elementary school cases. The third section provides the setting, description of participants, and collective sensemaking for the first school case, with the pseudonym of Sun Elementary. The fourth section describes the setting, description of participants, and collective sensemaking for the second school case, with the pseudonym Bright Elementary. The fifth section summarizes this chapter.

#### **Study Overview**

This study examined the perspective of communities of practice (Lave, 1991, Wenger, 2010a, 2010b) formed within the multi-tiered systems of support (MTSS) teams, implementing both RTI and PBIS within and across two selected elementary schools. The purpose of this chapter is to reveal results within each of the two sites of investigation.

The overarching research question framing the study asked:

*What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?*

In order to ascertain, the meaning of these initiatives at the micro-level, I provide an understanding of the meso (state) and district-level micro levels both of which bound

the two cases, the two schools with experience in implementing dual MTSS for students' academic and social needs.

### **District (Micro) Context**

As with many other U.S. school districts, this district initiated tiered supports for behavioral and social needs, PBIS, before addressing academic prevention and intervention, RTI. Despite this chronology, many of the schools in the district requested district support for initiating RTI prior to initiating PBIS. At the time of the study, all 51 elementary schools implemented RTI over several years, whereas only 15 schools continued PBIS implementation (field notes # 1, July 7, 2015).

The district lead reported two relevant matters to MTSS during the time of the study. First, despite plans for an integrated MTSS in the district, the district contact advised me to avoid using the term MTSS or Multi-Tiered Systems of Support with participants because the 2014-15 and 2015-16 plans had not yet included school teams (field notes # 1, July 7, 2015). Therefore, the district contact cautioned me that participants might not be familiar with the term Multi-Tiered System of Support or MTSS (field notes # 1, July 7, 2015). Similar to the introduction of RTI within this school district, district leaders were introducing MTSS- seeking guidance from national experts in the field (field notes # 1, July 7, 2015), yet with little policy guidance at the meso level (SC Department of Education website, n.d.). The second relevant issue regarded a recent change in the district providing services to students with Individualized Education Plans through an inclusion rather than pull out model.

In RTI, the district provided a guidance document regarding the process of RTI, including definitions of components of universal screening, progress monitoring, and evidence-based practice. The document also discussed recommendations for implementation, such as team composition, frequency of meetings, and topics of focus (Artifact # 1, August 26, 2015).

The district provided PBIS guidance through PD and consultation to schools during the time the two sites began implementing PBIS (Interview # 3, September 25, 2015; Interview # 13, October 27, 2015). The PBIS school teams attended summer professional development for the first two years of implementation (Interview # 3, September 25, 2015; Interview # 13, October 27, 2015). One of the participants at the first school of investigation described the trainings in the following quote. “We went to - I don’t know how many days of training...there’s so much, and it was such good information. It was overwhelming because it was so much. And we needed all of it to see the big picture” (Interview # 3, September 25, 2015). A participant at the second school of investigation stated that she has not attended any PD related to PBIS in her three years serving on the team (Interview # 2015).

The PBIS district leads provided consultation through attendance to school PBIS meetings. The district did not provide professional development, guidance documents, or direct consultation (i.e. attending team meetings) during the year and at least one year prior to when the study was conducted.

Both schools’ participants discussed the district’s use of a Student Study Team (SST), a pseudonym for the district’s name for a team it designed to intervene and/or

place students exhibiting needs exceeding their peers (Interview # 4, September 25, 2015; Interview # 7, October 9, 2015; Interview # 13, October 27, 2015; and Interview # 12, October 26, 2015). Schools across the districts employ an SST as a problem-solving team to address academic and behavior concerns for students.

The next two sections examine the two cases or schools. I gave the first school the pseudonym Sun based on the school's sunny large atrium. I gave the second school the pseudonym Bright, based on the school's cheery and picturesque environment.

### **Introduction to the First Case**

In the following sections, I describe my examination of the first case study, Sun Elementary. The sections include a description of Sun's setting and participants, along with the findings of sensemaking across the RTI and PBIS teams. The findings regarding sensemaking are explained through two themes: (a) tiers of support through multiple teams and (b) perceived influences on implementation.

### **Case One Setting**

The following sections introduce the setting of Sun Elementary in the realm of a) school context, b) background of RTI and PBIS implementation, and c) school provision of tiers of support through multiple teams.

### **School Context**

Sun Elementary School borders an urban area with major roads leading to Sun containing a number of stores and restaurants. The school itself is on a road away from major thoroughfares and is nestled in a wooded area on a large plot of land containing ample play zones, including a basketball court, climbing equipment, and grassy areas.

The school profile describes Sun’s location as a “small town setting with early textile mill history” (district website, 2016, para. # 1).

When entering Sun Elementary, a two story main atrium spans from the main office (SOP1, July 14, 2015). The hall displays large banners and signs of awards, school mission statement, and a PBIS acronym and motto: *Show Respect, Take Responsibility, And Be Ready to Learn* (SOP2, August 26, 2015). A podium displays the school’s ‘Book of Honor’, which contains the signatures of students who have received three positive office referrals (SOP2, August 26, 2015). The principal was excited to show this PBIS feature to me and reported that she has middle and high school students who come back to look up their names in the book (SOP2, August 26, 2015). Sun’s building was very neat, with orderly displays (SOP1, July 14, 2015; SOP2, August 26, 2015; SOP3, September 8, 2015). At my first of eight visits to Sun, I immediately noticed school-wide academic and behavioral data prominently lining the halls to the Principal’s office (SOP1, July 14, 2015). Bulletin boards in hallways throughout the building displayed specific academic goals (e.g. writing proficiency criteria for each grade) and steps for achieving successful outcomes (SOP2, August 26, 2015). For example, one board showed the following list: (a) Have a plan, begin with the end in mind; (b) Study, data review; (c) Do, list steps needed to achieve goal; and (d) Reflections, celebrate when specific goal is achieved (SOP2, August 26, 2015).

Evidence of PBIS was prominent throughout the school building and appeared through (a) compliment chains, (b) signs detailing site-specific behavior expectations, and (c) celebration of student success (SOP2, August 26, 2015; SOP3, September 8,

2015). Compliment chains are brightly colored links of paper given to classes for demonstrating positive behaviors (SOP4, September 14, 2015). When staff members other than the classroom teacher give a class a compliment, the class earns a link on the chain (SOP4, September 14, 2015). Compliment chains hang from classroom doors and once they hit the floor, the class earns a pre-established reward (SOP4, September 14, 2015). The classroom teacher helps the students decide upon appropriate class rewards at the beginning of the year and may include a backwards' day, pajama day, or similar reward (Interview # 5, September 25, 2015). On backwards day, the teacher employs such changes as: (a) allowing students to wear their clothing backwards, (b) flipping the schedule in reverse order or (c) having students walk backwards throughout the day (Interview # 5, September 25, 2015). On pajama day, the students and teacher wear their pajamas to school (Interview # 5, September 25, 2015). There are signs displaying the PBIS acronym and listing specific setting expectations (SOP2, August 26, 2015). For example, in the hallway next to dismissal, a sign includes the following specific behavioral expectations, among others: Be a car Star: greet others with a silent smile, show respect; place belongings in the appropriate place, take responsibility; enter the school with a positive attitude, ready to learn (SOP2, August 26, 2015).

The RTI and PBIS team members were eager to meet with me to ensure that they (a) understood my study and (b) invited me to all pertinent activities (SOP2, August 26, 2015). The staff members welcomed me enthusiastically for every visit. During my second observation (SOP2, August 26, 2015), the principal saw me in the hallway and stopped mid-trek to show me artifacts regarding PBIS and various displays around the

school She also spent time talking to me about issues they face, including high turnover and the ways in which they try to overcome such issues. When discussing high turnover, she indicated methods to build a community feeling with parents so that the students' families don't move to another school zone. The principal also discussed that the school is engaged in a theme-driven initiative connected to PBIS and focused on self-awareness and a positive approach (e.g. ways to start the day with a positive attitude). The faculty are reading a book with the self-awareness theme, aimed toward educators, and read a children's book to their students with the same theme (SOP2, August 26, 2015).

Sun Elementary enrolled approximately 636 students from Kindergarten through 5<sup>th</sup> grades during the 2015-16 school year (district profile of school, school website, 2015). A principal and assistant principal lead the school. Other educational personnel include an instructional coach, 44 teachers and 17 support staff. The state report card indicated the following information: *Average* absolute ratings for the past three years and a school attendance rate of 95.3%. The poverty index at Sun for 2014-15 was 83.2%. Additionally, Sun has a high turnover rate (12-15%) of students each year (SOP2, 8.26). Sun's racial demographics are as follows: 45% Black, 43% White, 4% Hispanic, and 8% Other (as listed on the 45 day count, district website, 2015-16). The district website (2015-106) also indicated 12% of Sun students with disabilities, which is lower than schools similar to Sun (13.7%). Sun is a Title I school and therefore has more federally funded resources, including 2.5 interventionist positions. Only 40% of Sun's teachers hold advanced degrees, which is significantly lower than schools like theirs at 60% (State Report Card, 2014-15 school year).



One measure of Sun's learning environment includes data from an annual state survey of teachers, parents and students. The state report card indicates administration of surveys to students at the highest grade level, 5<sup>th</sup> grade, and their parents. For Sun Elementary, the teacher's response rate was 41/41 (100%). Fifty-three parents and 100 students responded (data did not reveal the number of possible parents and students). The teachers reported 100% satisfaction with the learning environment and 98% satisfaction with the physical and social environment. The parents reported 87% satisfaction with the learning environment and 86% with the social and physical environment. Students reported 98% satisfaction with the learning environment and 94% satisfaction with the social and physical environment.

The principal of Sun Elementary had held this position for 19 years. The principal was one of the first principals to request district permission to implement RTI with math (field notes #1, July 14, 2015). Despite her many years in this position, Sun's principal is constantly seeking methods for improving instructional and behavioral approaches at her school, such as requesting district assistance to improve their math performance (field notes #1, July 14, 2015). The principal emphasized (a) inclusion of teachers in RTI and PBIS decision-making and (b) provision of varying interventions based on student needs, such as language deficits (field notes #1, July 14, 2015). She praised the school's interventionists' ability to collaborate and work with students (field notes #1, July 14, 2015).

## Case One Participants

I identify all participants by a pseudonym, either through participant choice or researcher choice if the participant did not wish to choose one. The following table displays each participant by pseudonym and provides characteristics, such as number of years in education and with the RTI or PBIS team.

Table 4.1

Participant Roles and Experience

Team	Pseudonym	Position	Years of Experience	Previous Educator Roles	# of Years of Participation on Team
RTI	Jane	Reading Interventionist	10-15	Teacher	6 years
RTI	Sylvia	Literacy Specialist	10 – 15	Teacher	2 years
RTI & PBIS	Emily	Reading Interventionist	10 – 15	Teacher PBIS Leader	4 on PBIS 3 on RTI
RTI	Horseshow Mom	Instructional Coach	20 +	Teacher	8 years
PBIS	Cindy	5 <sup>th</sup> Grade Teacher PBIS Leader	20 +		5 years
RTI & PBIS	Sally	1 <sup>st</sup> Grade Teacher	5 -10		2 years

Table 4.1 shows Sun Elementary School participants' pseudonyms and years of experience, position during the study and previous position(s), and affiliation with one or both of the initiatives. All Sun participants were women. They reported that either an administrator either asked them to serve on the team or that such participation on the team was an obvious requirement of the role and position in which they were hired (e.g.

reading interventionist or literacy specialist). Among the classroom teachers, there was representation from first and fifth grades (Interview # 1, # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 18, 2015). The following section describes each of the study participants in the chronological order of interviews.

**Jane** taught for five years at Sun then shifted to an interventionist role for the last five years. Jane discussed her passion for RTI, saying, “I think everybody should be doing RTI” (Interview # 1, September 23, 2015) and shared stories about positive outcomes and parents recognizing the importance of intervention in their child’s education. Jane also reflected on the many positive changes have occurred within their RTI system over the course of the last five years (Interview # 1, September 23, 2015)

**Sylvia** taught for 13 years in another district and in her second year as a literacy specialist. She discussed her and Emily’s shared passion for literacy. Sylvia was the only participant at Sun who has seen RTI in action at another school. Despite 13 years in education, Sylvia shared: “I started interviewing, in [name of district in the study], that kept coming up. What do you know about PBIS and what do you know about RTI” (Interview # 2, September 23, 2015). Similar to Sally, Sylvia described herself as still in the early stages of understanding both RTI and PBIS. She also reported tremendous insight developed from the few short years in her position. (Interview # 2, September 23, 2015). “I could see very quickly -by *really* meeting the children where they were in their individualized needs and the whole fluid idea was just *amazing* to me because it was just somewhat of a foreign concept” (Interview # 2, September 23, 2015).

**Emily** has spent her 16-year career in this school district with a position at Sun for the last 15 years. She described how volunteering in high school influenced her decision to become a teacher. In that experience, she witnessed the dichotomy between impoverished children and her own upbringing. She loves her work as an interventionist and former PBIS Team Leader. Emily led the PBIS team at Sun for four years and now, as an interventionist, is an RTI team leader within Sun's RTI process. Emily talked about her anxieties about making RTI presentations to teams and to the school. Recently, she reported feeling more empowered: "I feel like the knowledge I gained during my masters has given me things to back up [my beliefs]- I have all of these beliefs in side of me I've realized" (Interview # 3, September 25, 2015).

**Horseshow Mom**, who selected her pseudonym, has spent her entire career at Sun, holding multiple teaching positions. She has served as the Instructional Coach (for all content areas) for over ten years: "I only have a one sentence job description: academic improvement of all students" (Interview # 4, September 25, 2015). Horseshow Mom discussed how educators have made necessary changes due to an ever-evolving society with changes in family dynamics and school-family relationships. She discussed how her own thinking about behavior and academics have changed:

Well coming from the early '80s, my belief that was if you didn't make a C or higher, you were failing. If you didn't master the skills, you failed....Later in my career...I could see making progress toward mastery was improvement.

(Interview # 4, September 25, 2015)

**Cindy** has a wealth of experience in education and she identified herself as the PBIS team leader. She began her career in a private school and transitioned to public school approximately ten years ago. Cindy reported that she has subscribed to the notions of a positive approach to students. “So my big thing has always been - is to intervene before it got worse.... And the next part of that is the positive part...I have found relative success because I am positive in just everyday life” (Interview # 5, September 25, 2015). Upon learning the PBIS approach, Cindy described a sense of validation for her practice and beliefs. She effused about ways in which she incorporates PBIS components into her own practice by showing me displays around her classroom related to PBIS, including (a) a list of rewards for achieving compliment chains and (b) behavioral expectations (Interview # 5, September 25, 2015).

**Sally Smith** has served on both the RTI and PBIS teams for two years. She taught for two years after her graduation, took a 10-year hiatus, and has returned to teaching for the last four years. Sally authentically revealed frustration with time needed preparing for intervention: “I don’t feel like RTI should be a burden on the teachers. We should joyfully assist these new kids that come see us” (Interview # 6, September 28, 2015). Sally also discussed highlights of both RTI and PBIS implementation through describing student success stories. She shared how she can learn from others, as in the following quote:

Like 5<sup>th</sup> grade had a cart! And they have a parent go from room to room, like that’s *brilliant – brilliant* [emphasis added]! Like they’re a good little team up

there. We all need to go up there and watch...what they're doing. (Interview # 6, September 28, 2015)

All of Sun's participants at Sun learned about the PBIS and RTI initiatives within the current school district. Five of the six participants learned about both MTSS initiatives in the school. Therefore, the team members' learning mostly reflects team enactment and implementation within their school (Interview # 1, # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 18, 2015).

The following sections provide Sun's team members' collective sensemaking in terms of what are the MTSS components and how and why these components are used.

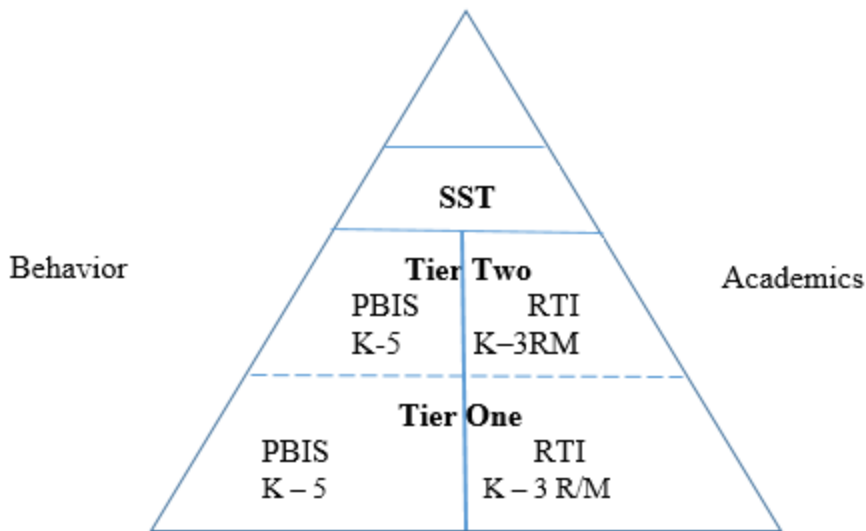
### **MTSS Sensemaking through a Tier 1 and 2 Continuum**

Sun's team members' collective sensemaking explicates their school's use of MTSS as Tiers 1 and 2 implementation of (a) RTI in grades K through 3<sup>rd</sup> and (b) PBIS in all grades. Within these respective grades and tiers, the team members depict a databased continuum of academic and behavioral interventions for students not on an Individualized Education Plan. Elements of improved capacity and communication marked supports to changes in definition and implementation of the systems over time. Sun's RTI and PBIS teams have sustained and extended certain processes of each initiative. Through utilizing RTI and PBIS, team members feel efficacious in making decisions to meet many students' needs. Nonetheless, the team members' definition of the two initiatives did not extend to the full continuum of services through Tier 3. The participants reported the role of the SST, and did not explain a connection to Tier 3. Therefore, the collective sensemaking of the teams depicts efforts for improving student

success; yet, their processes represent parallel, truncated MTSS initiatives (Interview # 1, # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 18, 2015; SOP2, August 26, 2015; SOP3, September 8, 2015; SOP4 September 14, 2015; SOP5, November 3, 2015; SOP6, November 24, 2015).

### **Tiers of Support through Multiple Teams**

Sun utilizes a dual MTSS teams approach to offer limited tiers of support for specified student academic needs and schoolwide behavioral needs. Sun PBIS and RTI teams separately address behavioral and academic concerns respectively for Tiers 1 and 2. In the 2015-16 school year, the RTI team focused on Tiers 1 and 2 for grades kindergarten through third. The PBIS team focused on Tiers 1 and 2 for all grades in the school, kindergarten through fifth. As parents', teachers', and/or other educators' concerns increase, they refer students to the Student Study Team (SST) to problem solve and implement additional interventions and/or determine a need for a psycho-educational evaluation. The district prompted initiation of three initiatives, SST, RTI and PBIS. However, Sun's dual MTSS school teams' sensemaking limit their roles to Tiers 1 and 2 without explicating clear linkage into the SST level (Interview # 1, September 23, 2015; Interview # 4, September 25, 2015; SOP2, August 26, 2015; SOP4, September 14, 2015; SOP5, November 3, 2015; SOP6, November 24, 2015).



*Figure 4.1* Sun’s process for addressing academic/behavioral concerns. SST stands for Student Study Team.

Figure 4.1 provides a graphic of Sun Elementary School’s dual MTSS approach with multiple teams. The line separating RTI and PBIS represents how the two teams operate as parallel, dual rather than unified, systems. The label of K–5 represents grade levels from kindergarten through 5<sup>th</sup> grade; that is, the entire grade levels span in Sun Elementary. Similarly, the label, K–3, represents kindergarten through 3<sup>rd</sup> grade levels, which for the RTI process demonstrates a limit in provision of interventions to all the school’s students because fourth and fifth grades are excluded from any RTI Tiers. The dashed line between Tier 1 and 2 indicates Sun’s dual fluid processes as Sun’s RTI and PBIS teams address both of those tiers. The solid line above Tier 2 indicates where Sun’s MTSS dual RTI and PBIS continua stop and where a common district-wide feature of a Student Study Team is used in the consideration of individual students’ academic or behavioral concerns. Table 4.1 shows each of parallel MTSS teams’ components, participants, and targeted grade levels, along with year of implementation.



Table 4.2

Components of Sun’s MTSS Teams

Tier	Initial Year	Participants	Grade Level Spans	Components
<b>RTI One</b>	2008/09	Instructional Coach, Interventionists, Literacy Specialist, Principal, All teachers in grades K–3	Grades K–3 All Students	<ul style="list-style-type: none"> <li>• Universal Screening and other data.</li> <li>• Grade-wide and individual data analysis.</li> <li>• Evidence Based Curriculum and Interventions</li> </ul>
<b>RTI Two</b>		Instructional Coach, Interventionists, Literacy Specialist, Principal, All teachers in grades K–3	Grades K–3 All Students	<ul style="list-style-type: none"> <li>• Evidence-Based Reading/Math Interventions</li> <li>• Progress Monitoring of Tier 2 data</li> </ul>
<b>PBIS One</b>	2010/11	AP, Counselor Grade level and Related Arts representatives	All grades All students	<ul style="list-style-type: none"> <li>• Positive and Disciplinary Referrals</li> <li>• School-wide Procedures, Expectations, and Rewards</li> </ul>
<b>PBIS Two</b>		Same PBIS team members	All grades All students	<ul style="list-style-type: none"> <li>• Evidence-Based Behavioral Interventions</li> <li>• Progress Monitoring of Tier 2 data</li> <li>• Bounce Backs</li> <li>• Peace Places</li> </ul>

Table 4.2 depicts the multiple teams, targeted grades, and RTI and PBIS components addressing students’ needs. The table and figure show how teams change the components on which they focus to address students’ individualized needs when students do not respond to the intervention sufficiently, based on academic or behavioral data. Sun’s RTI process include two subject areas, reading and math and grade levels from

kindergarten to third, and the teams select students for participation in RTI continua through Tier 2 prior to referral to the SST. All of Sun's students, kindergarten through fifth grades in every subject area, including Related Arts benefit from Tier 1 prevention and Tier 2 preventions and interventions prior to referral to the SST (Interview # 1, # 2, September 23, 2015; Interview # 4, September 25, 2015; SOP6 November 24, 2015).

At Sun, team members discussed the importance of RTI components: (a) universal screening, (b) evidence-based interventions, and (c) progress monitoring. The teams use two types of universal screening tools: one type for grades kindergarten and first for reading and math, and one type for grades two through five, reading and math. School staff members administer the tools to all students, including students on Individualized Education Plans. The kindergarten and first grade universal screening tool is time intensive and the team has created a method for efficiently administering the assessment over a four-day span. They use a computerized universal screening tool for all students grades two through five, yet within their RTI teams, discussed data up through grade three. The teams analyze the universal screening data to evaluate grade-wide, class-wide, and individual progress limited to kindergarten and first grade students in Tiers 1 and 2. The RTI team also uses the universal screening tool, in addition to their reading curriculum's assessment, teacher observation, and student's school history to determine intervention needs (Interview # 1, #2, # 3, September 23, 2015; Interview # 4, September 25, 2015; SOP4, September 14, 2015; SOP6, November 24, 2015).

Sun Elementary School's RTI team members relate MTSS to meeting a continuum of student needs. Therefore, each grade level includes a scheduled

intervention time every school day. All students in Tiers 1 and 2 (grades K through 3<sup>rd</sup>) participate in literacy and math intervention during that time. All of the teachers in grades K – 3 and the interventionists provide literacy intervention. Within the reading skills continuum, all the teachers spend intervention time focusing on phonics and decoding, sight word acquisition, fluency, and comprehension, using the RTI team’s analysis of students’ needs as groups and as individuals. Most of the interventions are district-provided, pre-packaged sequenced programs suitable for groups. The RTI team also creates other interventions, utilizing evidence-based instructional practices (Interview # 1, # 2, # 3, September 23, 2015; Interview # 4, September 25, 2015; Interview # 5, September 28, 2015; SOP2, August 26, 2015; SOP4, September 14, 2015; SOP5, November 3, 2015).

Multiple team members serve various RTI leadership roles. For example, Jane, the interventionist, coordinates the data for kindergarten and first grades. Horseshow Mom, the instructional coach, takes notes and distributes them to the team. Emily, who is an interventionist, facilitates RTI team meetings (Interview #1, September 3, 2015; Interview # 4, September 25, 2015; SOP4, September 14, 2015).

During the RTI meetings, team members discuss their interpretation of data, why they chose methods for depicting data, and emphasized the need to use data to enhance intervention fluidity. For example, Emily shared that she uses a bar graph rather than the typical MTSS triangle graphic for she believes it better reflects student progress within the grade levels over the course of the year (SOP4, September 14, 2015). She stated the need to communicate and analyze the data frequently to maintain a continuing

coordination of appropriate interventions for students' needs (SOP4, September 14, 2015).

Both RTI and PBIS teams highlight their use of multiple sources of data to make critical decisions about students. They use universal screening and progress monitoring data, teacher notes of student performance in instruction and intervention, and the school's curriculum assessment to determine a student's response to intervention. If a student is not showing adequate response, they analyze and discuss strategies for addressing such non-response (Interview # 1, September 23, 2015; Interview # 4, September 25, 2015; SOP6, November 24, 2015).

The PBIS team stressed: (a) meeting regularly, (b) engaging in deep processing of PBIS data to make decisions, and (c) understanding PBIS components of prevention and positive intervention to decrease negative behavior. The PBIS team meets monthly to discuss grade level data for Tiers 1 and 2 and to problem solve regarding any Tier 1 and 2 issues. They also plan Tier 1 and 2 delivery of PBIS (Interview # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP3, September 8, 2015; SOP5, November 3, 2015).

Delivery of PBIS at Sun includes Tier 1 and Tier 2 prevention and intervention. Prevention techniques include teaching of school-wide expectations and procedures, year-round school-wide celebrations and class-wide and individual reward systems. Classes earn compliment chains throughout the day and have class-wide rewards when the compliment chain touches the floor when hung from the outside classroom door. The class determines the rewards and how many chains are needed for various rewards.

Educators throughout the building distribute Star bucks to individual students for displaying positive behaviors according to the defined expectations in various settings. At Sun, PBIS is used to explicitly teach appropriate behaviors and use rewards to reinforce those behaviors. Educators also dispense Positive Office Referrals (PORs) to students for going above and beyond in their behavior (Artifact # 3, September 8, 2015; Artifact # 7, November 3, 2015; Field notes # 2, July 14, 2015; Interview # 1, September 23, 2015; Interview # 4, #5, September 25, 2015; Interview # 6, September 28, 2015; SOP3, September 8, 2015; SOP5, November 3, 2015). Sally Smith described a POR moment in the following excerpt:

And we had a little girl – she was very heavy, and kind of dirty [lowered voice] ...And [one day] people...scouted their chairs away. [The students said] ‘I don’t want to sit by her’ and one little boy said, ‘Why wouldn’t you want to sit by her? She’s the nicest girl in this classroom.’ Like I *stopped class* [emphasis added]. That was a POR moment! (Interview #7, September 28, 2015)

The PBIS team emphasizes and monitors consistency of Tier 2 interventions, including peace places and bounce backs, neither of which were defined during the meetings or discussed in interviews. The team collects data on the use of each of these interventions and determines if other Tier 2 interventions are warranted (Interview # 4, September 25, 2015; SOP2, August 26, 2015; SOP3, September 8, 2015).

The PBIS team has an aim of at least a four-to-one ratio of positives to redirection or discipline for negative behaviors. The team analyzes class and grade level data in the areas of discipline notes and bus referrals, and administration of rewards, such as positive

office referrals (PORs) and compliment chains. When analyzing the data, Cindy, the PBIS team leader, facilitates problem solving, analyzing data from current and previous years and comparing positive data to disciplinary data. Multiple team members are responsible for collecting and sharing about the various data sources. The team then determines if changes need to be made to Tier 1 or 2. Cindy also discusses why various components are important, encouraging their use (Artifact # 3, September 8, 2015; Artifact # 7, November 3, 2015; Field notes # 2, July 14, 2015; Interview # 4, #5, September 25, 2015; Interview # 6, September 28, 2015; SOP2 August 26, 2015; SOP3, September 8, 2015; SOP5, November 3, 2015).

### **Influences on Implementation**

The RTI and PBIS team members indicated four main areas as important to how their school staff implements RTI and PBIS. First, they discussed the importance of capacity to support a continuum of interventions. The second area shared by both teams' members linked their beliefs about how capacity spawns increases in communication and distributed cognition. Third, team members identified what they termed as fidelity as critical to RTI and PBIS success. Finally, in parallel the dual MTSS teams described their navigation of emotional geographies.

### **Capacity Building**

Capacity includes knowledge and structures needed to support implementation of RTI and PBIS. Over the years of implementation, the teams related ongoing efforts to support the RTI and PBIS processes. Such efforts involve increases in capacity and in turn, their sense of perceived efficacy, to meet more students' needs. Perceived efficacy

references how the team members view their competence in improving student outcomes. Changes in capacity have occurred through (a) heightened focus on resources and (b) increased collaborative problem solving.

**Heightened focus on resources.** Both of Sun Elementary School teams' members depicted RTI and PBIS as more cohesive than when first implemented, due to attention to resources and personnel. Team members explained how current RTI and PBIS team composition includes (a) utilizing personnel with expertise and (b) balancing consistency with diversity.

Sun's RTI team members indicated that initial stages of implementation involved RTI interventionists with limited expertise (Interview # 1, September 23, 2015; Interview # 3, September 25, 2015). Emily's quote represents multiple members' sentiment: "the interventionists we were hiring were inexpensive and inexpensive means inexperienced" (Interview # 3, September 25, 2015).

For Sun's RTI initiative, Emily is an interventionist who has recently obtained two Master's Degrees related to reading (Interview # 3, # 4, September 25, 2015; SOP2, August 26, 2015). The Literacy Specialist, Sylvia, is pursuing a Master's Degree in library sciences (Interview # 2, September 23, 2015; Interview # 4, September 25, 2015; SOP2, August 26, 2015). The RTI process melds team members' expertise in a number of different facets related to RTI, including literacy, school and family dynamics, interpretation of data as in Horseshow Mom's quote: "I don't have all the answers, but we have a wealth of information. And when we take my years of experience, their recent knowledge....When we put all of our heads together, we pretty much can solve any

problem” (Interview # 4, September 25, 2015). Sun’s PBIS initiative includes individuals with credible expertise in students’ emotional and behavioral development. Cindy, the PBIS leader, has a wealth of knowledge and skills with behavior management and positive behavior methods (Field notes # 1, July 14, 2015; Interview #4, September 25, 2015; # 7, September 28, 2015; SOP4, September 14, 2015; SOP5, November 3, 2015). The Assistant Principal, who is responsible for student discipline, and the school counselor who is responsible for providing social/emotional support, are both heavily involved in the PBIS team (Field notes #1, July 14, 2015; Interview #6, September 25, 2015; SOP4, September 14, 2015; SOP5, November 3, 2015).

Emily discussed how the RTI team’s attention to expertise extends into other realms. For example, the team matches teachers’ areas of expertise to provision of instruction or intervention, helping to mediate the negative influence of accountability:

And one of the conversations we had was all this accountability we had on teachers. They [the students] are yours, I [as a teacher] have to own them [the students]....But I am not as strong a math teacher as I am in reading... I would be dumb to not get someone who knows better than me to teach my kids math.

(Interview #3, September 25, 2015)

**Consistency and diversity of teams.** Sun’s RTI and PBIS team members indicated an imperative of what the participants’ termed, consistency in personnel, but could be explained as reducing turnover. This preference for stable team membership respected both expertise and including personnel with diverse perspectives (Interview # 1, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015). Emily opined that



better results could be tied to less personnel turnover “I think intervention used to be really dysfunctional here. I think that it’s getting better because I think we’ve had some consistency in who’s doing it” (Interview # 3, September 25, 2015). Jane has been an interventionist for five years and Emily for three years. The Assistant Principal and Counselor have served on the PBIS team since the school began PBIS implementation (Field notes # 2, July 14, 2015; Interview # 5, September 25, 2015). Cindy has served on the PBIS team for the last three years (Interview # 5, September 25, 2015).

The RTI and PBIS teams include diverse perspectives to addresses educators who may be struggling with PBIS or RTI concepts. Through such inclusion, the RTI and PBIS teams proffer expertise to additional educators, as described by Cindy:

There was a teacher who was having difficulty in her room with behavior. So [the Principal] suggested she serve on the committee on the team. So perhaps she would get a boost and she would maybe get some ideas and so forth. So I said [Principal] do you really want to do that? [nervous laughter] and [the Principal] said, “Well yeah!” So we did it. (Interview # 5, September 25, 2015)

Although this team member addition had been a recent change, observations of team meetings demonstrated methods for increasing members’ understanding of MTSS (SOP5, November 3, 2015). For example, one of the teachers shared that she was struggling with giving positive office referrals (POR) due to her understanding of Sun’s POR requirements of students “going above and beyond” (SOP5, November 3, 2015). Another team member explained a rationale for the distribution of PORs, emphasizing the need to give positives to prevent negative behaviors (SOP5, November 3, 2015). This

example is one of several in which Sun’s team members either engaged in open discussion or relayed stories about how such discussions improved understanding and implementation (Interview # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP5, November 3, 2015).

Both the RTI and PBIS teams discussed the need for consistency, meaning stability of personnel, expertise, and diversity on teams. Both RTI and PBI teams have also utilized experts to promote distributed leadership.

**Capacity situated within distributed leadership.** School leaders have engaged in an apparent and purposeful approach—capitalizing on the expertise of personnel and strategically placing them in RTI and PBIS leadership positions. Multiple team members share leadership of the RTI team, captured by Jane’s quote, “We are a *team* [emphasis added]” (Interview #1, September 23, 2015). She proceeded to explain how each member has a critical leadership role (Interview #1, September 23, 2015). Sylvia, Horseshow Mom, and Emily also discussed the conjoined effort toward leadership (Interview #2, September 23, 2015; Interview #3 & #4, September 25, 2015). Horseshow Mom, the Instructional Coach, takes notes and distributes them to team members (Artifact # 3, September 8, 2015; SOP4, September 14, 2015). Jane, an interventionist, is responsible for maintaining Sun’s reading website (Interview # 1, September 23, 2015). Emily facilitates team meetings. The principal supports the RTI team, yet the teachers and interventionists were the primary decision-makers (SOP4, September 14, 2015).

In PBIS, multiple team members also hold various roles to support leadership (Artifact # 3, September 8, 2015; Artifact # 7, November 3, 2015; SOP3, September 8,

2015; SOP5, November 3, 2015). Cindy facilitates PBIS team meetings. The Counselor collects and shares POR data. A teacher collects and shares data for the monthly number of: discipline notes, bounce backs, and peace places. The Assistant Principal is responsible for collecting and sharing office and bus referral data. Cindy views herself as the team leader, yet views the Assistant Principal as playing an important role in leadership (Interview # 5, September 25, 2015). Cindy expressed her view of leadership and ownership of the PBIS team.

So, you intervene on behalf of the children, but you also intervene within your teachers too....And it all kind of connects. I feel like I'm the mother of everybody, kind of, without them knowing it. Because I'm really looking out for the teachers too. (Interview # 5, September 25, 2015)

Distributed leadership emerged in layers due to dual team roles on the RTI and PBIS teams and in relationships with other colleagues (Interview # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP5, November 3, 2015). As teachers, Cindy and Sally facilitate discussion with grade level colleagues to analyze data and discuss PBIS-related concerns (Interview # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP 5, November 3, 2015). Cindy and Sally model practices and called attention to PBIS components with colleagues in their grade-level teams (Interview # 5, September 25, 2015; Interview # 6, September 28, 2015). Sally shared how she had explained to her grade level colleagues about the color-coded class behavior management system; yet, then noticed a colleague who employed a different color-coded system. Sally shared about how she had to talk to the colleague about using the agreed upon system. Sally

expressed her discomfort with confrontation, and still noted how she speaks up more as she learns from her work on the PBIS team (Interview # 6, September 28, 2015).

**Capacity situated within a databased culture.** Sun's databased culture further influenced both MTSS teams' expertise and ability to build capacity. Through Sun Elementary School, posters displayed databased goals and performance, sending a message regarding the importance of data. Each month, the PBIS team compared current positive and disciplinary behavioral data with previous data (Interview # 6, September 25, 2015; Interview # 6, September 28, 2015; SOP3, September 8, 2015; SOP5, November 3, 2015). Each meeting, the RTI team discussed grade-level and individual student reading and math data and used this data to substantiate decisions (SOP4, September 14, 2015; SOP6, November 24, 2015). The teams attempt to have all pertinent data available to make well-informed decisions. The following quote by Jane captures this notion further:

We also don't just look at [the students'] [name of assessment] scores, we look at their [name of commercial program] levels....Then we would open [the reading measure] up and go – okay, this kid doesn't know half of their sight words. So we analyze – we say, “We think this kid can sound out a couple of these words to put them here”. (Interview # 1, September 23, 2015)

Although participants attributed capacity in part to increased expertise and consistency, members portrayed RTI and PBIS as a mecca for collaboration. The next section discusses changes in communication and collaboration enhancing capacity further.

## **Supporting Distributed Cognition**

When serving on decision-making teams, a phenomenon occurs in which team member's work together to make sense of the components and delivery of each system. While doing so, they collaborate with educators who have different experiences, beliefs, and knowledge and promote distributed cognition.

Sun's RTI and PBIS team members collectively process their knowledge and understanding of RTI and PBIS components, hence distributing cognition (Interview # 1, # 2, September 25, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP2, August 26, 2015; SOP3, September 8, 2015; SOP4, Sept 14, 2015; SOP5, November 3, 2015; SOP6, November 24, 2015). Sun's PBIS and RTI teams foster distributed cognition through their incorporation of all teachers on RTI and teachers representatives for PBIS. Sun's Principal stated, "Teachers need to know how decisions are being made and need to be a part of the decision" (Field notes # 2, July 14, 2015). Additionally, members distribute cognition when sharing decisions at staff meetings to ensure dissemination and changes in implementation (Field Notes # 2, July 14, 2015; Interview # 4 & 6, September 25, 2015).

When team members serve multiple roles, they are able to learn through multiple practices. These multiple practices include (a) planning and making decisions on the RTI and PBIS teams and (b) daily practice of intervention or instruction and interpretation of data (Interview # 1, # 2, September 25, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015).

The following quotes show the contrast of current collaboration with early RTI implementation experiences. Emily discussed her early experience with RTI at Sun: “There was a big disconnect between the interventionist and the teachers....There was no like cohesiveness...I think everybody was new to the idea and hadn’t figured out what we were doing (Interview # 3, September 25, 2015).

In contrast, Sylvia shared her current experience with RTI at Sun, processing how teachers now understand reading and student performance, “Those in-depth discussions...Having those conversations like, ‘oh my gosh when this child was doing this and I saw this pattern. What’s your experience? What do you think that means when you’re reading’” (Interview # 2, September 23, 2015).

When these teams engage in collaborative problem solving, they challenge each other, explicitly discussing their ideas, explaining and/or inquiring about observations or knowledge. Such discussions activated iterative levels of learning. Sally shared a view of the process in which databased problem solving opens into in-depth conversations:

You know [data] *starts conversations* [emphasis added]. And so that’s why [the PBIS team] takes longer. And truly we’re going over data of years past. I mean we’re really going back and seeing how we did better, how we did worse. What can we improve? It’s just a more in-depth topic. (Interview # 6, September 28, 2015)

As team members serve on multiple teams, a dynamic occurs where educators extrapolate cognition into other realms of the school. Such extrapolation often occurs through frequent conversations outside of the RTI or PBIS teams. (Interview # 1 and # 2,

September 23, 2015; Interview # 3, September 25, 2015). Team members recognize that data literacy is a complex skill, involving a significant amount of practice and understanding of all sources of data. After engaging in the practice of data literacy, team members are better able to apply such skills, and application influences data interpretation, such as Sally's quote about PBIS data:

So I think in that aspect I have a big understanding where everyone else just sees the numbers up on the screen in the [staff] meeting. I'm thinking. That's from homework. I know the reason those numbers don't make sense. (Interview # 6, September 28, 2015)

Participation on the RTI and PBIS teams has combined expertise, practice and collaborative problem solving, yielding distributed cognition. Engagement in collaborative problem solving also necessitates and perpetuates such emotional components as empathy and perspective-taking among team members.

### **Fidelity**

All team members heralded the constructs of RTI and PBIS as a process for meeting students' needs (Interview # 1, # 2, September 25, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015). In fact, they described the essence of each initiative through experiences of students' social/emotional/academic success (Interview # 1, # 2, September 25, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015). They stipulated, though, that the success of both RTI and PBIS is contingent upon what they defined as fidelity (Interview # 1, # 2, September 25, 2015; Interview # 3, # 5, September 25, 2015). Team members' narratives

about fidelity included: (a) following the PBIS school-wide system, (b) adhering to the frequency, length, and sequence of the intervention program, and (c) a shared understanding of components and benefits of RTI. Unfortunately, multiple team members indicated concerns with PBIS fidelity across the school.

### **Emotional Geographies**

Although team members expressed for a concern about specific aspects of MTSS which they termed fidelity, they have found that promotion of fidelity involves an emotional component. Team members suggested an emotional struggle when: (a) making decisions for students and (b) encouraging educators to make changes to their practice (Interview # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015). For example, Cindy, as a PBIS leader, reported the inherent difficulties with encouraging adherence:

[Name of Assistant Principal] would say to me, “there are certain teachers who haven’t given any [positive office referrals] all year”. And I know... how am I going to do that politically without damaging camaraderie? So that’s tricky. Very tricky. So I haven’t come up with a great solution to that. I’m still working on it. (Interview # 5, September 25, 2015)

Due to this struggle, Sun’s RTI and PBIS team members shared a need for perspective taking and empathy (Interview # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015; SOP4, September 14, 2015; SOP5, November 3, 2015; SOP6, November 24, 2015). Sun participants discussed patience with a learning curve around the complexity of both multi-tiered systems, and



the need to support colleagues in their implementation (Interview # 3, # 5, September 25, 2015; Interview # 6, September 28, 2015). For example, Emily opined how her own experiences have enabled empathy “I think my classroom experience and having to learn [name of curriculum] and guided reading and balanced literacy and all that, I can empathize with [teachers] because we are all still trying to get better at it” (Interview # 3, September 25, 2015).

Team members opined how incorporation of all teachers and their own investment in the initiative encouraged trust (Interview # 2, September 23, 2015; Interview # 3, # 4, # 5, September 25, 2015; Interview # 6, September 28, 2015). Sylvia discussed how serving on the team and directly working with the children during assessment helps her to support, and in turn, gain credibility with teachers.

I’ve been involved with the benchmarking, been involved with discussions...they [the teachers] see your involvement. It removes you from being in this position of – they [Literacy Specialists] don’t live in our world, they’re not touching our kids...I think it’s *huge!* [emphasis added] (Interview # 2, September 23, 2015)

Sun’s RTI and PBIS team members discussed how sensemaking about MTSS involved capacity, communication, and generated emotions in the process. The teams perceive increased understanding of the two systems, which fosters implementation for RTI and PBIS. However, Sun’s dual approach limits MTSS in several ways. Only PBIS is a whole school all students and faculty initiative providing services on only Tiers 1 and 2. RTI has several boundaries in that although reading and math cover grades spanning Kindergarten through third grade, Tier 1 screening primarily addresses reading screening

limited to Kindergarten and first grade. Given the district-designed Student Support Team processes for students with high academic and social-behavioral needs, neither of Sun's MTSS provides Tier 3 services.

### **Summary of Sun Elementary**

During this study, team members' defined their implementation of dual MTSS, RTI and PBIS. According to RTI and PBIS team members, RTI addresses a Tier 1 and 2 continuum of academic needs in reading and math subjects only, in grades kindergarten through third. At Sun Elementary School, PBIS addresses a continuum of behavioral needs for students in Tiers 1 and 2 throughout all grades involving all teachers, including those in the Related Arts. The two teams depict and implement RTI and PBIS as separate, parallel processes. Sun's RTI and PBIS teams described their experiences as a form of continual learning with and from each other, or as distributed cognition. They reported changes in expertise and capacity over recent years and expressed optimism about how such changes enable positive student outcomes. Sun's participants discussed how collaborative problem solving enriched their understanding of RTI and PBIS and enhanced their knowledge and skills. Sun teams have observed how an increase in knowledge and skills yielded improvements in implementation. While the processes of Sun's dual MTSS support the participants' perspectives about the value of MTSS for students' learning, their sensemaking about MTSS is bounded to dual system that ends with Tier 2 services. The dual systems are not completely parallel as the social/behavioral focus is all grades, all subject areas, and all teachers. In contrast, RTI has been limited to two subject areas and only portions of the grade span at Sun

Elementary School. Not all teachers participate in RTI, especially not those teaching fourth and fifth grades, and none of the Related Arts teachers. The following section provides the setting and findings for the second case: Bright Elementary.

### **Introduction to the Second Case**

The following sections provide an examination of the second case study, Bright Elementary. The sections include a description of Bright's building and participants, along with the findings of sensemaking across the RTI and PBIS teams. I explain collective sensemaking through four themes: (a) multiple teams and tiers of support, (b) supports to implementation, (c) barriers to implementation and (d) emotional geographies. The following section describes the setting of Bright Elementary, followed by a description of participants and findings.

### **Case Two Setting**

The following sections describe the second case, Bright Elementary. The case description covers areas of school context and background and history of Bright's work in RTI and PBIS initiatives.

#### **School Context**

Bright Elementary is located in a rural part of the district, approximately seven miles from the closest highway and 19 miles from the district's main office. The drive to the school is beautifully pastoral, past fields, over meandering roads, with a nearby river and falls. The entrance to the school is cozy, with a one story circular entryway near the main office. The school features halls adorned with beautiful murals depicting nearby sites, such as a waterfall within 2 miles of the school. On my first of six visits, the

Principal was eager to show me a recently painted mural of the nearby falls. She discussed with me the importance of an appealing school environment for students. The principal indicated she would like one mural painted each summer. The school also displayed and highlighted student artwork in the main entryway and connected hallways.

Classical music plays in the lunchroom for periods of approximately 10 minutes to cue students that no talking is allowed during that time in order to encourage eating lunch. The school was neat and students quietly walked in straight lines through the halls. When one class walked in the hall and a few students were talking, the teacher turned calmly stating, “We are inside, so we need inside voices” (BOP2, September 4, 2015). Bright is an authorized International Baccalaureate Primary Years Program™ School, which “focuses on the development of the whole child as an inquirer, both in the classroom and in the world outside” (IB Primary Programs website, 2016). Therefore, several of the classroom posters indicated IB program expectations Interview # 9, October 9, 2015). After walking through main areas and hallways on the first and second floor, I did not find posters depicting PBIS signs or expectations (BOP1, July 20, 2015; BOP2, September 4, 2015; BOP3, September 17, 2015).

Bright Elementary enrolls approximately 700 students from Kindergarten through 5<sup>th</sup> grades (based on school website, 2016). The school principal, assistant principal and instructional coach (IC) serve as school administrators, leading 52 teachers and 21 support staff. The state report card indicated *Good* absolute ratings for the past three years. The school attendance rate for the year of investigation was 95.3%. Bright has a poverty index of 51.3%. Bright’s population includes 10.5% of its students identified

with disabilities. On the state survey, the teacher's response rate was 95% (38/40) and the parents' and students' responses were 103 and 80, respectively. The teachers reported 100% satisfaction with both the learning and the physical and social environment. Responding parents reported 94% satisfaction with the learning environment and 92% with the social and physical environment. Students reported 99% satisfaction with the learning environment and 98% satisfaction with the social and physical environment.

### **School History of RTI and PBIS Implementation**

Bright initiated RTI three years prior to PBIS. During the year of the study, they were implementing RTI in grades kindergarten through second and PBIS as a school-wide initiative. Prior to the year of study, they implemented RTI in kindergarten and first grades.

I collected the following information during my initial meeting (Field notes # 3, July 20, 2015) and during a semi-structured interview (Interview # 10, October 9, 2015) with Bright's principal along with the Bright Observation Protocol 1 (BOP1, July 20, 2015). Bright's previous principal volunteered to be a part of the district pilot program in RTI's second year of inception (2006-07).

Bright was one of 10 pilot schools because the district provided funding for an interventionist as part of the pilot program for two years. After the two-year period, the district no longer provided funds for the interventionist position. During the 2006-2008 school years, an interventionist attended training in the intervention program and worked with kindergarten and first grade. The kindergarten aides also attended training in the intervention program and provided intervention to kindergarten students early in RTI

implementation. The principal was unsure as to the timeline of each group's training due to its occurrence prior to her role as principal (Interview # 10, October 9, 2015).

Bright's principal reported that many school principals, herself included, chose to use a teacher allocation to fund an interventionist role. For two years, though, Bright lost funding for one teacher position due to low student numbers. The principal shared with me, "I heard of other schools that would have their classroom teachers do RTI but I couldn't wrap my brain around 'how would that work?' with them being able to do everything else they're needing [*sic*] to do" (Field notes # 3, July 20, 2015). Based on Bright's change in resources, she said they managed to maintain RTI only for kindergarten. The principal also said that the sole focus on kindergarten lasted two years because of funding constraints. The school began providing intervention to first grade during the 2014/15 school year, due to the state's literacy initiative that funded a Literacy Specialist. For 2015/16, RTI expanded to second grade based on a drop in first grade needs according to reading assessment screening (Interview # 10, October 9, 2015).

The RTI Coordinator, Marie, and a former RTI Coordinator, Alexis, attended PD for new RTI Coordinators in the beginning of the year (Interview # 9, October 9, 2015). Alexis attended with Marie to support her learning of the position and responsibilities. Marie also attended a beginning of the year PD on the reading assessment instrument regarding a) administration rules, b) data interpretation or analysis, and c) navigation of the reading assessment website. Bright Elementary School's PBIS team originally participated in summer Professional Development for PBIS during their first two years of

implementation (Interview # 13, September 28, 2015). The team had not attended any PD in the last three years (Interview # 11, October 26, 2015).

### Case Two Participants

The study participants involved seven members of the RTI and PBIS teams, collectively. The participants represented various educator roles and varying levels of experience as educators and with one or both teams.

Table 4.3

Bright Participant Roles and Experience

Initiative	Pseudonym	Primary Role	Years of Experience	Previous Role	Years on MTSS Team
RTI	Andrew	School Psychologist	1 – 5		4 years
RTI	Garrett	Instructional Coach	20 +	Teacher	9 years
RTI	Marie	Literacy Specialist	20 +	Teacher	First year
PBIS & RTI	Linda	Principal	10 – 15	Assistant Principal & Teacher	9 years combined
PBIS	Shannon	4 <sup>th</sup> Grade Teacher	1 – 5	Reading Intervention	3 years
RTI	Alexis	Kindergarten Teacher	1 – 5	RTI Coordinator	4 years
PBIS	Lily	Counselor	10 - 15	Teacher	7 years

Table 4.3 shows the roles and responsibilities of each participant, along with experience as an educator and in PBIS or RTI. Four of the seven participants learned of one or both initiatives at another school, yet within the district. Andrew, the school

psychologist for Bright, was the sole participant who gained initial knowledge of both initiatives through his pre-service training. The following section provides a description of each of the participants from Bright.

**Andrew** is a school psychologist in the district and served in this capacity with two other schools during the time of the study. He has worked with Bright Elementary for four years. Andrew expressed dissonance between his pre-service training and his practice within the district. Contrary to the other participants, he focused on the limitations of the school's RTI and PBIS implementation. For example, he discussed how the school is not collecting universal data regarding social/emotional skills and how RTI has been confined to just reading. Andrew was the only participant in the study to receive pre-service training in the area of PBIS and RTI components (Interview # 7, October 9, 2015).

**Garrett** has been an instructional coach (IC) for over ten years at Bright. Garrett also taught in multiple grades over the course of eight years before becoming an instructional coach. Garrett reported that primary areas of focus at Bright include working with and supporting academic instruction in all grade levels and all subject areas and serving as the International Baccalaureate coordinator. Garrett has participated on the RTI team during as an instructional coach and has little involvement with PBIS. Garrett answered the interview questions matter-of-factly, providing brief answers. (Interview # 8, October 9, 2015)

**Marie** has been an educator for more than 20 years and expressed confidence in her ability to teach students how to read. Marie has taught kindergarten through third



grade at Bright and is in her first year as a literacy specialist. She saw the move to literacy specialist as a good fit for her tendencies towards analyzing data and looking at patterns. She reflected about her direct approach in her questions and assertions, but also indicated that the teachers at the school know that she “doesn’t have an agenda” (Interview # 9, October 9, 2015). Marie shared about spending considerable time to understand the RTI data and for preparing for the RTI meetings by pulling records, asking questions of the teachers, and completing error analysis (BOP3, September 17, 2015; Interview # 9, October 9, 2015).

**Linda** is the school principal who demonstrated a clear commitment to her never-ending responsibilities as a principal. For example, she described how she enjoys waking before her family while on vacation to read an article or complete work-related tasks. I observed (BOP3, September 17, 2015) Linda as a capable facilitator during the RTI meeting, welcoming and showing respect for all participants’ input. Linda discussed how the data from RTI helps with making decisions. “The students that have RTI - [the SST] is definitely better because we have some really concrete data where the progress monitoring has been put in” (Interview # 10, October 9, 2015).

**Shannon** is a fourth grade teacher and is in her third year in this position. Prior to becoming a classroom teacher, she served two years as a reading interventionist in another school in the district. She has participated on the PBIS team since starting as a classroom teacher at Bright. Shannon opined that she incorporates substantial elements of RTI into her daily teaching and as a result she observed a positive influence on students emotionally and behaviorally. Shannon shared increased confidence in her abilities as a

teacher, reporting “[behavior] management probably was my weakest area...Having [PBIS] as a guideline is very helpful and then I know I’m being as equitable to the students as like a related arts teacher” (Interview # 11, October 26, 2015).

**Alexis** has taught at another school in the district in her first year and at Bright for the past four years. She serves as the only teacher on the RTI team and previously held the role of RTI Coordinator last year. Alexis learned of the PBIS initiative at another school in the district and reflected upon Bright’s more positive approach to PBIS. She mentioned the RTI team’s improvements in the few years she has participated and shared “I feel like my opinion has changed from being the teacher to the RTI coordinator and...back to teacher again. I feel like I sort of have empathy for her [the RTI Coordinator]” (Interview # 12, October 26, 2015).

**Lily** is a school counselor at Bright. She started her career in education as an elementary teacher and has been a counselor for about eight years. She taught in another school in the district and at Bright and became a counselor while at Bright. Lily discussed her involvement on the PBIS team since the school initiated the process in 2009. She reported that her counseling responsibilities and her participation on the PBIS team overlap. She stated that each role influences the other and contributes to her overall effectiveness in the school “[I] started [on the team] – [because] of course, the counselor is going to be on it, but the flip side is...if I’m going to start meeting with these kids individually, I want as much information as I can” (Interview # 13, October 27, 2015).

The following sections describe these participants’ collective sensemaking of MTSS at Bright.

## Sensemaking through PBIS Tier 1 and 2 and RTI Tier 2

Bright team members varied in their discussion of MTSS. All members endorsed both MTSS as potentially effective frameworks for supporting students' social, emotional, and behavioral needs. The Bright participants' interpretation of RTI and PBIS remained dual and parallel systems stopping short of the full three-tier continua of services as the district-designed Student Support Team provides all academic and social-behavioral interventions and plans for students with the greatest needs...

### Multiple Teams and Tiers of Support

Bright addresses student academic and behavioral needs through multiple teams. Although the focus of this study is on the RTI and PBIS teams, the graphic depicts Bright Elementary School's multi-team configuration with RTI and PBIS focused on Tiers 1 and 2.

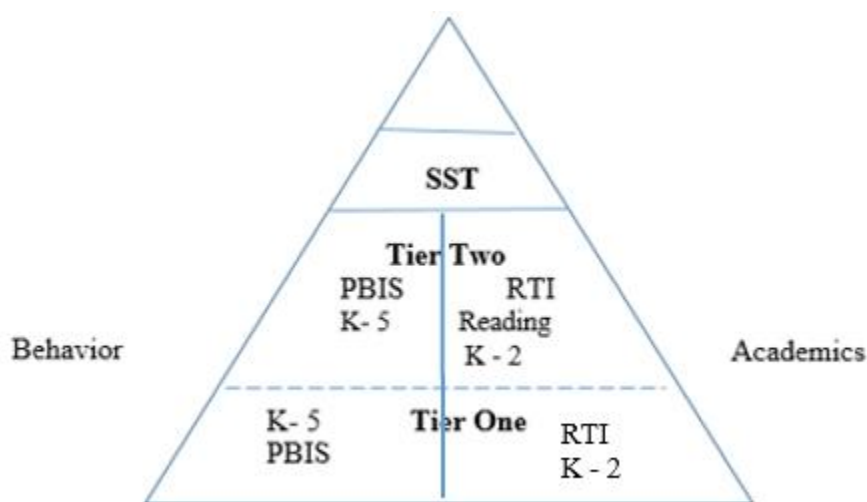


Figure 4.2 Bright's process for addressing academic/behavioral concerns.

Figure 4.2 indicates PBIS team focus on behavior in Bright's complete grade span from Kindergarten through 5<sup>th</sup> grades for Tiers 1 and 2. Bright's RTI team focuses on

reading for grades kindergarten through second through Tiers 1 and 2. The dashed line between Tier 1 and 2 RTI indicates use of universal screening data among all students in Tier 1 to place students in the Tier 2 intervention program. The dashed line between the PBIS Tiers 1 and 2 indicate team responsibility for prevention and intervention for all students in both tiers. The solid line above the dual MTSS's Tier 2 indicates the point where the district-design SST takes over to address students' needs (Interview # 7 & 8, October 9, 2015). Table 4. 4 shows team participation, targeted grades, and RTI/PBIS components and at each tier of the above figure.

Table 4.4  
Components of Bright's MTSS Teams

Tier MTSS	Initial Year	Team Participants	Students	Components
<b>RTI One</b>	06/07	Instructional Coach, K teacher, Literacy Specialist, Principal, School Psychologist	Grades K – 2 All Students	<ul style="list-style-type: none"> <li>• Universal Screening.</li> <li>• Individual Data Analysis.</li> </ul>
<b>RTI Two</b>		Instructional Coach, K teacher, Literacy Specialist, Principal, School Psychologist	K – 2 Students receiving intervention with LS or with K teacher assistants	<ul style="list-style-type: none"> <li>• Evidence-Based Reading Interventions</li> <li>• Progress Monitoring</li> </ul>
<b>PBIS One</b>	09/10	Assistant Principal, Grade level and Related Arts representatives, Counselor	All grades All students	<ul style="list-style-type: none"> <li>• Classroom Discipline Referrals,</li> <li>• School-wide Procedures, Expectations, Rewards</li> </ul>
<b>PBIS Two</b>		Same PBIS members	All grades Students needing intervention	<ul style="list-style-type: none"> <li>• Progress Monitoring</li> <li>• Mentoring and Individual Plans</li> </ul>

Bright RTI team members' sensemaking of Bright RTI components consists of: (a) universal screening, (b) evidence-based intervention, and (c) progress monitoring, only for one subject, reading, and only among students in the grades spanning kindergarten through second. Bright's RTI team members discuss use of literacy data for decision-making as a critical feature of RTI. The Literacy Specialist, Marie, coordinates the universal screening data for students in grades kindergarten to second. She also collects additional data, including review of students' school history, conducts an error analysis of student reading errors, and performance on Bright's reading curriculum assessment. She presents data to the RTI team in September and January. The RTI team members discuss individual students, determining which students to place in Bright's Tier 2 services which include two grade-level based, pre-packaged intervention programs. The Literacy Specialist delivers a program for first and second grades. The kindergarten assistants provide a different program for kindergarten students. The Literacy Specialist assesses the reading progress of students in the Tier 2 intervention program for first and second grade. The kindergarten teachers progress monitor the kindergarten students in the Tier 2 intervention program. The progress-monitoring tool assesses the same types of skills as the universal screening assessment (Artifact # 5, September 17, 2015; BOP3, September 17, 2015; Interview # 7, # 9, # 10, October 9, 2015; Interview # 12, October 26, 2015).

PBIS at Bright consists of Tier 1 prevention and Tier 2 intervention. Tier 1 prevention consists of the following PBIS features: (a) instruction about school-wide expectations and procedures, (b) classroom color-coded behavior system, (c) a school-

wide reward and discipline system, and (d) methods for boosting teacher morale. The school-wide reward system involves staff acknowledging students' positive behaviors by distributing cards. Students turn in the cards to earn rewards. Tier 2 currently consists of adult mentors and of individual student behavior plans for students exhibiting more behavioral difficulty (Artifact # 2, September 4, 2015; BOP 4, October 7, 2015; Interview # 10, October 9, 2015; Interview # 11 and # 12, October 26, 2015; Interview # 13, October 27, 2015).

The PBIS team meets five times per year for about 20 to 30 minutes, and only met one time during the course of the three-month study. During this meeting, PBIS team members discussed plans for teaching the school-wide system, including creating videos of the procedures for the cafeteria, hallways, and use of restrooms. The team members plan ways to boost teacher morale, such as having parents provide lunch relief, or planning a special treat for the teachers. PBIS data includes bus referrals and Classroom Discipline Referrals (Artifact # 2, September 4, 2015; Artifact # 6, October 7, 2015; BOP4, October 7, 2015; Interview # 10, October 9, 2015; Interview # 11, October 26, 2015; Interview # 12, October 26, 2015; Interview # 13, October 27, 2015).

### **Supports to Implementation**

Bright Elementary School has a dual set of MTSS; one focused on RTI and the other, on PBIS. Participants from both of Bright's MTSS teams shared a view about RTI and PBIS enabling positive student outcomes. Within each team, the participants expressed a shared understanding of specific components, which support their

implementation practices. The team members also view their school's positive approach as constructively influencing implementation and student success.

### **Capacity: Building Knowledge for Enhanced Decision-Making**

Both of Bright's RTI and PBIS teams utilize databased collaborative problem solving. Team participation creates opportunities to interact with respective RTI and PBIS data while team members learn about students who require behavioral/academic interventions and how to design those interventions. These members espouse enhanced ability to make decisions and to provide support (Artifact # 5, September 14, 2015; Artifact # 6, October 7, 2015; Artifact # 9, BOP3, September 17, 2015; Interview #7, # 8, # 9, # 10, October 9, 2015; Interview # 11, # 12, October 26, 2015; Interview # 13, October 27, 2015). Garrett discussed how data influences decisions. He said, "I think we rely much more heavily on the data now than we did in the beginning. I think in our decision making, we really, really look at the data before we make decisions" (Interview # 8, October 9, 2015). In addition to examination of data, Alexis described the strategic thinking the team used in decision-making about interventions.

When I first started, we more or less would make the groups and then just pull the kids based on, like, who in this teacher's class needed help. Then we started thinking, is that really, what's best for them? We had kids in intervention they were all on different levels. (Interview # 12, October 26, 2015)

Finally, Lily reflected about how she has improved in her analysis of problems and then, support students in her counseling role.

Being on that team allows me to see – because referrals don’t come through me at all. So this allows me to know exactly what’s going on and dive a little bit deeper into – what’s causing this? What’s it stemming from? So ...I gain a little more knowledge about what’s going on with our kids. (Interview # 13, October 27, 2015)

**Positive school climate.** According to Bright’s participants, a positive and supportive school climate enhances PBIS and RTI implementation. Several aspects of Bright provided evidence of a positive and supportive climate. First, the principal’s explained her emphasis on creating a beautiful environment. Next, the PBIS team’s discussion of boosting teacher morale showed a dimension to addressing the MTSS work with an adult focus. Then Bright generated an overall impression of school-wide positive attitudes. Bright’s participants attributed their school’s supportive climate as starting from the administrators and then filtering through to students. School leaders emphasized their concern for teacher morale and time (BOP1, July 20, 2015; BOP3, September 17, 2015; BOP4, October 7, 2015; Field notes # 3, July 20, 2015; Interview # 7, 10, October 9, 2015; Interview # 12, October 26, 2015; Interview # 13, October 27, 2015).

Linda, the school principal, expressed her preference for RTI operating as collaborative leadership team. She said, “I want *them* [emphasis added] to make the decisions, to have ownership of it, though” (Interview # 10, October 9, 2015). In Andrew’s opinion, teachers’ knowledge of the students coupled with a positive attitude decreases demands on his work as school psychologist.



It definitely is a very positive school – Bright [is]. I don't hear behaviors—you know there's different schools. Behavior that ... you know, my phone would be ringing off the hook at some schools, I never hear about it at Bright. They have a really good understanding of kids. They try to do everything they can to keep kids in the classroom.

Shannon, a fourth grade teacher, attributed Bright's success with PBIS system as due to the teachers' positive attitudes:

I was at a different school and they used [PBIS]...and it didn't seem like a positive system....It seemed more like a chore there as opposed to "I'm delighted to be giving these cards out because you did a good job"...and we're proud of what we earn here. (Interview # 11, October 26, 2015)

As part of the supportive climate, school personnel prioritize student needs when making difficult decisions about scheduling. For example, they make every effort to avoid interfering with student intervention time (Interview # 12, October 26, 2015 and Interview # 13, October 27, 2015).

### **Barriers to Implementation**

Although team members speak of RTI and PBIS as facilitating decision making, the participants listed a set of barriers to their use of the dual MTSS. The Bright RTI and PBIS team members cited three implementation barriers, including: (a) staff turnover, (b) few opportunities to practice and process learning, and (c) emotional aspects of leadership.

## **Staff Turnover**

The combination of staff turnover coinciding with decreased district guidance has created a start-and-stop effect on the Bright Elementary School MTSS teams' sensemaking and implementation. Both the school principal and assistant principal, who is the PBIS team leader, assumed their administrative positions four years ago. Five of the seven participants have assumed RTI or PBIS team roles after RTI and PBIS start-up, nine years ago and six years ago, respectively. Furthermore, there have been a number of different personnel serving as reading interventionist; with two years in which Bright had no interventionist (Field notes # 3, July 20, 2015; Interview # 7, # 8, # 9, # 10, October 9, 2015; Interview # 11 and # 12, October 26, 2015).

## **Opportunities to Practice and Process Learning**

Given observations and interviews, Bright's RTI team meets at least two times a year in September and January, while the PBIS team's schedule of five times per year would mean a meeting once every two months. The meeting rates for Bright's RTI and PBIS teams suggest that members likely have few opportunities to practice such components as analyzing data or collaborative problem solving. Another indication that participants had few opportunities to consider Bright's dual MTSS rippled through the interviews when participants reacted vaguely to the counterpart initiative (BOP3, September 17, 2015; BOP4, October 7, 2015; Interview # 8 and 9, October 9, 2015; Interview # 11, October 26, 2015). For example, Lily, school counselor, said, "RTI, that's our kindergarten thing, right? Where we're assessing them?" (Interview # 13, October 27, 2015).

Not only do teams meet infrequently, when they do meet, the allotted time may curtail discussion. For instance, the PBIS meeting lasted approximately 20 minutes, during which time, certain members shared the annual plan and the rest of the members agreed (BOP4, October 7, 2015). The PBIS team seems to have a non-confrontational dynamic, which may decrease in-depth processing of PBIS components (BOP4, October 7, 2015; Interview # 10, October 9, 2015; Interview # 11, October 26, 2015; Interview # 13, October 27, 2015). Shannon's description of the PBIS team is as follows: "The mix that we have is very easygoing, willing to listen. Usually if there's a suggestion that sounds great, we'll say, 'Okay let's try it.'" (Interview # 11, October 26, 2015). Lily characterized her role on the team as "silent observer" (Interview # 13, October 27, 2015), and Shannon indicated, "I'm not one of those [to disagree] but that's just not my personality" (Interview # 11, October 26, 2015). These quotes indicate several participants' preferences in avoiding conflict. Emotional geographies within education complicate these issues further.

### **Emotional Geographies**

According to Bright's participants, RTI and PBIS teams involve emotional conflict. During their interviews, team members reported two emotional aspects of MTSS processes: (a) disagreements about students' and teachers' workload and beliefs; and (b) genuine concern that teachers' concerns outweigh the student results. The principal introduced concerns about teacher workloads associated with MTSS in two ways; first implicating the district's allocation of funds for interventionists, and secondly, with an assumption that classroom teachers could not handle any tier of intervention

within classrooms (Field notes 3, July 20, 2015; Interview # 10, October 9, 2015). Additionally, multiple team members mentioned difficult conversations regarding scheduling and intervention placement for individual students (Interview # 12, October 26, 2015; Interview # 13, October 27, 2015). Team members reported teachers' frustration with teams' databased decisions (Field notes # 3, July 20, 2015; Interview # 8, #9, October 9, 2015; Interview # 12, October 27, 2015).

Multiple members intimated avoidance of difficult conversations and viewed their role on the team as "listeners"; hence, limiting school-wide implementation and effectiveness. Shannon opined that differences in student behavior stemmed from differences in teacher classroom management, but also expressed a belief that addressing such discrepancies is beyond the PBIS team's scope.

Like even coming up from 3rd to 4th, I can clearly tell what classroom [the students] came from. And that's just the expectations and their [student] behavior and how they treat one another. ... [Examining classroom data and problem solving] would *never* occur [with the PBIS team] because we are super polite, we're not hostile. (Interview # 11, October 26, 2015)

Shannon emphatically shared how such discussions implicate specific teachers, which she felt was not appropriate topic for the PBIS team because administrators should talk to individual teachers about their practices (Interview # 11, October 26, 2015).

Marie also depicted issues around communication, yet in relation to RTI implementation. She described difficulties in scheduling with teachers, causing possible barriers to implementation, "that scheduling part, [teachers have] got to be lenient,

and...well in certain grades, and certain [teacher] personalities, [they] don't like to change their stuff, and then that makes it hard on that part” (Interview # 9, October 9, 2015).

Alexis, Garrett, and Linda shared vignettes epitomizing the difficulties of navigating decision-making and disagreement with teachers (Interview # 8, # 9, October 9, 2015; Interview # 12, October 26, 2015). The following excerpt is Alexis’s quote addressing disagreement about inclusion of a particular student in intervention:

I know last year we had one [student] that, just based on his scores he was ready to be dismissed and the teacher did not think he was ready [to come back to her classroom]. And I had to be like, “he’s meeting end of year goals - already met them - and it’s not the end of the year...We have some kids that are just not anywhere near there”. (Interview # 12, October 26, 2015)

Across the Bright PBIS and RTI teams, participants described barriers of turnover, limited interaction and opportunities for deliberation, and emotional aspects of MTSS processes. These barriers inhibit team members’ sensemaking of MTSS across all levels of the continuum.

### **Summary of Bright Elementary**

Within this study, all Bright team members perceived the RTI and PBIS systems as beneficial and shared moments of student success connected to one or both systems. However, they reported barriers in their understanding and use of dual MTSS. The teams facilitate both frameworks as disparate processes and neither system is used to address the full continuum of student needs in Tiers 1 through 3. PBIS implementation varies among teachers in the school, impacting student behavioral outcomes. RTI addresses

only reading issues and only for a select group of students in kindergarten through second grades. Among the other barriers that Bright's participants reported, factors of time and an inclination to avoid conflict affected their sensemaking.

### **Conclusion**

This chapter delved into district and school context, along with two schools' dual MTSS teams' sensemaking. Findings revealed insights into the varying contexts and emphasis of both systems.

Findings at Sun Elementary indicate participant sensemaking of RTI and PBIS as a continuum of academic and behavioral supports within and across Tiers 1 and 2. The RTI team views RTI as limited to grades kindergarten through three, consisting of an evidence-based curricula for reading and math linked to evidence-based interventions and use of multiple sources of data to make decisions for students' needs. The Sun participants in the study depict PBIS as a school-wide, all grade levels (k through 5<sup>th</sup>) prevention system including explicit instruction of: expectations and procedures with a reward and discipline systems. The teams explicate PBIS as a databased decision making team process regarding both positive and disciplinary data. Finally, Sun PBIS provides clear Tier 2 interventions. Sun collective sensemaking also implicated avenues of distributing cognition situated within collaborative teams and a databased culture.

Findings at Bright Elementary convey sensemaking of RTI as a Tier 2 databased reading intervention program limited to the entry grade span from kindergarten through second. RTI's design is limited to protect teacher time and workloads. Bright

participants' sensemaking of PBIS is a schoolwide, all grades and subjects prevention and intervention system. PBIS at Bright also promotes ways to boost teacher morale.

Chapter Five offers a cross-case analysis of both schools' participants' interpretations of their dual MTSS. Chapter Six provides an answer to the research question with the implications for practice and research.

## CHAPTER FIVE

### CROSS-CASE FINDINGS

Chapter Five provides a cross-case examination of how two schools' MTSS team members make sense of their roles and practices. The research question for this study was:

*What is the collective sensemaking of key educators in two selected elementary schools when implementing two multi-tiered systems of support?*

The chapter has three sections. The first section delineates site differences. The second section describes similarities across the two sites of investigation. Finally, the fourth section interprets the similarities and differences in light of variant contexts and roles of team members.

#### **How Do Sun and Bright MTSS Differ?**

By design, a comparative case study includes selection criteria, which may offer specific contextual differences. For this study, selection processes offered two differentiating criteria. The first criterion was a proxy for student and family wealth, that proxy was defined as participation in the Elementary and Secondary Education Act (ESEA)'s (P.L. 107-110 recently reauthorized as P.L.114-95) Title 1 programming for students in poverty. The second criterion for differentiation in this comparative case study was the tenure of the two cases' principals.

The variations in funding-based resources and leadership may have contributed to variations in findings. Title 1 funding enabled more resources for Sun Elementary School, while Bright Elementary relied on a fluctuation in district or state funds, resulting



in fewer resources. Additionally, Sun's principal has a 19-year tenure, while Bright Elementary School's principal was promoted to the position 4 years ago. The principals expressed differing views about staffing MTSS, which may be due to the selection criteria for these contrasting cases. At Sun Elementary, Title 1 funding offers staffing resources that can affect teacher workloads in prevention and intervention practices for both RTI and PBIS. Bright's principal perceived the district's allocation of additional personnel for RTI as a signal that additional personnel are necessary and that grade-level as well as related arts teachers should not have to assume the burden of prevention or intervention.

Perhaps due to the differences in funding sources as well as principal perceptions, Sun and Bright MTSS differ in *how* participants described RTI and PBIS implementation through Tiers 1 and 2. At Sun, RTI addresses Tiers 1 and 2, in both reading and math, grades K through three, for all students except those on Individualized Education Plans. At Bright, RTI consists of a Tier 2 reading intervention program for identified students in grades K through two, with a literacy interventionist for first and second graders. Kindergarteners receive intervention services from aides. At Sun Elementary, the PBIS team members emphasize data analysis of both positive and disciplinary data to plan school-wide Tier 1 prevention and Tier 2 school and classroom interventions. They do not problem solve around individual students. At Bright, the PBIS team members focus on boosting teacher morale and implementation of their yearlong plan. During some of the meetings, they discussed disciplinary data but did not collect data on positive outcomes. The PBIS team at Bright engaged in individualized student problem solving.

Finally, Sun and Bright differ in methods of supporting implementation, identified in rounds of coding analysis as: (a) capacity, (b) communication, and (c) emotional geographies. All three of these areas trigger opportunities for sensemaking.

### **Capacity**

At both schools, interview responses indicated improvements in capacity but the volume of responses differed. That is, Sun participants shared four ways they saw an increase in capacity including: (a) a change in methods for data collection reflecting efficiency, (b) changes in team composition, incorporating more members and shared leadership responsibilities, (c) increased resources to provide intervention to more students, and (d) improvement in data literacy and decision making. Bright RTI team members' narratives divided between one form of shared learning and barriers to capacity for MTSS. Bright's focus on shared learning encompassed increased knowledge of data. Bright's participants listed staff turnover and funding as the barriers to MTSS implementation.

### **Communication**

Differences in Sun and Bright's interview responses and observations of team meetings indicated variance in communication and in teams' shared processing of MTSS components. From Sun, RTI and PBIS team members appreciated multiple perspectives, engaged in a shared process around MTSS sensemaking, and created deeper levels of learning and databased decision making. Sun's participants emphasized frequent and in-depth communication about MTSS within the teams and with colleagues outside of the teams. Sun's team members communicated about methods and types of assessment,

interpretation of data, instructional or preventative approaches, ways to increase student performance and constructed an explanation of why they perform certain practices. In contrast, Bright's participants rarely discussed communication as a significant aspect of RTI and PBIS. Bright's team members discussed their primary role as listening and providing their input or perspective to decision-making within the team. While describing their team membership norms, they indicated a deliberate avoidance of conflict or confrontation about practices. They also focused on lessening burdens on teachers. Bright's participants did not discuss more in-depth or ongoing informal conversations.

As Sun's RTI and PBIS teams meet more frequently, incorporate more personnel on team meetings, and engage each other in more in-depth conversations about MTSS, the participants reported how they are better able to share or distribute cognition about the two systems. As Sun's MTSS teams expand definition of RTI and PBIS, they expand implementation of the two systems. With limited opportunities for similar engagement at Bright, the teams' sensemaking of RTI and PBIS remain confined. Emotional geographies were reported as another aspect of influence on implementation.

### **Emotional Geographies of MTSS**

Even though both sites' participants mentioned situations where RTI and PBIS implementation raised emotions, their views differed. Sun Elementary School's team members talked about perspective-taking, shared investment in the processes, and open discussion of opinions to encourage learning of the systems. Bright's team members, took a teacher workload perspective, and reported the importance of teacher support coupled with a preference to avoid conflicts, which could and did arise over prevention or

intervention practices. Because Bright's teams meet infrequently, due to a concern about teacher time and workload, and because the dual MTSS do not include most classroom teachers, a structure for communication and even de-escalation of conflicts may not exist.

### **Similarities of Sensemaking across Both Sites**

The findings indicated similarities in schools' definition of some MTSS components. Both sites' teams shared similar goals justifying MTSS implementation. In both schools, Team members perceived RTI and PBIS as positive frameworks for improved student outcomes. Neither school team applies RTI or PBIS to students beyond Tier 2 and use the district-designed Student Support Team (SST), a third school-based group for addressing the highest levels of student need. Neither school's participants speculated on the reasoning for running dual MTSS instead of a unitary approach to students' academic and social-behavioral success. Neither did any of the participants speculate on the truncation of both MTSS's services to only Tiers 1 and 2.

Both schools limit RTI to the youngest students within the entry grade levels. Both schools focus RTI on the core subject of literacy and use state funded literacy personnel as key members of their RTI teams. Both schools' RTI teams define RTI components as primarily focused on universal screening, evidence-based intervention, and progress monitoring. Both RTI teams analyze multiple sources of reading data and determine which students need Tier 2 intervention.

The two schools shared similar approaches to PBIS. In both schools, PBIS is a schoolwide, entire grade span, and all student program, with the exception of students identified with disabilities who have Individual Education Plans (IEPs). Both PBIS teams

rationalize PBIS as prevention through the application of four school-wide components: (a) expectations, (b) procedures, (c) rewards, and (d) discipline systems. Both teams collect discipline data through their PBIS system.

Both schools share some similarities in RTI and PBIS team membership involving school officials and establishing leadership among educational specialists. The administrators at both schools demonstrated leadership commitment to the initiatives by serving on either the PBIS or RTI teams and seeking ways to support team efforts. The principals and instruction coaches of both schools serve on the RTI team and both assistant principals serve on their schools' respective PBIS teams. Three of the four teams utilize non-administrative personnel to lead team meetings. Both schools' literacy specialists serve on their respective RTI teams. In both cases, the school counselor serves on the PBIS team. Both schools also have grade-level teacher representatives on their PBIS teams, whose PBIS membership emphasizes the schoolwide nature of both schools' implementation for social-behavioral MTSS.

### **Examination of Similarities and Differences**

The following figure captures the two sites' similarities and differences in their collective sensemaking of RTI and PBIS.

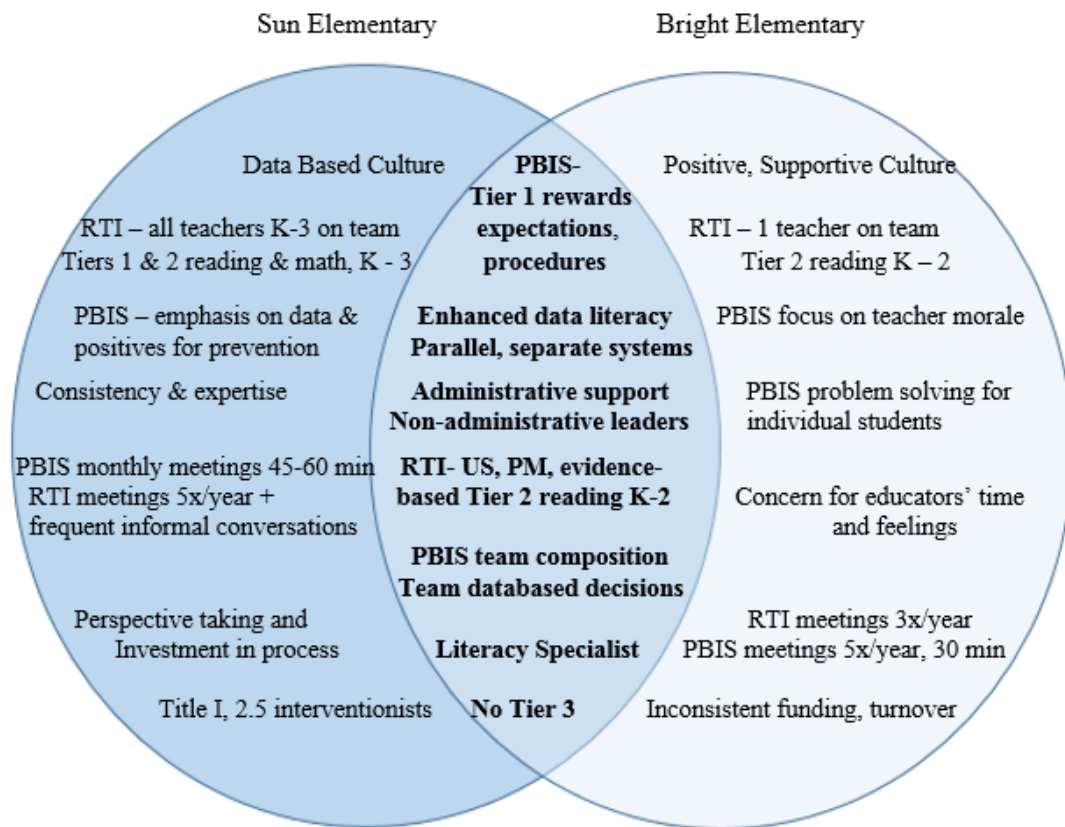


Figure 5.1. Venn diagram depicting similarities and differences across Sun RTI/PBIS teams and Bright RTI/PBIS teams. US is an acronym for Universal Screening, PM for progress monitoring, K – 2 or K – 3 represent grades kindergarten to 2<sup>nd</sup>, 3<sup>rd</sup> grades.

Figure 5.1 depicts how Sun and Bright share some elements of sensemaking, especially in the areas of PBIS Tier 1 components and RTI Tier 2 components. Both teams have these commonalities: (a) administrators’ participation; (b) databased team decision making; and (c) attributed capacity improvement for data use to MTSS implementation. Both schools espoused a schoolwide, all grade levels, all subject areas approach to PBIS, and did not question their omission of Tier 3 services in favor of the district-design additional team, SST, for high need students. Both schools’ approach to RTI limited grade span access and subject areas, and neither schools’ participants

mentioned omission of Tier 3 RTI services with their adoption of the district-designed SST.

The schools differed in several ways over specific implementation strategies. Sun team members elaborated on a continuum of services through Tier 2 that involved the dual MTSS's team members working with each other, and with classroom teachers beyond the teams. Bright team members often expressed uncertainty about their understanding of either MTSS, and they focused primarily on issues associated with teachers' morale. Bright's participants expressed their need to avoid conflict or burden colleagues with interventions. While Sun's RTI team expanded to two subject areas for RTI prevention and intervention and justified the expansion through a collaborative, databased decision, Bright's RTI team limited implementation by confining intervention to specialized personnel to avoid affecting teacher morale. Sun's PBIS team members shared how they confronted individual teacher practices; Bright's participants expressed a view that colleagues should not discuss individual teacher's work, deeming such concerns a matter for administrators. Instead, Bright's PBIS incorporated a teacher morale component to the typical PBIS activities developing a positive climate for student success. These differences suggest that despite a common expression of MTSS's purposes for student success, in one case, the sensemaking led to participants' awareness of student need and appropriate practices for addressing them. In the other case, participants' sensemaking seemed arrested at the point of how implementation affected teachers' work, not student success. These differences possibly arise due to the case

selection method designed to highlight comparison based on school resources (Title 1 or not) and principal tenure (19 years versus 4 years).

### **Conclusion**

This chapter discussed a cross-examination of the two sites of investigation. The comparative case selection criteria specified the following two defining differences: (a) a school-level proxy for poverty and associated resources, eligibility for Title 1 and (b) the tenure of the principal. Sun Elementary School represented the criteria of a Title 1 school and a principal who led the school for a 19-year tenure. Bright Elementary School led for four years by its principal represented a more affluent student population, as it was not a Title 1 school.

Despite these selection-based differences, school teams shared commonalities in the participants' expression of the purposes and configurations of MTSS components. A district-designed requirement for a team, known as Student Support Team (SST), to handle high-need students' academic and social-behavioral intervention plans, effectively truncating RTI and PBIS services to Tiers 1 and 2. Both schools seemed to interpret the district-designed team as the only provider of Tier 3 schoolwide for all, and any, student needs. Both schools limited RTI to their entry-level grades span, excluding upper grade-level students, and at least initially, both implemented RTI as a literacy initiative. Participants from both schools expressed concerns about staffing the initiatives and both interpreted the state's investment in personnel for literacy as an indication of the need for RTI implementation specialists beyond classroom teacher participation.



Perhaps because of the case-selection criteria, as both schools' participants explained their practices, they revealed variations across the two sites. Although Bright Elementary has implemented both RTI and PBIS two years longer than Sun Elementary, Bright's participants hesitated in their explanations about their MTSS practices and divulged their concerns about teacher workloads and morale in light of nearly all of the dual MTSS components. In contrast, Sun Elementary School's participants indicated an extension of implementation through added RTI content areas, grade levels, with schoolwide PBIS involvement for all teachers, all subject areas, and all students.

The comparative case design highlighted differences in the way two selected elementary schools' participants made sense of MTSS. The case boundary of a single state and school district influenced case selection criteria, which in turn revealed similarities in participants' taken-for-granted sensemaking of the MTSS components of continua of services as well as the necessary personnel and subject matter scope of RTI. Chapter Six situates these findings through a discussion of implications, limitations, and recommendations for further research.

## CHAPTER SIX

### SUMMARY, DISCUSSION, AND CONCLUSIONS

#### **Introduction**

In Chapters Four and Five, I discussed the findings for each of the two sites and provided a cross-case analysis. In Chapter Six, I will provide (a) a summary of the study, (b) a discussion of the findings, (c) practical and theoretical implications, (d) limitations, delimitations, and assumptions of the study, and (e) recommendations for future research. The purpose of this chapter is to expand upon the previous literature knowledge base in regards to policy-based initiatives, specifically multi-tiered systems of support (MTSS) implementation.

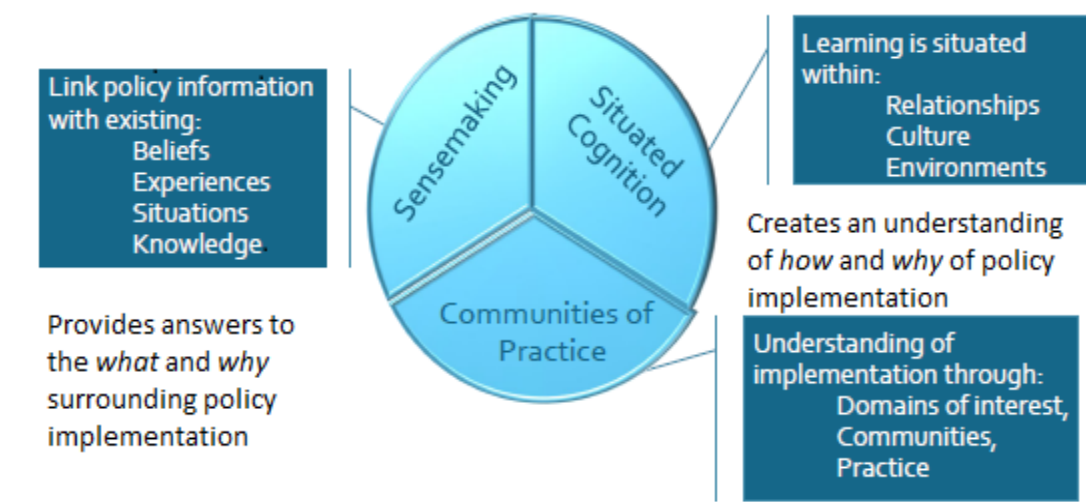
#### **Summary of the Study**

This section addresses a connection among the purpose, research question, theoretical framework, methodology and subsequent findings in the study. The purpose of this study was to examine policy-based initiatives within the micro-level of policy interpretation, adaptation, and practice across two schools' RTI and PBIS leadership teams. The research question was:

*What is the collective sensemaking of key educators in two selected comparative elementary schools when implementing two multi-tiered systems of support?*

I first inspected the macro, meso, and micro level contexts of MTSS within the introduction and literature review, demonstrating continued issues around implementation. Based on MTSS's foundation in policy, I explained a theoretical lens, which offers insight into policy-based initiatives at the micro or practitioner level. The

lens included concepts from literatures about collective sensemaking, situated cognition, and communities of practice. This combination of concepts enabled my analysis of sensemaking embedded within team and individual practices and school and district contexts. Figure 6.1 illustrates the conceptual amalgam of literatures about micro-policy implementation's sensemaking and situated cognition as connected within communities of practice (Cobb & Jackson, 2012; Colburn, 2001; Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005).



*Figure 6.1* Theoretical framework for guiding interpretation of local sensemaking surrounding MTSS implementation practices

Using the above framework, I created a two-case, comparative design focusing on the micro-level of two selected schools. I determined school selection based on criteria about implementation history and contextual contrasts and explored each school's sensemaking about implementation of dual MTSS. The comparative two-case design

permitted the comparison and contrasts in cross-case analysis to expose the *what* and *how* of RTI and PBIS with insights about *why* such differences occur (Cobb & Jackson, 2012).

I generated data through the following methods: (a) observations, (b) interviews, and (c) examination of artifacts. These multiple sources enabled triangulation of my analyses pertaining to team members' collective sensemaking. Observations of the two sites enabled an examination of each case's contexts. Observations of team meetings allowed me to (a) establish rapport with participants and (b) directly witness team decision-making, interactions among team members, and methods for enacting RTI or PBIS. Observations gave me opportunities to refine my understanding of answers and offered directions to probe further during interviews. I utilized observation protocols to document examples of situated cognition and collective sensemaking.

The collective sensemaking, situated cognition, and communities of practice literature supported my development of ten interview questions. I conducted semi-structured interviews with six participants at the first school, Sun Elementary, and seven participants at the second school, Bright Elementary. The use of semi-structured interviews allowed me to follow participant leads and delve further when emergent themes surfaced.

Field notes regarding my immediate reflection of interviews allowed me to examine any influences of bias, areas needed for follow-up, and further note any emotive aspects of the interviews. Finally, the RTI and PBIS team leaders provided documents during or after the observations, generating a complete picture of the process and decision tools used to guide implementation.

In order to answer the research question of sensemaking, I used the state, district, and school contexts surrounding these cases pertaining to RTI and PBIS. I used three data gathering processes including observations and interviews within the sites, and solicited artifacts from the teams of their MTSS processes. The analysis process incorporated the software, NVivo10 (QSR, 2012), to code all documents through three phases. In the first round, provisional coding, a set of start-codes rooted in sensemaking provided initial organization into themes of: (a) beliefs, (b) experiences, (c) roles, and (d) culture. Within those codes, I utilized abductive reasoning with an In Vivo coding round. The third and final coding round, I employed affective coding for a synthesis of themes. Once analysis for each school site was complete, I composed each case's narrative about sensemaking for MTSS. Once the two cases narratives were completed, I conducted a cross-case examination of sensemaking.

### **Discussion of Findings**

Policy implementation literature about school policies, in general, and MTSS, in particular, indicated a need for research at the level of practice. In conducting research at this micro level, change agents occupy favorable positions to explain context and practitioner sensemaking to build *successful* rather than merely *implementable* practices (Cobb & Jackson, 2012; Colburn, 2001; Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Horn, 2005; Spillane, 2000). For MTSS implementation, school-based teams face leadership responsibilities requiring shared decision-making to meet students' needs along a continuum of interventions. Therefore, such MTSS teams represent a micro-level, policy-defined community of practice (Lave, 1991; Wenger, 2010), which must make

collective sense of team practices and each member's role and practices within the team (Cobb & Jackson, 2012; Colburn, 2001; Honig & Ikemoto, 2008; Spillane, 2000).

Findings from these two elementary school cases of Sun and Bright extend the knowledge base of policy implementation and MTSS literature.

### **Two Schools' MTSS Sensemaking**

At Sun Elementary, MTSS implementation followed a dual rather than unitary implementation of academic and social-behavioral interventions. For academic MTSS, Sun implemented RTI across Tiers 1 and 2 at specific grade levels within specified subjects, rather than an all-grades, schoolwide approach. The RTI team operated shared strategies with a fluid approach to academic evidence-based interventions through school, class, groups, and individual databased decision making. Based on the availability of personnel and student data, the RTI team collaboratively decided to expand from reading to math for specific grade levels. At Sun, participants believed that PBIS means schoolwide, all grade levels and all subject areas Tier 1 and 2. PBIS implementation at Sun involves evidence-based prevention and intervention for behavior utilizing positive and disciplinary office referrals to evaluate student performance and determine changes to either Tier.

At Bright Elementary, RTI means use of Tier 1 universal reading screening to identify and deliver evidence-based, packaged interventions to students in Tier 2. Bright participants believe that specific personnel, other than classroom teachers, deliver interventions. To participants at Bright, PBIS means that teachers' morale can, and should, be addressed. Bright Elementary School participants' sensemaking about both

MTSS acknowledge a purpose for improved student outcomes, but focus on teacher workloads. To Bright participants, MTSS brings extra work that either is not, or should not, be classroom-based practices.

As district leaders engage in initiative sensemaking, they influence school level practice (Honig, 2008, 2012). These two schools' sensemaking revealed district-level influences. First, and consistent with the individual histories of PBIS and RTI (Barnes & Harlacher, 2008; Carr et al., 2002; NASDSE, 2007; Sugai & Horner, 2009) both schools reported different years of initiation for each MTSS, which likely set the participants' understanding of different and separate teams for addressing academic and behavioral needs. Also, the district designed a school-level Student Support Team (SST) to address students exhibiting high needs academically and behaviorally. Both schools' participants unquestioningly explained SST's role in each school. None of the participants recognized that their schools' reliance on SST effectively truncated the continua of services of either MTSS from three tiers to only two (Lewis et al., 2010; McIntosh et al, 2006a; Scott et al., 2010; Tilly, 2008). Two cross-case commonalities, reliance on dual, not unitary, MTSS and reliance on SST for Tier 3 services, indicate how the district-level case boundary affected participants' sensemaking (Coburn & Russell, 2008; Honig, 2008; Honig & Ikemoto, 2008; Yin, 2014).

Both cases' team members discussed PBIS and RTI as potential frameworks for evidence-based methods for data collection and intervention delivery – addressing the *what* of MTSS (Cobb & Jackson, 2012). In both cases, participants provided definitions of RTI and PBIS purposes in accordance with literature rationalizing the two systems

(Barnes & Harlacher, 2008; Kincaid et al., 2016; Lewis et al., 2010; NASDSE, 2006, 2007; Sugai & Horner, 2008; Tilly, 2008).

In both cases, participants described steps in the implementation of the dual MTSS in concert with literature about common databased and collaborative decisions for prevention and intervention. These participants' sensemaking of their dual MTSS approaches align with Kincaid and colleagues recent (2016) PBIS definition through: (a) research-based assessment and intervention and (b) databased decision making. These features also fit RTI's processes (Barnes & Harlacher, 2008; Sugai & Horner, 2009; NASDSE, 2006, 2007).

However, similar to studies occurring as early as 2002 and as recently as 2015, neither team defines or implements either system through a full continuum, furthering issues with Tier 3, the neediest students (Balu et al., 2015; Lane & Menzies, 2003; Nelson et al., 2002; Stewart et al., 2007). An implementation model of separate and disconnected teams, with detached special education, signals continued use of unequal and inequitable stratified systems (O'Laughlin & Lindle, 2014). Finally, the school personnel employ separate and multiple systems to address behavioral versus academic concerns for school-wide, small group and individual students. These separate teams are concerning given literature necessitating a single integrated multi-tiered system of approach to academic and social, emotional, behavioral supports (Amatea & Clark, 2005; Atkins et al., 2010; Domitrovich, 2010; McIntosh et al., 2006a; Rutherford & Nelson, 1995; Stewart et al., 2007).



One prominent component of this study is how team members equate and demonstrate MTSS as a practice for databased decision making with advances in data literacy. Both schools' RTI and PBIS teams and Sun's PBIS team utilized multiple sources of data with significant emphasis on quantitative data in order to validate and triangulate decision making. However, Bright team members demonstrated differences from Sun teams over the frequency and opportunities for shared data analysis and decision making. Additionally, school leaders at Sun Elementary displayed PBIS and RTI related information and data-specific outcomes throughout the halls reinforcing a databased culture. Thus, Sun Elementary School provides one contrasting case to literature claiming insufficient and limited quantitative databased decision-making among school teams (Crone et al., 2016).

Both schools' RTI teams and Sun's PBIS team demonstrated evidence of what Mandinach and Grummer (2013) termed, pedagogical data literacy, which addresses the impetus of accountability through databased decisions grounded in ESEA policy (Mandinach & Gummer, 2013). One can frame this result within Cobb and Jackson's (2012) *what* and *how of* implementation, along with Lave (1991) and Wenger's (2010) discussion works regarding shared processing and iterative learning through team practice. That is, extended exposure and learning of the initiatives (*what*) through practice enables participants to question and understand the *how* of complex processes involved within these policy initiatives (Cobb & Jackson, 2012; Wenger, 2010).

A final similarity across school settings demonstrated commitment among school administrators, which is associated with positive capacity to implement MTSS (Kincaid

et al., 2007; Kratochwill et al., 2007; White et al., 2012). Both teams have administrators serving on each of the RTI and PBIS teams, with three of the four teams utilizing non-administrative personnel to lead team meetings.

Although truncated implementation pervade the sensemaking of both school sites, team members' variations in *how* of site implementation (Cobb & Jackson, 2012) demarcate a variation in site-based methods of support. These team variations also implicate *why* of policy implementation (Cobb & Jackson, 2012).

I discovered three main areas of divergence when examining MTSS sensemaking situated within varying school contexts: capacity building, distributed cognition, and emotional geographies. Sun's RTI and PBIS teams utilize communities of practice (Lave, 1991; Wenger, 2010a, 2010b) to support improvements in implementation (*how*) and to extend definition of MTSS (*what*). An application of Wenger's (2010) notions about communities of practice offers a hypothesis about MTSS teams' practices in their conversations to unpack and inquire about MTSS features and methods of delivery (*why*), and engage in frequent databased decision-making (Wenger, 2010). That hypothesis suggests that as MTSS teams engage each other, they potentially extend implementation to more students and across the full MTSS continua of Tiers. The MTSS sensemaking potentially meets the macro-policy intents of increasing all students' access to high quality and appropriate instruction for both academic and social-behavioral success (ESEA, P.L. 107-110; IDEA, P.L. 108-446; Yell, 2006).

In the area of capacity building (Newman, King & Young, 2000), these schools varied based on staffing resources and perceived MTSS needs for specialized expertise

(Newman et al., 2000). Sun's participants perceived improvement in accessing professionals with expertise in the areas of literacy, behavior management, data analysis and problem solving. Even with specialized support, Sun's participants emphasized inclusion of all classroom teachers in decision making. Teacher involvement in decision making positively influences educators' belief in the school faculty's ability, or collective efficacy, to educate students (Goddard, Hoy, & Hoy, 2004).

Bright Elementary School's selection as a comparative case in this study fit the criterion of non-Title 1 school, a proxy for the affluence of the students and families in the Bright school community. Title 1 is a section of the federal Elementary and Secondary Education Act - ESEA (P.L. 114-95), which targets educational services, including personnel and other resources, to students in poverty. Title 1, as with most federal policy, has regulations, about states' and districts' use of funds. Under the 2001 No Child Left Behind (NCLB) ESEA version (P.L. 110-107), states defined schools' eligibility for Title 1 funding. The state and district-based boundaries of this comparative case study influenced Bright Elementary School's access to Title 1 funding. For this study, this set of case specifications contextualize the participants' reports at Bright. In their view, Bright Elementary's affluence limits the district in personnel allocations because Bright does not have access to Title 1 funding for academic specialists. Not only did the state's definitions of Title 1 allocations affect the district's staffing policies, the state's adoption of a literacy statute (Read to Succeed Act, 2014) affected Bright participants' reports of inconsistent staffing. These perceptions about staffing consistency

align with findings by Kincaid and colleagues (2007) who identified increased staff turnover as a barrier to sustainability of school wide behavioral supports.

MTSS literature is replete with its inherent complexities and issues surrounding systems change (Daly et al., 2007; Kincaid et al., 2007; Lane & Menzies, 2003; Reinke et al., 2011; Stewart et al., 2007, Williams et al., 2007). Such complexities require capacity building for full implementation (Daly et al., 2007; Kincaid et al., 2007; Lane & Menzies, 2003; Reinke et al., 2011; Stewart et al., 2007, Williams et al., 2007). In turn, the general policy implementation literature highlights the importance of capacity building (Bush, 2011; Cohen et al., 2007; Honig, 2006; Saito & Atencio, 2013). Cohen and colleagues (2007) and Honig (2006) stipulate capacity as a subset of systems change. Other policy implementation theorists underscore how team-based implementation supports systems change and fosters collaboration among micro-political agents (Bush, 2011; Saito & Atencio, 2013).

In this study, Sun Elementary School's participants provided ideas about their capacity and commented on distributed leadership practices. Distributed leadership enables capacity toward efforts supporting positive student outcomes (Harris et al., 2007; Klar, 2013; Leithwood et al., 2009). Sun's dual MTSS teams defined constructs by sharing decision making and implementation schoolwide, rather than limiting their discussions and practices to team members only. Sun's 19-year principal supported both MT teams, yet, critical decisions about the school, grade levels, and for individual students spread in a collective leadership fashion. The case of Sun's RTI and PBIS school

teams may be an exemplar of what Klar (2013) recommended regarding strategic planning of distributed leadership.

Sun's school teams demonstrated a final element of capacity through frequent engagement in collaboration and problem solving. Sun's teams' concerted inclusion of all teachers and on improving communication—discussing the *what*, *how* and *why* (Cobb & Jackson, 2012) of MTSS—created avenues for distributed cognition and implementation of practices. That is, extended exposure and learning of the initiatives through frequent meetings enabled participants to collectively question and understand the *why*, that is, complex processes involved within these policy initiatives (Cobb & Jackson, 2012; Putnam & Borko, 2000). Such distributed cognition within communities of practice in the case of Sun fostered risk-taking and application of professional and scholarly knowledge as well as expansion of implementation practices, perhaps dismantling pressures of policy-based accountability, as found by Olsen & Sexton (2009).

In contrast, at Bright, team members conveyed a lower frequency of meetings with limited membership. Such descriptions portrayed Bright as offering comparatively lessened levels of definition and implementation regarding the dual MTSS initiatives in their school. Bright team members confined their definition of RTI to the Tier 2 structured intervention program, only for reading, and including only specialized personnel to perform or monitor interventions. Although Bright's participants defined PBIS as schoolwide, team members also confided a focus on improving teacher morale instead of a typical PBIS recommended focus on student outcomes. Also, regarding both MTSS, participants expressed a preference to avoid challenging classroom teachers'

practices, even in the interest of improved student outcomes. One possible explanation for the contrast in Bright teams' reports may be that of performativity (Ball, 1997, 2003). Ball (2003) discussed the paradox of expecting site-based excellence and creativity while prescribing rigid adherence to specific practices. Other policy literature notes the untoward consequences of reductive attempts to adhere to oversimplified rules and activities, generating either a concrete interpretation (Honig, 2006, 2008, 2012; Honig & Ikemoto, 2008; Malen, 2006; Spillane, 2000) or a disingenuous effort by educators. Disingenuous efforts may stem from educators' value-conflicts, beliefs about their roles, and emotional reactions to specified changes in workloads (Ball, 1997, 2003; Hargreaves, 2001a).

During the structured interviews, Bright team members hesitated in their discussion of MTSS, yet also disclosed their concerns about conflicts in the decision making or in addressing colleagues practices. Interestingly, Sun team members stressed the importance of addressing colleagues' practices to promote improved student outcomes, and reported professional risk-taking in confronting colleagues. As both Sun and Bright are situated within the same district, it may be argued that these contradictory paths are curious. Site-based differences may have influenced such variations. For example, differences in principal tenure, with Sun's principal tenure at 19 years and Bright's at roughly 20% of that length, may have caused differences in interpretation of MTSS definition and methods of implementation. As Kincaid and colleagues identified in 2007, staff turnover is a barrier to implementation. Furthermore, Bright's principal's

beliefs indicated an implementation capacity contingent upon specific personnel, due in part to concerns around using teachers as interventionists in RTI's Tier 2 phase.

Moreover, differences in consistency and expertise of interventionists, and frequency and depth of collaboration may have yielded altered definitions and practices. For instance, if team members have limited experience, they may rely on a notion of fidelity as defined by strict adherence to concrete constructs, thus undermining the complexities of implementation (Honig, 2006) instead of an adaptive fidelity keyed to contextual variability (Bryk et al., 2015).

A final interesting finding related to leadership as an emotional endeavor, with “vicarious emotional understanding” or empathy with colleagues (Hargreaves, 2001b, p. 1059). The role of leadership on these teams requires navigation and sensitivity to teachers in their capacity as decision-makers for their students and in terms of expectations related to time. Sun MTSS dual teams’ members discussed how being involved directly with the students and on grade level teachers’ teams help mediate such conflicts. Bright’s MTSS team members confided concerns about conflict in decision-making, and preferences to avoid initiating any disagreement with teachers or each other. Such attention to teacher input is critical, when literature has demonstrated the need for teacher autonomy in the processes of implementing and sustaining policy-based initiatives (Ball, 2003; George et al., 2007; Olsen & Sexton, 2009). Hargreaves (2001b) provides insight regarding teachers’ emotional responses and a consequential avoidance of certain conversations. Hargreaves (2001a, 2001b) explained how teachers avoid

challenging their peers and viewed conflict as a negative emotion rather than an opportunity for learning.

### **Implications for Practice**

Policy implementation literature reveals the micro-level complexities inherent in implementing macro-level initiatives and underscores the importance of examining sensemaking at the level of practice (Coburn, 2001; Honig, 2008, 2012; Spillane, 2000).

A summary of such literature offers at least three directions to leaders as follows:

- (a) allocate time and methods for frequent opportunities of shared learning (Bush, 2011; Putnam & Borko, 2014; Saito & Atencio, 2013; Wenger, 2010);
- (b) offer access to resources and expertise for building capacity (Cohen, Moffitt, & Goldin, 2007; Honig, 2006; Keller-Margulis, 2012); and
- (c) supply methods for navigating emotional geographies of leadership (Beatty, 2000; Hargreaves, 2001a; 2001b).

The specific features of MTSS offer potential implementation lessons since practitioners reside nested within macro, meso, and micro-levels. At the macro and meso-levels, change agents must incorporate increased capacity by connecting research to practice and monitor the ways in which the continua of services can be disrupted by allocations of staff or implementation models of multiple, and conflicting, teams for decision making (Kincaid et al., 2007; Sansosti & Noltemeyer, 2008). If the intended continua involve access to classrooms with flexible levels of interventions, then the role of specialized staff such as coaches and interventionists, should be constructed around supporting students in classrooms rather than supplanting student access to classrooms



(Barnes & Harlacher, 2008; Tilly, 2008). If the purposes of MTSS are schoolwide, then all subject areas and entire grade spans must be addressed.

This study reported two schools' implementation facets according to capacity, situated cognition, and emotional geographies. First, in one of the cases, the study suggested that utilization of diverse stakeholders and a variety of experts with distributed leadership in a consistent pursuit of building capacity for implementing innovative efforts (Kincaid et al, 2007; White et al., 2012). In both of the cases in this study, participants' perceptions provided insights about communities of practice engaging in collaborative efforts to support distributed and iterative learning (Lave, 1991; Putnam & Borko, 2000; Wenger, 2010). The two cases showed differences in how participants dealt with interrupting proclivities toward the *implementable* - concrete and familiar concepts, rather than *successful* implementation (Honig, 2006). Both cases implicated policy messages from the state, district, and school around intentional professional learning opportunities to explicate the *what, how* and *why* of MTSS initiatives. Due to state and district practices, the two schools' participants reported MTSS as parallel, rather than unitary, and also limited the services by truncating tiers, limiting involvement among schoolwide classrooms, subject areas and grades. Finally, the study's cases revealed differentiation in the affective weight of decision-making balanced with other collegial relationships and demonstrated how incorporation of teachers in all facets and shared investment affects trust and potential for conflict.

## **Recommendations for Further Research**

The purpose of this study was to examine the sensemaking of teams charged with leadership for RTI and PBIS implementation. I explored such sensemaking with two elementary school cases bounded by a single school district and state. Although this study did garner revelatory findings, the study also incurred several limitations. The first limitation pertains to case selection within a single district and state without in-depth exploration of state and district influences upon implementation. The second limitation related to my previous role providing district professional learning for RTI and possible impact upon interview responses. Interviewees initially responded with definition-type responses with somewhat robotic tones, as if their knowledge was being tested, perhaps due to my role. However, with further conversation and probing, they quickly transitioned into a more relaxed tone, discussing experiences, rather than concrete knowledge. Within my field note reflections, I noted moments of interviewee authenticity pertaining to positive, moving experiences with students, or denoting hardships related to certain aspects of initiative delivery. Therefore, I feel that my concentration on beliefs and experiences dissuaded tendencies toward so-called *right* answers and promoted genuine responses, overall addressing this limitation. The final limitation concerns the three-month scope of investigation, barring observation of multiple team meetings or discovery of findings associated with time-relevant characteristics.

Further research should investigate whether district and school practitioners' with perceived implementation fidelity and efficacy, along the full continua, correlate to goals of access, quality, and equity (Balu et al., 2015; Goddard et al., 2004; Keller-Margulis,

2012; White et al., 2012). A second recommendation for research surrounds quantifying and qualifying MTSS leadership team meeting and informal problem solving in terms of: frequency, focus, and inclusion of diverse stakeholders as a means of distributing cognition and impacting decisions (Crone et al., 2016; Horn, 2005; Putnam & Borko, 2000; Wenger, 2010). A third area of research pertains to ways of mitigating the emotional conflicts of non-administrative personnel involved in and pertaining to leadership roles (Beatty, 2000; Hargreaves, 2001a; 2001b). Additional research may also extend to schools in various districts and states and over a longer or different time of the school year, increasing opportunities to observe sensemaking specific to times of the year and to other settings.

### **Conclusions**

Through this study, I extended the literature base regarding (a) implementation of both RTI and PBIS and (b) understanding of communities of practice, situated cognition, and sensemaking when implementing policy-based initiatives. I used a cross-case examination to identify variations in: (a) the *what* of MTSS: participant definition and school implementation of tiers, and (b) the *how* and *why* of MTSS supports: social resources, including expertise and diversity among diverse stakeholders; frequency and depth of team and participant conversations; and emotional conflicts involved in leadership. The first school's context (i.e. consistent principal and staff presence), and methods to build capacity and encourage collaboration, both suggest ways to promote implementation to more grades, subjects, and students. Finally, I acknowledged the

continued need to inculcate implementation definitions around a full continuum of integrated supports in order to afford truly equitable services.

## APPENDICES

## Appendix A

### Email Documenting Permission to Use Graphic

**Brian Meyer** <brian.meyer@istac.net>

📧 12/10/14 ☆



to Karen, me ▾

Hi Ellen,

The information posted to the former Illinois PBIS Network can be used by you as needed. You can just reference the webpage where you found the graphic.

Thanks

Brian

## Appendix B

### Email Granting Permission for Graphic

 **Hayes, Lindsey** <lhayes@air.org> 12/12/14 ☆    
to me, Response ▾

Dear Ms. Hampshire:

This is in response to your inquiry through our website about using the RTI Center's MTSS graphic in your work. You are more than welcome to use and cite the graphic. Please use both the full citation for the [essential components brief](#) (listed below) and please cite the Center parenthetically underneath the graphic.

National Center on Response to Intervention (March 2010). *Essential Components of RTI – A Closer Look at Response to Intervention*. Washington, DC: U.S. Department of Education, Office of Special Education Programs, National Center on Response to Intervention.

Thank you for your inquiry and have a great day!

***Lindsey Hayes, M.Ed.***  
*Research Associate*  
American Institutes for Research  
1050 Thomas Jefferson Street, NW  
Washington, DC 20007  
[202.403.5999](tel:202.403.5999)  
[lhayes@air.org](mailto:lhayes@air.org)

## Appendix C

### Internal Review Board Approval

Validation of IRB2015-047: Collective Sensemaking about the Implementation of Multi-Tiered Systems of Support

The Office of Research Compliance (ORC) reviewed the protocol identified above using exempt review procedures and a determination was made on February 23, 2015 that the proposed activities involving human participants qualify as Exempt under category B1 based on federal regulations 45 CFR 46. The approved consent document is attached. Your protocol will expire on October 31, 2016.

The IRB will need an e-mail or signed approval letter from the district before you may begin data collection. Please refer to our guidance on research site letters for more information, [http://media.clemson.edu/research/compliance/irb/research\\_site\\_letters.pdf](http://media.clemson.edu/research/compliance/irb/research_site_letters.pdf).

The expiration date indicated above was based on the completion date you entered on the IRB application. If an extension is necessary, the PI should submit an Exempt Protocol Extension Request form, <http://www.clemson.edu/research/compliance/irb/forms.html>, at least three weeks before the expiration date. Please refer to our website for more information on the extension procedures, <http://www.clemson.edu/research/compliance/irb/guidance/reviewprocess.html>.

No change in this approved research protocol can be initiated without the IRB's approval. This includes any proposed revisions or amendments to the protocol or consent form. Any unanticipated problems involving risk to subjects, any complications, and/or any adverse events must be reported to the Office of Research Compliance (ORC) immediately.

All team members are required to review the Responsibilities of Principal Investigators and the Responsibilities of Research Team Members available at <http://www.clemson.edu/research/compliance/irb/regulations.html>. The Clemson University IRB is committed to facilitating ethical research and protecting the rights of human subjects. Please contact us if you have any questions and use the IRB number and title in all communications regarding this study.

Good luck with your study.

All the best,

IRB Coordinator

Clemson University

Office of Research Compliance Institutional Review Board (IRB)



## APPENDIX D

### District Approval of Study

Ms. Ellen Hampshire  
102 Tillman Hall  
Clemson, SC 29634-0702

**SUBJECT: Collective Sense-making about the Implementation of Multi-Tiered Systems of Support**

Dear Ms. Hampshire:

██████████ Research Committee reviewed your research proposal. **District approval for this study has been granted.** The approval period for this study is one year from the date of this missive. You are reminded that the approved research design and procedures are to be followed. NO change in protocol is allowed without prior written approval from the District.

The Director of Accountability and Quality Assurance may withdraw District approval at any time and for any reason. If approval is terminated, all research and accompanying activities involving the District and/or the external agency will cease in ██████████. Lastly, by conducting research in ██████████, you agree to follow all federal regulations for privacy and protection; District research guidelines; and District professional conduct policies. All information, including student, school, and District names, will remain confidential and anonymous when publicly reporting. Again, violation of the statement of agreement will be considered a breach of contract.

A final copy of the report is requested by ██████████.

Sincerely,

<Sent via e-mail>

██████████

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## APPENDIX E

### Initial Principal Contact

Hello [principal of selected school],

This is Ellen Hampshire of Clemson University. I am currently involved in a study investigating how schools implement and practice the PBIS and RTI initiatives. This study is approved by Clemson Institution Review Board (IRB #) and (name of district) Accountability and Quality Assurance.

Your school was recommended as a potential site for participation in the study, based on your performance and fidelity of implementation with the PBIS and RTI initiatives. Your participation in this study is completely voluntary.

The first step of the study would be a brief meeting with you to discuss possible participants for the study. The study focuses on RTI and PBIS teams and therefore would involve participation from RTI and PBIS team members.

I plan on incorporating at least one representative from: administration, general education (one from each team), special education, mental health (one member from each team) and an RTI and PBIS interventionist (if a designated role). Once possible participants are identified, I will contact them by email, providing the informed consent forms. Once permission is granted, I would ask for the team to meet with me to identify locations and times for observations of PBIS and RTI meetings and ask for copies of RTI and PBIS planning and decision-making documents. I will specify that all documents must not include non-participant names or have names redacted. If additional members of your school community are involved in the identified meetings, I will obtain their consent as well prior to observation.

Based on team recommendation, I would conduct observations over a three week period, based on the scheduled meeting times. I will also conduct individual interviews with participants lasting approximately 45 minutes per member. I will conduct the interviews over a period of three weeks. The interviews will be conducted during a time of day convenient to your staff. Finally, I will review available pertinent documents relevant to the RTI and PBIS process. All items of the process will be discussed with you and will require your approval prior to administration.

I am emailing you an information letter and description of the study as approved by the Clemson Institution Review Board (IRB2015-047). I will call you next week to follow-up regarding your participation.

Thank you for your time,  
Ellen Hampshire

## Appendix F

### Email Contact to Recruit Participants

My name is Ellen Hampshire and I am a PhD Doctoral Candidate investigating the RTI and PBIS initiatives. Your name was given to me as a potential participant in this research study due to your participation on either the RTI or PBIS team. The purpose of this research is to explore school team members' understanding of the two Multi-Tiered Systems of Support: RTI and PBIS. An essential element of this study is to demonstrate varying perspectives of these initiatives based on varying school roles. Therefore, your insight within your particular role in the school will be highly informative.

Your involvement in the study will consist of a brief group meeting to discuss a schedule for observations and interviews, an interview lasting approximately 45 minutes, and possible observations of RTI or PBIS team meetings. Your name and your school's name will not be identifiable within the study.

Please review the attached description of the study and details of your potential involvement. Once you've reviewed this information, please feel free to contact me with any questions or to indicate your interest in the study via email or phone.

I truly appreciate your time in considering this,

Ellen Hampshire  
Clemson University  
PhD Doctoral Candidate

## APPENDIX G

### Participant Consent Letter

Information about Being in a Research Study  
Clemson University

#### **Collective Sensemaking about the Implementation of Multi-Tiered Systems of Support: A Case Study of Two Selected Elementary School Teams Description of the Study and Your Part in It**

Mrs. Ellen Hampshire, PhD Doctoral Candidate, supervised by Dr. Jane Clark Lindle, E. T. Moore Professor of Educational Leadership, is inviting you to take part in a research study. The purpose of this research is to explore schools' understanding, implementation, and practice of the two Multi-Tiered Systems of Support: RTI and PBIS.

Specifically, Ellen Hampshire will either be observing meetings you may be involved in or interviewing you regarding your participation with RTI or PBIS. Interviews will pertain to the RTI and PBIS initiatives and your role as a team member. The interviews will be conducted at a time and place convenient to your schedule and will not interrupt instructional time. With your permission, all interviews will be audio recorded. All recordings will be stored in a locked container and coded with a pseudonym. Please note that additional follow-up questions or clarification may be needed and will be completed based on your preferred format (face-to-face, email or phone).

#### **Risks and Discomforts**

We do not know of any risks or discomforts to you in this research study, for you and your school and district will not be identifiable by name.

#### **Possible Benefits**

We do not know of any way you would benefit directly from taking part in this study. You will be provided with an analysis of an important program to your district and findings may be of assistance to your organization. This research will also extend previous literature regarding policy implementation and in the area of multi-tiered systems of support.

#### **Protection of Privacy and Confidentiality**

It is our responsibility to do everything possible to protect your privacy and confidentiality. We will not discuss your information or participation in the study with anyone outside of the research team. Your name will not be used in any dissemination of the work, including reports, articles, or presentations. You, your school and district will be assigned a pseudonym. Any identifiable information specific to you or your school

will also be excluded. All data associated with your information will be in a locked container or password protected. Once the study is complete and results are disseminated, all recordings will be erased from all devices, including the recording device and computer.

### **Voluntary Participation**

Your participation in the study is completely voluntary. You may choose to not take part and it is also your choice to stop participating at any time. There will be no negative consequences in any way if you elect to stop participating or decide not to take part in any manner.

### **Contact Information**

If you have any questions or concerns about this study now or in the future, please contact Dr. Jane Clark Lindle at Clemson University at [jlindle@clemson.edu](mailto:jlindle@clemson.edu) or 864-508-0629.

Please direct any question or concerns about your rights in the research study to the Clemson University Office of Research Compliance (ORC) at 864-656-6460 or [irb@clemson.edu](mailto:irb@clemson.edu).

A copy of this form will be provided to you.

## Appendix H

### Observation Protocol Literature Base

Observation Protocol Literature Base	
Record primary focus of discussions.	“We therefore concluded the attainment of the <i>what</i> of...policy might contribute to the intended outcome, improvement in the quality of classroom instruction” (Cobb & Jackson, 2012, p. 505).
Record how decisions are discussed.	“Individuals typically use evidence that is consistent with prior knowledge to reinforce prior understandings and actions. However, when new evidence conflicts with prior knowledge, then the individual might reject the new evidence, reinterpret the new evidence so it better fits with her prior knowledge, or use the incoming evidence to construct new, basic conceptual understandings” (Honig, 2008, p. 648).
Record who is involved (role) in discussions and involvement.	“Specific condition emerged as particularly prominent mediators of ILDs’ work...conditions included: the ILDs’ conceptions of their role...how they frame or understand the fundamental nature of their role” (Honig, 2012 p. 760).
Record if any changes in ideas resulted from discussion.	“By coordinating their understanding of their reform slogans, questioning the assumptions underlying their categories for students, and rendering classroom practice in their conversations, the...teachers made many aspects of teaching and learning available for collective reflection and inquiry” (Horn, 2005, p. 231).
Record any methods for mitigating identified barriers or disagreement around decisions.	“If teachers work in environments where the policy environment offers few occasions and incentives to learn about reform ideas, their opportunities to learn will be substantially reduced” (Spillane, 2000, p. 165).
Describe any tools or resources used to support practices. Include any district or other guidance documents used.	“In the context of large-scale instructional improvement efforts, designed tools can also play another important role by supporting members of a particular role group in developing compatible practices” (Cobb & Jackson, 2012, p. 495).
Note any observations regarding affect/tone during discussions.	Affective coding focuses on elements of emotions, beliefs, and attitudes of participants (Saldaña, 2012).

## Appendix I

### Interview Protocol Literature Base

<b>Proposed Question</b>	<b>Literature Base Foundation/Quotation</b>
Lets' first begin with some background. Please tell me what your profession is, how many years you've been in this profession and what compelled you to pursue this line of work.	“The policy stimulus is not all that matters: implementers’ beliefs, knowledge, and experiences, as well as their situation, also influence the ideas they come to understand from policy” (Spillane, 1998b as cited in Spillane, 2000, p. 146). “local beliefs, agendas, and situations are important influences on the ideas about reforming practice” (Spillane, 2000, p. 146).
Let’s discuss some experiences you’ve had in relation to RTI/PBIS. Tell me about a few occasions that you feel represent what RTI/PBIS means to you.	“The policy stimulus is not all that matters: implementers’ beliefs, knowledge, and experiences, as well as their situation, also influence the ideas they come to understand from policy” (Spillane, 1998b as cited in Spillane, 2000, p. 146).
Discuss your view of the RTI/PBIS initiative from when you first learned of the initiative to how you view it now.	“Individuals typically use evidence that is consistent with prior knowledge to reinforce prior understandings and actions. However, when new evidence conflicts with prior knowledge, then the individual might reject the new evidence, reinterpret the new evidence so it better fits with her prior knowledge, or use the incoming evidence to construct new, basic conceptual understandings” (Honig, 2008, p. 648).
What prompted you to serve on this team?	The goal when analyzing the implementation of a policy...is to document and account for the situated reorganization of practice at multiple levels of an educational system” (Cobb & Jackson, 2012, p. 516).
Please describe your understanding of your role on this team:	“Specific condition emerged as particularly prominent mediators of ILDs’ work...conditions included: the ILDs’ conceptions of their role...how they frame or understand the fundamental nature of their role” (Honig, 2012 p. 760).

<p>Let's discuss some experiences you've had while working on the RTI/PBIS team. Tell me about a few occasions that you feel truly represent how the team makes decisions.</p>	<p>"The why of policy concerns an often implicit rationale for why the supports might enable the members of a target group to attain the learning goals" (Cobb &amp; Jackson, 2012, p. 488).</p>
<p>Does your participation on this team influence your interactions or discussions with colleagues regarding RTI/PBIS?</p>	<p>"Improvement efforts often include the creation of new positions whose responsibilities include supporting others' learning... In some cases, the holder of the new position is expected to support learning directly by providing expert guidance" (Cobb &amp; Jackson, 2012, p. 490).</p>
<p>Now let's talk about _____ (if discussed RTI, PBIS). Describe some experiences of this initiative within your daily practice:</p>	<p>"No matter how much external effort is made to shape, dictate, or mandate practice, in the end it reflects the meanings arrived at by those engaged in it" (Wenger, 2010, p. 2)</p>
<p>Explain if and how either initiative have ever conflicted or aligned with your prior knowledge, practice, or role as an educator</p>	<p>"The policy stimulus is not all that matters: implementers' beliefs, knowledge, and experiences, as well as their situation, also influence the ideas they come to understand from policy" (Spillane, 1998b as cited in Spillane, 2000, p. 146). "local beliefs, agendas, and situations are important influences on the ideas about reforming practice" (Spillane, 2000, p. 146).</p>
<p>Do the practices of each initiative overlap or conflict in any ways and how so?</p>	<p>"Our analysis also suggests that research moving forward should explore the conditions that help and hinder ILD's work and in particular how ILD's manage the role conflicts that certain conditions seem to create" (Honig, 2012, p. 766)</p>



## APPENDIX J

### Post Interview Field Notes

**Researcher:** Ellen Hampshire

**Date:**

**Participant Name:**

**Location:**

1. What are the key take-aways from this interview?
2. Where there any questions that caused emotional [affective] responses from participants? a. If so, what questions or responses were they attached to?
3. Where there any noticeable changes to participants' body language or voice? a. If so, what questions or responses were they attached to?
4. Were there moments during the interviews that my biases and assumptions may have interfered with my conversation with the participant? a. If so, what were they?  
b. What can I do about it?
5. Are there things that I need to keep in mind for future interviews?

## APPENDIX K

### Sun Coding Cycles

First Wave of Coding: Sensemaking and Situated Cognition Provisional Codes	Second Wave of Coding: InVivo Nodes	Third Wave of Code: Affective Coding and Themes
Experiences	Infrastructure for Fluid Decision-Making	Capacity Situated within Distributed Leadership
Beliefs	Consistency in Personnel or Intervention	
Roles and Beliefs	Individual and Collective Expertise	
Beliefs	Perceived fidelity of intervention implementation	
Experiences	Knowledge: data, students, MTSS process, reading, curriculum	
Beliefs and Experiences	Conduit for Communication within and across teams	Supporting Distributed Cognition Emotional Geographies
Role	Leadership role: within team and within school	
Culture	Distributed leadership	
Culture Culture	Teacher involvement Pedagogical Data Literacy and Databased decision making	Sustaining and Extended RTI and PBIS
Role	Efficacy – collective, process, and self	
Role and Beliefs	Emotional infection: optimism	
Role and Experiences	Understanding of peers and empathy	

APPENDIX L  
Sources of Evidence for Sun Findings

Sources of Evidence	Resources & Expertise	Distributed Leadership	Conduit for Communication	Databased Culture	Perspective Taking	Distributed Cognition	Improved Efficacy	Fidelity
Interview # 1	✓	✓	✓			✓		
Interview # 2			✓	✓	✓	✓	✓	✓
Interview # 3	✓		✓		✓	✓	✓	✓
Interview # 4	✓	✓				✓	✓	
Interview # 5	✓	✓	✓		✓	✓	✓	✓
Interview # 6			✓	✓	✓	✓	✓	
SOP1 7.14	✓		✓	✓		✓	✓	
SOP2 8.26	✓	✓	✓					
SOP3 9.8		✓	✓	✓		✓	✓	
SOP4 9.14		✓	✓	✓	✓	✓	✓	
SOP5 11.3								
SOP6 11.24								
Artifacts		✓	✓	✓		✓		
Field Note 2		✓	✓	✓		✓	✓	

## APPENDIX M

### Bright Elementary Nodes and Themes within Coding Cycles

First Wave of Coding: Sensemaking and Situated Cognition Provisional Codes	Second Wave of Coding: InVivo Nodes	Third Wave of Code: Affective Coding and Themes
Experiences	Knowledge of data and students	Databased Knowledge Enhances Decision- Making
Beliefs	Team: Infrastructure for decision-making	
Roles and Beliefs	Collaboration and collegiality	Supportive and Positive Climate
Beliefs Experiences	Supportive and positive culture Distributed Leadership	Affective Influence on Team Discussion
Beliefs and Experiences	Self efficacy – enhanced decision making	
Role	Emphasis on teacher morale	
Culture	Consistency builds process efficacy	

## APPENDIX N

### Bright Sensemaking Themes

Sources of Evidence	Knowledge: Data Students	Staff Turnover	Positive & Supportive Culture	Belief in MTSS	Uncertainty
Interview#7	✓	✓	✓		✓
Interview#8	✓			✓	✓
Interview#9	✓	✓			✓
Interview#10	✓	✓	✓	✓	✓
Interview#11	✓	✓	✓	✓	
Interview#12	✓			✓	✓
Interview#13	✓		✓	✓	✓
BOP1		✓			
BOP2			✓	✓	
BOP3	✓	✓	✓		✓
BOP4			✓	✓	
Artifacts	✓		✓		
Field Note 3	✓	✓	✓	✓	✓

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