ENGLISH LANGUAGE LEARNERS IN MULTI-TIER SYSTEM OF SUPPORTS (MTSS) READING IMPLEMENTATION: AN EXPLORATORY STUDY OF INCLUSION AND TEACHER PERCEPTIONS

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ABSTRACT

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English language learners are a rapidly growing population who face many challenges within the education system. Simultaneously, Multi-Tiered System of Supports (MTSS) has gained popularity in schools across the country (Spectrum K12 School Solutions, 2011). However, there is scarce literature regarding the use of MTSS practices with ELLs, particularly in regard to how ELLs are included and teacher perceptions of this inclusion. The current study used an exploratory, mixed methods approach to better understand the inclusion of ELLs in MTSS practices and teacher perceptions about this inclusion. Quantitative methods were used to better understand the degree to which ELLs are being included in MTSS practices across classrooms, and qualitative methods were used to examine teachers' perceptions about ELL inclusion. Cultural historical activity theory (CHAT) was used to frame the results by identifying the various elements of the activity system and inner contradictions. Results indicate a general trend toward inclusion of ELLs and a variety of educator perceptions regarding the inclusion. Notable topics that persisted across quantitative and qualitative data sets include a desire for more professional development, variance in teacher inclusion behavior based on the number of ELLs in the classroom, and involvement of EL teachers in the MTSS process.

Keywords: English language learners, Multi-tier system of supports, Inclusion, Teacher perceptions

This dissertation is dedicated to my loving husband and selfless parents.
Thank you for your never-ending time and support, and for always believing I could get here.
And for my curious Cato, may this wonderful world always amaze and intrigue you.

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KEY TO ABBREVIATIONS

CBA	Curriculum-Based Assessment
CBM	Curriculum-Based Measurement
CBM-R	Curriculum-Based Measurement in Reading
CHAT	Cultural Historical Activity Theory
CLD	Culturally and Linguistically Diverse
DIBELS	Dynamic Indicators of Basic Early Literacy Skills
ELL	English Language Learner
ESSA	Every Student Succeeds Act
IDEIA	Individuals with Disabilities Education Improvement Act
IDEL	Indicadores Dinámicos del Éxito en la Lectura
IES	Institute of Education Sciences
IQ	Intelligence Quotient
IST	Instructional Support Team
MiBLSi	Michigan's Integrated Behavior and Learning Support Initiative
MTSS	Multi-Tiered Systems of Support
NASEM	National Academies of Sciences, Engineering, and Medicine
NCES	National Center for Education Statistics
NCLB	No Child Left Behind
NCELA	National Clearinghouse for English Language Acquisition
NRP	National Reading Panel
NWEA	Northwest Evaluation Association
PBR	Practice-Based Research

PNRT	Published, Norm-Referenced Test
RTI	Response to Intervention
R-TFI	Elementary Reading Tiered Fidelity Inventory
SAIPE	Small Area Income and Poverty Estimates Program
STAR	Standardized Test for the Assessment of Reading
TESOL	Teachers of English to Speakers of Other Languages
WLPB-R	Woodcock Language Proficiency Battery-Revised
WIDA	World-class Instructional Design and Assessment

CHAPTER 1: INTRODUCTION

Purpose

The purpose of this exploratory, mixed methods study was to examine the inclusion of English language learners (ELLs) in a multi-tiered system of support (MTSS) model. This research descriptively examined whether and how ELLs were included in critical aspects of MTSS across local schools, as well as qualitatively examined teacher perceptions about inclusion of ELLs in MTSS practices. The current study, framed by Cultural-Historical Activity Theory (CHAT), focused on four of the five major components of MTSS: universal screenings, tiered interventions, progress monitoring, and data-based decision making. High quality core instruction is the fifth major component of MTSS, but was not a focus of the current study.

It is important to note that the purpose of this study was not to conclude that ELLs should or should not be included in critical aspects of MTSS as it is currently implemented in schools. MTSS models have grown in popularity across the United States (Spectrum K12 School Solutions, 2011), and some MTSS practices are associated with positive outcomes for ELLs (Healy, Vanderwood, & Edelston, 2005b). However, schools and teachers face many practical challenges that make it difficult to implement MTSS processes. Therefore, the purpose of the study was to examine current school practices and complement this information with educator perceptions in order to provide exploratory data about ELL inclusion in MTSS practices. This information provides a better understanding of current practices regarding ELL inclusion in MTSS practices, and indicates what future research may be important to address practitioner needs.

Background

English Language Learners

ELLs are defined as students living in an English-speaking environment (such as the United States) who have not yet achieved proficiency in English (Gersten & Baker, 2000). This includes students who have achieved conversational English proficiency, but not yet academic English proficiency (J. Klingner & Bianco, 2006). ELLs are one of the fastest growing populations within the Unites States (Rhodes, Ochoa, & Ortiz, 2005). Between 1999 and 2009, the ELL population increased by 51%, from 3.5 to 5.3 million ELLs. Between 2009 and 2015, the ELL population continued to increase in more than half of states. The ELL population in 2015 was just over 4.8 million, representing roughly 10% of the United States student population (U.S. Department of Education, 2017). Schools are adjusting for the unique student needs associated with the cultural and linguistic diversity of ELLs (Batt, 2008; McLaughlin, 1992; Vanderwood & Nam, 2007). ELLs score far below native language peers in areas such as reading and math (Fry, 2007). Within the ELL population, 70% of fourth grade students and 71% of eighth grade students score below the basic reading level. This is in stark contrast to the non-ELL population, where only 30% of fourth grade students and 23% of eighth grade students score below the basic reading level (National Clearinghouse for English Language Acquisition [NCELA], 2011). Although there are some concerns as to how these types of percentages are calculated, including the exclusion of reclassified ELLs in the analyses (Saunders & Marcelletti, 2013), the challenge of appropriately educating ELLs continues to be highlighted in the literature (Morgan et al., 2015).

MTSS Implementation

MTSS and similar models (such as Response to Intervention, or RTI) have gained popularity within schools. RTI is defined as the process in which a student's response to interventions (such as an increase or decrease in academic skills) determines the type and intensity of instruction and interventions provided (Gresham, 2007). RTI and MTSS are extremely similar in theory and practice, and the terms are sometimes used interchangeably (Reschly, 2014). Practically, RTI is often used when describing strictly academic services, such as reading, while MTSS can also include behavioral services. However, both terms refer to a system of multiple tiers in which students receive services based on their response to intervention, and these services change in accordance with students' increase or decrease in skill (Reschly, 2014). Both terms are used throughout the literature review to discuss the tiered framework that is associated with both models, although it should be noted that the community partner with whom this research was completed (Michigan's Integrated Behavior and Learning Support Initiative, or MiBLSi) uses the term MTSS.

MTSS models have their roots in public health models which support preventative services coupled with early intervention (Strein et al., 2003). Public health models emerged in the 1970s as a solution to the growing costs and risks to society resulting from the population's decreasing health. Unlike traditional psychology, which often focuses on individuals, public health models examine populations in order to improve overall health for everyone. This is very similar to MTSS models, which involve the examination of student instruction and achievement across entire grades, schools, and districts in order to improve educational outcomes for all students. In addition, the tiered approach to public health models (universal prevention, selective

prevention for at-risk individuals, and indicated intervention for individuals displaying symptoms of an illness) is similar to the multiple tiers of support associated with MTSS.

In general, MTSS models have five steps: 1) all students are provided with quality classroom instruction, 2) all students are screened for progress, 3) students who are not appropriately progressing receive different or more intensive instruction, 4) progress is monitored for these students, and 5) students who are still not appropriately progressing are referred for even greater intervention, which may include special education (D. Fuchs et al., 2003). MTSS models are conceptualized in terms of tiered supports, with each tier indicating an additional level of support (Batsche et al., 2006). Typically three or four tier models are most common (Batsche et al., 2006). Within a three-tiered model, Tier One consists of the general classroom instruction and assessment that all students receive. The amount of support then increases at each tier, with Tier Two representing targeted instruction and assessment, and Tier Three representing intensive instruction and assessment. An example of a three-tiered model for reading (from Batsche et al., 2006, p. 22) can be found in Figure 1. In theory, tiers of instruction build on one another, rather than replace one another. For example, a student receiving a Tier Two intervention continues to also receive Tier One instruction.

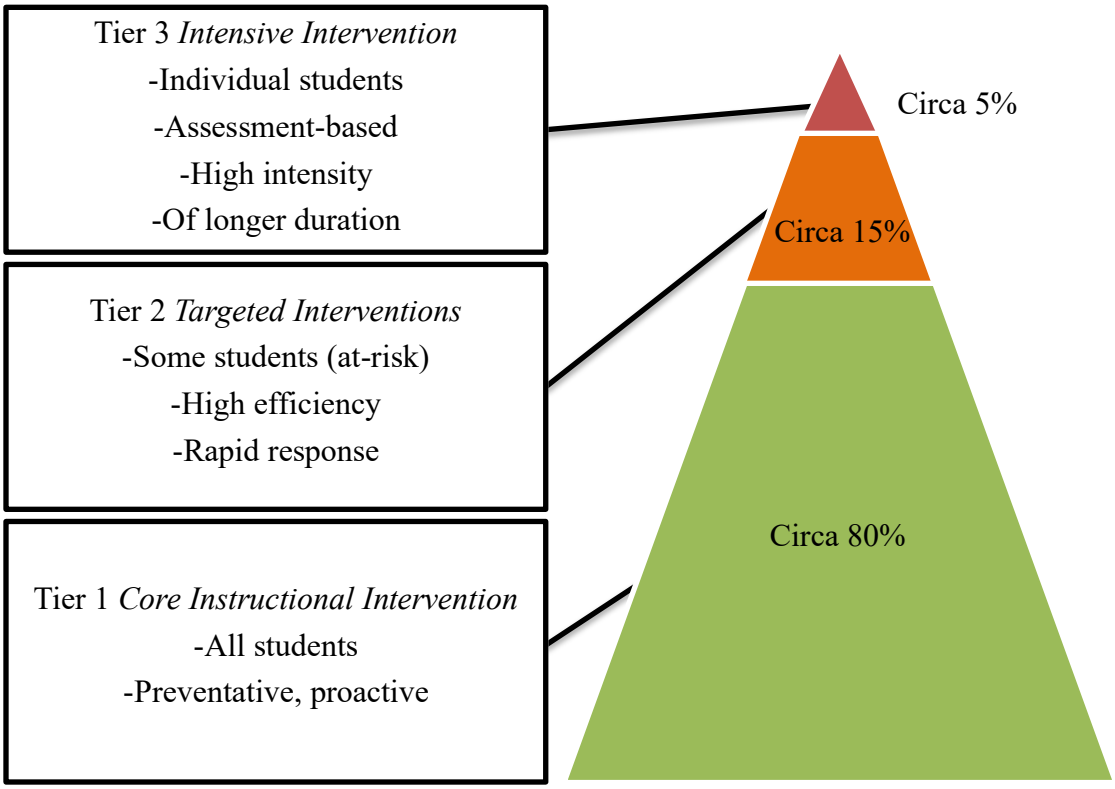
MTSS approaches are generally divided into two types of models: the standard protocol model and the problem solving model (D. Fuchs et al., 2003). In the standard protocol model, all students with similar difficulties are given the same intervention. For example, all students with reading comprehension difficulties may be given the same intervention, and all students with phonemic awareness difficulties may be given another intervention (D. Fuchs et al., 2003). In contrast, the problem-solving model is more individualized to student needs and is based on the following set of questions:

- Is there a problem, and if so, what is the problem?
- Why does the problem exist?
- What can be done to solve the problem?
- Did the solution/intervention work to solve the problem? (Tilly, 2008)

MTSS problem-solving models include defining the problem, developing the plan, implementing the plan, and evaluating the student response. Problem-solving approaches promote more targeted analysis of individual student skill deficits, with interventions selected to meet those individual student needs, which is argued to allow for a higher likelihood of the plan working (Fuchs & Fuchs, 2007; Upah, 2008). However, problem-solving approaches tend to take more time and resources than standard protocol approaches.

Figure 1

Three-Tier Model of School Supports (Modified from Batsche et al., 2006, p. 22)



Although the basic conceptual framework of MTSS models is largely based on a prevention model for a population of students (Kratochwill et al., 2007), the use of MTSS models in practice is also connected to special education services; with the link between an MTSS approach and special education being indicated as early as 1982 by the National Research Council (Heller et el., 1982; Kratochwill et al., 2007). MTSS approaches have sometimes been conceptualized in practice as alternatives to the discrepancy model, which was introduced in the 1970s as part of The Education for All Handicapped Children Act of 1975. The discrepancy model was a way for schools to determine which students qualified for special education services based on the notion that if a student had a higher intelligence quotient (IQ) than an academic achievement score, then there must be a learning disability preventing the student from utilizing their cognitive ability to reach their academic potential.

In 2004, the Individuals with Disabilities Education Improvement Act (IDEIA) challenged the sole use of the discrepancy model for special education evaluations based on concerns that the discrepancy model lacked accuracy and did not help inform instruction or allocate resources (Fuchs et al, 2003). IDEIA provided new regulations on how students could qualify for special education under the classification of a learning disability (D. Fuchs et al., 2003), including the MTSS approach.

Over the past two decades, an increasing number of schools have transitioned to or are in the process of transitioning to MTSS practices (Bender & Shores, 2007). In Michigan, roughly 23% of elementary and middle schools have participated or currently participate in MiBLSi (MiBLSi, 2014; MI School Data, 2014), an organization that supports the implementation of MTSS in schools. It is likely that the number of schools implementing MTSS models in Michigan is greater than 23%, as schools outside of the MiBLSi program are also likely utilizing

these approaches. All 50 states mention RTI in their educational regulations, and the Every Student Succeeds Act (ESSA) references MTSS directly five times (ESSA, 2015). The estimated proportion of schools implementing some level of MTSS across the United States is 94% (Spectrum K12 School Solutions, 2011).

Importance

ELLs are a growing population in the United States, and as such it is critical that educators and researchers learn how to properly and effectively provide ELLs with an appropriate education. Low academic achievement is associated with multiple negative factors for both students and the broader community, such as high school drop-out rates (Battin-Pearson et al., 2000; Suh et al., 2007), which can be costly for society (Kaufman et al., 2000). ELLs are particularly at-risk, with 25% of ELLs dropping out of school compared to only 15% of non-ELLs (Kim, 2011). Alternatively, increasing academic achievement for ELLs can have positive effects for both students and communities. Academic achievement, and literacy in particular, is correlated with higher attendance, self-esteem, and cognitive skills (Paul et al., 1997).

One way to promote positive outcomes for ELLs is to examine what research indicates about best practices for ELLs and to implement these practices in schools. Ideally, these practices would align with processes that schools are already doing. This approach is efficient as it does not require practitioners to learn a new model or framework, but rather builds from their existing knowledge. One increasingly common approach to supporting the needs of all students is an MTSS approach. This type of model can be effective in improving academic achievement for all students (L Fuchs et al., 2002; Vellutino et al., 2006), and recent research suggests that MTSS models may be effective in improving academic outcomes for ELLs as well (Healy et al., 2005b; Linan-Thompson et al., 2006). However, this research is limited, and concerns have been

raised regarding the cultural appropriateness of MTSS practices with ELLs. Therefore, more research examining ELL inclusion in MTSS practices is warranted.

Finally, examining ELL inclusion in MTSS practices from practitioner perspectives is an important addition to the literature. Teacher perceptions are rarely discussed in a meaningful way in school reform and system change literature (Darling-Hammond, 2009). These perceptions are important to obtain and understand, as they allow researchers insight into how and why systems function in certain ways. Furthermore, successful system change within schools begins at the teacher level (Greenfield et al., 2010), and teacher perceptions can influence buy-in, fidelity, and professional development (Castro-Villarreal et al., 2014). As general education teachers are often heavily involved in implementing MTSS practices (Stuart et al., 2011), teacher perceptions are critical for understanding how MTSS models practically function in schools (Rinaldi et al., 2011; Werts et al., 2012). Recent studies have begun to examine teacher perceptions of MTSS practices (Castro-Villarreal et al., 2014; Regan et al., 2015; Stuart et al., 2011), however these studies focus on MTSS with the general student population, rather than specifically with ELLs. In order to understand how ELLs are included in MTSS practices, what supports schools need to best support ELLs, and in order to inform future research on these topics, it is critical that educator perceptions regarding these matters are examined.

Rationale

No previous research studies have examined actual ELL inclusion rates in MTSS practices, and few to none have examined teacher perceptions of this inclusion. These topics are important to study as many potential challenges exist for schools trying to implement MTSS practices with ELLs, such as the heterogeneity of the ELL population, limited resources, and poor professional development (Hernandez Finch, 2012; J. Klingner & Edwards, 2006). These

challenges may create differences between how MTSS is theoretically intended to be implemented and how it is actually implemented in practice. Although recent (and limited) research may present the benefits of including ELLs in MTSS practices, there may be legitimate reasons that practitioners choose not to include ELLs in these practices, such as concerns regarding cultural appropriateness or lack of resources. Understanding practitioner perceptions regarding ELL inclusion in MTSS practices allows researchers to better understand potential challenges and tensions within the system, which can lead to important research aimed at resolving these challenges or more effective professional development.

Research Questions

The present study addressed five main research questions about how ELLs are included in MTSS reading practices and the teacher perceptions associated with ELL inclusion. First, the study quantitatively examined how schools are currently including ELLs in the MTSS process. This was descriptive in nature in order to better understand the school context for ELLs with regard to MTSS reading practices. ELL inclusion in universal screening, progress monitoring, tiered interventions, and data-based decision making is examined. Second, the study quantitatively examined how implementation fidelity of MTSS practices with the general student population related to ELL inclusion in these practices. High implementation fidelity is important for transferring programs to new populations (O'Donnell, 2008; Swanson et al., 2011) and recent research highlights concerns over the current fidelity of MTSS practices in schools (Balu et al., 2015; Shinn & Brown, 2016). Third, the study used a CHAT activity system framework to qualitatively examine teacher perceptions about implementing MTSS reading practices with ELLs. Teacher perceptions are a critical component to understanding system change and potential tensions within a system (Castro-Villarreal et al., 2014; Greenfield et al., 2010), and

provide unique and valuable insight into ELL inclusion practices. Fourth, the study gathered complementary interview data from stakeholders in order to provide a more meaningful context for the teacher interview data. Finally, the study identified and examined inner contradictions within the activity system. This analysis, provided a clearer understanding of tensions that arise when considering ELL inclusion in MTSS practices. Understanding these tensions allows researchers to isolate and examine barriers to change, and can offer information useful for community stakeholders and practitioners to design effective solutions. Combined, these quantitative and qualitative data provide a more complete description of ELL inclusion in MTSS practices in order to inform future research and understand practitioner needs. The current study examined the following research questions:

1. To what extent do early elementary teachers that are involved in MTSS implementation include ELLs in critical aspects of MTSS?
2. How does ELL inclusion in critical aspects of MTSS differ between schools with varying levels of MTSS implementation fidelity (as measured for the general student population)?
3. How do first grade teachers perceive their activity system in regard to ELL inclusion in MTSS practices?
4. How do other stakeholders (i.e. principal and state-level MTSS implementation staff) perceive their activity system in regard to ELL inclusion in MTSS practices?
5. What inner contradictions exist in regard to ELL inclusion in MTSS practices?

CHAPTER 2: LITERATURE REVIEW

In this chapter, relevant theoretical and empirical literature regarding MTSS practices with ELLs is reviewed in order to provide a foundation for the study. First, practice-based research (PBR) is introduced as the process for the current study. Second, challenges to providing quality instruction to ELLs is reviewed in order to highlight the unique challenges that teachers face when working with ELLs. Research regarding ELL inclusion in MTSS practices is then reviewed, and criticisms of the use of MTSS models with ELLs are also highlighted. The importance of implementation fidelity and how it relates to these criticisms of ELL inclusion in MTSS practices is discussed. The chapter then presents a specific framework for examining the complex topic of ELLs in MTSS, more specifically, through application of CHAT. CHAT is identified as a beneficial way to examine the inclusion of ELLs in MTSS practices, as it focuses on individual perceptions and frames these perceptions within an activity system that can then be analyzed in order to inform practice and future research.

Practice-Based Research

Ideally, research and practice would be closely related to one another; researchers would provide useful knowledge and practitioners would implement this knowledge. However, the interface between the two has historically been complicated, and a substantial research-practice gap exists. This gap between research and practice has been discussed for decades and is recognized as a critical problem in educational research and practice (Vanderlinde & van Braak, 2010). To better understand this gap, it is best to first define the research-practice relationship.

One way to consider the research-practice relationship is as a one-way street, where research informs educational practice. Researchers act as producers of knowledge who send information to practitioners, with the intent that the practitioners will receive the information and

appropriately adopt the knowledge into their practice (Bauer & Fischer, 2007). In this schema, the research-practice gap is defined as the difference between what researchers find to be effective and what practitioners implement (Dupaul, 2003). This is a traditional understanding of the researcher-practitioner relationship and the research-practice gap.

Another way to understand the research-practice relationship is by viewing it as cyclical, with the practitioner as a consumer of knowledge who articulates needs and the researcher as a service provider for those needs (Bauer & Fischer, 2007). This is the approach the current study uses to examine the research-practice relationship. Bauer and Fischer (2007) discuss a four-step sequence in this relationship: 1) a research question is formulated that is relevant to practice; 2) the research is conducted; 3) the results of the research are communicated with the practitioner; and 4) the results are adopted. This understanding of the relationship fosters a different understanding of the research-practice gap, one that places responsibility on both parties. Rather than solely holding practitioners responsible for failing to enact research-based practices, responsibility is also placed on researchers to conduct research that is useful for practitioners.

One way to address a cyclically-defined research-practice gap is through practice-based research (PBR) (Crooke & Olswang, 2015). PBR is defined as "the use of research-inspired principles, designs and information gathering techniques within existing forms of practice to answer questions that emerge from practice in ways that inform practice" (Epstein, 2001, p. 17). The goal of PBR is to create research that is practically relevant, which is the first step in the cyclical approach to the research-practice relationship. Indeed, the failure of education researchers to provide useful and meaningful research for practitioners is well cited in the literature (Gersten, et al., 1992; Greenwood & Abbott, 2001; Greenwood et al., 1988; Malouf & Schiller, 1995). There are five main principles of PBR: 1) it is driven by wisdom created in

practice and this wisdom is paired with theory; 2) the research questions seek answers that are descriptive or correlational in nature; 3) the data are gathered through both qualitative and quantitative means through routine practice; 4) the results are formative to practice; and 5) the practitioners are included in the scientific process (Crooke & Olswang, 2015).

The current study took a PBR-based approach to addressing ELL inclusion in MTSS practices through the five main principles described above: 1) it was originally developed from an interaction the researcher had at an educational conference in which school-based practitioners expressed concerns over not knowing whether and how to include ELLs in MTSS practices; 2) these practitioner concerns were coupled with the CHAT framework in order to examine ELL inclusion in MTSS practices for the current study; 3) a mixed methods design was selected and data were collected through routine practices; 4) it is hoped that the study informs practice by providing stakeholders, such as MiBLSi, with information regarding actual inclusion rates and teacher perceptions in order to better support schools. Finally, 5) MiBLSi is included in the current study as a community partner in data collection and obtaining agency support.

Challenges to Providing Quality Instruction to ELLs

It is important to consider ELLs separately from their non-ELL peers when discussing MTSS practices, as ELLs present unique challenges for teachers. In a review of 60 published articles, Hang Khong and Saito (2014) outline the challenges that teachers of ELLs face in the modern education system. These challenges are divided into three broader categories: societal challenges, institutional challenges, and personal challenges. Each of these categories are reviewed in order to provide a basic understanding of how ELLs are unique, what challenges teachers identify and face when working with ELLs, and why it is important to specifically examine ELLs within an MTSS system.

Societal Challenges

Hang Khong and Saito (2014) discuss three societal challenges that school systems face in providing quality instruction for ELLs: the growth and diversity of ELLs, societal attitudes, and educational policies. The growth of the ELL population is well documented in both education and government research (Hang Khong & Saito, 2014; NCELA, 2011), however schools have yet to fully adapt their instruction as a result of these population changes. Furthermore, ELLs are inherently a diverse group of individuals, coming from different countries, cultures, ethnicities, home lives, and linguistic backgrounds. As such, not all ELLs are equally at risk for academic difficulties (Klingner et al., 2006), and not all ELLs require the same types of supports. Without a large research base available for specific subgroups of ELLs, such as non-Spanish speaking ELLs, schools may be uncertain about which strategies are most effective for their ELLs, or if the available research is applicable to their students (J. K. Klingner et al., 2006; Rinaldi & Samson, 2008; Vanderwood & Nam, 2007).

In addition to the challenges posed by the growth and diversity of ELLs, societal attitudes toward ELLs can also create challenges (Hang Khong & Saito, 2014). Although teachers are generally accepting of ELL inclusion in their classrooms, there is considerable variability (Karabenick & Noda, 2004). In one study, 14% of K-12 teachers objected to an ELL placement in their classroom and 20% objected to adapting classroom materials for an ELL placed in their classroom (Walker et al., 2004). Current political rhetoric may also influence teachers' views of ELLs. Indeed, Americans tend to prefer immigrants who can fluently speak English (Hainmueller & Hopkins, 2015) and 40% of Americans oppose accepting Middle Eastern refugees into the country (Telhami, 2016). However, although 33% of Americans currently view

immigrants as a burden to the country, this number is down from 63% in 1994 (Jones, 2016). These societal attitudes can directly and indirectly influence teachers working with ELLs.

Finally, national and local education policies can also present challenges, including both how the policies are written and how they are implemented. Indeed, previous research indicates that ELL outcomes are related to educators' understanding and implementation of policy (Estrada & Wang, 2018; Mavrogordato & White, 2017). Although the federal government has passed multiple acts mandating certain requirements for ELLs in public schools (including No Child Left Behind [NCLB] and the recently passed ESSA), the spirit of the law and the practice of the law do not always align (Hang Khong & Saito, 2014). NCLB was criticized for not including adolescent ELLs in teacher training requirements (Short & Fitzsimmons, 2007), focusing on English learning at the expense of academic success (Short & Fitzsimmons, 2007), and establishing a reclassification system that rewarded schools for reclassifying ELLs as English-proficient before they were ready (Ragan & Lesaux, 2006). Although ESSA is generally seen to be an improvement on NCLB in regard to ELLs, the effects of ESSA have yet to be determined and some concerns have already been raised. The organization Teachers of English to Speakers of Other Languages (TESOL) cites concerns that ESSA fails to provide support for increasing the number of ELL and bilingual specialists in schools, and that it does not explicitly support multi-lingual education programs (TESOL, 2015).

Another concern is the removal of federal accountability standards in favor of state accountability systems, which critics argue will be difficult to appropriately create and maintain with limited state resources (Mitchell, 2016). Furthermore, an array of differing state policies creates a patchwork system of supports. This is particularly relevant for the subgroup of ELLs who seasonally travel between states, and therefore are likely to suffer from inconsistencies in

policies and practices. For example, reclassification criteria for ELLs to exit out of EL programs and enter mainstream programming vary across states, districts, and schools (Cimpian, Thompson, & Makowski, 2017). An ELL who may be close to exiting EL programming in one state, may find themselves far from exit criteria in another state, or even in another district withing the same state.

The gap between research and policy is also notable, and many current policies contribute to inequitable access to education and educational outcomes for ELLs (Robinson-Cimpian, Thompson, & Umansky, 2016). For example, research supports the use of bilingual instruction over English-only instruction for improving literacy outcomes for ELLs (Bialystok et al., 2009; Lesaux & Siegel, 2003; Proctor et al., 2006; Sparks et al., 2008); however, states such as California, Arizona, and Massachusetts have implemented laws to restrict or eliminate bilingual education while increasing English-only instruction (Borden, 2014). These policies highlight some of the societal level policy challenges that practitioners may face.

Institutional Challenges

Beyond societal challenges, institutional factors including teacher education, resources, time, communication, school culture, and the academic achievement of ELLs can influence the provision of quality instruction to ELLs (Hang Khong & Saito, 2014). Lack of teacher education and limited professional development opportunities are perhaps some of the more critical barriers to providing quality instruction for ELLs, and recent studies highlight some substantial concerns in these areas (J. Klingner & Harry, 2006; Orosco & Klingner, 2010). In order to examine teacher knowledge and professional development, Klingner and Harry (2006) qualitatively examined child study team conferences in which special education placements were being considered for ELLs. The results suggest that child study teams preferred testing without

adequate pre-referral interventions and tended to view ELL difficulties as being within-child. Overall, the authors observed a wide variety of conversations during these meetings, including meetings with high quality discussions regarding language barriers, and meetings where the student's ELL status was not discussed at all. A lack of cultural awareness was also apparent in many of these meetings, such as the following interaction which was noted by the authors: "Family's roof was just blown off. Teacher tells translator to tell the father that homework is important, like the roof" (Klingner & Harry, 2006, p. 259). The teacher here is likely making the assumption that the parent does not value the homework, rather than understanding that there may be challenging barriers at home. Although it seems that the teacher wishes to help the student better access instruction through completing homework, it is apparent that the teacher does not have the cultural competency necessary to either fully understand the dilemma nor problem solve the dilemma with the parent in this situation.

Indeed, many teachers do not have appropriate training for working with ELLs, and teacher training in this area is uneven (Gandara et al., 2005). Due to poor training, teachers are often unclear on what kinds of expectations they should set for ELLs (Youngs, 1999), and this can also lead to low teacher confidence (Gandara et al., 2005). One interesting finding is that the more training a teacher has received for working with ELLs, the more likely they are to recognize system barriers regarding ELL instruction, such as a lack of appropriate resources (Gandara et al., 2005). This suggests that many teachers may not recognize what they do not have or do not know.

Another institutional challenge is the availability of tools and resources. ELLs sometimes require unique assessment and instruction materials to accurately measure their knowledge and provide appropriate instruction. Cultural biases in test questions, poor norming samples,

language proficiency status, cultural differences, and a student's educational history can all influence the validity of a test when administered to a particular student in a particular situation (Martines & Rodriguez-Srednicki, 2007; Rhodes et al., 2005). Instructional materials made for the general student population may not consider the unique cultural backgrounds of students. For instance, a student from southern Mexico may not understand a story about building a snowman if they have never encountered a snowman before. Indeed, teachers cite the lack of appropriate materials as a barrier for effectively providing instruction to ELLs (Gandara et al., 2005). However, instruction and assessment materials are not the only type of resources teachers have voiced concerns about. Available personnel, technology, access to student assessment data and poor resource organization have also been cited by teachers as resource barriers to providing ELLs with effective instruction (Suzuki, 2008). Research suggests that these material and personnel resources are critical for building systems of support for teachers with ELLs (Elfers, Lucero, Stritikus, & Knapp, 2013).

Lack of time, both for instruction and preparing for instruction, is one of the most cited resources that teachers report as a barrier to quality ELL instruction (Gandara et al., 2005; Gitlin et al., 2003; Hang Khong & Saito, 2014; Reeves, 2006; Suzuki, 2008). In numerous studies examining teacher beliefs about ELL instructional barriers, teachers discussed how they did not have enough time to address the needs of ELLs (Karabenick & Noda, 2004; Reeves, 2006; Youngs, 1999), or how their workload increased in order to accommodate ELL needs (Gitlin et al., 2003). Time was rated as a significant challenge for elementary teachers working with ELLs, with one teacher stating, "the greatest challenge is having the time to give [ELLs] what they need while meeting the needs of all the other students" (Gandara et al., 2005, p. 7).

Communication is also a challenge for teachers working with ELLs, including communication between the school and family and communication within the school (Gandara et al., 2005; Lee et al., 2007; Suzuki, 2008). In one study that examined California elementary teachers' attitudes, communication and a feeling of connectedness with ELLs' families was the most highly reported challenge in working with ELLs (Gandara et al., 2005). Teachers have reported that schools and districts do not provide professional development focused on helping teachers of ELLs better reach out to families. In addition, teachers also report wanting the opportunity to collaborate with colleagues to better plan instruction for ELLs (Gandara et al., 2005), but often find that schools and districts do not provide enough support, resources, or time for such professional collaboration (Suzuki, 2008).

As many of the concerns above highlight, school culture can play a pivotal role in the challenges that teachers experience, and school culture itself can act as a barrier to providing effective services to ELLs (Hang Khong & Saito, 2014). School leadership can create a culture in which all teachers share responsibility for ELLs (Hopkins, Gluckman, & Vahdani, 2019), but a failure to foster this culture could lead teachers to disengage from their responsibilities for ELLs. Indeed, schools that separate language learning from content skill areas can reinforce the notion for non-EL teachers that teaching English is not their responsibility (Hopkins et al., 2019). If administrative officials or other school personnel exhibit negative attitudes toward ELLs or their families, this can affect how teachers behave toward and think about ELLs (Harklu, 2000; Walker et al., 2004). Teachers report the lack of administrator flexibility toward creating accommodations for ELL needs (such as varying the pace of instruction and allowing for inter-classroom groupings) as a barrier to effective ELL instruction (Suzuki, 2008). Furthermore, research suggests that school leaders have the ability to influence school conditions to create

more equitable educational environments for ELLs (Cambron-Mccabe & Mccarthy, 2005; Reyes, 2006), and that top-down mandates are often required to create equity-focused change (Oakes, Welner, Yonezawa, & Allen, 2005). This reinforces the notion that school culture and school leadership is pivotal for positive ELL outcomes, yet many school leaders may lack an awareness of how their activities impact equity for ELLs (Mavrogordato & White, 2020).

Finally, Hang Khong and Saito (2014) discuss the academic achievement of ELLs as an institutional barrier to providing effective instruction for ELLs. Although the ELL population is diverse and some ELLs are academically successful, research suggests that ELLs tend to achieve below their peers (National Center for Education Statistics [NCES], 2014) and drop out of school more often (Battin-Pearson et al., 2000; Cho & Reich, 2008; Markham et al., 1996; Suh et al., 2007; Thompson et al., 2002). Teachers may feel large amounts of pressure to try and fix a problem that seems much larger than themselves and their own classroom (Hang Khong & Saito, 2014), and working with low achieving students within the context of a lack of resources can be stressful and may lead to burnout.

Personal Challenges

The above institutional challenges can make it difficult for teachers to provide ELLs with effective instruction in school systems that (usually unintentionally) hinder best practices through a lack of resources, time, and support. However, personal challenges can also create unique barriers to effective instruction with ELLs, including attitudes and emotions (Hang Khong & Saito, 2014). Teacher attitudes are important to consider when working with ELLs, as they are closely related to the academic success of ELLs (Lucas et al., 1990). Frustration from working with ELLs can lead teachers to develop negative attitudes toward ELLs, especially when teachers are working with limited resources (Byrnes et al., 1997). In addition, teachers

must serve a diverse population of ELLs, and ELLs come to the classroom with a wide variety of academic and language skills. This variety in skill level can be frustrating for teachers who must not only differentiate instruction for ELL needs, but then also differentiate this instruction within their ELLs. Indeed, teachers in California report frustration with their ability to address the variety of their ELLs' skill levels in the context of inadequate support (Gandara et al., 2005). As mentioned earlier, research suggests that some teachers object to ELLs placed in their classrooms and to adapting materials for ELLs (Walker et al., 2004), and may have many misconceptions regarding ELLs, including the notion that ELLs should be able to learn English quickly (Hang Khong & Saito, 2014; McLaughlin, 1992; Reeves, 2006). Teachers are less likely to adhere to best practices when they have such misconceptions, and this may lead to poor education outcomes for ELLs such as disproportionate representation in special education (Reeves, 2006). Although less examined in the literature, Hang Khong and Saito (2014) discuss teacher emotions as the final potential barrier to providing effective instruction to ELLs. Negative teacher emotions regarding ELLs and EL instruction are often intrinsically linked to the other barriers discussed. Teachers may feel frustrated over the lack of resources (Gandara et al., 2005) or experience high amounts of stress over not being able to appropriately prepare students for future experiences (Markham et al., 1996), which can foster negative emotions.

The current section highlights how the complexity and heterogeneity of the ELL population creates unique challenges for teachers trying to provide quality instruction to ELLs. When considering practices such as MTSS, it is important to examine these potential challenges unique to ELLs. Indeed, schools likely do not know how to best serve this population in an MTSS system. The available research mimics this practitioner confusion, as current literature both supports the use of MTSS practices with ELLs and also provides reasonable concerns about

including ELLs in such practices. In the following section, the literature specific to ELL inclusion in MTSS practices is reviewed.

ELLs Within an MTSS Model

Research supports the effectiveness of MTSS models for the improvement of reading performance for students in general (Faggella-Luby & Wardwell, 2011; D. Fuchs et al., 2008; Lembke et al., 2010). For example, one such study examined the effectiveness of first grade Tier Two reading interventions within an RTI framework (D. Fuchs et al., 2008). The results indicated that after nine weeks the students in the tutoring group outperformed students in the control group on both progress monitoring measures and standardized reading tests. This suggests that the process of RTI (screening, providing intervention, and progress monitoring) allowed the researchers to identify students at-risk for reading difficulties and provide them with an effective intervention, and that this intervention allowed for gains that would not have occurred otherwise. Lembke and colleagues (2010) documented the process and the results of implementing RTI at a Midwestern elementary school. Within two years of implementing RTI, the school began to see positive results. The number of students classified in Tier One jumped from 30% to 44% while the number of students in Tier Three dropped from 44% to 31%. This indicates that fewer students required more intensive reading supports (i.e., Tier 2 or Tier 3) in order to be academically successful as a result of the RTI implementation. The efficiency of the special education referral system in the school also improved. Previously, only 50% of students referred for a special education evaluation qualified after the evaluation process. Within two years of implementation, the percentage of qualifying students from the referral system jumped to 80%. The increased accuracy of referrals allowed for more efficient resource allocation and prevented unnecessary testing stress for both students and staff.

Although these studies suggest that MTSS practices may produce positive outcomes for students, neither study provides information about their sample in regard to ELL status. Fuchs and colleagues (2008) do not provide any racial, ethnic, or cultural information other than describing their sample as being from urban and suburban Middle Tennessee. Lembke and colleagues (2010) only describe their sample as 79% receiving free/reduced lunch and 50% minority students. Indeed, although the literature regarding the effectiveness of MTSS is large, the number of these studies that specifically examine ELL outcomes in MTSS models is limited. Therefore, when considering whether MTSS practices may be effective with ELLs (and when working with a limited research base), it is helpful to consider how instructional practices often used in conjunction with MTSS models align with research-based instructional best practices for ELLs. If best practices for ELLs align with best practices for MTSS, it would suggest that MTSS may be an appropriate model to use for ELLs.

MTSS Alignment With English Reading Skill Development and ELL Best Practices

In order to examine the alignment between ELL best practices and MTSS best practices, the current section describes the basic skills that ELLs need in order to read in English, and reviews research-based instructional practices for teaching these skills to ELLs. The similarities between these skills and instructional practices and MTSS practices are then highlighted, and corresponding research related to ELL inclusion in MTSS practices is reviewed.

English Reading Skill Development

All students, ELLs and non-ELLs, must develop specific skills in order to learn to read in English. Phonemic awareness is often emphasized as an important skill for monolingual children to acquire in order to be successful readers (Lesaux et al., 2006). Phonemic awareness is defined as “the ability to focus on and manipulate phonemes in spoken words” (National Reading Panel

[NRP], 2000, p. 2-1). In 2000, the NRP reported that phonemic awareness is highly correlated with positive reading outcomes for monolingual students. Phonemic awareness skills are also important when acquiring reading skills in a second language, as English phonemes may be different than phonemes in a student's native language. The NRP (2000) provides the example of the English words "chop" and "shop", which sound very similar but have different meanings. Although a native English speaker may easily perceive the difference between the "ch" and the "sh" sounds, a native Spanish speaker may believe that these sounds are interchangeable, as they are in many Spanish dialects. Therefore, explicit phonemic awareness instruction regarding these different phonemes is critical for a native Spanish speaker to understand that "chop" and "shop" are two different words. Indeed, phonemic awareness skills are positively associated with reading outcomes for second language learners (Healy et al., 2005b; Linklater et al., 2009).

In addition to phonemic awareness, phonics skills are also important for developing reading skills (NRP, 2000). Phonics is defined as "the group of techniques used by the speller or reader to encode, decode, or recode, using primarily his knowledge of the phonology, morphology, and syntax of his language and the graphemic options available to him in that language" (Lamb, 1975, p. 15). The NRP (2000) found that systematic phonics instruction (instruction that involves teaching and practicing phonics in a planned and sequential way) produced significantly better reading results for students in general compared to non-systematic phonics instruction or no phonics instruction. Phonics may also be an important skill for ELLs (Bialystok, 2001), and phonics interventions have produced positive reading outcomes for ELLs (Tong et al., 2010; Troia, 2004; Vadasy & Sanders, 2010).

Finally, text level skills such as fluency, comprehension, and vocabulary are critical for not only developing reading skills, but for reading itself. Fluency has long been associated with

higher reading outcomes for monolingual students (Vadasy & Sanders, 2009; M. Wolf et al., 2009), and may also be important for ELLs (Cruz de Quirós et al., 2010; Ehri et al., 2007; Hapstak & Tracey, 2007; Tong et al., 2010). Comprehension is arguably the most important aspect of reading (Hamayan et al., 2013). This is critical for all readers, as failing to understand what the text means largely defeats the purpose of reading the text. Comprehension assessment and intervention is crucial for ELLs, as the relationship between reading and understanding may not be as natural as it is with monolingual students. For example, if an ELL has developed phonemic awareness and phonics skills, this student may be able to read a page of text and sound very fluent. However, this student may not understand various grammatical structures, idioms, colloquial terms or vocabulary terms, and therefore may not understand this text. Interventions that include comprehension instruction have been found to be effective at increasing reading skills in ELLs (Tong et al., 2010; Troia, 2004).

Closely tied to comprehension, vocabulary also plays a key role for students learning to read. If a student does not know what a single word in a sentence means, that student may misunderstand the meaning of the whole sentence. Although the development of basic vocabulary skills often comes naturally for non-ELLs, ELLs must often be explicitly taught vocabulary in order to interact with the world around them (Graves, 2006), and an insufficient vocabulary can greatly and adversely affect an ELL's reading achievement (García, 1991).

It is important to recognize that these various reading components (phonemic awareness, phonics, fluency, comprehension and vocabulary) are important skills for ELLs to develop. This should be considered when discussing instructional content for ELLs, and specifically instructional content commonly related to MTSS practices. However, this knowledge does not necessarily provide information regarding how to best support ELLs in their development of

these skills; knowing what needs to be taught and knowing how to teach it are two different things. Therefore, it is also important to examine best practices in ELL reading instruction.

Best Practices in ELL Reading Instruction

Although there are many ways to define quality reading instruction for ELLs, the Institute for Education Sciences (IES) created a research-based practice guide in 2007 that provided five recommendations for effective literacy instruction practices for ELLs (Gersten et al., 2007). This practice guide was updated in 2014 to reflect the rapidly growing body of ELL instruction research. The updated recommendations include: 1) intensively teaching academic vocabulary words in sets across several days while utilizing diverse instructional activities, 2) integrating both written and oral English language instruction into core content areas, 3) providing regular and structured writing instruction, and 4) providing small group intervention for students struggling with language and literacy skills (Baker et al., 2014). Each of these instructional recommendations from the IES is grounded in research that meets specific guidelines from What Works Clearinghouse. Evidence of high internal and external validity was also required.

In addition to the guidelines listed by IES, assessment is also a critical aspect of quality ELL instruction. Gottlieb (2006) discusses five primary purposes for assessing ELLs: identification to determine eligibility for support services, monitoring progress of language proficiency and academic achievement, accountability for language proficiency and academic achievement, reclassification within or transition from support services, and program evaluation to ascertain effectiveness of support services. Assessment allows teachers to understand gaps in ELL knowledge to better understand what skills need to be taught, as well as get feedback on whether instruction is effective. Without appropriate assessment, teachers would be unable to adjust instruction according to student needs or know when students had mastered various skills.

Evidence for ELL Inclusion in MTSS

The previous sections highlight the necessary skills ELLs must develop to read English and the research-based instructional practices that are likely to promote these skills. Comparing these skills and instructional practices to MTSS models, one finds many overlapping characteristics. MTSS reading models are often used as a means of promoting phonemic awareness, phonics, and fluency- all areas that are important for ELLs to develop. In addition, MTSS models promote formative assessment and small group instruction, which are important instructional practices for ELLs.

If ELL best practices and MTSS practices have areas of alignment, and ELL best practices are beneficial for improving reading outcomes, then it would be expected that MTSS practices are also beneficial for improving ELL reading outcomes. Indeed, recent research suggest that MTSS practices can be beneficial for ELLs. In one such study, Healy and colleagues (2005) examined how first grade ELLs who were referred through universal screeners responded to a Tier Two phonological awareness intervention accompanied with progress monitoring and a behavior management plan. If students displayed appropriate behavior during the intervention, they earned stickers that could be redeemed for a prize. The intervention took place two times a week, for 30 minutes per session, and lasted between 12 and 25 sessions depending on the student. If students showed progress that exceeded their goal after 12 sessions (based on rate of improvement), they were exited from the program. Of the fifteen students in the study, twelve exited the program within 25 sessions due to exceeding their progress monitoring goal. The authors argue that these results suggest ELLs can benefit from an RTI model, as many of the students were able to dramatically improve their skills as a result of the intervention. However, one limitation of the study is the combination of the behavior management system and the

literacy intervention. From this study, there is no way to tell if the progress of the students was a result of the phonological awareness intervention or a result of the behavior management program. The combination of behavioral and academic interventions is likely to produce better outcomes for students; and some MTSS experts argue that academic and behavior MTSS approaches should always be coupled together. However, the combination limits the conclusions that can be made regarding the effectiveness of strictly reading MTSS practices with ELLs.

Another study examined how first grade ELLs who were referred by means of both English and Spanish universal screeners responded to a Tier Two intervention (Linan-Thompson et al., 2006). Students were randomly divided into either a control condition that received the school's typical instructional program for struggling readers, or an intervention condition that received small group, supplemental reading instruction 50 minutes daily for seven months. All students were progress monitored through second grade. The authors found that students who participated in the intervention group were more likely to meet benchmark at the end of first grade (97% of intervention students meeting criteria compared to 70% of control students) as well as at the end of second grade (100% of intervention students meeting criteria compared to 92% of control students). The results suggest that the intervention was particularly helpful for students during first grade, and a difference between the groups was maintained one year later.

The results of this study suggest that an intensive intervention can help ELLs improve their literacy skills. The authors argue that it may be important to include ELLs in the RTI process so that they are eligible to receive such interventions. However, the RTI process used in this study was less traditional than the RTI process found in most schools. In this study, students were screened and progress monitored with standardized achievement tests. The universal screening tools were the Letter-Identification subtest of the Woodcock Language Proficiency

Battery-Revised (WLPB-R) and an experimental word reading list, while the progress monitoring tools were the Word Attack and Passage Comprehension subtests of the WLPB-R. Typically, curriculum-based measurement probes such as AIMSweb or the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are used because these measures are quickly administered and benchmarked in a manner that allows schools to make predictions about future performance. For example, a student who scores in the 45th percentile on an AIMSweb screener is 80% likely to meet proficiency on a state standardized test (AIMSweb, 2011). Furthermore, standardized achievement tests are not ideal for screening purposes as they are not easily administered to groups, it can be difficult to repeat these procedures throughout the school year, and administration, scoring, and analysis take substantial amounts of time (Ikeda, Neesen, & Witt, 2008). The use of the WLPB-R rather than a Curriculum-Based Measurement (CBM), such as AIMSweb or DIBELs, makes the generalization of the findings questionable for most schools, where brief CBM assessment tools are often used.

Although the studies described above suggest promising academic results for ELLs included in MTSS processes, they both have limitations regarding their practical applications to MTSS in schools. The first study did not isolate reading MTSS practices, and the second study did not use screening measures commonly or practically used in schools. Furthermore, there is little research regarding ELL inclusion in MTSS practices. As such, concerns and critiques remain among researchers and practitioners regarding the effectiveness of such inclusion. Many of these critiques highlight the research-practice gap and express concern that MTSS models (as implemented in practice) do not actually meet the needs of ELLs.

Criticisms of ELL Inclusion in MTSS Models

A common critique of including ELLs in MTSS practices is the screening and progress monitoring tools that are typically used with MTSS models, which critics argue are not appropriate for culturally and linguistically diverse (CLD) students (Klingner & Edwards, 2006). One concern is that these tools typically do not include CLD students in the sample norms and therefore may not effectively discriminate between CLD students who require extra help and those who do not (Hernandez Finch, 2012; Linan-Thompson et el., 2007). Similarly, the Tier Two and Tier Three interventions that are commonly provided in schools often do not include CLD students in their research samples (Klingner & Edwards, 2006). If an intervention study does not include ELLs in their research sample, then the results should not be generalized to ELLs and schools should not assume that this intervention will be effective with ELLs. Furthermore, information regarding participant demographics in intervention reports is often incomplete or inadequate, making it difficult for practitioners to determine whether the intervention is appropriate for ELLs (Klingner & Edwards, 2006).

Another major criticism of implementing MTSS with ELLs is the lack of professional development to provide teachers with the necessary knowledge (Dougherty Stahl et al., 2012; Klingner & Harry, 2006; Orosco & Klingner, 2010; Xu & Drame, 2007). Through student achievement data, classroom observations, questionnaires, and focus groups, Dougherty Stahl and colleagues (2012) found that although ELLs' yearly gains in reading achievement were at a similar rate to their non-ELL peers in a school implementing MTSS, a disproportionate number of ELLs were retained in the first grade. The authors attribute this high retention rate to the teachers' lack of theoretical and pedagogical knowledge needed to effectively support ELLs in the classroom. Furthermore, Dougherty and colleagues found that the decision-making teams in

the participating schools also lacked expertise in effective ELL instructional practices. This is consistent with previous work, which also found that teachers and other school personnel often do not have the appropriate resources or knowledge to provide effective instruction to ELLs (Klingner & Harry, 2006; Orosco & Klingner, 2010). Orosco and Klingner describe the process of a large urban school with a high percentage of ELLs implementing RTI at the elementary level. The particular school district observed was in its second year of RTI implementation. The authors found that although the school personnel were highly educated (a majority of whom had attained a Master's in Education), they had little to no training in working with an ELL population. The results suggested a misalignment between assessment and instruction, a negative school culture, and inadequate teacher preparation. The authors suggested that because the school personnel did not understand how to effectively provide quality assessment and instruction for ELLs, they also could not effectively include ELLs in MTSS practices.

Criticisms in Context

Although recent research suggests MTSS practices may be beneficial for ELLs, legitimate concerns regarding the cultural sensitivity of these practices and the ability for schools to effectively implement these practices remain. Furthermore, although many MTSS practices align with what researchers know about English language acquisition and best practices in EL instruction, there are also potentially significant misalignments. A summary of how MTSS aligns with best practices in EL instruction can be found in Table 1.

Concerns regarding ELL inclusion in MTSS practices are appropriate and constructive; however, it is important to note that many cited concerns regarding ELL inclusion in MTSS practices may be particularly relevant for schools implementing a standard protocol model, where assessments and interventions are not necessarily individualized for unique student needs.

Table 1

Alignment of MTSS and ELL Practices

Important factors for ELL reading development	Research-based approaches for ELLs	Often included in MTSS models (in practice)	Often not included in MTSS models (in practice)
Development of English reading skills	Phonemic awareness, phonics, fluency, comprehension, and vocabulary[1]	Focuses on phonemic awareness, phonics, fluency[3] and comprehension	Vocabulary skills
Best practices in instruction	Intensive vocabulary instruction, integrating English instruction into core content, regular and structured writing instruction, small group instruction and formative assessment[2]	Focuses on intensive, small group instruction and formative assessments	Intensive vocabulary instruction, integrating English instruction into core content, regular and structured writing instruction

(1) Carlo et al., 2004; Cruz de Quirós et al., 2010; Healy et al., 2005; Linklater et al., 2009; NRP, 2000; Tong et al., 2010; Townsend & Collins, 2009; Troia, 2004; Vadasy & Sanders, 2010; (2) Baker et al., 2014; Gottlieb, 2006 (3) Burns & Gibbons, 2008

Schools that utilize a problem solving model may be able to better mitigate some of these concerns (Richards-Tutor et al., 2013). In a problem-solving model, practitioners examine the needs of each student individually, and implement interventions that have been found to be effective for a student's particular population, such as ELLs. Furthermore, a problem-solving approach allows practitioners to look at individual student data and their progress over time to determine growth rather than the standard use of benchmarks (Tilly, 2008). Standard protocol models have the advantage of efficiently using resources. Problem solving models, while initially more resource intensive, tend to better meet student needs. MiBLSi encourages practitioners to

use a problem solving approach if there is an expectation that the standard intervention will not be effective for an individual student (Gortsema et al., 2009; MiBLSi, 2012). However, the extent to which schools follow MiBLSi's recommendations regarding MTSS implementation may differ. Indeed, recent research highlights the potentially poor implementation fidelity of MTSS practices in schools (Balu et al., 2015; Shinn & Brown, 2016). If schools are not implementing MTSS with fidelity for students in general, then it is unlikely that they will be able to implement it with fidelity for ELLs. The next section will discuss the research on MTSS implementation fidelity in order to explore how this may impact its effectiveness for ELLs.

MTSS Implementation Fidelity

Implementation fidelity is defined as the "determination of how well an intervention is implemented in comparison with the original program design" (O 'Donnell, 2008, p. 33). Although education researchers have provided a variety of definitions regarding implementation fidelity; each definition tends to emphasize adherence and integrity (O'Donnell, 2008). In the current study, implementation fidelity refers to the comparison between how MTSS is conceptualized in the literature and how MTSS is implemented in practice.

Implementation fidelity data are essential for high quality research and program implementation (Swanson et al., 2011), however, the fidelity of MTSS implementation can vary greatly depending on numerous factors. At the national level, Zirkel and Thomas (2010) found that state policies regarding MTSS implementation widely differ. States also differ on which core characteristics of MTSS they require or recommend. For example, some states have explicit laws requiring aspects of MTSS (e.g. universal screening), some states have implicit guidelines, and yet others have no guiding documents. These differences between explicit and implicit (and sometimes nonexistent) policies exist across the nation, suggesting that the geographic location

of a school could influence how the school conceptualizes MTSS. One study documented MTSS implementation across 41 relatively affluent schools (Mellard et al., 2009). The results suggest that 90% of schools in the sample reported using screening instruments, although only 23% administered these instruments three times a year. In addition, although all schools in the sample administered progress monitoring tools, the frequency with which these tools were administered varied between schools from daily to annually, suggesting that schools implementing MTSS may use progress monitoring tools very differently. These studies suggest that MTSS implementation varies across schools, and may often deviate from an ideal approach to MTSS. This may limit or negatively affect the potentially positive benefits of MTSS models (McKenna et al., 2014).

Implementation fidelity is arguably one of the most important aspects of MTSS implementation (Johnson et al., 2006; Keller-Margulis, 2012). High fidelity can allow school personnel to identify programs that may be failing as a result of poor implementation, rather than as a result of a poor program (O'Donnell, 2008; Swanson et al., 2011), as well as ensure that decisions made through an MTSS model are valid (Shinn, 2007). High fidelity also allows interventions to be scaled up, broadened, and transferred to various settings with more ease (O'Donnell, 2008; Swanson et al., 2011). This is critical when one considers that MTSS is potentially being broadened to include specific sub-populations such as ELLs. In addition, high fidelity allows researchers and practitioners to identify the core components of a program (Abry et al., 2015). Core components represent the aspects of an intervention or program that are critical for the intervention to work. Identifying core components is critical when implementing programs with various cultural groups (such as MTSS practices with ELLs), as modifications are sometimes made to make programs more appropriate and relevant for these various groups. These modifications can be necessary for providing a culturally appropriate program; but it is

important that these modifications do not alter critical core components if the positive effects of the intervention are to be maintained. Indeed, transferring programs between populations can be difficult and the positive effects may not always be maintained (Ingraham & Oka, 2006).

Research also strongly supports the relationship between implementation fidelity and student outcomes. Collier-Meek and colleagues (2013) notably refer to implementation fidelity as the link between treatment and outcomes. When fidelity is high, outcomes are also significantly higher (O'Donnell, 2008; Telzrow et al., 2000). In a review of over 500 studies, Durlak and DuPre (2008) suggest that implementation fidelity influences outcomes in both promotion and prevention programs. In one study examining instructional support teams (ISTs), ISTs with high implementation fidelity showed significantly higher gains in student comprehension, task completion, and time-on-task outcomes compared to ISTs with low implementation fidelity (Kovaleski et al., 1999). In some cases, student outcomes for low ISTs actually declined, suggesting that poor implementation fidelity can lead to ineffective and potentially harmful school reforms and practices. However, all student outcomes are not equally influenced by implementation fidelity, the role of fidelity may differ between subgroups of students (Harn et al., 2013). In particular, implementation fidelity may be particularly crucial for students at-risk for reading difficulties (Odom et al., 2010). The influence of implementation fidelity also differs by gender and ethnic group. As ELLs may be particularly at risk for reading difficulties and disproportionate representation in special education (Fry, 2007; Sullivan, 2011), it is important to consider fidelity factors when working with this group of students.

The importance of high implementation fidelity is supported in the literature, and it is important to measure fidelity in order to produce the desired outcomes of a program and to efficiently transfer the program to specific groups of students. MTSS implementation fidelity is a

concern for researchers and practitioners (Bianco, 2010) due to the increasing popularity of MTSS practice and the lack of implementation fidelity research regarding MTSS practices. Indeed, a recent report by the United States Department of Education indicated that RTI may actually produce negative effects for struggling students (Balu et al., 2015); however, Shinn and Brown (2016) caution against generalizing the results of the report, stating that the schools in the report's sample at best provided RTI implementation that "[fell] well short of the critical features of quality RTI described in a substantial number of professional resources" (p. 7). One of the primary critiques of the sample's RTI implementation was the manner in which tiered interventions were provided (Shinn & Brown, 2016). The report found that roughly 20-37% of schools did not deliver interventions via highly-trained personnel and that 67% of schools provided at least some tiered reading intervention during core reading instruction rather than in addition to core reading instruction for students. In addition, at least 45% of schools provided intervention to students who met proficiency/benchmark standards. Although this may not be problematic for student outcomes if schools have adequate resources to provide extra support to many students, this creates a challenge for researchers trying to examine the effects of RTI. The recent report analyzed RTI outcomes by comparing students who barely met benchmark standards with students who barely did not meet benchmark standards. This research design works because the cut point (e.g. meeting benchmark) produces different instructional assignments for students who may not actually be that different from each other, and therefore creates a quasi-random assignment. However, as described above, many students included in the report who met benchmark standards also received extra support, and therefore the instructional assignments were very similar rather than being exclusive from each other. Although the U.S. Department of Education report (Balu et al., 2015) seems to indicate that RTI practices are not

effective, a closer examination of how RTI was implemented in the sample schools reveals that poor implementation fidelity negatively affected the validity of the research and the potential effectiveness of RTI (Shinn & Brown, 2016).

The importance of implementation fidelity is strongly emphasized by Shinn and Brown (2016), and previous research on MTSS implemented with high fidelity suggest positive student outcomes (Gersten et al., 2009). Although research regarding ELL inclusion in MTSS practices also suggests potentially positive outcomes (Healy et al., 2005b; Linan-Thompson et al., 2006), this research is typically based on MTSS practices that are implemented with high fidelity and take the unique needs of ELLs into account. However, the results of the U.S. Department of Education report (2015) strongly suggest that schools may not be implementing MTSS with high fidelity. Poor implementation fidelity could cause negative outcomes for ELLs, as there are significant concerns regarding the cultural appropriateness of ELL inclusion in MTSS practices if students' unique needs are not taken into consideration (Klingner & Edwards, 2006).

Cultural Historical Activity Theory (CHAT)

The previous sections discuss the uniqueness of the ELL population, the research for and against ELL inclusion in MTSS practices, and the importance of examining implementation fidelity of MTSS practices. Indeed, ELL inclusion in MTSS practices is a complicated topic that is relatively new for schools. This is evidenced by the practitioners at a national conference who inspired the current study by raising concerns regarding ELL inclusion in MTSS practices. The uncertainty of these practitioners speaks to the complexity of the topic, which involves systems change, cultural differences, social influences, and individual factors, as well as requiring schools to consider both best practices for MTSS and best practices for ELL instruction. The

criticisms of ELL inclusion in MTSS practices highlight some of challenges schools have faced when trying to reconcile what they know about ELLs with what they know about MTSS.

In order to capture the complexity of the current topic in a meaningful way, CHAT was selected as a theoretical foundation as it is a "framework for understanding transformations in collective practices and organizations" (Engeström et al., 2002, p. 211). CHAT allows for the analysis of complex, transitional situations by considering social context and individual perceptions. In CHAT, activities and tasks are analyzed with the understanding that social and historical contexts influence these activities and tasks (Koszalka & Wu, 2004; Nussbaumer, 2012), and CHAT allows for the holistic analysis of individuals and their environment (Yamagata-Lynch & Haudenschild, 2009). Indeed, ELLs have a complex status and history in the United States, complicated by politics, education standards, immigration, and more. In order to best understand ELLs, they cannot be viewed in isolation. Rather, broad and local influences must be considered. CHAT is able to account for these complexities by describing tasks as activity systems, where various components interact within an environment to produce change. For the current study, this activity system is the act of including ELLs in MTSS. CHAT was developed through the social constructivist work of Vygotsky (1962, 1978) and is currently considered to be in its third generation. A history and description of CHAT is described below.

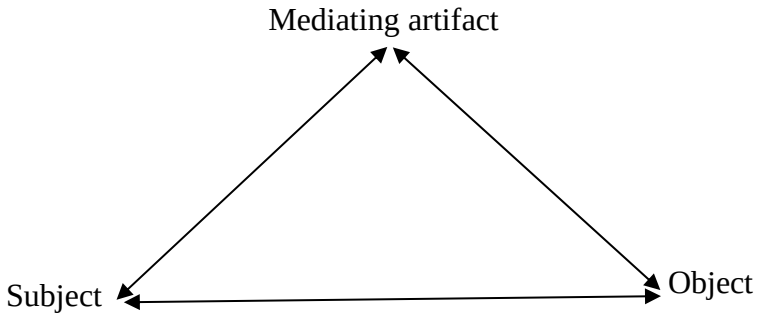
History of CHAT

The foundational principles of CHAT were developed by Leo Vygotsky, Alexander Luria, and Alexei Leont'ev in the late 1920s and early 1930s (Center for Activity Theory and Developmental Work, n.d.; Nussbaumer, 2012). The main principle of the first generation of CHAT was mediation, which was the focus of Vygotsky's work and is represented as an activity system in Figure 2 (Nussbaumer, 2012). Vygotsky viewed the human mind's interaction with the

world as mediated, arguing that "humans do not act directly on the physical world but rely, instead, on tools and labor activity, which allows us to change the world, and with it, the circumstances under which we live in the world" (Lantolf, 2000, p. 1). Mediation continues to be a major principle of CHAT.

Figure 2

First Generation CHAT Model (Engeström, 2001, p. 134)



Luria, on the other hand, focused his research on the community and the division of labor (Nussbaumer, 2012). This combination of mind and community is referred to as a *functional system*, and is "formed when the brain's electro-chemical processes come under control of our cultural artifacts" (Lantolf, 2000, p. 8). Luria's 1928 article "The Problem of the Cultural Behavior of the Child" focused on the use of these cultural tools. As the third major founder of the theory, Leont'ev focused on motivations, arguing that all activity is motivated by either a biological or a cultural need, and that these needs become motives once they are directed at a specific object (Lantolf, 2000). His 1930 article, "The Development of Voluntary Attention in the Child", discussed the social, historical, and culturally mediated aspects of psychological processes (Cole, 1988).

CHAT continued to develop though Luria's research in the Soviet Union and Central Asia in the 1930s (Cole, 1988). It was not until the 1960s and 1970s that their work made its way

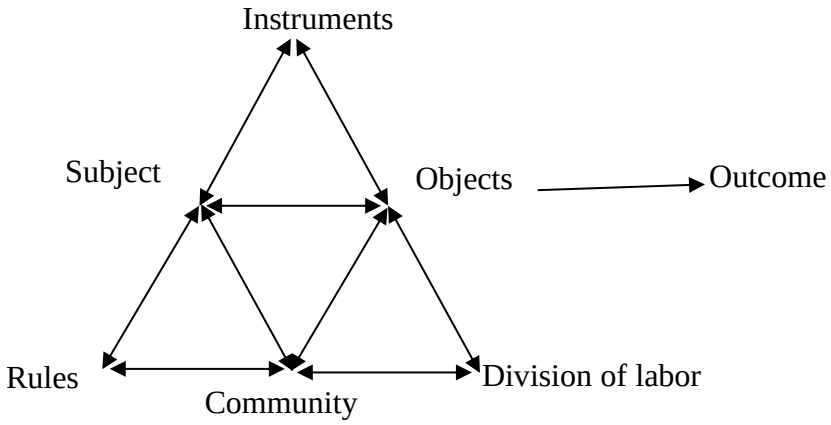
to western researchers. In the 1960s, Michael Cole, an American psychologist, began as a postdoctoral student in Luria's lab (Cole, 1988). Soon after, in the 1970s, the works of Vygotsky, Luria, and Leont'ev were translated in English and their ideas were recontextualized by western researchers (Center for Activity Theory and Developmental Work, n.d.). In the 1980s, education researcher Yrjö Engeström (1987) and psychologist Michael Cole (1988) independently published two foundational texts that influenced how western researchers understand CHAT.

Cole's article, "Cross-cultural research in the sociohistorical tradition" (1988) described the difference in the term "sociocultural" between the USSR and the USA. Cole describes the USSR research as mediational, focusing on the mediated function of higher psychological functions as well as the role of history, political, and economic factors. In contrast, Cole describes the research in the USA as context based, focusing on the cultural context and concrete activity systems. Cole then proposes an activity-based, context-sensitive, sociohistorical approach to researching human development.

Engeström's book, "Learning by Expanding" (1987) aimed to counter the traditional idea that learning was the "acquisition and reorganization of cognitive structures within the closed boundaries of specific tasks or problems" (Engeström, 2015, p. i,) by "offering a foundation for understanding and designing learning as a transformation of human activities and organization" (Engeström, 2015, p. i,). This book is considered to be the basis for the second generation of CHAT (displayed in Figure 3). In the second generation, Engeström emphasized the inclusion of rules and outcomes, and the importance of interactions between contexts within the activity system (Nussbaumer, 2012). These contexts, or elements, are a critical component of CHAT.

Figure 3

Second Generation CHAT Model (Engeström, 1987, p. 78)



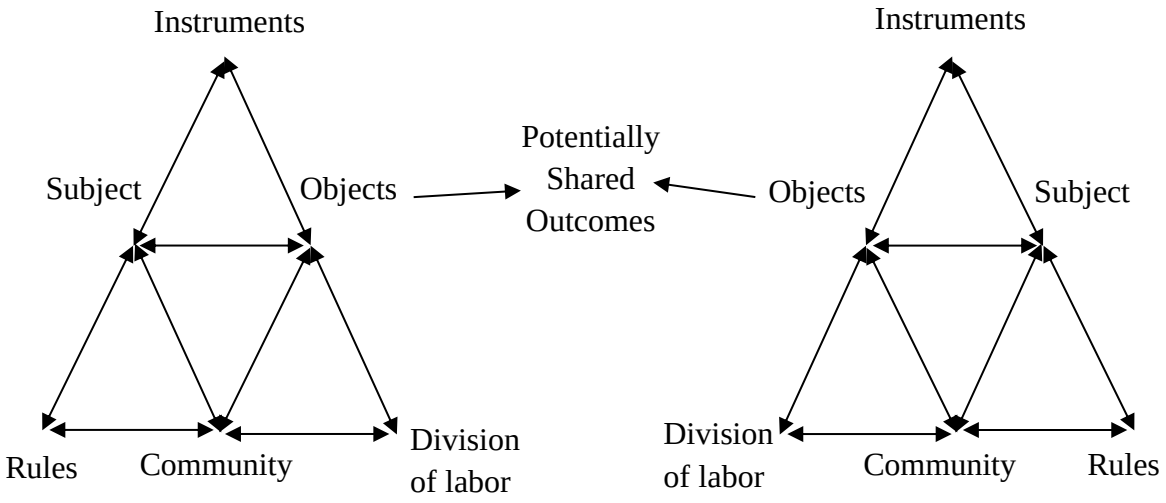
In this system, the subject is defined as the party seeking to achieve certain objects. The object is defined as "the 'raw material' or 'problem space' at which the activity is directed" (Engeström, 1993, p. 67). Specific to education, Yamagata-Lynch and Haudenschild (2009) defined the object as "the goal of an activity, the subject's motivation for participating in an activity, and the material products that subjects gain through an activity" (p. 508). Related to the object, outcomes are defined as "the consequences that the subject faces because of his/her actions driven by the object" (Yamagata-Lynch & Haudenschild, 2009, p. 508). How the object or the outcome is achieved is influenced by the instruments, rules, community, and division of labor that also exist within the system. These activity system elements are defined as follows (Yamagata-Lynch & Haudenschild, 2009, p.508):

- Instruments: "socially shared cognitive and/or material resources"
- Rules: "regulate the subject's participation while engaging in an activity"
- Community: "the group or organization to which subjects belong"
- Division of labor: "the shared participation responsibilities in the activity".

The third (and current) generation of CHAT (Figure 4) focuses on "tensions and contradictions that encourage collective networks through change" (Nussbaumer, 2012, p. 39). Engeström developed CHAT beyond the first and second generations partly to examine contradictions that may exist and create tension (Engestrom, 2001; Nussbaumer, 2012). This focus on contradictions and tensions highlights the assumption that individuals exist in social and cultural communities. These social and cultural communities can create imbalances within the activity system, and these imbalances foster change (Yamagata-Lynch & Haudenschild, 2009). For example, a set of teachers may be placed in charge of selecting a new reading curriculum. These teachers likely all share the same goal of improving reading outcomes for students, but some teachers may be selecting a curriculum based on the knowledge needed for students to pass an end of the year test, and some may be selecting a curriculum based on personal values about reading skills. One can imagine that with these differing approaches for achieving the same object, tensions and contradictions will arise within this group of teachers; what one teacher views as a good curriculum based on how to pass the test may not align with what another teacher views as a good curriculum based on personal judgment. The existence of these contradictions creates some type of change in the activity system. In the current example, change may be observed in the relationships of the teachers within the school community, the curriculum the teachers use, the school's definition of what constitutes a good curriculum, or the reading outcomes of students. Engeström (1987) identified four broad types of contradictions that can arise between individuals or parties: primary secondary, tertiary, and quaternary. A further discussion of inner contradictions is described below.

Figure 4

Third Generation CHAT Model (Center for Activity Theory and Developmental Work, n.d., p. 3)



Inner Contradictions

The first inner contradiction level is the primary level. "Primary contradictions occur when activity participants encounter more than one value system attached to an element within an activity that brings about conflict" (Yamagata-Lynch & Haudenschild, 2009, p. 509). For example, school administrators and teachers share the same object (goal) of increasing reading achievement. However, administrators may prefer Curriculum A for cost reasons and teachers may prefer Curriculum B because they are familiar with it. Here the conflict is based on the different values (cost and familiarity) that the participants (administrators and teachers) place on the instruments used (reading curriculum) within the activity. It's important to note that one value is not necessarily better than another value. Rather, what's important is that the values differ or are perceived to differ. This is the most basic of the four contradiction levels, and can reside within each element of the activity system (Engeström, 1993).

Secondary contradictions, "...occur when the activity participants encounter a new aspect of an activity, and the process for assimilating this new aspect into their daily activity brings

about conflict (Yamagata-Lynch & Haudenschild, 2009, p. 509). For example, teachers may agree to assess all students using a new reading test at the end of the school year. However, the expectations for curriculum content coverage does not decrease with the addition of this new task, and teachers may experience difficulty finding time to complete both the curriculum and the new test. Here the conflict is based on the assimilation of a new aspect of an activity (the addition of a reading test) into their daily activity (the existing curriculum).

Next, "tertiary contradictions occur when activity participants face conflicting situations by adopting what is believed to be a newly advanced method for achieving the object" (Yamagata-Lynch & Haudenschild, 2009, p. 509). An example of a tertiary contradiction may be the adaptation of an administrator-chosen reading curriculum (Yamagata-Lynch & Haudenschild, 2009). In this example, teachers may be required to learn the curriculum, participate in professional development, rearrange their class schedule, and create new assignments for a curriculum that may or may not align with their own perceptions of reading instruction. This conflict is based in the subjects (teachers) facing conflicting situations (need to rearrange schedules, give up old curriculum, learn new curriculum, etc.), although both parties want to achieve the object (providing a quality curriculum). Again, the presence of a contradiction does not indicate that one value is better than another. In the above example, teachers may be unnecessarily rearranging their schedule or rearranging it in an inefficient manner. Or, administrators may have underestimated the extra work necessary from teachers as a result of the curriculum change. The purpose of identifying inner contradictions is not to place blame on a particular party, but rather to identify areas where tensions exist in order to resolve tensions in a manner that creates positive change and promotes positive outcomes.

Finally, “quaternary contradictions occur when activity participants encounter changes to their activity that result in conflicts with adjacent activities” (Yamagata-Lynch & Haudenschild, 2009, p. 509). Continuing the previous example, teachers implementing a new reading curriculum may be required to teach reading for 90 minutes each day, while the previous curriculum only required 60 minutes each day. Therefore, teachers will need to remove 30 minutes from another aspect of instruction (such as math or science) in order to comply with the demands of the new curriculum. In this example, the subjects (teachers) encountered a change in their activity (a new reading curriculum mandating 90 minutes of daily instruction) that resulted in conflict with adjacent activities (removing 30 minutes of math each day).

The CHAT framework is an increasingly popular framework for education researchers to use due to the theory’s ability to describe complex situations with rich detail (Nussbaumer, 2012). In recent years, CHAT has been used to examine classroom technology integration (Koszalka & Wu, 2004), preservice teachers’ experiences (Sezen-Barrie et al., 2013), novice teachers’ participation in the school community (Saka et al., 2009), and teacher professional development (Yamagata-Lynch & Haudenschild, 2009). The third-generation model of CHAT is used to frame the current study in conjunction with the PBR framework in order to analyze practices and perceptions about ELL inclusion in critical MTSS aspects; a more complete description of how these frameworks provide a basis for the current study can be found below.

Frameworks Within the Current Study

Two frameworks have been described for the current study: PBR and CHAT. PBR guides the study’s focus and emphasizes practitioner perspectives as critical to conducting useful research. CHAT provides an important theoretical framework for analysis. By using CHAT, the current study is able to frame educator perceptions in an activity system and identify inner

contradictions. This analysis can then better inform stakeholders (such as MiBLSi and researchers) in order to foster useful change and address teacher concerns. The remainder of the literature review re-examines ELL inclusion in MTSS practices using a CHAT framework.

A CHAT Approach to ELL Inclusion in MTSS Practices

As noted earlier, ELLs are a complex population that can be difficult to study due to the intrinsic heterogeneity of the population, language and culture differences, and institutionalized barriers. MTSS practices are also complex, involving assessment and intervention practices, special education evaluations, systems-level change, and implementation fidelity. Examining ELLs within an MTSS model is a new and developing body of research. Therefore, in order to examine this complex new line of research, the current study proposes CHAT as a framework. Conceptualizing ELL inclusion in MTSS practices through the CHAT framework is something that has not yet been done in the literature, but is advantageous because CHAT provides a means for analyzing complex topics such as this. Furthermore, CHAT places an emphasis on perceptions, a critical area of research often neglected within teacher-related and systems change literature (Darling-Hammond, 2009). The following sections highlight challenges presented earlier in the chapter and reconceptualizes them within the seven elements of the CHAT activity system: subject, instruments, rules, community, division of labor, objects, and outcomes.

Elements of the Activity System

Subject

Teachers can be important agents of change for students with unique cultural and linguistic needs (Au & Mason, 1981; Jiménez & Gersten, 1999; Masny & Ghahremani-Ghajar, 1999). With the potential to be a great influence on a child's educational development, it is important to examine teachers as a critical system element when considering ELL inclusion in

MTSS practices. As discussed earlier, teacher education and professional development are important factors that relate to quality EL instruction. (J. Klingner & Harry, 2006; Orosco & Klingner, 2010). In addition, there is uneven training across teachers (Gandara et al., 2005), misconceptions about the speed of learning English (Hang Khong & Saito, 2014; McLaughlin, 1992; Reeves, 2006), low teacher confidence (Gandara et al., 2005), and confusion regarding what expectations should be set for ELLs (Youngs, 1999). Previous research also suggests that many teachers may not recognize what resources or training they lack (Gandara et al., 2005), and have high amounts of frustration and stress when working with ELLs (Gandara et al., 2005; Hang Khong & Saito, 2014; Markham et al., 1996). Some teachers have reported objecting to ELLs placed in their classrooms or to adapting materials for ELLs (Walker et al., 2004).

Briefly discussed earlier was the influence of teacher attitudes on quality EL instruction (Hang Khong & Saito, 2014; Lucas et al., 1990). Attitude "refers to a person's favorable or unfavorable evaluation of an object" (Fishbein & Ajzen, 1976, p. 12) and can be an important indicator of the importance and acceptance that individuals place on treatment procedures, goals, and outcomes (Foster & Mash, 1999; Wolf, 1978; Gersten et al., 2005; Reimers et al., 1987). In regard to the general student population, teachers tend to find certain aspects of MTSS to be acceptable (Eckert et al., 1995; Stebbe Rowe et al., 2014; Wilcox et al., 2013). Much of the research regarding teacher acceptability of MTSS has focused specifically on curriculum-based assessments (CBAs), which are typically used for universal screening and progress monitoring in MTSS approaches. In one such study, teachers ranked reading, writing, and math screeners as containing important information for their students to know (VanDerHeyden et al., 2001). Another study examined teachers' perspectives on RTI implementation through surveys, interviews, and focus groups (Wilcox et al., 2013). Although teachers generally expressed a

desire for more professional development, they tended to feel confident at measuring student achievement and identifying students with potential learning disabilities. However, they did not feel confident in their ability to provide instruction in a way that would promote learning. In another mixed methods examination of teacher acceptability of reading curriculum-based measurement techniques (CBM-R), teachers reported that CBM-R was generally an appropriate, fair, and reasonable method for determining student performance (Stebbe Rowe et al., 2014).

Although teacher acceptability is relatively high for MTSS practices with the general student population, much less research exists that examines teachers' attitudes toward MTSS practices specifically with ELLs. As the literature has not yet settled on whether MTSS practices as they are currently implemented in schools are culturally appropriate for some or all ELLs, it is unlikely that teachers feel confident in their decisions regarding whether or not to include ELLs in critical aspects of MTSS. One study qualitatively examined teacher perceptions of RTI after one year of implementation in an urban school that included both ELLs and non-ELLs (Greenfield et al., 2010). The results indicated five themes: 1) assessment and progress monitoring helped teachers understand student progress and increased student achievement, 2) RTI helped teachers provide targeted instruction and know when to change their instruction, 3) RTI influenced teacher practices for referring students for special education, 4) teachers felt that they were integral stakeholders in the school, and 5) concerns persisted regarding the use of RTI with ELLs. Teachers reported that although RTI could help them know when to refer ELLs for special education evaluations, they were still concerned about making these referral decisions. Although RTI seemed promising, the teachers stated that it was still in development and they weren't sure how it was influencing ELLs' academic achievement. ELLs were referred to as both "a hard topic" and "a huge problem" (p. 56). Teachers reported concerns with over-referring

ELLs for special education regardless of whether or not RTI was implemented, however they also reported that the RTI process influenced how they made referral decisions regarding ELLs. This study highlights the potential confusion that teachers currently have regarding the inclusion of ELLs in RTI practices. However, this is only one study that did not exclusively examine ELLs, and further examination of teacher perceptions of ELL inclusion in MTSS practices is necessary if researchers hope to identify potential solutions for these practitioner concerns.

Instruments

The second element of the activity system is instruments. This refers to the resources that are available within the system, such as time, money, materials, etc. It was discussed earlier that ELLs sometimes require unique assessment and instruction materials (Martines & Rodriguez-Srednicki, 2007; Rhodes et al., 2005). Teachers also report a lack of personnel, technology, access to student assessment data and resource organization (Suzuki, 2008). Finally, teachers often report time as a critical barrier to quality ELL instruction (Gandara et al., 2005; Gitlin et al., 2003; Hang Khong & Saito, 2014; Reeves, 2006; Suzuki, 2008; Youngs, 1999). Challenges with resources and tools is likely to increase as requirements for these resources become more specific (i.e. if finding ELL assessments is difficult, then finding ELL assessments for MTSS practices is likely to be even more difficult). Indeed, many concerns about including ELLs in MTSS practices focus on a lack of culturally appropriate resources (Gandara et al., 2005).

Rules

Previous sections noted the challenge that teachers can face when trying to accommodate varying levels of education policies (Hang Khong & Saito, 2014). Federal, state, and district policies may require teachers to act against their own judgement, may be confusing, or may create more work for teachers. Indeed, teachers may feel the pressure of trying to follow rules

regarding MTSS, special education eligibility, and ELL practices. It is likely that teachers struggle with knowing how to best navigate these different policies, as is evidenced by the practitioners at a national conference who inspired the current study. These practitioners discussed confusion over how to follow perceived rules for ELL best practices while still following perceived rules for MTSS procedures.

Community

The next element of the activity system is the community in which teachers exist. This includes the larger context of the nation (such as current political rhetoric regarding immigration and English as a national language), trends in scientific research (Klingner et al., 2006; Rinaldi & Samson, 2008; Vanderwood & Nam, 2007), and the growth and diversity of the ELL population (Hang Khong & Saito, 2014; Klingner & Edwards, 2006; NCELA, 2011). As mentioned earlier, ELLs often tend to have lower academic achievement scores than their peers and are more likely to drop out of school (Battin-Pearson et al., 2000; Cho & Reich, 2008; Markham et al., 1996; Suh et al., 2007; Thompson et al., 2002; U.S. Department of Education, 2014). These larger, national trends can influence the way teachers view ELLs and create pressure for teachers trying to provide a quality education to a diverse ELL population (Gandara et al., 2005; Hang Khong & Saito, 2014). National education trends, such as the increasing popularity of MTSS, can also influence the way in which teachers teach, and various trends/policies may contradict each other and be confusing for educators to reconcile (such as the increase in anti-bilingual legislation in tandem with a current push for more inclusive classrooms).

The community element also includes a narrower context, such as local district and school communities. These local influences are also an important part of the culture in which the system exists (Hang Khong & Saito, 2014), such as administrator perceptions about MTSS

and/or administered perceptions of resource allocation for ELLs (Harklu, 2000; Suzuki, 2008; Walker et al., 2004). A city or district's local ELL demographics and population trends are also relevant, such as whether the ELL population tends to speak the same native language or many native languages, or whether they tend to be transient or stationary.

Division of Labor

Another element of the activity system that is important to investigate when considering ELL inclusion in MTSS practices is the division of labor. Providing quality education requires a partnership between numerous parties, including teachers, administrators, and family. Dividing responsibilities between parties is an inevitable part of any system, and understanding these divisions is important for successful outcomes.

Families are one important party that share responsibility for ELL outcomes. However, teachers report communication with ELL families as a challenge (Gandara et al., 2005; Lee et al., 2007; Suzuki, 2008). Although family communication is not typically emphasized in MTSS practices (Byrd, 2011), it cannot be ignored as a potentially important barrier when considering MTSS practices with ELLs. Byrd (2011) discusses three principle reasons why parents should be involved in the MTSS process: 1) MTSS is a complicated process that often uses educational jargon; 2) MTSS can sometimes lead to special education, a process in which parents are required to participate; and 3) parent involvement in their children's education leads to positive student outcomes. These reasons seem particularly relevant for ELL families, who may have language barriers or be unfamiliar with the United States education system.

The division of labor within schools is also important to consider, especially with ELLs. MTSS often requires a restructuring of staff duties, such as deciding who will administer assessment tools or who will provide different tiers of interventions. McInerney and colleagues

(2014) advise schools to consider the following division of labor questions (p. 59); 1) "Who oversees the program at the school and district level?", 2) "Who delivers the interventions and monitors and evaluates progress?", 3) "Are interventionists' caseloads manageable?", and 4) "Are teams identifying the students who require intensive intervention correctly?". These tasks are typically divided between teachers, educational assistants, special education staff, and MTSS coaches. However, ELLs often receive support from ESL staff as well, so additional questions regarding how ESL staff are included in an MTSS system arise. In a case study of six elementary schools, ESL specialists were noted to be standing members of the schools' RTI teams (Neff Vardy, 2016). Another case study noted that ESL specialists were included on the school's RTI team, but referred to the ESL services as "negligible support that was infrequent and ineffective" (Orosco & Klingner, 2010). Rinaldi and Samson (2008) suggest that ELL specialists should progress monitor oral and academic language skills in Tier Two settings and be involved with data-based decision making, although the regularity of this in practice is unknown.

Finally, teachers report wanting the opportunity to collaborate with colleagues (Gandara et al., 2005), but often find that schools do not provide enough support, resources, or time for this (Suzuki, 2008). In a study that examined the integration of ESL and MTSS services for first-grade students, Caloia (2016) found that classroom teachers were responsible for administering universal screeners, and reading specialists were responsible for delivering interventions and administering progress monitoring probes. ESL teachers were involved in the RTI teams, but their involvement in the RTI process was a point of contention (p. 94.):

> "...ESL services were not considered to be a Tier II intervention, because the ESL teacher was providing support so that English Language Learning students could access the core, Tier I classroom instruction. As a result, while the ESL teacher documented lesson plans

> and collected instructionally relevant information for herself, the ESL services and progress of ESL students in that setting were not officially documented. This became an issue when a fourth grade English Language Learning student might be struggling and there was no documentation of the additional instruction that the student received"

This example highlights the importance of collaboration between school personnel. Indeed, division of labor challenges may be particularly relevant when considering ELL inclusion in MTSS practices, as ELLs may require additional personnel such as ESL teachers and translators.

Object

Providing high quality reading instruction to ELLs is likely done in order to provide an appropriate education to ELLs. Schools may also have additional reasons as well, such as improving school reputation, meeting legal mandates, or social justice causes. The objectives of providing high quality reading instruction to ELLs could be very similar to the objectives for providing MTSS practices to ELLs. For example, schools who include ELLs in MTSS practices may desire to improve ELL outcomes, improve school reputation, meeting new local and federal mandates regarding disability evaluations, or for broader social justice concerns.

However, a school's objectives for providing high quality reading instruction to ELLs may differ from their objectives for including ELLs in MTSS practices. For example, a school may provide high quality reading instruction in order to increase reading outcomes for ELL, but include ELLs in MTSS in order to have data for teacher evaluations. In these cases, it might be unclear as to which of these objectives are prioritized, but understanding these differences could lead to a better understanding of how ELLs are practically included in MTSS models.

In addition, understanding how teachers perceive objectives could also lead to important insights. For example, if teachers perceive that the objective of including ELLs in MTSS

practices is to delay or deny services to ELLs, they may be less likely to support inclusion in MTSS practices. In contrast, if a teacher perceives that the objective of including ELLs in MTSS practices is to improve student outcomes, they may be more likely to promote ELL inclusion.

Outcome

MTSS practices are associated with improved outcomes for students, including fewer evaluations, reduced waste of resources, reduced special education rates, and reduced disproportionality rates in special education (Faggella-Luby & Wardwell, 2011; Fuchs et al., 2008; Lembke et al., 2010; VanDerHeyden et al., 2007). The (limited) available research examining ELL outcomes from MTSS practices parallels this research on all students, suggesting that ELL inclusion in MTSS practices may improve reading outcomes for ELLs (Healy et al., 2005a; Linan-Thompson et al., 2006). However, beyond student outcomes, inclusion of ELLs in MTSS practices could lead to broader outcomes as well, such as a change in the distribution of school resources, changes in teacher perceptions, and changes in school cultures. These outcomes may be positive and/or negative. How teachers perceive actual outcomes is also likely to influence their perceptions of the system and their willingness to engage in the system. For example, if a teacher perceives that ELL inclusion has good intentions but actually leads to negative outcomes, this teacher may be less likely to include ELLs in MTSS practices.

Inner Contradictions Within ELL Inclusion in MTSS Practices

Inner contradictions are part of the CHAT framework that allow for an analysis of tensions within and between activity systems. Although a majority of persons in education likely share a common objective of improving reading outcomes for ELLs, it is recognized that conflicts exist within any system going through some type of change. These conflicts are represented in the CHAT framework as inner contradictions, which, when identified, can help

stakeholders understand complicated dynamics and foster positive change. Contradictions represent "historically accumulating structural tensions within and between activity systems" (Engeström, 2001, p. 137). Throughout this section, challenges and concerns described in relation to ELLs and MTSS practices are reframed as potential inner contradictions (see Table 2) in order to provide examples of inner contradictions that may exist in practice. As inner contradictions exist on four levels, the following section is organized accordingly.

Primary Contradictions

Primary contradictions occur when different parties do not share a common value on some element within the activity system (Yamagata-Lynch & Haudenschild, 2009), and exist within a single system element (Roth, 2004). An example of a primary contradiction could be the use of typical assessment and intervention materials for implementing MTSS with ELLs, as administrators buying materials may not share a common value with teachers on what assessment and intervention characteristics are important (i.e. research based versus cultural sensitivity). The contradiction exists within the instrument component, with parties disagreeing on which assessment tool (instrument) to use based on differing values. Again, it is important to note that the term "values" does not connote positive or negative attributes, but rather simply indicates differing levels of importance or priority. For example, teachers may place a high value on having culturally-sensitive assessment materials in their classrooms, but administrators may place a high value on evidence-based, reliable, and valid assessment materials in their classrooms. Both teachers and administrators have good intentions, but also different values. Values do not need to be mutually exclusive (although they may be perceived that way), indeed, one of the purposes of evaluating inner contradictions is to uncover differing values in order to address these differences in a mutually beneficial way.

The current literature review highlights more potential primary contradictions in addition to the above example. Poor professional development regarding best practices for ELLs could represent differing priorities between administrators and teachers. For instance, administrators may provide professional development to increase MTSS competencies, but may not specifically focus on a sub-topic that teachers desire (such as ELLs). Alternatively, teachers may not be actively participating in professional development that schools offer because they do not believe it will be beneficial. The lack of opportunity for teachers to collaborate with colleagues may represent differing values between administration and teachers if the administration does not value communication between teachers as highly as teachers do, possibly preferring use of extra time to provide professional development or work on other school priorities.

Secondary Contradictions

A secondary contradiction occurs when assimilation of a new element in the system brings about conflict between multiple components (Roth, 2004; Yamagata-Lynch & Haudenschild, 2009). The concerns raised regarding the lack of research for diverse groups of ELLs could be considered a secondary contradiction. Researchers may have difficulty conducting research that includes specific subgroups of ELLs, such as non-Spanish-speaking ELLs. This creates a lack of research and materials for these subgroups, which can create barriers for schools and teachers trying to provide best practices. This concern represents a tension between the community (the diverse population of ELLs) and the instruments available (various assessment materials).

Another example of a secondary contradiction would be the lack of resources available to foster communication between the teacher and ELL families (Gandara et al., 2005; Suzuki, 2008). This could represent a contradiction between the instrument component (the needed

resources, such as time or translators) and the rules component (administration/district policies/budget decisions). The feelings of pressure and frustration that teachers report (Gandara et al., 2005; Hang Khong & Saito, 2014) could also be considered a secondary contradiction. This could be conceptualized as a tension between the instrument component (time and resources) and the community component (a societal trend of low-achieving ELLs).

Tertiary Contradictions

Tertiary contradictions occur when a new method is developed to achieve the object and conflicting situations arise (Yamagata-Lynch & Haudenschild, 2009). An example of a tertiary contradiction would be the introduction of MTSS practices as a means of improving reading outcomes for ELLs. Teachers may believe that standard MTSS practices are not beneficial for ELLs. For example, if a school implements a standard-protocol approach that does not account for unique ELL needs, such as vocabulary, teachers may be hesitant to adopt this new approach in favor of other approaches that better align with ELL best practices. Similarly, if teachers don't understand the ways in which MTSS can be individualized for ELLs through a problem-solving approach, they may dismiss the MTSS approach. Another example of a tertiary contradiction from the literature may be many of challenges discussed in the implementation fidelity literature. When implementing a new program such as MTSS, teachers may face challenging situations such as making additional time during reading instruction to progress monitor.

Quaternary Contradictions

A quaternary contradiction exists when a change in the activity causes conflict with another, adjacent activity (Yamagata-Lynch & Haudenschild, 2009). An example of a quaternary contradiction is the concern that individualizing instruction for ELLs conflicts with other instruction/assessment activities (Gandara et al., 2005). Similarly, taking the time to

individualize MTSS practices for ELLs could also conflict with other classroom or ELL-related activities. Teachers may be less likely to promote ELL inclusion if they believe that ELLs are losing valuable ESL intervention time in order to received MTSS-based tiered intervention time.

Table 2

Potential Inner Contradictions Presented in the Literature Review

Level	Engeström's definitions	Challenges and concerns raised in literature review
Primary	"When activity participants encounter more than one value systems attached to an element within an activity that brings about conflict."	Teachers and school administrators may not share a common value on culturally sensitive materials. Teachers and school administrators may not share a common value on ELL-focused professional development sessions. Teachers and school administrators may not share a common value on inter-staff communication.
Secondary	"When activity participants encounter a new element of an activity, and the process for assimilating the new element into the activity brings about conflict."	Researchers and school personnel do not account for the heterogeneity of ELLs in classrooms, which creates a lack of appropriate research, instruction and assessment materials, as well as less resources for family communication and increased pressure and frustration for teachers.
Tertiary	"When activity participants face conflicting situations by adopting what is believed to be a newly advanced method for achieving the object."	If schools require teachers to use MTSS practices to improve reading outcomes with ELLs. The lack of overlap between MTSS and ELL best practices Implementation fidelity and an understanding of how to implement a newly advanced method.
Quaternary	"When activity system participants encounter changes to an activity that result in creating conflicts with adjacent activities."	Individualizing instruction for ELLs conflicts with other instruction/assessment activities. Taking extra time to individualize MTSS practices for ELLs may conflict with other ELL or classroom activities.

It is important to note that many of the situations described above could be categorized as different levels of contradictions based on the exact details of each situation. For example, the challenge of communicating between teachers and ELLs' families was described as a secondary contradiction between the instrument and the community components of the activity system. However, this same challenge could be described as a primary contradiction within the community component if teachers and administrators had different values on the importance of including ELLs' families in the learning process. The above examples demonstrate ways in which the challenges described in the literature could be represented in the CHAT framework, but the manner in which these challenges are categorized in any given activity system depends on the unique perceptions and experiences of the subjects within any specific system.

Gap in the Research

MTSS models have recently appeared in federal policies and are being increasingly implemented at local schools (Spectrum K12 School Solutions, 2011). The implementation of these models is likely to have an influence on students' educational development, yet research examining ELLs within an MTSS context is limited. In addition, the research-practice gap between researchers and practitioners is a persistent challenge within the field, and this is particularly true in regard to ELL inclusion in MTSS practices (Hill et al., 2012). Not only are school personnel likely unclear on what best practices are for ELLs in regard to MTSS, but researchers are unclear on how schools are implementing MTSS with ELLs. Furthermore, it is not clear how and why ELL inclusion may vary, and teacher perceptions of ELL inclusion in MTSS practices have yet to be examined by researchers.

The current study explored gaps in the literature regarding ELL inclusion in MTSS practices. Specially, two gaps in the researcher-practitioner relationship cycle were identified: 1)

there is a lack of understanding on current implementation of MTSS practices with ELLs, including how implementation fidelity relates to ELL inclusion; and 2) there is a lack of knowledge on what perceptions practitioners may have in regard to ELL inclusion. In order to address these gaps, the following research question and hypotheses were developed.

Research Questions and Hypotheses

1. To what extent do early elementary teachers that are involved in MTSS implementation include ELLs in critical aspects of MTSS?

As little research has investigated actual inclusion rates of ELLs within MTSS practices, it is difficult to hypothesize whether schools are currently including ELLs in critical aspects of MTSS, specifically universal screenings, tiered instruction, progress monitoring, and data-based decision making. In addition, the research-practice gap that exists creates potentially wide variation in teacher knowledge and perceptions regarding ELL inclusion. While some teachers may be including ELLs based on a general understanding that MTSS is a universal practice, others may have concerns about the ability to implement MTSS in a culturally sensitive manner, or may be experiencing practical challenges for implementation. It was hypothesized that there would be a range of ELL inclusion practices across teachers within the sample.

2. How does ELL inclusion in critical aspects of MTSS differ between schools with varying levels of MTSS implementation fidelity (as measured for the general student population)?

Research on implementation fidelity suggests that programs implemented with high fidelity are more easily transferred to another group (O'Donnell, 2008; Swanson et al., 2011). Furthermore, MiBLSi encourages the use of a problem-solving approach for students with unique needs, and schools may recognize that this approach may alleviate some challenges to implementing MTSS with students who have unique linguistic and cultural needs. Therefore, it

was hypothesized that higher ELL inclusion rates are more likely in schools that have higher implementation fidelity with the general student population.

3. How do first grade teachers perceive their activity system in regard to ELL inclusion in MTSS practices?

This research question was developed as a means to qualitatively explore and describe teachers' perceptions about ELL inclusion in MTSS practices through a CHAT activity system framework. It is recognized that the data collected via interviews are limited to an exploration of teachers' current perceptions within the scope of their schools' current approaches to MTSS reading practices. It was expected that teachers would identify a variety of themes within each CHAT element regarding the inclusion of ELLs in an MTSS model.

4. How do other stakeholders (i.e. principal and state-level MTSS implementation staff) perceive their activity system in regard to ELL inclusion in MTSS practices?

Similar to teacher data, it is recognized that the data collected via interviews are limited to current perceptions. It was expected that these stakeholders would identify a variety of themes within each CHAT element regarding the inclusion of ELLs in an MTSS model.

5. What inner contradictions exist in regard to ELL inclusion in MTSS practices at the first-grade level?

The teacher activity systems were examined for inner contradictions (primary, secondary, tertiary, and quaternary) via the CHAT framework. Interviews with principals and a MiBLSi representative supplemented this data to further inform the analysis. It was hypothesized that all four types of contradictions would emerge from the interview data and that tensions would exist within and between the various activity system elements.

CHAPTER 3: METHODS

Design

In order to understand current teacher practices and perceptions related to including ELLs within MTSS, a mixed methods research design was selected. Mixed methods designs utilize quantitative and qualitative methods in order to increase the strength of a study beyond what using only quantitative or qualitative methods could provide (Creswell & Plano Clark, 2007), and allow for methodological triangulation (Morse, 1991). There are four classifications of methodological triangulation: primarily qualitative and simultaneous, primarily quantitative and simultaneous, primarily qualitative and sequential, and primarily quantitative and sequential (Morse, 1991). Simultaneous methodological triangulation occurs when data are collected simultaneously and the findings are used to complement each other in the discussion; sequential methodological triangulation occurs when the quantitative/qualitative data are necessary in order to collect the corresponding qualitative/quantitative data. The current study was primarily qualitative and simultaneous (QUAL+quan). A primarily qualitative mixed methods study is suggested if any of the following criteria are met (Morse, 1991, p. 120):

a) "The concept is 'immature', due to a conspicuous lack of theory and previous research
b) A notion that the available theory may be inaccurate, inappropriate, incorrect, or biased
c) A need exists to explore and describe the phenomena and to develop theory; or
d) The nature of the phenomenon may not be suited to quantitative measures".

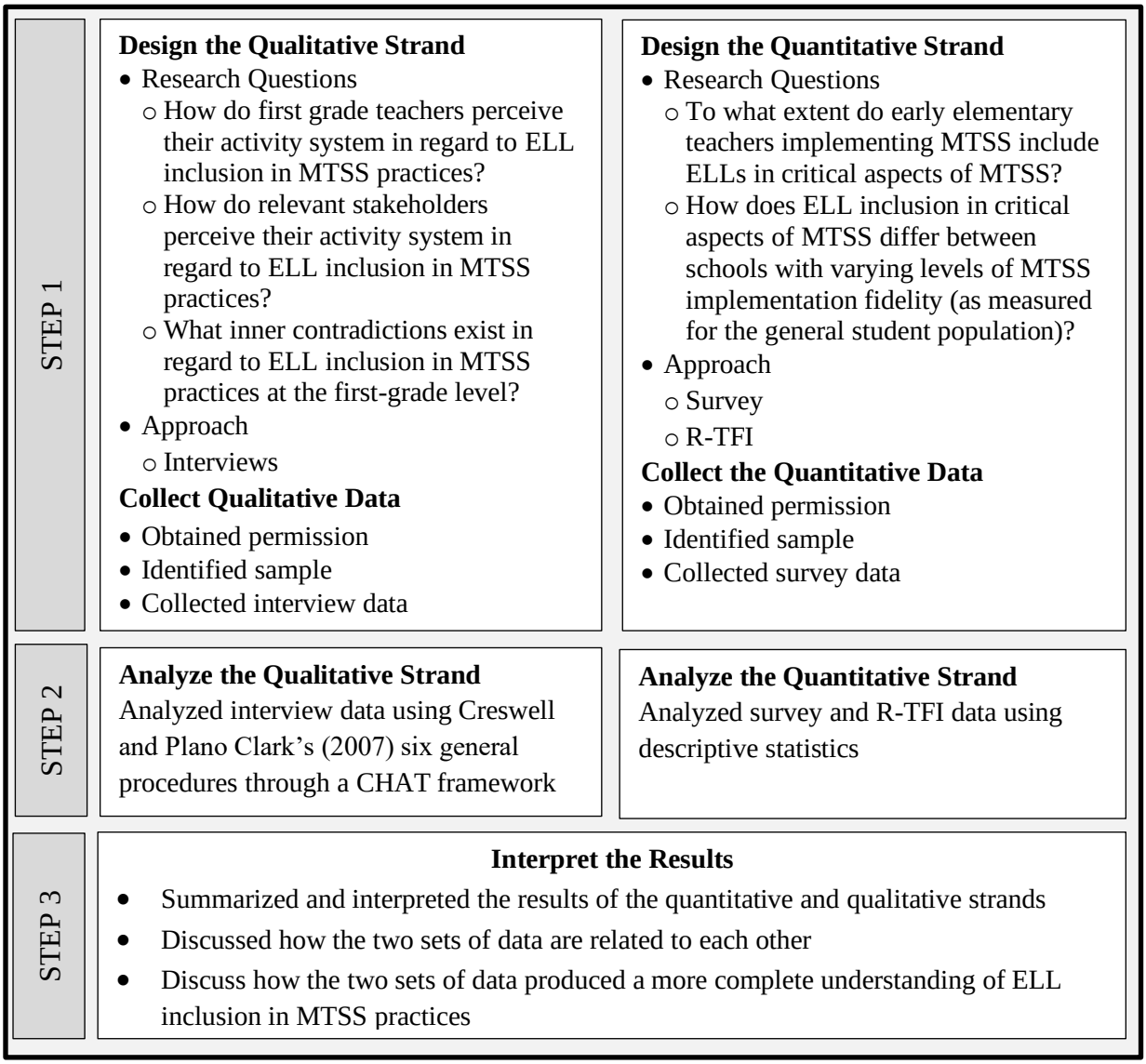
If none of the above criteria are met, then a primarily quantitative study is suggested (Morse, 1991). The current study was primarily qualitative in nature as the concept of ELL inclusion in MTSS practices is new, and the research regarding this inclusion is limited (i.e., "immature").

Another means of classifying methodological triangulation is Creswell and Plano Clark's (2007) six major mixed methods research designs. These classifications build off of previous means of classifying methodological triangulation, and are specific to the social and behavioral sciences. The current study used a convergent mixed methods design, which parallels the QUAL+quan design. A convergent design is defined as "concurrent quantitative and qualitative data collection, separate quantitative and qualitative analyses, and the merging of two data sets" (p. 73). Convergent mixed methods designs are appropriate when the aim is to develop a better understanding of a topic, and when the quantitative and qualitative data are independent of one another. This is appropriate for the current study, as little research has been published regarding ELL inclusion in MTSS practices and teachers' perceptions regarding this system. In addition, the current study had independent quantitative and qualitative pieces that complement each other rather than inform each other, as is appropriate with convergent designs. An acceptable variant of a convergent design, named parallel-databases variant, occurs when the data sets are merged during the interpretation of the data (rather than in the analysis) in order to gain a more complete picture of the topic. This variant was appropriate for the current study as the qualitative and quantitative pieces examine two facets of the same general topic. The quantitative questions on the survey and Elementary Reading Tiered Fidelity Inventory (R-TFI) examined ELL inclusion practices in teachers' classrooms and implementation fidelity, while the qualitative interviews examined perceptions of inclusion. Together, these two sets of data provided a deeper understanding of ELL inclusion. "The purpose of simultaneous triangulation is to obtain different but complementary data on the same topic, rather than to replicate results" (Morse, 1991, p. 122). Synthesizing two independent facets in the discussion in order to better understand

a greater topic is a common way to interpret data (e.g. Feldon & Kafai, 2008). Figure 5 displays a flowchart of the basic procedures for design implementation.

Figure 5

Basic Procedures in Implementing a Convergent Design With a Parallel-Database Variant



Participants

Survey Participants

Participants included early elementary teachers currently implementing an MTSS framework as evidenced by their participation in MiBLSi or by publicly available school

materials. MiBLSi is an initiative funded by the Michigan Department of Education. MiBLSi "provides a statewide structure to create local capacity for an integrated behavior and reading Multi-Tiered System of Supports (MTSS) that can be implemented with fidelity, is durable over time and utilizes data-based decision making at all levels of implementation support" (MiBLSi, n.d.). MiBLSi supports participating schools through training and coaching at the district and county level, as well as providing access to student assessment tools. Initially, only teachers at schools participating in MiBLSi were sought out for participation in the study. However, the participant pool was broadened in order to increase the number of participants.

Kindergarten, first, and second grade teachers were included in the survey sample, as MTSS strategies are more commonly used with early elementary students. Working with a narrow group of teachers (i.e. early elementary) lessened the educational diversity within the ELL population and between the ELL and non-ELL population, as early elementary students all have similar years of education. For example, if a first-grade ELL enters the classroom with no prior education, the student will only be one year behind their non-ELL peers in regard to a formal education as it is provided in the United States. However, if the sample was raised to a more advanced grade, such as fifth grade, then a new ELL could be up to five years behind his peers.

It is recognized that some schools may place restrictions on younger ELLs in regard to special education evaluations (such as not allowing an ELL to be evaluated for special education until third grade), and therefore the data gathered regarding special-education decision making may be limited. However, special education evaluations are only one aspect of the current study and therefore the importance of guaranteeing a large enough sample size of teachers who implement MTSS practices was judged to outweigh the importance of a large enough sample

size of teachers who evaluate ELLs for special education services. Although it will be important for future researchers to examine a wide range of ELLs participating in MTSS practices, the limited sample size of the current study coupled with an overly diverse sample was anticipated to create excessive challenges when interpreting results. Therefore, a narrow sample demographic was selected in order to increase the likelihood of gathering meaningful descriptive data.

The teacher survey was completed by 116 teachers; however, 16 teachers reported that they did not currently have any ELLs in their classes. In addition, one survey respondent indicated that she was an ESL teacher, one respondent reported she was a special education teacher, and one respondent reported she taught fourth grade. Only the data from the remaining 97 survey responses (K-2 general education teachers implementing MTSS with at least one ELL in the classroom) were used during data analysis. Out of the 97 teachers, 40 reported currently teaching kindergarten/early kindergarten, 30 reported teaching first grade, and 29 reported teaching second grade. The majority of respondents were female (n = 95, or 97.9%). The mean, median, minimum, and maximum for years of teaching and years of education among respondents can be found in Table 3.

Table 3

Participant Descriptive Statistics for Years of Teaching and Education

Variable	N	Mean	Median	Minimum	Maximum
Years of Teaching	87	13.86	13.00	1	35
Years of Education	71	6.97	7.00	4	12

Teachers reported a variety of earned degrees and endorsements. In regard to the highest degree earned, 22 teachers indicated that they had earned a Bachelor's degree, 69 teachers indicated a Master's degree, 1 teacher indicated two Master's degrees, 3 teachers indicated an Education Specialist degree, and 2 teachers indicated a Certificate of Advanced Graduate

Studies. In regard to the endorsements earned, 49 teachers indicated they had an Early Childhood endorsement, 27 indicated an English Language Arts endorsement, 17 reported a Reading endorsement, 11 reported an ESL or TESOL endorsement, 5 teachers indicated a Special Education endorsement, 4 indicated an endorsement in a specific foreign language, and 2 teachers reported they had an endorsement in Educational Technology.

The majority of teachers indicated White or Caucasian as their ethnicity (*n*= 94). The remaining three teachers indicated their ethnicities as Hispanic or Latinx (*n* = 1), Black or African American (*n* = 1), and Other (*n* = 1). Most teachers indicated their age to be between 31 and 40 years (*n* = 39). Teachers aged 20 to 30 represented the next largest group (*n* = 21), followed by teachers aged 41-50 (*n* = 20), and teachers aged 51 to 60 (*n* = 16). One teacher reported their age as greater than 60 years.

Socioeconomic status of the districts the teachers worked in was calculated using data from The U.S. Census Bureau's Small Area Income and Poverty Estimates program (SAIPE). The SAIPE data indicated that the number of children considered to be in poverty within the teachers' district's geographical boundaries ranged from 4 percent to 37 percent of children in poverty (Mean = 17.5 percent). Half of all teachers (*n* = 49) worked in districts with 11 percent or fewer children in poverty, one quarter of teachers (*n* = 23) worked in districts with 12 to 22 percent of children in poverty, and one quarter of teachers (*n* = 25) worked in districts with 37 percent of children in poverty. These 25 teachers with the highest rate of child poverty all worked in the same district, which is a large district with over 15 elementary schools.

Teachers were also asked to report on aggregate ELL demographics for their classroom (see Figure 6). Overall, teachers reported a range of 1 to 26 ELLs currently in their classrooms, but many teachers reporting only 1 to 2 ELLs in their classrooms. Teachers reported over 26

native languages spoken in their classrooms. The majority of teachers reported that only one non-English native language was present in their classrooms, with the most common languages being Arabic and Spanish (see Figure 7 for number of languages spoken per classroom). Most teachers (*n* = 57) reported that the ELLs in their classrooms have spoken English for similar amounts of time, while 37 teachers reported that ELLs in their classroom have spoken English for varying amount of time, and 3 teachers reported not knowing how many years the ELLs in their classroom have been speaking English (see Figure 8).

Figure 6

ELLs in Classroom. Number of ELLs per Classroom

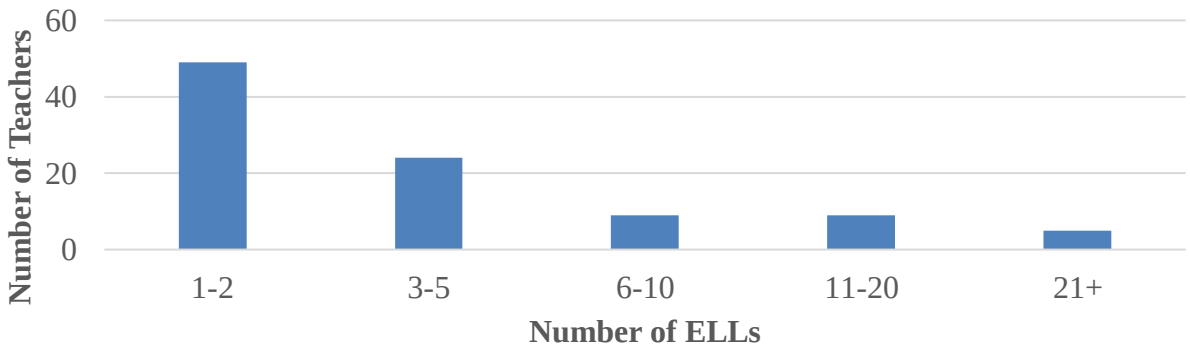


Figure 7

ELLs in Classroom. Number of Non-Native Languages Spoken per Classroom

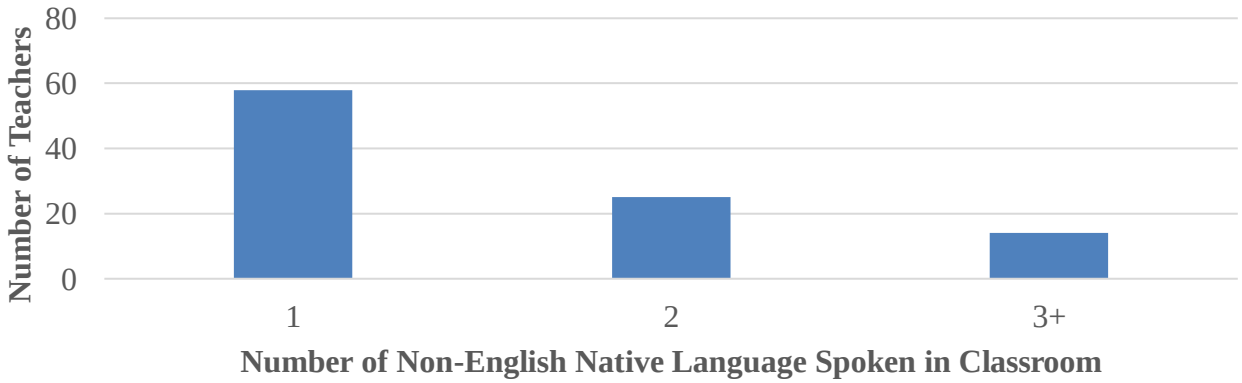
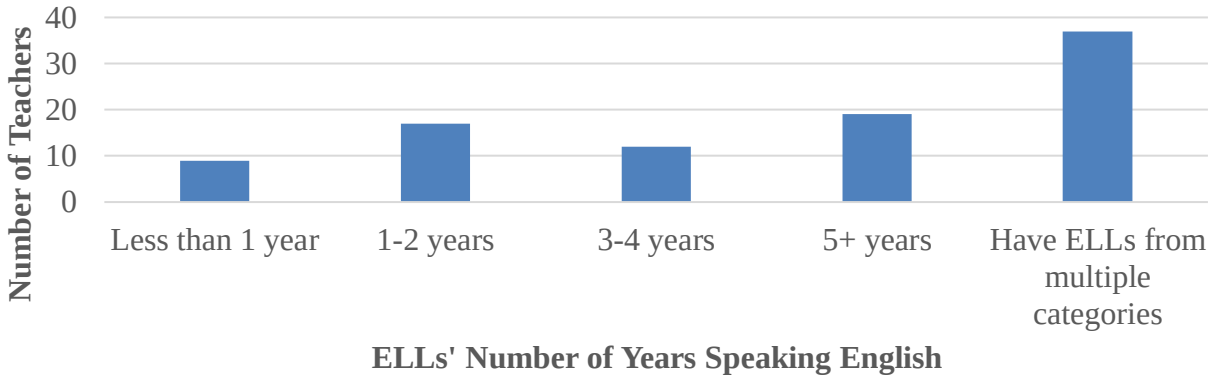


Figure 8

ELLs in Classroom. Number of Teachers Reporting ELLs' Years of Speaking English.



A total of 18 teachers who participated in the survey worked at schools that completed the R-TFI. The number of ELLs per classroom in this group ranged from one to four, with seven teachers reporting having one ELL, six teachers reporting two ELLs, four teachers reporting three ELLs, and one teacher reporting that they had four ELLs in their classroom.

Interview Participants

Only first grade teachers were selected to participate in teacher interviews in order to create a more homogenous group. Limiting interviews to a single grade-level allowed for a deeper analysis of the qualitative data. First grade teachers were exclusively selected to participate in the teacher interviews as much of the existing research on MTSS has focused on first grade (Fuchs et al., 2008; Healy et al., 2005a; Linan-Thompson et al., 2006). Furthermore, first grade universal screeners and progress monitoring tools traditionally include both measures of early reading skills as well as a measure of fluency skills, indicating that first grade teachers may be in a unique position to provide insight into how different types of screeners and assessment tools may play a role in ELL inclusion in MTSS practices. A total of eight first-grade

teachers from the survey sample participated in interviews. Interviewee demographics are presented in the Results section as part of the CHAT analysis of the data.

In addition to first grade teachers, principals and a MiBLSi representative were also included in the sample via interviews in order to facilitate a more complete understanding of the system and contribute to a particularly rich inner contradiction analysis. Three principals agreed to participate. It should be noted that the purpose of these interviews was not for confirmation. Rather, as is appropriate when mixing multiple qualitative methodologies, the use of principal interviews is used to complete the data (Barbour, 1998). It is recognized that the principal sample and the teacher sample do not completely align (there are some teachers in the interview sample who do not have a corresponding principal in the interview sample). However, as noted before, the purpose of the interviews is to complete and complement, rather than to confirm, teacher perception data. In addition, in order to gather data that can provide a broader systems perspective, a MiBLSi representative also participated in an interview. This MiBLSi participant was selected based on their expertise in MTSS practices and a willingness to participate. Again, these data were used to complement and complete the data in order to provide a deeper understanding of the system in which teachers exist. Principal and MiBLSi interviewee demographic data are also presented in the Results section as part of the CHAT analysis.

Measures

Elementary Reading Tiered Fidelity Inventory (R-TFI)

The R-TFI (St. Martin et al., 2015) is a 53-item self-assessment tool designed to measure the implementation of a multi-tiered school-wide reading model (see Appendix A). The R-TFI measures implementation across four subscales: teams, implementation, resources, and evaluation. These subscales are separately measured for each of the three tiers of school-wide

reading model features. MiBLSi recommends that the R-TFI is completed by School Leadership Teams at participating schools at least once each year, (the 2015-2016 school year was the first year this tool was utilized). Schools are generally expected to complete only the Tier One section their first year, followed by the Tier One and Tier Two section their second year, and all three tiers during subsequent years. The measure has undergone a five-phase development and content validation framework (Haynes et al., 1995) by MiBLSi to increase the validity.

The first phase of the validation framework focused on construct definition and item generation. This was accomplished by examining existing measures: the Planning and Evaluation Tool for Effective Schoolwide Reading Programs-Revised (Kame'enui & Simmons, 2003), the School-Wide Evaluation Tool for Reading: Self-Assessment (St. Martin et al., 2015), and the School-Wide Positive Behavioral Interventions and Supports Tiered Fidelity Inventory (Algozzine et al., 2014); reviewing feedback from previous administrations of these measures, and studying recent literature regarding school-wide reading practices. The second phase focused on test content validation, which was sought by reaching out to experts and practitioners in the field using a four-part content validation survey protocol. During this phase, experts and practitioners provided feedback on the R-TFI via track changes, rated the attainability and importance of each item, and had the opportunity to select five items that they believed were most critical. Experts and practitioners also offered suggestions on the item order, the frequency of administration, and provided open-ended comments about the assessment in general and whether it was an improvement on previous types of similar assessments. In Phase Three, the R-TFI was updated based on the results of Phase Two. The fourth phase focused on response process validity via a think aloud protocol. During this phase, the R-TFI was read aloud by practitioners with the instruction to vocalize any thoughts, reactions, or questions they had while

reading the measure. Finally, the fifth phase consisted of analyzing the think aloud protocol to help clarify the R-TFI, which included rewording directions, adding additional glossary terms, and eliminating some items that were deemed as district-level, rather than as school-level, items.

For the current study, R-TFI scores were calculated by taking the average of the Tier One and Tier Two scores. Tier Three scores were not included as they had not been completed by schools. The averages ranged from 34.0 to 85.5 (with higher scores indicating higher fidelity, and a maximum possible score of 100), and these averages were used to create R-TFI score bands. Teachers who worked at schools with average R-TFI scores between 34 and 51 were grouped as Low Fidelity (n = 7), teachers who worked at schools with average R-TFI scores between 52 and 68 were grouped as Medium Fidelity (n = 4), and teachers who worked at schools with average R-TFI scores between 69 and 86 were grouped as High Fidelity (n = 7).

Teacher Survey

In order to measure current MTSS reading practices with ELLs, a teacher survey was created (see Appendix B) based on four of the five major components of MTSS models (Fuchs et al, 2003): universal screening, intervention, progress monitoring, and data-based decision making. Definitions for the survey were also taken from the National Association of State Directors of Special Education's published work: Response to Intervention, Policy Considerations and Implementation (Batsche et al., 2006). The survey consisted of four question categories:

- survey participation requirement questions, as well as a question indicating teacher interest in interview participation
- teacher information questions including name, school, teaching experience, educational level, professional development, confidence working with ELLs, gender, age, and race

- classroom information questions including use of universal screeners, number of ELLs, native language of ELLs, and the number of years ELLs have been learning English
- key items measuring ELL inclusion in MTSS practices, including both open-ended and multiple-choice questions

A pilot study of the teacher survey and interviews was completed in Spring 2017 to determine whether any items were confusing for teachers. After receiving administrator approval, the pilot survey was emailed to elementary teachers at five Michigan schools and was completed by 16 kindergarten, first, or second grade teachers. Teachers from schools that did not complete the R-TFI were selected for the pilot survey in order to preserve the size of the sample for the actual survey. Teachers received compensation valued at $10 for their completion of the pilot survey, as survey compensation is shown to increase response rates (Ulrich et al., 2005).

Pilot teachers also answered additional open-ended questions on each survey page including: “Was anything on this page confusing? If so, what was confusing about it?” This was done in order to gain information that was anticipated to improve the clarity of the survey. The qualitative results of the pilot survey indicated that teachers generally found the questions to be clear and understandable, however a few minor adjustments to wording were made based on teachers’ qualitative comments. A review of the quantitative data revealed some discrepancies created by technical errors to the survey logic and/or human error. These were also addressed by editing question logic, mandating certain items, and giving teachers a chance to review their answers to some items. Specific changes to the survey can be found in Appendix C.

Interview Protocols

Interview questions centered on identifying perceptions of ELL inclusion based the components of MTSS and CHAT elements. These interviews were semi-structured interviews in

order to focus the discussion around CHAT elements in MTSS while still allowing respondents to expand on their thoughts. Interview protocols (see Appendices D and E) were developed to reflect best practices in qualitative interviewing, such as starting with basic questions, avoiding leading questions, and asking open-ended questions, (Jacob & Furgerson, 2012; Seidman, 2014). The teacher protocol was limited to eleven questions, and the principal/MiBLSi protocol was limited to nine questions in order to gather necessary data and be cognizant of the participants' time; six to ten well-written questions can take up to 90 minutes to complete in qualitative interviews (Jacob & Furgerson, 2012). Interviews ranged from 38 to 71 minutes.

Procedures

Consent

Administrative approval to contact teachers regarding interviews and survey participation was sought from all 89 MiBLSi elementary schools (see Appendix F for consent documents). Using the MI School Data database, it was estimated that 57 of the 89 schools currently had ELLs. For principals that did not respond within one week, a second email was sent accompanied by a phone call. For principals that did not respond to the second email or phone call within one week, a second phone call was made. Face to face meetings were offered during each phone call. Principals from 41 schools responded, with 23 principals agreeing to complete the consent form, and 17 principals ultimately completing the consent form. It should be noted that administrative consent was collected simultaneously for all aspects of the study (contacting teachers, R-TFI data, and principal interest in participating in the principal interview).

Due to low participation from MiBLSi schools, the survey was expanded to Michigan schools who indicated on their websites that they implemented RTI/MTSS. As teachers and principals from these schools would not be included in interviews, and as R-TFI data could not be gathered from these schools, administrator consent was not obtained for non-MiBLSi schools.

Emails regarding the nature of the study and consent forms were sent to all identified early elementary general education teachers. Teacher emails were obtained through each school's website. The email emphasized that only kindergarten, first, or second grade teachers whose classrooms currently participate in MTSS practices and who currently have at least one ELL in their classroom were eligible to participate in the study. A second email was sent to teachers who did not respond to the email within one week. A third email was sent to teachers who did not respond to the second email within a week.

Teacher Survey

Following administrative consent and pilot survey revisions, identified teachers were contacted via Qualtrics in the winter/spring of the 2016-2017 and 2017-2018 school years. The timing of administration (i.e. no fall administration) was intended to allow time for students to potentially move through various tiers of support prior to the survey administration. Each week for three weeks, a reminder email was sent to all teachers who had not yet completed the survey. Teachers received compensation valued at $10 for completion of the online survey. At the end of the survey, first grade teachers were informed about the possibility of participating in an interview, and were asked to indicate whether they would be interested in such an activity.

Interviews

Teacher interviews took place during the Spring/Summer of 2018. Of the 30 first grade teachers who completed the survey, 9 consented to participate in the interview and 8 were successfully contacted and interviewed (the final teacher did not respond to scheduling inquiries). Of the eight teachers who participated in interviews, five were from MiBLSi schools. Of these five principals, three indicated interest on the initial administrator consent form. These three principals were contacted and interviewed in Summer 2018. Finally, the research liaison at

MiBLSi connected the researcher with a MiBLSi representative based on expertise. The MiBLSi representative agreed to participate, and this interview was conducted in Summer 2018.

Locations were selected based on the geographical locations of the participants and their personal preferences. All interviews occurred in a quiet, semi-private place, as is indicated by best practices (Jacob & Furgerson, 2012). The interviews were conducted using the interview protocol and were audio-recorded. Best practice indicates that qualitative interviews should be audio-recorded, and limited note-taking should occur in order to build rapport and gather meaningful data (Jacob & Furgerson, 2012). Participants received compensation valued at $40.

R-TFI

The R-TFI was administered in the spring of 2018 during school MTSS team meetings as part of MiBLSi's program. MiBLSi coaches are present during each meeting to ensure that surveys are accurately completed. Once R-TFI administrations were completed, the data were collected from MiBLSi. R-TFI data was available from 16 schools. A summary of the entire procedural timeline is indicated in Table 4 below.

Table 4

Procedural Timeline

Activity	Time period
Pilot survey	Spring 2017
Teacher survey	Spring 2017-Spring 2018
R-TFI administration	Spring 2018
Teacher interviews	Spring-Summer 2018
Principal/MiBLSi interviews	Summer 2018

Data Analysis

Prior to data analysis, descriptive data regarding the sample were analyzed using information provided by teachers in the survey. Additional data from The U.S. Census Bureau's

Small Area Income and Poverty Estimates program (SAIPE) were used to calculate district socioeconomic status. SAIPE reports on annual school district poverty rates by calculating the number of children living in poverty within a district's geographic boundaries. SAIPE data are a high quality measure of SES, and more accurate than free and reduced lunch rates due to the increasingly popular use of the Community Eligibility Provision as an alternative to household applications for free and reduced breakfast and lunch services in schools (National Forum on Education Statistics, 2015). An overview of the analytic plan is presented in Table 5.

Table 5

Data Analysis Methods

Research question	Measures	Variables	Analysis
1. To what extent do early elementary teachers implementing MTSS include ELLs in critical aspects of MTSS?	Teacher survey	Reported inclusion in universal screening, progress monitoring, tiered interventions, and data-based decision making	Quantitative: Descriptive coding
2. How does ELL inclusion in critical aspects of MTSS differ between schools with varying levels of MTSS implementation fidelity (as measured for the general student population)?	Teacher survey, R-TFI	R-TFI school-level scores, ELL inclusion teacher-level scores	Quantitative: Descriptive coding
3. How do first grade teachers perceive their activity system in regard to ELL inclusion in MTSS practices?	Teacher interviews	Responses to questions asked regarding perceptions toward ELL inclusion in MTSS practices	Qualitative: Activity system coding
4. What inner contradictions exist in regard to ELL inclusion in MTSS practices?	Interviews	Responses to questions asked regarding perceptions toward ELL inclusion in MTSS practices	Qualitative: Inner contradiction analysis

CHAPTER 4: QUANTITATIVE RESULTS

This chapter presents the results of the analyses for the first two research questions. Chapter Five will present the analysis results for the last three research questions. The quantitative and qualitative results will be compared and discussed in the Discussion section n, as is appropriate with a convergent design with a parallel-databases variant.

Research Question One

The first research question was: To what extent do elementary teachers that are involved in MTSS initiatives include ELLs in critical aspects of MTSS? Teacher responses to survey questions about the following MTSS components were analyzed: universal screening, tiered interventions, progress monitoring, data-based decision making for instruction, and data-based decision making for special education.

Universal Screening

Teachers were asked to report how many ELLs in their class were administered a universal screener, and how many of those ELLs met benchmark. In order to analyze this information, the total number of ELLs that participated in the most recent universal screening was compared to the total number of ELLs in the classroom for each teacher. Two teachers were removed from this analysis as one reported more ELLs participating in the screener than they had previously reported in the classroom, and one reported zero ELLs in the classroom at the time of the screener. The remaining 95 teachers reported a range of including no ELLs in universal screening to including all ELLs (see Table 6). The majority of teachers in this sample (n = 85) reported including all ELLs in universal screenings of reading skills, while very few included only some (n = 5) or none (n = 5). The extent to which ELLs were included in universal screenings of reading skills was also examined according to various teacher groups reflecting

various teacher characteristics. The majority of teachers across all of the groups examined included all ELLs in universal screening.

Table 6

Inclusion in Universal Screening

	N	Included all ELLs	Included some ELLs	Included no ELLs
All Teachers	95	85 (90%)	5 (5%)	5 (5%)
Number of ELLs in Classroom				
1-2	49	45 (92%)	2 (4%)	2 (4%)
3-5	23	19 (83%)	1 (4%)	3 (13%)
6-10	9	9 (100%)	0 (0%)	0 (0%)
11+	14	12 (86%)	2 (14%)	0 (0%)
Professional Development				
ELLs	51	45 (88%)	3 (6%)	3 (6%)
MTSS	85	78 (92%)	4 (5%)	3 (3%)
ELLs in MTSS	36	32 (89%)	3 (8%)	1 (3%)
Endorsements				
ESL	11	9 (82%)	1 (9%)	1 (9%)
Reading	17	15 (88%)	0 (0%)	2 (12%)
Years Teaching				
0-5	16	15 (94%)	0 (0%)	1 (6%)
6-10	17	15 (88%)	1 (6%)	1 (6%)
11-15	22	20 (91%)	2 (9%)	0 (0%)
16-20	13	12 (92%)	0 (0%)	1 (8%)
21+	17	14 (82%)	2 (12%)	1 (6%)
Years of Education				
3-5	11	10 (91%)	0 (0%)	1 (9%)
6-10	54	49 (91%)	3 (5%)	2 (4%)
11-15	4	3 (75%)	1 (25%)	0 (0%)
Confidence with Teaching ELLs				
1 (Not at all)	2	2 (100%)	0 (0%)	0 (0%)
2	7	7 (100%)	0 (0%)	0 (0%)
3	23	20 (87%)	2 (9%)	1 (4%)
4	37	34 (92%)	1 (3%)	2 (5%)
5 (Very)	26	22 (84%)	2 (8%)	2 (8%)

The total number of ELLs who met benchmark on the universal screener was also examined. Out of the 90 teachers who included at least some ELLs in the universal screening, 71 teachers reported knowing whether or not the ELLs in their classroom had met benchmark. Many teachers reported that some, but not all ELLs met benchmark (n = 33). About one third of teachers reported that no ELLs in their classroom met benchmark (n = 24), and 14 teachers reported that all ELLs in their classroom met benchmark.

The measurement tools that teachers used for universal screenings with ELLs were counted and described. Overall, teachers reported using a wide range of universal screening measures. Kindergarten teachers reported using 16 different measures for universal screening, and most often reported using DIBELS Letter Naming Fluency (37.5 percent of teachers), DIBELS First Sound Fluency (35.0 percent), and iRead (12.5 percent). First grade teachers reported using 22 different measures for universal screening, and most often reported using DIBELS Nonsense Word Fluency (40.0 percent), DIBELS Letter Naming Fluency (33.3 percent), and DIBELS Phoneme Segmentation (33.3 percent). Second grade teachers reported using 16 different measures for universal screening, and most often reported using DIBELS Oral Reading Fluency (41.4 percent), DIBELS Retell Fluency (31.0 percent), and DIBELS Nonsense Word Fluency (27.6 percent). It should be noted that school participating in MiBLSi are highly encouraged to use DIBELS for universal screening purposes.

Teachers were asked to report which personnel in their schools were responsible for administering the universal screenings of reading to their ELLs (see Table 7). Teachers most often indicated that they or an intervention provider administered the universal screener. About one quarter of teachers reported that an ESL or ELL teacher administered the screener.

Table 7

Personnel Who Administer Universal Screening Measures to ELLs

Personnel	Percentage of teachers reporting
Self (Participant)	40.2
Intervention provider	40.2
ESL or ELL teacher	23.7
Another general education teacher	4.1
*DIBELS Support Team	3.1
Special education teacher	3.1
Student support staff	2.1
*Trained substitute	1.0
*Other (not further described)	1.0

*write-in response

Table 8

Factors Influencing Teachers' Decisions to Include ELLs in Universal Screening

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school has appropriate universal screening assessments available for measuring the reading skills of ELLs	85	2.7	40	1	13	10	21
The appropriate personnel is/are responsible for screening these ELLs	88	3.0	35	1	14	8	30
Including these ELLs is what is normal/expected of me	87	4.2	10	1	7	11	58
There is a supportive school environment for screening these ELLs	86	3.2	26	5	14	9	32
My own beliefs about how administering universal screeners is one important step toward better outcomes for these ELLs	85	3.0	30	3	15	13	24

*1 indicates No Influence, 5 indicates Great Influence

Table 9

Factors Influencing Teachers' Decisions to Not Include ELLs in Universal Screening

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school does not have appropriate universal screening assessments available for measuring the reading skills of ELLs	13	2.3	6	1	4	0	2
I do not believe that the appropriate personnel is/are responsible for screening these ELLs	12	2.2	6	0	4	2	0
Not including these ELLs is what is normal/expected of me	12	2.5	5	0	5	0	2
There is an unsupportive school environment for screening these ELLs	12	2.2	6	0	4	2	0
My own beliefs about how administering universal screeners is not an important step toward better outcomes for these ELLs	12	2.3	6	0	4	1	1

*1 indicates No Influence, 5 indicates Great Influence

Teachers were asked which factors influenced their decision to include ELLs in universal screeners. The scale ranged from "1" to indicate "did not influence my decision", to "5" to indicate "greatly influenced my decision." The decision-making factor with the highest average endorsement rating was that including ELLs in universal reading screeners was normal/expected. The decision-making factor with the lowest average endorsement rating was the quality of the screening assessments available. Table 8 provides the average endorsement rating for each item, as well as the distribution of responses. The results indicate that teachers most often reported ratings of 1 or 5. For teachers who did not include ELLs in universal reading screenings, no factor had an average endorsement of greater than 2.5, with means only ranging from 2.2 to 2.5 (see Table 9).

Finally, teachers were asked to rate how much they agree with the following statement: "In general, including ELLs in universal screening can be one important step toward improving their reading outcomes". The scale ranges from "1" to indicate "strongly disagree", to "5" to indicate "strongly agree." All 97 teachers responded to this question. The mean response was 3.92, with a median of 4.0 and a range from 1-5. By far, teachers reported somewhat agreeing (n = 31) and strongly agreeing (n = 39) with this statement.

Tiered Intervention

Teachers reported how many ELLs in their classroom receive tiered reading intervention. As the typical MTSS model only provides intervention for students who do not meet the universal screening benchmark, the number of ELLs that participated in tiered interventions was compared to the number of ELLs who did not meet benchmark in order to approximately gauge the number of ELLs being included in MTSS practices as one might expect.

It should be noted that some teachers may use additional data beyond the universal screener to make decisions about student intervention placements, and doing so is often considered to be best practice. The potential use of these additional data may explain discrepancies in the current data regarding how many ELLs meet benchmark and how many receive intervention. For example, an ELL who successfully completes all classroom assignments, but did not meet benchmark on a universal screener that was administered on a day he felt ill might not be placed in an intervention group, and this would likely be best practice.

However, the purpose of universal screeners is to quickly and accurately identify students in need of intervention. Therefore, for purposes of simplicity and analysis, teachers from the current study were grouped into three categories: intervention provided as expected, intervention overprovided, and intervention underprovided. Again, it is noted that these terms may not fully

convey the complexity of how and why teachers choose to include ELLs in these practices, and do not indicate whether or not teachers are using best practices. However, if large discrepancies are pervasive between those who fail to meet benchmark and those who receive intervention, it may be an indication that something is not functional in the system (such as the universal screener is not considered particularly reliable and valid by teachers, or teachers are not using the data to make decisions). Therefore, examining teachers in these groups is beneficial for understanding meaningful patterns in ELL inclusion in tiered reading intervention.

Table 10 shows the number of teachers who provided tiered reading intervention as expected (i.e., the number of ELLs who did not meet benchmark and the number of ELLs provided intervention were equal), the number of teachers who overprovided tiered reading intervention (i.e., more ELLs received intervention than who did not meet benchmark), and the number of teachers who underprovided tiered reading intervention (i.e., fewer ELLs received intervention than did not meet benchmark). Overall, roughly half of teachers provided intervention as expected *(n* = 29), while roughly half either over- or underprovided intervention (*n* = 28). Teachers tended to slightly overprovide intervention (*n* = 17) compared to underproviding intervention (*n* = 11). How various groups of teachers included ELLs in tiered reading intervention was also examined. Teachers with only 1-2 ELLs in their classroom tended to engage in practices that suggested they were using the screening data to directly inform intervention decision-making; in other words, they were more likely to provide intervention as expected". Teachers with less education (only 3-5 years) and teachers who felt less confident in the ability to teach ELLs (rated themselves as 2) also tended to provide tiered reading interventions "as expected".

Table 10

Inclusion in Tiered Reading Intervention

	N	Provided as expected	Overprovided	Underprovided
All Teachers	57	29 (51%)	17 (30%)	11 (20%)
Number of ELLs in Classroom				
1-2	33	24 (73%)	5 (15%)	4 (12%)
3-5	11	4 (36%)	6 (55%)	1 (9%)
6-10	5	1 (20%)	3 (60%)	1 (20%)
11+	8	0 (0%)	3 (38%)	5 (62%)
Professional Development				
ELLs	27	11 (40%)	8 (30%)	8 (30%)
MTSS	50	26 (52%)	15 (30%)	9 (18%)
ELLs in MTSS	20	9 (45%)	6 (30%)	5 (25%)
Endorsements				
ESL	7	0 (0%)	3 (43%)	4 (57%)
Reading	9	5 (56%)	3 (33%)	1 (11%)
Years Teaching				
0-5	9	3 (33%)	2 (22%)	4 (45%)
6-10	8	4 (50%)	2 (25%)	2 (25%)
11-15	16	9 (56%)	5 (31%)	2 (13%)
16-20	8	4 (50%)	3 (38%)	1 (12%)
21+	9	3 (33%)	4 (45%)	2 (22%)
Years of Education				
3-5	5	4 (80%)	1 (20%)	0 (0%)
6-10	36	17 (47%)	11 (31%)	8 (22%)
11-15	0	0 (0%)	0 (0%)	0 (0%)
Confidence with Teaching ELLs				
1 (Not at all)	1	0 (0%)	1 (100%)	0 (0%)
2	4	4 (100%)	0 (0%)	0 (0%)
3	13	8 (61%)	1 (8%)	4 (31%)
4	21	11 (53%)	7 (33%)	3 (14%)
5 (Very)	18	6 (33%)	8 (45%)	4 (22%)

Teachers were also asked about their perceptions on the effectiveness of the tiered reading interventions being provided. Teachers provided the number of ELLs in their class for whom they perceived the tiered reading intervention to be effective, and this number was compared to the total number of ELLs in their classroom receiving intervention. By far, most

teachers (n = 50) reported that the tiered reading intervention was effective for all ELLs in their classrooms. A substantial number of teachers (n = 12) reported that the intervention was effective for the majority of ELLs in their classroom, and five teachers reported that the intervention was only effective for half or less than half of their ELLs. Only four teachers reported that the intervention was not effective for any ELLs in their classroom. These four teachers also reported that only one ELL in their classroom was receiving intervention.

Teachers were asked to report which personnel in their schools were responsible for providing tiered reading interventions to their ELLs. Teachers most often indicated that an intervention provider provided tiered reading interventions to ELLs. Teacher also often reported that they provided intervention, and/or that an ESL/ELL teacher provided intervention. Associated data are presented in Table 11.

Table 11

Personnel Who Provide Tiered Reading Intervention to ELLs

Personnel	Percentage of teachers reporting
Intervention provider	48.5
Self (Participant)	46.4
ESL or ELL teacher	32.0
Another general education teacher	22.7
Special education teacher	11.3
Student support staff	4.1
*Paraprofessional	2.1
*Computer program	1.0
*Reading teacher assistant	1.0

*Written-in response

Teachers were asked which factors influenced their decision to include or not include ELLs in tiered reading intervention (see Table 12). The scale ranged from "1" to indicate "did not influence my decision", to "5" to indicate "greatly influenced my decision." The decision-making factor with the highest average endorsement rating was that including ELLs in tiered

reading intervention was normal/expected. The decision-making factor with the lowest average endorsement rating was the appropriateness of the reading interventions available to them. However, the difference between ratings was minimal, with all factors receiving an average rating between 3.8 and 4.4.

Table 12

Factors Influencing Teachers' Decisions to Include ELLs in Tiered Reading Instruction

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school has appropriate reading interventions available for measuring the reading skills of ELLs	72	3.8	13	1	10	11	37
The appropriate personnel is/are responsible for providing tiered intervention to these ELLs	73	4.1	8	0	14	7	44
Including these ELLs is what is normal/expected of me	73	4.4	5	0	8	8	52
There is a supportive school environment for providing reading intervention to these ELLs	74	4.0	7	3	15	8	41
My own beliefs about how providing tiered interventions is one important step toward better outcomes for these ELLs	72	3.9	10	4	11	9	38

*1 indicates No Influence, 5 indicates Great Influence

For teachers who did not include ELLs in tiered reading intervention, no factor had an average endorsement rating greater than 2.1, with means ranging from 1.4 to 2.1. One factor that may have influenced the low importance teachers placed on these factors when deciding not to include an ELL in tiered reading intervention is that the ELL met benchmark, so no tiered intervention was necessary. Indeed, 39 teachers indicated that they did not include at least one ELL in tiered reading intervention because that student met benchmark on a universal screening measure.

Table 13

Factors Influencing Teachers' Decisions to Not Include ELLs in Tiered Reading Instruction

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school does not have appropriate reading interventions available for measuring the reading skills of ELLs	44	2.0	30	1	3	4	6
I do not believe that the appropriate personnel is/are responsible for providing tiered intervention to these ELLs	43	1.6	32	2	4	3	2
Not including these ELLs is what is normal/expected of me	42	2.1	27	2	3	2	8
There is an unsupportive school environment for providing reading interventions to these ELLs	43	1.4	35	2	4	0	2
My own beliefs about how providing tiered reading interventions is not an important step toward better outcomes for these ELLs	43	1.7	32	1	4	3	3

*1 indicates No Influence, 5 indicates Great Influence

Finally, teachers were asked to rate how much they agree with the following statement: "In general, including ELLs in tiered reading interventions can be one important step toward improving their reading outcomes". The scale ranges from "1" to indicate "strongly disagree", to "5" to indicate "strongly agree." All 97 teachers responded to this question, and the mean response was 4.4, with a median of 5.0 and a range from 1-5. By far, teachers reported somewhat agreeing (n = 20) and strongly agreeing (n = 65) with this statement.

Progress Monitoring

Teachers reported how many ELLs in their classroom received progress monitoring. As the typical MTSS model only provides progress monitoring for students who are receiving tiered

reading intervention, the number of ELLs receiving progress monitoring were compared to the number of ELLs receiving tiered reading intervention. The data in Table 14 show the number of teachers who provided progress monitoring as expected (the number of ELLs receiving intervention equaled the number receiving progress monitoring), the number of teachers who overprovided progress monitoring (more ELLs received progress monitoring than intervention), and the number of teachers who underprovided progress monitoring (fewer ELLs received progress monitoring than intervention). Overall, the majority of teachers (n = 57) provided progress monitoring to the same number of ELLs who received intervention. Teachers tended to overprovide progress monitoring (n = 22) rather than underprovide (n = 8). Teachers with only 1-2 ELLs in their classroom, and teachers who felt less confident in the ability to teach ELLs (rated themselves as 1 or 2) tended to provide progress monitoring as expected at greater rates.

The measures that teachers use for progress monitoring were also counted and described. Overall, teachers reported using a wide range of progress monitoring measures. Kindergarten teachers reported using 20 different measures for progress monitoring, and most often reported using DIBELS First Sound Fluency (30.0 percent of teachers), DIBELS Letter Naming Fluency (25.0 percent) and DRA/DRA2 (25.0 percent). First grade teachers reported using 24 different measures for progress monitoring, and most often reported using DIBELS Nonsense Word Fluency (23.3 percent), DRA/DRA2 (16.7 percent), and DIBELS Phoneme Segmentation (16.7 percent). Second grade teachers reported using 17 different measures for progress monitoring, and most often reported using DIBELS Oral Reading Fluency (37.9 percent), DRA/DRA2 (24.1 percent), DIBELS Nonsense Word Fluency (17.2 percent), and DIBELS Retell Fluency (17.2 percent). Although DRA/DRA2 was not a highly reported universal screening tool, it was reported across grade levels as a common progress monitoring tool.

Table 14

Inclusion in Progress Monitoring

	N	Provided as expected	Over provided	Under provided
All Teachers	87	57 (66%)	22 (25%)	8 (9%)
Number of ELLs in Classroom				
1-2	43	35 (81%)	8 (19%)	0 (0%)
3-5	23	15 (66%)	4 (17%)	4 (17%)
6-10	9	4 (45%)	3 (33%)	2 (22%)
11+	12	3 (25%)	7 (58%)	2 (17%)
Professional Development				
ELLs	47	24 (51%)	17 (36%)	6 (13%)
MTSS	77	51 (66%)	18 (23%)	8 (10%)
ELLs in MTSS	31	17 (55%)	11 (35%)	3 (10%)
Endorsements				
ESL	9	4 (44%)	4 (44%)	1 (11%)
Reading	14	9 (64%)	3 (21%)	2 (14%)
Years Teaching				
0-5	14	9 (64%)	4 (29%)	1 (7%)
6-10	16	10 (62%)	6 (38%)	0 (0%)
11-15	21	16 (76%)	3 (14%)	2 (10%)
16-20	12	9 (75%)	1 (8%)	2 (17%)
21+	16	8 (50%)	5 (31%)	3 (19%)
Years of Education				
3-5	11	8 (73%)	3 (27%)	0 (0%)
6-10	48	33 (69%)	10 (21%)	5 (10%)
11-15	3	2 (67%)	1 (33%)	0 (0%)
Confidence with Teaching ELLs				
1 (Not at all)	2	2 (100%)	0 (0%)	0 (0%)
2	7	6 (86%)	1 (14%)	0 (0%)
3	21	13 (62%)	6 (28%)	2 (10%)
4	31	20 (65%)	6 (19%)	5 (16%)
5 (Very)	26	16 (61%)	9 (35%)	1 (4%)

Teachers were asked to report which personnel in their schools were responsible for administering progress monitoring measures to their ELLs. Teachers most often indicated that they administered progress monitoring measures to ELLs. A large percentage of teachers also indicated that an intervention provider administered progress monitoring, and about a fifth of

teachers reported that an ESL/ELL teacher administered progress monitoring measures.

Associated data are presented in Table 15.

Table 15

Personnel Who Administer Progress Monitoring to ELLs

Personnel	Percentage of teachers reporting
Self (Participant)	56.7
Intervention provider	48.5
ESL or ELL teacher	20.6
Special education teacher	7.2
Another general education teacher	3.1
*Paraprofessional	2.1
*District team	1.0
*Reading teacher assistant	1.0
*ECS	1.0

*written in response

Table 16

Factors Influencing Teachers' Decisions to Include ELLs in Progress Monitoring

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school has appropriate progress monitoring assessments available for measuring the reading skills of ELLs	79	3.6	14	4	13	14	34
The appropriate personnel is/are responsible for progress monitoring to these ELLs	80	3.8	10	5	16	10	39
Including these ELLs is what is normal/expected of me	80	4.4	6	1	11	3	59
There is a supportive school environment for progress monitoring these ELLs	80	3.7	13	4	15	9	39
My own beliefs about how progress monitoring is one important step toward better outcomes for these ELLs	78	3.7	13	2	17	10	36

*1 indicates No Influence, 5 indicates Great Influence

Teachers were asked which factors influenced their decision to include ELLs in progress monitoring (see Table 16). The scale ranged from "1" to indicate "did not influence my decision", to "5" to indicate "greatly influenced my decision." The decision-making factor with the highest average endorsement rating was that including ELLs in progress monitoring was normal/expected. The decision-making factor with the lowest average endorsement rating was the appropriateness of the progress monitoring tools available to them. However, the difference between ratings was minimal, with all factors receiving an average rating between 3.6 and 4.4.

For teachers who did not include ELLs in tiered reading intervention (see Table 17), no factor had an average endorsement of more than 2.2, with means ranging from 1.3 to 2.2. One factor that may have influenced the low importance teachers placed on these factors when deciding not to include an ELL in progress monitoring is that the ELL did not receive tiered reading intervention, so progress monitoring was not necessary. Indeed, 25 teachers indicated that they did not include at least one ELL in progress monitoring because that particular student did not receive a tiered reading intervention.

Finally, teachers were asked to rate how much they agree with the following statement: "In general, including ELLs in progress monitoring can be one important step toward improving their reading outcomes". The scale ranges from "1" to indicate "strongly disagree", to "5" to indicate "strongly agree." All 97 teachers responded to this question, and the mean response was 4.4, with a median of 5.0 and a range from 1-5. By far, teachers reported somewhat agreeing (n = 26) and strongly agreeing (n = 60) with this statement.

Table 17

Factors Influencing Teachers' Decisions to Not Include ELLs in Progress Monitoring

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
My school does not have appropriate progress monitoring assessments available for measuring the reading skills of ELLs	27	1.4	23	1	1	1	1
I do not believe that the appropriate personnel is/are responsible for progress monitoring to these ELLs	27	1.6	22	0	2	1	2
Not including these ELLs is what is normal/expected of me	27	2.2	17	1	2	2	5
There is an unsupportive school environment for progress monitoring these ELLs	27	1.3	23	1	2	1	0
My own beliefs about how progress monitoring is not an important step toward better outcomes for these ELLs	27	1.4	21	2	3	1	0

*1 indicates No Influence, 5 indicates Great Influence

Data-Based Decision Making

Data-based decision making was analyzed for two general types of decisions: whether instruction/intervention decisions for ELLs are informed by progress monitoring/universal screening (CBM) data, and whether special education placement/evaluation decisions for ELLs are informed by CBM data. In each sub-category, teachers reported which types of data they consider, and which types of data are most important when making decisions.

Decisions for Instruction and Intervention

Teachers reported using many types of data when deciding how to alter instruction/intervention for ELLs (see Table 18). The three types of data most often reported by teachers as a top data source were observations, running records, and CBMs.

Table 18

Data Used by Teachers to Inform Instruction and Intervention Decisions

Type of data	Percentage of teachers who use this type of data	Percentage of teachers reporting this type of data as a top data source
Observations of student	95.9	60.8
Running records	76.3	51.5
CBMs	77.3	48.5
Reading level	82.5	39.2
Professional judgement	73.2	34.0
Standardized achievement tests	54.6	23.7
Reading specialist input	49.5	16.5
Classroom tests/quizzes	58.8	12.4
*iReady	2.1	2.1
*NWEA	2.1	2.1
Parent input	25.8	1.0
*Progress monitoring	1.0	1.0
*Formative assessment	1.0	1.0

*Indicates written-in response

How various groups of teachers rated the use and importance of CBM data was also examined (see Table 19). In general, roughly half of teachers surveyed reported that CBM data were a top three data source for making instruction/intervention decisions. The groups with the greatest rate of teachers reporting CBM data as a top three data source for making instruction/intervention decisions were teachers who rated themselves as not confident with ELL instruction (either a 1 or 2 self-rating), and teachers who rated themselves as confident (a 4 self-rating). This indicates that perhaps teacher self-rating of confidence is not a good predictor of value placed on CBM data usage for instruction/intervention decisions. Teachers with a reading endorsement also tended to report a high value of CBM data, while teachers with an ESL endorsement tended to report a lower value placed on CBM data. Teachers who reported having ELL-based professional development also reported a lower value of CBM data. However, teachers who had received professional development targeted at ELLs in MTSS tended to

reported a higher value on CBM data. In regard to number of ELLs in the classroom, teacher value of CBM data tended to decrease as the number of ELLs increased.

Table 19

Use of CBM Data to Inform Instruction and Intervention Decisions

	N	CBM data used	CBM data in top three
All Teachers	97	75 (77%)	47 (48%)
Number of ELLs in Classroom			
1-2	50	40 (80%)	26 (52%)
3-5	24	18 (75%)	11 (46%)
6-10	9	7 (78%)	4 (44%)
11+	14	10 (71%)	6 (43%)
Professional Development			
ELLs	51	36 (71%)	21 (41%)
MTSS	86	67 (78%)	42 (49%)
ELLs in MTSS	36	28 (78%)	18 (50%)
Endorsements			
ESL	11	7 (64%)	4 (36%)
Reading	17	13 (76%)	10 (59%)
Years Teaching			
0-5	16	14 (88%)	8 (50%)
6-10	18	14 (78%)	7 (39%)
11-15	22	18 (82%)	12 (55%)
16-20	14	10 (71%)	7 (50%)
21+	17	13 (76%)	8 (47%)
Years of Education			
3-5	11	9 (82%)	6 (55%)
6-10	55	45 (82%)	29 (53%)
11-15	4	3 (75%)	2 (50%)
Confidence with Teaching ELLs			
1 (Not at all)	2	2 (100%)	2 (100%)
2	8	7 (88%)	5 (63%)
3	23	17 (74%)	8 (35%)
4	37	31 (84%)	22 (60%)
5 (Very)	27	18 (67%)	10 (37%)

Teachers reported which factors influenced their decision to include CBM data as a top data source for informing their instruction and intervention (see Table 20). The scale ranged from “1” to indicate “did not influence my decision”, to “5” to indicate “greatly influenced my

decision." The decision-making factor with the highest average endorsement rating was that using CBM data as a top data source was normal/expected. The decision-making factor with the lowest average endorsement rating was the quality of the CBM data available to them. However, the differences were minimal, with all factors receiving an average rating between 3.5 and 4.5.

Table 20

Factors Influencing Teachers' Decisions to Include CBM Data as an Important Data Source for Instruction/Intervention

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
The availability of high-quality curriculum-based measurement data for ELLs	46	3.5	5	2	17	10	12
The appropriate personnel is/are involved in using this data	46	4.0	3	2	9	12	20
Using CBM data for this us what is normal/expected of me	47	4.5	0	0	7	12	28
There is a supportive school environment for using CBM data with ELLs	46	4.1	1	1	12	12	20
My own beliefs about how using CBM data to inform instruction/intervention decisions is one important step toward better outcomes for these ELLs	46	3.7	2	3	15	12	14

*1 indicates No Influence, 5 indicates Great Influence

For teachers who did not include CBM data as a top data source for instructional decisions, the decision-making factors with the highest average endorsement rating were the lack of availability of high-quality curriculum-based measurement data for ELLs. The decision-making factor with the lowest average endorsement rating was the lack of appropriate personnel and an unsupportive school environment. However, the difference between ratings was minimal, with all factors receiving an average rating between 2.3 and 3.2.

Table 21

Factors Influencing Teachers' Decisions to Not Include CBM Data as an Important Data Source for Instruction/Intervention

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
The lack of availability of high-quality curriculum-based measurement data for ELLs	47	3.2	9	1	22	4	11
I do not believe that the appropriate personnel is/are involved in using this data	46	2.3	20	3	16	5	2
Not using CBM data for this us what is normal/expected of me	46	2.6	14	3	21	3	5
There is an unsupportive school environment for using CBM data with ELLs	45	2.3	20	3	14	4	4
My own beliefs about how using CBM data to inform instruction/intervention decisions is not an important step toward better outcomes for these ELLs	46	2.5	17	6	13	4	6

*1 indicates No Influence, 5 indicates Great Influence

Finally, teachers were asked to rate how much they agree with the following statement: "In general, using CBM data to make instructional/intervention decisions about ELLs can be one important step toward improving their reading outcomes". The scale ranges from "1" to indicate "strongly disagree", to "5" to indicate "strongly agree." A total of 96 teachers responded to this question, with a mean response of 3.9, with a median of 4.0 and a range from 1-5. By far, teachers reported somewhat agreeing (n = 49) and strongly agreeing (n = 21) with this statement. A substantial number of teachers (n = 23) reported neither agreeing nor disagreeing with the statement.

Decisions for Special Education

In addition to how CBM data are used for intervention and instruction purposes, teachers were also asked how CBM data are used for special education referral and evaluation purposes. Four teachers noted that their school has a policy against evaluating ELLs for special education at their grade level. One teacher noted that they did not know which assessments were used to inform a special education referral. The remaining 92 teachers reported using many types of data when making special education referral and evaluation decisions for ELLs (see Table 22). The three types of data most often reported by teachers as a top data source for special education decisions were CBMs, observations, and standardized achievement tests.

Table 22

Data Used by Teachers to Inform Special Education Referral and Evaluation Decisions

Personnel	Percentage of teachers reporting using this type of data	Percentage of teachers reporting this type of data as a top three data source
CBMs	79.3	60.9
Observations of student	77.2	46.7
Standardized achievement tests	63.0	42.4
Reading level	73.9	37.0
Running records	59.8	32.6
Professional judgement	64.1	28.3
Reading specialist input	56.5	18.5
Classroom tests/quizzes	50.0	14.1
Parent input	44.6	4.3
*NWEA	2.2	2.2
*Lack of growth/progress	1.1	1.1
*iReady	1.1	1.1
*MTSS personnel	1.1	1.1
*iRead	1.1	0.0
*DRA	1.1	0.0

How various groups of teachers rated the use and importance of CBM data for special education referral and evaluation purposes was also examined (see Table 23). In general, a little over half of teachers surveyed reported that CBM data were a top three data source for making

special education decisions. The groups with the greatest rate of teachers reporting that CBM data is a top three data source for making special educations decisions were teachers reporting a little confidence in teaching ELLs (rating of 2), teachers with a reading endorsement, teachers with 1-2 ELLs in their classroom, and teachers with 0-5 years of experience. Teachers with an ESL endorsement and teachers who reported having ELL-based professional development reported a lower value of CBM data.

Table 23

Use of CBM Data to Inform Special Education Referral and Evaluation Decisions

	N	CBM data used	CBM data in top three
All Teachers	92	73 (79%)	56 (61%)
Number of ELLs in Classroom			
1-2	49	40 (82%)	32 (65%)
3-5	21	15 (71%)	13 (62%)
6-10	8	7 (89%)	4 (50%)
11+	14	11 (79%)	7 (50%)
Professional Development			
ELLs	48	39 (81%)	25 (52%)
MTSS	83	68 (82%)	51 (61%)
ELLs in MTSS	34	29 (85%)	20 (58%)
Endorsements			
ESL	11	9 (82%)	6 (55%)
Reading	15	13 (87%)	11 (73%)
Years Teaching			
0-5	15	13 (87%)	10 (67%)
6-10	18	14 (78%)	10 (56%)
11-15	22	16 (73%)	14 (64%)
16-20	13	11 (85%)	7 (54%)
21+	15	12 (80%)	8 (53%)
Years of Education			
3-5	10	9 (90%)	6 (60%)
6-10	52	42 (81%)	33 (63%)
11-15	4	1 (25%)	0 (0%)

Table 23 (cont'd)

	N	CBM data used	CBM data in top three
Confidence with Teaching ELLs			
1 (Not at all)	2	2 (100%)	1 (50%)
2	8	6 (75%)	6 (75%)
3	23	17 (74%)	14 (61%)
4	33	28 (85%)	20 (61%)
5 (Very)	26	20 (77%)	15 (58%)

Teachers were asked which factors influenced their decision to include CBM data as a top data source for informing special education decisions (see Table 24). The scale ranged from "1" to indicate "did not influence my decision", to "5" to indicate "greatly influenced my decision." The decision-making factor with the highest average endorsement rating was that using CBM data as a top data source was normal/expected. The decision-making factor with the lowest average endorsement rating was their own beliefs regarding using CBM data for special education decision. However, the difference between ratings was minimal, with all factors receiving an average rating between 3.4 and 4.2. For teachers who did not include CBM data as a top data source, no factor had an average endorsement rating higher than 2.9. All factors received an average rating between 2.2 and 2.9.

Table 24

Factors Influencing Teachers' Decisions to Include CBM Data as an Important Data Source for Special Education Referral and Evaluation

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
The availability of high-quality curriculum-based measurement data for ELLs	53	3.6	2	3	21	16	11
The appropriate personnel is/are involved in using this data	53	3.8	2	2	18	14	17

Table 24 (cont'd)

Factor	N	Mean	1	2	3	4	5
Using CBM data for this us what is normal/expected of me	54	4.2	1	2	14	8	29
There is a supportive school environment for using CBM data with ELLs	53	3.9	3	0	14	18	18
My own beliefs about how using CBM data to inform instruction/intervention decisions is one important step toward better outcomes for these ELLs	52	3.4	5	3	20	17	7

*1 indicates No Influence, 5 indicates Great Influence

Table 25

Factors Influencing Teachers' Decisions to Not Include CBM Data as an Important Data Source for Special Education Referral and Evaluation

			Number of teachers indicating each response*				
Factor	N	Mean	1	2	3	4	5
The lack of availability of high-quality curriculum-based measurement data for ELLs	35	2.9	9	4	12	0	10
I do not believe that the appropriate personnel is/are involved in using this data	35	2.3	13	5	13	3	1
Not using CBM data for this us what is normal/expected of me	34	2.8	10	4	10	3	7
There is an unsupportive school environment for using CBM data with ELLs	35	2.2	14	5	12	2	2
My own beliefs about how using CBM data to inform instruction/intervention decisions is not an important step toward better outcomes for these ELLs	35	2.6	12	4	9	5	5

*1 indicates No Influence, 5 indicates Great Influence

Finally, teachers were asked to rate how much they agree with the following statement: "In general, using CBM data to make special education decisions about ELLs can be one important step toward improving their reading outcomes". The scale ranges from "1" to indicate

"strongly disagree", to "5" to indicate "strongly agree." A total of 92 teachers responded to this question, with a mean response of 3.9, with a median of 4.0 and a range from 2-5. By far, teachers reported somewhat agreeing (n = 50) and strongly agreeing (n = 18) with this statement. A substantial number of teachers (n = 20) reported neither agreeing nor disagreeing with this statement.

Summary

Overall, most teachers included ELLs in MTSS practices, such as universal screenings, tiered reading interventions, and progress monitoring. Teachers also generally reported agreeing that each aspect of MTSS was one important step toward improving reading outcomes for ELLs. Teachers tended to include ELLs in interventions and progress monitoring even when the ELLs met benchmark or were not receiving intervention (respectively). Teachers with only one or two ELLs in their classrooms tended to include ELLs in intervention and progress monitoring at expected rates (according to the typical MTSS process) more often than teachers with three or more ELLs. Roughly half of teachers reported highly valuing CBM data to inform instruction/intervention decisions for ELLs, and over half reported highly valuing CBM data to inform special education decisions for ELLs. Teachers with an ESL endorsement tended to value CBM data less often, while teachers with a reading endorsement tended to value CBM data more often. This was true for both instruction/intervention and special education decisions.

Research Question Two

The second research question was: How does ELL inclusion in critical aspects of MTSS differ between schools with varying levels of MTSS implementation fidelity (as measured for the general student population)? Results from the survey and R-TFI are presented below for each aspect of MTSS.

Universal Screening

Universal screening inclusion was coded for each teacher as “includes all ELLs’, “includes some ELLs” or “includes no ELLs”. These data were compared to the R-TFI bands (see Table 26 below). All teachers across all bands included at least some ELLs in their universal screening of reading skills, and the majority of teachers included all ELLs in universal screening.

Table 26

Universal Screening Inclusion Between R-TFI Groups

Category	Schools (n)		Teachers (N=18)			
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	3	n	6	1	0	7
Medium Fidelity	3	n	4	0	0	4
High Fidelity	3	n	7	0	0	7

Tiered Interventions

Within the typical MTSS framework, tiered reading interventions are provided to students who do not meet proficiency/benchmark standards on universal screeners. Therefore, tiered reading intervention inclusion was determined by separating teachers into three groups, those who reported that no ELLs met benchmark, those who reported that some ELLs did not meet benchmark, and those who reported that all ELLs met benchmark. Tiered intervention inclusion was then coded for each teacher as “includes all ELLs”, “includes some ELLs” or “includes no ELLs”.

Intervention data for teachers who reported that no ELLs met benchmark were examined (n = 5). In general, intervention would be provided for students who did not meet benchmark standards in an MTSS model. All four teachers across both fidelity groups reported that they included all ELLs in intervention (see Table 27).

Teachers who reported that some ELLs did not meet benchmark would typically be expected to have some ELLs receiving intervention (see Table 28). All teachers from the low and medium fidelity groups, as well as three teachers from the high-fidelity group, provided tiered reading intervention to some ELLs. In the high-fidelity group, one teacher indicated that they included no ELLs in intervention despite having ELLs who did not meet benchmark. It is possible that this teacher had reasonable justification for not including ELLs who did not meet benchmark in tiered reading intervention, such as having additional data supporting higher reading skills. However, not including students who did not meet benchmark in tiered reading intervention is atypical in an MTSS system.

Table 27

Tiered Intervention Inclusion Between R-TFI Groups: Teachers Who Reported That No ELLs Met Benchmark

Category	Schools (n)		Teachers (N=4)			
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	1	n	2	0	0	2
Medium Fidelity	2	n	2	0	0	2
High Fidelity	0	n	0	0	0	0

Table 28

Tiered Intervention Inclusion Between R-TFI Groups: Teachers Who Reported That Some ELLs Did Not Meet Benchmark

Category	Schools (n)		Teachers (N=7)			
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	1	n	1	1	0	2
Medium Fidelity	1	n	1	0	0	1
High Fidelity	3	n	1	2	1	4

Intervention data for teachers who reported that all ELLs met benchmark were also examined (n = 5). In general, no intervention would be provided for students who met benchmark standards in an MTSS model. All five teachers across all fidelity groups reported not including any ELLs in intervention who already met benchmark (see Table 29).

Table 29

Tiered Intervention Inclusion Between R-TFI Groups: Teachers Who Reported That All ELLs Met Benchmark

Category	Schools (n)	Teachers (N=5)				
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	1	n	0	0	1	1
Medium Fidelity	1	n	0	0	1	1
High Fidelity	2	n	0	0	3	3

Progress Monitoring

In a typical MTSS model, progress monitoring tools are administered to students who are receiving tiered interventions. Therefore, progress monitoring inclusion was determined by separating teachers into three groups, those who reported all of their ELLs received tiered reading intervention, those who reported some of their ELLs received intervention, and those who reported none of their ELLs received intervention. Progress monitoring inclusion was then coded for each teacher as “includes all ELLs”, “includes some ELLs”, or “includes no ELLs”. Table 30 displays the fidelity data for teachers reporting that all ELLs receive tiered reading intervention. All teachers from the low and medium fidelity groups provided progress monitoring to all ELLs. The single teacher in the high-fidelity group indicated that they only included some ELLs in progress monitoring despite providing intervention to all of their ELLs.

Table 30

Progress Monitoring Inclusion Between R-TFI Groups: Teachers Who Reported That All ELLs Received Tiered Intervention

Category	Schools (n)	Teachers (N=9)				
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	2	n	5	0	0	5
Medium Fidelity	2	n	3	0	0	3
High Fidelity	1	n	0	1	0	1

Progress monitoring data for teachers who reported that some ELLs receive intervention were also examined (see Table 31). The lone teacher in the low fidelity group reported that some ELLs receive progress monitoring. The two teachers in the high fidelity group reported that either some or all ELLs receive progress monitoring. Progress monitoring data for teachers who reported that no ELLs receive intervention was also examined (see Table 32). In a typical MTSS model, no progress monitoring would be provided for students who did not receive intervention. Teachers from the low and medium fidelity groups all reported that they did not include any ELLs in progress monitoring. In the high-fidelity group, one teacher indicated that they included all ELLs in progress monitoring despite not having any ELLs who receive intervention.

Table 31

Progress Monitoring Inclusion Between R-TFI Groups: Teachers Who Reported That Some ELLs Received Tiered Intervention

Category	Schools (n)	Teachers (N=3)				
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	1	n	0	1	0	1
Medium Fidelity	0	n	0	0	0	0
High Fidelity	2	n	1	1	0	2

Table 32

Progress Monitoring Inclusion Between R-TFI Groups: Teachers Who Reported That No ELLs Received Tiered Intervention

Category	Schools (n)		Teachers (N=6)			
			Included all ELLs	Included some ELLs	Included no ELLs	Total
Low Fidelity	1	n	0	0	1	1
Medium Fidelity	1	n	0	0	1	1
High Fidelity	2	n	1	0	3	4

Data-Based Decision Making

Data-based decision making was split into two sub-categories and analyzed separately: whether instruction/interventions are altered for ELLs as informed by progress monitoring/universal screening (CBM) data, and whether special education placement/evaluation decisions for ELLs are informed by CBM data. When using CBM data to inform intervention and instruction for ELLs, the majority of teachers in both the low and high-fidelity groups indicated that CBM data were very important. Teachers in the medium fidelity group indicated that CBM data are used, but only one of four teachers indicated that it is very important data (see Table 33). When using CBM to inform special education decisions for ELLs, the majority of teachers in all fidelity groups indicated that CBM data were very important (see Table 34).

Table 33

Data-Based Decision Making Between R-TFI Groups: Instruction/Intervention

Category	Schools (n)		Teachers (N=18)			
			CBM data are very important	CBM data are used, but not very important	CBM data are not used	Total
Low Fidelity	3	n	4	1	2	7
Medium Fidelity	3	n	1	2	1	4
High Fidelity	3	n	5	1	1	7

Table 34

Data-Based Decision Making Between R-TFI Score Groups: Special Education

Category	Schools (n)		Teachers (N=18) CBM data are very important	CBM data are used, but not very important	CBM data are not used	Total
Low Fidelity	3	n	5	2	0	7
Medium Fidelity	3	n	4	0	0	4
High Fidelity	3	n	5	0	2	7

Summary

Overall, no noticeable trends between fidelity groups were observed in the data. Almost all teachers included all ELLs in universal screenings of reading skills. For tiered reading intervention, all teachers included all ELLs as would be expected in a typical MTSS model if either all ELLs in their class met benchmark, or if no ELLs in their classroom met benchmark. When only some ELLs met benchmark, teachers across fidelity bands reported a variety of intervention inclusion. For progress monitoring, all teachers reported inclusion in progress monitoring as would be expected based on their ELLs' inclusion in intervention, with the exception of two teachers in the high fidelity group who reported including all ELLs when no ELLs or only some ELLs received intervention. In regard to using CBM data to make decisions, no noticeable trend was present across fidelity groups for either instruction/intervention decisions or special education decisions. However, teachers in the medium fidelity group were highly more likely to use CBM data for special education decisions than they were for instruction/intervention decisions.

CHAPTER 5: QUALITATIVE RESULTS

This chapter describes the findings associated with the qualitative research questions. Understanding community is essential for interpreting meaning (Vygotsky, 1978), and the use of the CHAT framework allowed for the inclusion of ELLs in MTSS practices to be considered not just as isolated practices, but as practices influenced by a much larger community. Indeed, CHAT allowed for the inclusion of ELLs in MTSS practices to be viewed as a complex transition influenced by both social context and individual perceptions. This framework is particularly beneficial for this topic, as the cultural-historical context of ELLs in MTSS systems is complex, being influenced by broader understandings of English as a national language, immigration, testing culture in education, and more.

First, a general overview of the qualitative findings is presented. Then, interview data associated with the qualitative research questions are presented and analyzed. Teacher interviews are described first, organized by each of the major themes that are part of the CHAT framework: subject, instruments, rules, community, division of labor, object, and outcomes. Minor themes are also described. Then, in order to provide supplementary information on corresponding perspectives of ELL inclusion in MTSS practices, the principal and MiBLSi staff member interviews are described. Finally, inner contradictions are discussed at the end of the chapter.

Overview

The current study focused on classroom experiences of teachers. The participating teachers spend each day balancing the needs of the entire class with the needs of individual students, including ELLs. MTSS practices created a structure by which teachers provided reading instruction and intervention to these students. For ELLs, this structure is complicated by the addition of ESL services, cultural differences, a language barrier, and the broader cultural

history of servicing ELLs in public education. Through qualitative interviewing, teachers, principals, and MiBLSi discussed this changing system, and these conversations were coded to identify themes present across interviews.

In general, interviewees described ELLs as a large or growing population. Many schools had large migrant populations, and most teachers had only one foreign language spoken in their classroom. Teachers generally expressed a desire to support ELLs' reading skills through MTSS practices, yet noted difficulties due to a lack of resources. Translation services and EL teacher support were noted as particular areas of need. Principals reiterated these needs, but often cited a lack of money or authority required to address the needs. Conversely, MiBLSi noted that schools had not asked for these resources, and were unaware of the growing need for ELL supports in their partner schools.

Within their schools, teachers described ELLs receiving MTSS through a team of people, including themselves, other grade level teachers, interventionists, MTSS teams, and EL teachers. Team members other than teachers were most often involved in administering screeners and progress monitoring measures, as well as providing intervention and determining intervention groups. This was true for all students, not just ELLs. However, the addition of the EL teacher was unique for ELLs. The responsibilities and involvement of the EL teacher varied. Some teachers discussed the pivotal role their EL teacher played in MTSS practices, such as providing reading intervention, supporting Tier One instruction, and consulting with teachers for instructional and special education decisions. Other teachers discussed a lack of support, indicating that the EL teacher worked on their own with little to no collaboration with other staff members, and sometimes offered little to no direct support for ELLs.

Although teachers and principals indicated a strong desire to be supportive of ELLs and their families, many had not yet developed comprehensive procedures to support these students' unique needs within existing MTSS systems. For example, one teacher reported a struggle to provide intervention services to a student due to what the school identified as parental concerns with existing procedures. More specifically, the parents did not want their child to receive additional support due to concerns regarding the student's name appearing on paperwork, which the parents potentially perceived as having the negative effect of highlighting their immigration status. This family ultimately left the district. While the teacher expressed an awareness that recent immigration policies and political turmoil may have impacted this situation, the school was unable to successfully navigate the paperwork barrier to support the student and family. In addition to this situation, teachers and principals across interviews often described ELLs as being treated as "any other student", describing more of a cultural-blindness approach rather than a cultural competence approach to providing educational support.

Teachers indicated a large number of daily tasks and responsibilities, such as teaching standards-based curriculum, administering assessments, and implementing what students were determined to need on a one-on-one basis. As a result, teachers often indicated that how they implemented MTSS was largely constrained by time, particularly for ELLs. ELLs required the same supports as other students-inclusion in universal screening, participation in the general reading curricula, and tiered intervention. However, they also often required extra time out of the classroom to receive ESL services, and teachers needed to commit additional time to differentiate materials (such as translating documents for parents). Principals also emphasized time and scheduling as a significant barrier, noting that creating a school-wide schedule where all students have time for Tier One instruction, intervention, additional content instruction, and

specials (e.g., gym, music) was extremely difficult. Given that ELLs also needed time for ESL services, this was perceived to create even more difficulty. The MiBLSi representative also indicated time as a significant barrier for schools, such as trying to find time to provide professional development to teachers during the school year.

Understandably, teachers were able to explain the daily experiences of ELL inclusion in MTSS practices with greater comprehensiveness than principals or the MiBLSi representative. Although principals recognized the need for resources and the difficulty of scheduling, they were slightly removed from the daily successes, frustrations, and hard work of teachers. Several teachers expressed frustration from a lack of collaboration with the child study/MTSS teams; this concern was not generated by any principal. The MiBLSi representative, even further removed from the classroom, expressed no specific concerns for ELLs, repeatedly stating that partner schools have not indicated ELLs as an area of concern to MiBLSi.

The following sections delve deeper into the interviews of teachers, principals, and MiBLSi representative in order to better understand the system that is ELL inclusion in MTSS practices. It is important to note that although each interview was meant to focus on ELL inclusion in MTSS practices, the actual daily experiences of educators cannot be compartmentalized so easily. Interviewees often spoke of issues that could, upon initial consideration, seem tangential to the current research questions. For instance, teachers often spoke of ESL language interventions which took place outside of the MTSS structure, or discussed MTSS practices in general rather than specifically for ELLs. However, it is important to note that this information does provide insight on the complexity of studying teacher practices and perspectives. This information may also be critical for understanding the integration of

services provided (or lack thereof) toward the purpose of facilitating the reading skill development of ELLs.

Research Question Three

Research question three asked: How do teachers perceive their activity system in regard to ELL inclusion in MTSS practices? Eight first-grade teachers were interviewed. These data were analyzed using the six general procedures outlined by Creswell and Plano Clark (2007). The third and fourth procedures are slightly modified in order to focus on CHAT elements.

First, a transcription of each interview was completed by a research assistant. A second research assistant read through this transcription while listening to the audio and marked any discrepancies via track changes. The principal researcher determined any discrepancies. Second, the two research assistants and the principal investigator read through each transcription and took notes about general themes and first impressions of the data. Third, both research assistants and the principal investigator read each transcript and marked a descriptive code that described the statement. These descriptive codes were individually generated by each coder and then reviewed during a meeting with the two research assistants and the principal researcher. During this meeting, each descriptive code from each coder was reviewed as well as its relation to other descriptive codes from the same coder and from different coders. A list of minor themes based on the descriptive codes of all three coders was generated through discussion, with each element of the activity system being a major theme. Each transcript was then independently re-coded by each coder according to the newly developed minor/major theme coding scheme. Any discrepancies in coding minor/major themes was then decided via discussion during additional meetings.

Reliability was checked throughout the coding procedure by having multiple coders. Validity was checked by examining how the results relate to current literature, as is appropriate with qualitative data (Creswell & Plano Clark, 2007). The teacher interview data were independently analyzed at each step by both the primary researcher and two research assistants in order to minimize subjectivity and increase validity and reliability. No numerical reliability rating was developed, as the goal of multiple coders is consensus (Harry, Sturges, & Klingner, 2005).

A summary of the coding scheme is available in Table 35, including information on how many teachers discussed each minor theme and how many total references to each theme were made. Below, minor themes are summarized within the context of major themes, and sample quotes are used to provide examples.

Subjects

All eight teachers were white females. Two teachers reported ages between 20-30, five teachers reported ages of 31-40, and one teacher reported her age was between 41-50. Years of experience ranged from 5 to 19 years, with one teacher not reporting. All eight teachers had earned a Master's Degree, two had an additional reading endorsement, and one had an additional ESL endorsement. The majority of teachers interviewed had 1-2 ELLs in their classroom (n = 5), with two teachers reporting 3-5 ELLs, and one teacher reporting 11 or more ELLs. The majority of teachers reported only having one non-English language spoke in their classroom (n = 6), with the remaining two teachers reporting two non-English languages spoken in their classrooms.

Instruments

The element of Instruments represents the system resources, including those that are available and those that are desired. Six minor themes were identified: assessments, instruction/intervention, professional development/knowledge, time, translator, and EL supports.

Assessments

All teachers described the various reading measures they used and their thoughts on the validity of these measures. Teachers described a variety of tools used, such as DIBELS, NWEA, observations, formative assessments, World-class Instructional Design and Assessment (WIDA), and running records. Concerns with CBMs such as DIBELS and AIMSweb were noted, including unrelatable passages for ELLs (such as a student from Guatemala reading about snow) and the brevity of the tools. One teacher stated:

> It's hard with AIMSweb Plus because you're just getting a one-minute snapshot of the child, and sometimes kids just don't test well. So, you're going to have a kid that bombed, and you're like, you know, the kid got a level two which is a beginner reader. But in my group the kid is reading a level eight book, and I have proof because I have these 12 running records. So, the child just didn't test well that day.

However, teachers who used both a traditional universal screener, such as DIBELs, and an adaptive computer-based universal screener, such as STAR or NWEA, often preferred the traditional screener, "The [STAR] data is very skewed because it, a lot of kids just click away... [DIBELS] provided a better score for some of those [instructional] decisions." As another teacher noted, "DIBELS is a little more straightforward because you can see what the kid is doing, and the NWEA is very tricky, there's a lot of language on that test." A third teacher reiterated these concerns, "On NWEA every question is different, and it's, a lot of them are very

wordy. I mean it does read to them, the one we give them, but it's still hard. It's very easy to just click through." Some teachers emphasized this language piece, especially the inability for many of these tests to account for vocabulary difficulties, "I feel like the ELL is always going to get the shaft, per say, because they're going to do terrible on the vocab piece." Many teachers expressed additional concerns with computer-based screeners, and stated that they highly valued their classroom-based data over screening data. One teacher stated:

> I'm not completely sold on the NWEA. It's very difficult for all students at my grade level to be able to take it and [for me] to know that's really their score. It's an adaptive test, which I don't understand that it can get so high that it's beyond their skill level completely, so I think that my reading level [score] trumps that.

Another teacher noted:

> I wish that there was something else that we were screening [ELLs] on to make sure that we were putting them on the right path...I think that a universal screener is exactly that, it's universal and it doesn't really tell you as much as you need to know. [I wish] there was a more in-depth test or use of something that would show us, yes, this student is truly learning disabled.

Instruction/Intervention

Each teacher discussed the instruments available to them to provide reading instruction and intervention to ELLs within an MTSS model. Teachers described the tools they had available to them, such as the Fountas and Pinnell Leveled Literacy Intervention System (LLI). Some teachers were satisfied with their instructional resources for ELLs, as one teacher noted regarding LLI, "I really really like it. I think no matter what, I don't think this could harm any reader. I think it's a phenomenal strategy no matter who [the student] is." When asked about her

thoughts on the interventions used with ELLs in her school, another teacher stated, "I think we do a really good job." However, other teachers noted that they wanted something different or something more to use with ELLs. When asked about available reading interventions for ELLs, one teacher noted:

> I think that there is probably something better out there, and if I were qualified, I would be using it... I think they work better for some students who are more accustomed to the language... I don't think they're the best tool that we could be using though.

Another teacher stated:

> I just wish we had more. I mean, I hate that our go-to is the iPad because it can translate. I wish we had more hands-on Spanish, or any language, whichever student we're talking about. I wish we had more hands-on activities for them.

In general, whether teachers were satisfied or dissatisfied with the resources, they generally reported using the same reading intervention for both ELLs and non-ELLs in their classrooms. Some teachers reporting using supplemental strategies and tools with ELLs (such as front-loading vocabulary or providing EL teacher support) in addition to the reading intervention.

Professional Development/Knowledge

Each teacher discussed their knowledge, or lack of knowledge, about ELLs and their inclusion in MTSS. Teachers tended to report receiving professional development on universal screening tools, such as NWEA or DIBELs, but reported a lack of training in ELL interventions and instructional strategies. One teacher stated, "I've never had an ELL professional development. We've had some cultural things, but nothing that is about teaching students that are ELL, no. I'd definitely say that is something, to be honest, I've never considered." Additional teachers talked about the need for such professional development opportunities. When asked

what ELL resources she would like, one teacher noted "To give [teachers] more support. If we knew more about how to help...Sometimes it's just assumed that we know how to support a lot of kids and we don't, so we're not offered the professional development to help those kids." In addition, teachers noted a lack of knowledge regarding the WIDA, including not knowing whether students had taken it, what students' scores were, and how to appropriately interpret those scores:

> We are emailed the WIDA scores...it just says how [the ELLs] scored, so there's not a lot of information that goes with that. So even though we're given [the score], we don't necessarily know what that means or how to support.

Time

Most teachers referred to time as a critical instrument. Time was generally seen as limited, with teachers noting difficulties scheduling MTSS meetings, providing progress monitoring, scheduling interventions, and fitting in professional development. When asked about barriers to implementing MTSS with ELLs, one teacher noted:

> Just kind of the logistics, so the scheduling between the two pull-out teachers and then between the gen ed teacher and what [the ELL interventionists] are doing. It's always where do you pull somebody out of when everything is very important. We don't have an MTSS, an RTI hour or anything like that so it's always, well, you take from here, but [the students] are missing out on this.

Another teacher discussed how the strict scheduling of universal screening and progress monitoring impacted the validity of the assessments:

> I feel like my kids that take the AIMSweb Plus at 8:30 in the morning compared to, by the time 3:00 rolls around, and I'm getting to those students. Just that, the time aspect,

> you know my morning kids that I'm assessing do very well...just because by 3:00 everyone's checked out.

However, one teacher noted that her intervention and progress monitoring routine worked well for her. Discussing how she manages her time when she progress monitors her ELL, the teacher stated. "I'm assessing her one-on-one, so when [other] kids are re-reading, I'm assessing her. So, it's like a management. The kids are really good at it so they know the routine now."

Translator

Most teachers discussed a need for language translators, including translating assessment directions, translating instruction and intervention directions, translating in order to build rapport with students, and translating conversations to communicate with parents. One teacher noted her frustrations with having parent conversations for ELLs regarding students who are struggling:

> I would definitely like to have a translator or someone available...someone who could help me with explaining things, so that I understood that [the ELL's parents] were understanding. Because I know generally there aren't a lot of questions asked even from English-speaking parents when you're having these conversations, they just nod their head. And then they go home and process it, and then I get emails from my English-speaking parents. But I don't necessarily get the emails from the ELL parents who aren't, and my guess, and that's my own assumption, is that they're having enough trouble understanding what I'm saying here that they're not really, the process is, they're processing it much longer or different things like that, and just at that point they don't even know.

EL Supports

Many teachers also discussed English Language supports, such as availability of EL teachers. Six of the seven teachers who discussed EL supports expressed frustration with these supports, such as teachers who weren't well trained, teachers who were spread too thin across multiple schools, or not having any EL support at all. As one teacher noted when asked about resources for providing MTSS to ELLs:

> I would say the biggest thing is because we only have one [EL] person K-12 and our district is big...she is running back and forth between buildings and mostly supporting upper elementary...I would ask her [for help] but then is she doesn't get back to me. [So, instead] it would be like looking online to see what I can find, or trying to find resources as far as what books I could read to help figure that out and to support them.

Another teacher stated "Both districts that I've taught in have not had very good ELL support at the elementary level. So, having anyone come in and give [teachers] additional ELL support does not happen." The single teacher who expressed positive perceptions of her EL support noted that her school's EL teacher was passionate, collaborated with teachers, provided intervention, and brought up concerns about student progress when necessary.

Rules

The element of Rules represents the laws and norms (both written and unwritten) that teachers perceive. Four minor themes were identified: assessment rules, instruction/intervention rules, MTSS decision making rules, and English Language support rules.

Assessment Rules

Each teacher talked about rules surrounding reading assessment for ELLs in MTSS. Teachers mainly discussed how certain assessment tools were locally mandated, such as

DIBELS, NWEA, or STAR. Teachers also stated how the rule or norm in their school was to include all students in both universal screening and progress monitoring. Many teachers also discussed the new third grade reading law in Michigan, and how this influenced their practices:

> There's also the diagnostic piece that's required by the State of Michigan now, and so using that information [the team] decides whether a student will get Tier Two interventions in the classroom, or if they would see the reading interventionist.

Finally, one teacher noted that the use of assessment data for teacher evaluations is part of the reason that they are required to include all students in universal screenings.

Instruction/Intervention Rules

Each teacher discussed rules regarding how reading instruction and intervention are provided to ELLs in their MTSS systems. Many teachers talked about how interventions are provided to the students who score lowest on assessments as determined by rank order. Teachers discussed how ELLs were included in these ranked lists, such as by written policy or by school norm. One teacher talked about how ELLs were previously not included, but are now included due to the advocacy of a new EL teacher. Teachers also discussed how intervention groups are created, such as whether groups are based on grade level, behavior, or comfort with the interventionists. As one teacher stated, "It's typically by grade level and it's typically by skill in what [the students] need, but sometimes it's, 'well this is convenient for me as a teacher so take [the students] at this time'." Teachers also discussed rules surrounding which instructional materials they were allowed to use, or how much time they were required to provide intervention. One teacher described her school's specific intervention policy:

> We're supposed to triple dip these kids, the bottom 30, so you meet with them for one round, which is 10 to 15 minutes. Then, the second dip is our reading specialist, who

meets with them for another 15 minutes of small group instruction, two to three kids. And the third, the triple dip, is a quick 5 minutes with those same kids.

MTSS Decision Making Rules

Each teacher discussed their schools' rules regarding how data-based decisions are made for ELLs in MTSS. Most teachers noted that there is no difference in the MTSS process for ELLs versus non-ELLs. Teachers often discussed a 6- or 12-week waiting period between intervention modifications (typically as dictated by the MTSS or SAT teams), as well as the use of CBM data to make decisions. For example, a student may need to stay in the same intervention for 12 weeks while CBM data are collected before the intervention can be changed in type, intensity, or duration. This was described as the same regardless of ELL status, however some teachers noted the exception that WIDA data may be considered or the EL teacher may become involved. When asked specifically about how the MTSS process may lead to a special education referral, some teachers then discussed differences in the process between ELLs and non-ELLs, specifically school policies surrounding ELLs and special education. As one teacher noted, "I've been told that if [ELLs] haven't been here for three years don't even do the [MTSS] process yet, because they can't be identified yet [for special education]."

EL Support Rules

Four teachers discussed rules surrounding how ELLs are able to receive English Language supports. Although not directly related to the central topic of MTSS inclusion, teachers often discussed EL supports during interviews. These remarks indicated that EL supports may indirectly influence how ELLs experience MTSS. For example, two teachers worked in districts where ELLs need to change schools in order to receive EL services. Teachers

not working in the ELL-designated school receive very limited ELL consultation. One teacher discussed the effect of this rule on her ability to provide quality reading instruction to her ELLs:

> [Teachers] are just kind of on our own, and we know that. I mean [the ELL teacher] comes in and she can try to give us ideas but, it's usually either [ELLs] are in the program or they're not. So, if they're not [in the program], then usually it's how can we get them into the program more than what you can do to help them in the classroom.

Teachers also briefly discussed rules for how ELLs are labeled as ELL. They noted that ELLs are often identified through parent report regarding home language on enrollment paperwork, and how ELLs are exited through WIDA testing. The status of being ELL was noted as essential to receiving EL services.

Community

The element of Community represents the society that the system functions in, both at the local level (such as the school) as well as a broader level (such as the nation). Five minor themes were identified: academic characteristics of ELLs, language characteristics of ELLs, socio-cultural characteristics of ELLs, local ELL population, and school culture.

Academic Characteristics of ELLs

Each teacher described their ELLs by discussing their academic characteristics and needs. Teachers largely discussed ELLs as having the common need for substantial development in English vocabulary and reading comprehension skills. One teacher summarized the need for vocabulary development:

> There's so much vocabulary development that they don't know...they might be able to sound it out but they don't know what it means, and those kids will really struggle with

> comprehension because if they don't know what the word is, even if they can sound it out, they're not going to know what the meaning is.

Another teacher highlighted this common need by noting the changes she makes in instruction and intervention:

> [...] we are focusing on vocabulary and we are focusing on more of the comprehension. I probably do a better job of front-loading that information so [my ELL] knows it and it makes more sense to him, versus my other students we're not really working on the comprehension piece.

A few teachers also discussed ELLs' low phonics skills as evidenced by measures of nonsense-word fluency (a common way to assess non-ELLs early reading skills):

> [K]ids who have really struggled with [nonsense words], at least for these last two years, have been ELL learners and I don't know if that's a coincidence or if that's because they don't have a word to grasp that would make sense to them, so then it seems really odd that they would just say that make-believe word.

Individual teachers also briefly commented on ELLs' struggles with syntax, verb tense, expressive language skills, alphabetic principle, and rhyming.

Language Characteristics of ELLs

Teachers described the language characteristics of ELLs, such as how English proficiency influences inclusion in MTSS practices. This was especially emphasized when ELLs had no English language background:

> [...] with the exception of, if they're a newcomer and they don't speak any English, I think a lot of [ELLs] are just looked at as learning to read. I mean, especially at this age

> group. They're all learning to read. I mean, it's going to sound bad, but we don't...look at them as any different than the other kids unless they're like an extreme newcomer.

Teachers noted that ELLs are generally included in MTSS the same as non-ELLs, unless they have no prior English language exposure, in which case teachers were often uncertain on what the MTSS process would be, "If we had a student who didn't speak English at all I don't know what we would do. I mean, I honestly don't know what we would do. Which is unfortunate." Some teachers also mentioned how students' native languages impacted their ability to teach, with Spanish often being viewed as an easier language to work with than other languages. Pronunciation and code-switching were also briefly highlighted by teachers as ELL language characteristics common in their community.

Socio-Cultural Characteristics of ELLs

Teachers commented on the socio-cultural characteristics of ELLs in their classrooms, such as how some ELL families frequently move, making it difficult for the school to include them in MTSS. As one teacher stated:

> [...] we try and give the best support that we can when [the ELLs] are there, however the moving greatly does affect it because it's different levels of support...especially if a kid comes in in-between screeners. Necessarily, they're not always picked up right away because the screener has already [happened].

Teachers also discussed how important they perceived education to be in ELL families. This was perceived by teachers as sometimes higher and sometimes lower than the typical non-ELL family, and teachers stated that a family's value for education impacted the student's ability and desire to learn English and develop reading skill proficiency. The confidence of ELLs was also discussed, almost exclusively with regard to a perception of lower confidence among ELLs in

comparison to non-ELL peers and how this influences ELLs' ability to display their knowledge on a test. As one teacher stated, "I've noticed ELL students tend to be less confident in their reading...so I feel like [DIBELS] is a very anxiety-driven test for them." Different family backgrounds, including differences in previous access to computers (which are often used for universal screening assessments such as NWEA and STAR), and mainstream cultural background knowledge (often necessary for reading and reading comprehension assessments), were also discussed by teachers within the context of including ELLs in MTSS practices.

Local ELL Population

Teachers commented on the size and diversity of their school's ELL population. Many teachers discussed how their local ELL population had grown in recent years and how they expected the population to continue to grow. Some teachers also commented on how the ELL population had traditionally been large at their school. Teachers commented on how these large and growing populations influenced their schools' use of resources:

> [...] we just got our numbers and we have twice as many ELL learners, I mean twice as many as we had in the past, twice as many kids needing support, so, I think, I just don't think we have the support that we need.

One teacher also discussed how the number of ELLs in their classroom influenced behaviors:

> I did have one ELL student this year, I had four last year. So, my four last year were a struggle because my four last year worked as a pod and spoke Spanish to each other and did not get as much from my [ELL] this year because my one [ELL] was isolated.

School Culture

Each teacher discussed various aspects of their school or district's culture surrounding ELLs and MTSS. Some teachers made positive comments about culture, such as supportive

administration, a culture of celebrating diversity, an overall desire to help ELLs learn to read, a high value on CBM testing fidelity, a recent focus on including ELLs in reading interventions, or school/district goals focused on decreasing the reading achievement gap between ELLs and non-ELLs. Other teachers discussed negative school cultures, such as frustrations with administration (leading teachers to put in less effort), a lack of using data to make decisions, and high tensions between teachers and the child study/MTSS teams (leading teachers to stop utilizing the teams or leave meetings in tears). Some teachers stated that their school had no specific culture surrounding ELLs. As one teacher noted, "I don't think [there is a specific culture surrounding ELLs] because we have so many ELLs and this is just what our school is." Finally, one teacher commented on the impact of the larger, national climate surrounding undocumented immigrants, and how she believed this impacted some ELL families' willingness for their child to receive potentially beneficial reading services.

Division of Labor

The element of Division of Labor represents how responsibilities are divided among members of the system. Five minor themes were identified: who administers assessments, who provides instruction/intervention, who makes decisions, who decides on resource allocation, and responsibilities of parents/families.

Who Administers Assessments

Teachers stated that universal screening and progress monitoring assessments were typically administered by teachers, interventionists, the EL teacher, or sweep teams. Three of the five teachers who discussed sweep teams also discussed difficulties with the use of multiple assessors, including student anxiety when testing with an unknown person, and the lack of validity across assessors. For example, one teacher noted:

> If you don't follow [directions] to a T, [student] scores are going to fluctuate, and there's not a lot of validity in that... If one person was hired to do every single AIMSweb assessment, you would have the same voice, the same time, for every single [student].

Who Provides Instruction/Intervention

Teachers discussed their role in providing Tier One instruction, as well as their role in providing interventions. They also discussed how interventions were provided by other teachers, educational assistants, reading specialists, and EL teachers. Expertise was often discussed as a deciding factor for providing intervention:

> We have the educational assistants work with the high kids, because we feel like their training is just not as extensive as our training. I mean, two of us have Master's degrees, we just have a little bit more training for the lower kids.

ELL status was not discussed as a deciding factor in who provides intervention, rather student reading skills were often considered the primary deciding factor. When asked about who provides reading intervention to ELLs, one teacher noted the emphasis on what reading skills the student needs rather than whether or not the student is ELL, "First it's definitely is there an intervention need? And then secondary becomes the ELL." While some teachers discussed the benefits of having a large team of interventionists, others discussed the difficulties of having limited personnel, "we have two Title teachers...but we had a hundred and some first graders, so making sure everyone can get services is a bit tricky sometimes."

Who Makes Decisions

Teachers also discussed who was responsible for data-based decision making for ELLs in MTSS processes. Every teacher discussed a team-based process for determining special education referrals, as well as a team-based approach for some intervention decisions. Teams

that consisted of administrators and support staff, such as the school psychologist, principal, and special education teacher were often noted as necessary for providing teachers with individual student support and coaching, as well as formal decisions such as special education referrals:

> [...] if I am thinking that [an ELL] needs more support, I would need to...make sure that I had six weeks of data of what I was doing and what everyone was doing with them, and then I could take them to MTSS. And then from there I would be given a plan of action of what I should do. And then, and that may be right away that they get more support, it may be right away that they get tested if they need special ed services. Most likely it's here's what [the team] wants you to try, [teachers] will come and, I've already tried things for six weeks mind you, but here's what [the team] wants you to try and then you can come back and [the team] will revisit from there.

Teachers also discussed grade-level teacher meetings, and how reading intervention groups are determined at these meetings. However, teachers also discussed informal meetings between themselves, EL teachers, and reading specialists. Teachers stated that these informal meetings, consisting of two staff members, were a way to change intervention type, duration, and intensity for ELLs (and all students) without waiting for a formal grade-level or team meeting to occur:

> If they're not being pulled for reading intervention then I might put them on [the reading interventionist's] radar and say 'hey, if you have an opening can my kid slide in?' or 'hey, you take these other two kids, this kid would fit right in with that group can I push that kid in there?

Overall, teachers tended to value having general education teachers and ELL teachers participate in the role of data-based decision making, as one teacher noted:

> It's been really nice to be able to have that ELL tutor to say [to the team] you know, [the ELL tutor] has taken them, and maybe it's even a one-on-one. And so, in that data meeting be able to say, you know what, I'm not sure that kid is going to fit in any of these groups.

Another teacher stated, "it's really useful that there is a gen ed [teacher], not just because it's me, but that there's a gen ed teacher, two of them on the team, because you have that teacher perspective." One teacher noted the difficulties of dividing the responsibility of determining intervention groups between general education teachers and Title teachers:

> In a perfect world the [intervention students] would be with the Title teachers, but people get offended very easily if you move their groups and they're not present. And it's not always the easiest task to get the Title teachers in our teacher [professional learning communities] with us, and we learned the hard way not to do that without people present.

Who Decides on Resource Allocation

Teachers discussed who is responsible for determining how ELL and MTSS resources are distributed. Four teachers referred to resource decisions being made by administrators higher up than their principals, and that these decisions often resulted in resources being allocated to areas other than ELLs' needs. As one teacher stated, "The principal's great. I think her hands are tied as far as the help that we have, it's kind of work with what you can.", and another, "Even building principals, I feel like it's above their heads at this point, because the teachers are coming, I mean I know the teachers are going to our administration and asking for more [EL] support; it's not being offered." When discussing low ELL testing scores, one teacher stated, "with regards to what our administrator can do, there's not much. Like she's talked to the [person

in charge of resources], and it's been very like, 'well, this is how we do things.' So, there's not a lot of leeway."

Parent/Family Role

Each teacher discussed the involvement of ELL families. Many teachers talked about the right of parents to refuse services, such as EL services, MTSS reading services, and special education. Parents were also discussed as critical providers of information, including home language and cultural information. As one teacher stated:

> The mom came in and explained to us, you know, [the ELL] doesn't make eye contact, it's a sign of disrespect in his home country. And so, she was able to talk to us so we could interact more appropriately with him and have appropriate expectations. But a lot of times we're just guessing too, if we don't have that from the parents, to help us.

Teachers also discussed the role that parents have in providing reading support at home and motivating their children to learn English. One teacher mentioned the difficulty ELL parents have in providing reading support at home, due to the difficulty in communication between parents and teachers, "I don't think [parents] work on any of those [reading] things, because they don't know what I'm asking them to do. Not that they're terrible parents, they're great parents, they just have no idea what I'm asking them to do."

A few teachers also talked about the lack of involvement all parents have in the MTSS process, noting that parents have little to no involvement until the special education evaluation process begins. One teacher discussed her personal practices in involving ELL parents, and how this differs from what is required:

> I personally like to discuss with my families when I'm taking my students to MTSS. It's not a district-mandated thing that you speak with the parents and let them know...So I like

to have those conversations, granted I'm not very good at Spanish...I like to communicate with families the whole way through, just so they're aware that their student is struggling as much as I see that they're struggling, but it's not necessarily a requirement.

Objects

The element of Objects represents the purpose of teachers' involvement in the system- why do they include/not include ELLs in MTSS practices? Two minor themes were identified: reading related objects and non-reading related objects.

Reading

Each teacher talked about reading outcomes as an object for their participation in ELL inclusion in MTSS practices. Teachers discussed objects of showing growth in reading skills, digging deeper to find out what ELLs need, providing ELLs with the reading services that they need, and getting ELLs to grade-level reading skills. One teacher noted:

> I mean obviously every teacher's goal is to have [ELLs] at grade level. But, on average, we really look, we want these kids to grow about 15-20 points a year in the NWEAs...So, I want them to grow, and be better than they were with me. I always want them to be better than they were. So that's kind of my goal with them. I want them to grow more than two points, that's not growth to me. Ten points is growth to me, like really getting them to be their best so they can be successful.

Non-Reading

Some teachers also discussed non-reading related objects associated with including ELLs in MTSS practices, such as a general improvement of English language skills for ELLs. When asked what her overall goal for reading interventions with ELLs was, one teacher stated, "I would want [ELLs] to be learning English as well as learning to read at the same time." Teachers

also discussed social-emotional goals for ELLs when asked about MTSS inclusion, such as making friends and feeling like they belong, “I always hope by the end of the year that [ELLs] have made good friends, and you can look outside my window at recess and see them laughing and joking with each other.” Finally, one teacher also mentioned documentation as an object of including ELLs in MTSS practices:

> If something were to happen in the future [other staff] would say then that you’ve done your job as a teacher in order to get these kids to where they need to be at. No one can come back and say you didn’t.

Outcomes

The element of Outcomes represents what actually happens as a result of the system, whether intended or unintended, positive or negative. Three minor themes were identified: reading, social emotional, and teacher stress/frustration.

Reading

Many teachers discussed reading outcomes as a result of including ELLs in MTSS. Five teachers noted positive reading outcomes, such as students meeting benchmark, making growth, or getting needed reading support. As one teacher noted about ELLs in her school’s MTSS system, “they’re getting extra targeted support; they’re getting exactly what they need from a reading specialist.” However, four teachers also noted reading outcomes that were not positive, such as ELLs not showing much growth, not meeting benchmark, or not getting the reading support they need. Some teachers discussed the lack of individualized interventions or accurate data as the cause of poor reading outcomes. One teacher stated:

> I think sometimes kids get stagnant, and they’re not getting the support they need and they’re not progressing as they need to be...I don’t know how much support was offered

> from the ESL person and how that decision was made, but I feel like decisions like that, I mean, [the stagnant scores] could have been helped if we would have offered more support to these students.

Another teacher stated "I think that right now it's a lot of blanket groups, blankets like [the ELLs] are just kind of lumped together and then they go."

Social Emotional

Teachers also discussed social-emotional outcomes as a result of ELL inclusion in MTSS practices. Three teachers noted positive social outcomes, specifically building confidence and feeling like they belong. One teacher noted:

> At this level students love to leave to go with another teacher and have a group, so that might be a nice outcome that [ELLs] feel very included for a different reason, not just because they are leaving with the EL teacher and they're all walking out together with students that all look like them, but they're going in a different type of group.

However, four teachers noted negative social emotional outcomes for students, such as stress, anxiety, and future drop-out risk. One teacher stated when asked about ELL outcomes, "I would say huge anxiety...the anxiety is probably higher and the struggles are worse or harder for [ELLs] because they're not getting the support they need."

Teacher Stress/Frustration

Each teacher expressed some degree of frustration associated with including ELLs in MTSS. Many teachers discussed the slow process of MTSS in getting ELLs needed support:

> Because what ends up happening a lot of times is you have all the data that says there's a huge deficit area but then [the team] just often says, 'well, it's because they're ELL. We're going to wait another year, or two years until they get some special ed

> services'...so [teachers] have to do, basically do everything to rule out that it's not an ELL rather than saying like, you're ELL, what other supports can we put in place? So, it's kind of backwards, but that's what happens.

Teachers also talked about the stress of having to add in extra intervention and supports, having students miss content to be pulled for interventions, frustrations with communicating with parents across languages, and frustrations with not having their opinions valued. Teachers often paired these frustrations with their desire to support students, such as one teacher who stated:

> [including ELLs leads to] more students in the reading specialist program. But that shouldn't, to me that should not be something we even have to worry about or stress about. Of course, it is, because there is only one [reading specialist], but it shouldn't. That's just not right.

Summary of Teacher Interviews

Teachers discussed a wide variety of factors related to ELL inclusion in MTSS practices. Within the Instrument element, teachers discussed concerns with using a single piece of data to make decisions, as well as potentially inaccurate testing data. Although they were generally satisfied with instructional tools, many did not have anything specific to ELLs. Professional development on ELLs and ELLs in MTSS was lacking, as was access to translators and quality EL teacher support. Teachers also reported a lack of time to accomplish everything. Within the Rules element, teachers discussed which assessments they were mandated to give, and the rules for creating intervention groups. The MTSS decision-making process was generally the same for ELLs and non-ELLs, with the exception of moving to a special education referral or evaluation, which often included more stringent rules for ELLs and/or additional personnel involved in the decision. The rules for how students received EL teacher supports were frustrating for some

teachers. Within the Community element, teachers described their ELL population as growing, and often transient. ELLs tend to struggle with reading comprehension and vocabulary, and ELLs who are brand new to English present unique challenges. Most teachers reported that their schools had no specific culture surrounding ELLs. Within the Division of Labor element, teachers reported that multiple personnel were responsible for providing assessments and intervention. Some concerns regarding standardization of assessments across personnel were noted. Allocation of relevant resources were generally determined by administration higher up than the principal. The roles of ELL families were also discussed in a variety of ways. Within the Objects element, teachers discussed their reading goals for ELLs as well as non-reading goals, such as increased language skills and social skills. Within the Outcomes element, teachers discussed both positive and stagnant reading outcomes, as well as positive (making friends) and negative (increased anxiety) non-reading outcomes. Teacher stress largely due to a lack of support was also emphasized as an outcome.

Table 35

Teacher Interview Code Frequency

Final coding scheme	Number of teachers discussing code	Total references
Instruments		
• Assessment	8	85
• Instruction/intervention	8	29
• Professional Development/knowledge	8	37
• Time	5	22
• Translator	6	17
• EL supports	7	40
Rules		
• Assessment	8	47
• Instruction	8	31
• MTSS decision making	8	67
• EL support	4	17

Table 35 (cont'd)

Final coding scheme	Number of teachers discussing code	Total references
Community		
• Academic characteristics	7	18
• Language characteristics	7	26
• Socio-cultural characteristics	6	14
• Local ELL population	6	19
• School culture	8	32
Division of Labor		
• Who provides assessment	7	17
• Who provides intervention	8	38
• Who makes decisions	8	43
• Who decides on resource allocation	5	10
• Parent/family role	8	32
Objects		
• Reading	8	24
• Non-reading	3	9
Outcomes		
• Reading	7	24
• Social-Emotional	6	13
• Teacher stress/frustration	8	21

Research Question Four

Research question four asked: How do other stakeholders (i.e. principal and state-level MTSS implementation staff) perceive their activity system in regard to ELL inclusion in MTSS practices? As with teacher interviews, CHAT was used as a framework to understand and organize the responses of principals' and the MiBLSi representative. The coding procedure for teacher interviews was also used for stakeholder interviews. Each major and minor theme are described below, first for the principal interviews and then for the MiBLSi representative's interview. Tables 36 and 37 present the full coding schemes for principals and the MiBLSi staff member. Similar to teachers, principals and the MiBLSi representative would, at times, discuss matters that went beyond the scope of ELL inclusion in MTSS practices. The MiBLSi representative, in particular, tended to have a broader outlook on MTSS and ELLs, often relating

discussion points to larger issues beyond the specific scope of the questions. Again, these discussions represent what these educators perceive to be important when talking about ELLs and MTSS. Therefore, relevant tangential aspects of the interviews were included in the data analysis in order to preserve the integrity of the interviews.

Principal Interviews

Subjects

All three principals identified as Caucasian. Two principals identified as male, one as female. Ages ranged from 35 to 54. Years of educational experience ranged from 12 to 22, and years of postsecondary education ranged from 11 to 12. All three principals had earned a Master's Degree, and one had earned a leadership endorsement. All three principals reported that they had received professional development on MTSS. Only one reported that they had received professional development focused on ELLs. On a scale of one to five (one being low and five being high), principals reported a range of confidence in their school's ability to provide quality instruction to ELLs. One principal reported a score of two, another reported a score of three and a half, and the final principal reported a score of four.

Instruments

Principals identified six minor themes within the major theme of instruments: assessments, instruction/intervention, professional development/knowledge, time, resources for family communication, and EL teacher supports.

Assessment. Each principal discussed instruments and tools used for assessing ELL reading skills in their MTSS systems. All three principals stated that their schools used DIBELS, and each principal noted at least one concern with this. Two principals discussed concerns regarding the use of DIBELS with ELLs who spoke little to no English, with one principal

stating, “If we have a student whose language level is really, really, low, I don’t think that that’s a really good predictor at all.” Another principal stated concerns with using only DIBELS to understand student deficits, noting, “It gets tricky with ELLs, because sometimes, through DIBELS, especially when it comes to phonics and the accuracy, they have an ability to decode really well, and the comprehension’s very poor.” Computer-based screeners, such as NWEA, were also discussed by each principal as universal screeners. Like DIBELS, each principal noted some concerns with these measures. One principal stated, “To me [STAR] doesn’t give you a lot of data because you have no idea whether or not the students were taking it seriously.”

Assessment data from Fountas and Pinnell’s LLI were also discussed by each principal. Two principals expressed relatively large concerns with their teachers’ use of these data, with both stating that their schools have been trying to move away from LLI. One principal stated:

> We used to use [LLI], and that was fine, but through the RTI process we would say, ‘well, he’s gone from a B to a C, but we can’t get him past a C,” but there are so many minute skills between a C and a D, and we never were really looking at those specific skills.

Another principal noted, “our district has moved away from [LLI].” Principals also discussed additional sources of data, such as parent input, teacher judgment, observations, and WIDA scores. When asked what additional data may be used in MTSS (beyond NWEA and DIBELS), one principal stated, “Whatever in the classroom they might be doing, so like Fountas and Pinnell might be something, or just your qualitative interactions, the conversations that they might be having with children.”

Instruction/Intervention. All three principals discussed reading interventions and instruction used to support ELLs, and how they focus interventions on specific skill deficits, such as phonemic awareness or fluency. One principal described Tier Two at their school:

> Our challenging students will have a very targeted plan of what they're working on. So, if it's phonemic awareness, if it's comprehension, if it's fluency, if it's accuracy, it's be very specific skills that they're working on.

Principals reported being generally satisfied with their current interventions, such as Rewards, although one noted he would like more reading interventions specifically tailored for ELLs, "we don't have a lot of programs specific for ELLs, we just teach them as if they were low, low students." Each principal also briefly discussed Tier One instruction, noting that teachers used google translate and taught vocabulary skills. Two principals discussed how implementing high quality Tier One instruction was important. One noted that their Tier One curriculum, Journeys, had specific instructions for how teachers can differentiate the curriculum for ELLs.

Professional Development/Knowledge. All three principals discussed a need for more professional development and staff knowledge regarding ELLs. When asked which teachers are qualified to work with ELLs, one principal stated, "I think all teachers are qualified, but I think some teachers might have more of a background in it than others...but I think that's an area that we have a lot of work to do in." Another principal discussed a desire to provide his teacher with professional development, but an inability to find relevant training, "I don't think in my six years I've ever seen a professional development geared towards struggling ELL students. I could be wrong; that's one of the things I look for, so I would be surprised if I'm wrong." When asked about barriers to including ELLs in MTSS, this principal emphasized the need for this professional development, "I really think that the barriers are the resources, the learning, the

techniques, the teaching strategies...Having some more programs or trainings to help us to work with students that are learning English would be helpful."

One principal also discussed his lower level knowledge regarding the WIDA, which is a comprehensive, standardized assessment used to measure English language skills in K-12 students, and is required by the State of Michigan for each ELL to take annually. This principal stated, "I'm not well versed, I'm very well versed at DIBELs, and NWEA, but the WIDA is not something I can look at and tease out very easily."

Time. Each principal talked about time as a limited resource and a barrier for providing effective MTSS reading services to ELLs. All three principals discussed the challenge of scheduling reading intervention time, especially with the added need for English language intervention time for ELLs. One principal stated, "I think the biggest challenge is truly just the schedule." Missing core content or other academic instruction to receive interventions was a common problem identified across principals, with one principal noting that the school tries "not to pull them out of their literacy time in their gen ed classroom, but if we have to...because there's a reality. There's great theory, and then there's a reality." Principals also discussed the challenge of EL teachers or reading interventionists having enough time to work with students due to their large caseloads.

Resources for Family Communication. Each principal briefly discussed the resources needed for communicating with ELL families. One principal discussed the significant challenge of finding translators for the many different languages represented at the school, stating "It's a challenge to have a resource of how to build a relationship when you can't communicate with [parents]." This principal stated that they have used community volunteers, siblings, friends of staff, family of staff, foreign language teachers, and personnel from local universities as

translators during parent meetings. Another principal stated that translators are often needed, and the county consortium provides this service. However, translators are not always available or practical to request. When a consortium translator is unavailable, the student often functions as the translator between staff and parents. Google translate was mentioned as a tool for translating both written and/or oral communication. The third principal noted that, because the ELLs at that school tend to have higher language skills, they often do not need translators, noting:

> [The language barrier] is not so poor that we couldn't, you know, between gestures, or maybe between the husband and wife, mom and dad, couldn't make it work. But that's definitely something in the back of my mind, that would be a barrier, to try and communicate what we need to do for the child.

EL Teacher Supports. All three principals described their EL teacher as an instrument in their building. Two principals reported sharing their EL teacher with other buildings. In one district, the EL teacher was shared between three buildings, and in the other district the EL teacher was shared between five buildings. The need to share this support across buildings was a frustration for principals, with one noting "She's one person for the entire elementary, so I think logistically that's tough. I think it's a problem we should find a solution for," and the other principal stating, "we only have two teachers which is just servicing 4,000 kids. It's just not enough." These principals also expressed some concern with their EL teachers' qualifications, with one stating "I question the ability of the teacher, to be perfectly honest. I'm not 100 percent sure that the services that [they are] providing are best practices." The third principal stated that their school hired their own, full time EL teacher. However, this principal also noted concerns with the qualifications of their teacher, noting that there was high turnover and the district set a low hourly payrate for the position. This principal stated, "he has his degree in something

unusual...so, we've trained him 100 percent...he enjoys this, but I'll lose him eventually." In regard to how EL teachers were utilized in the school, the principal who reported having a full-time EL teacher reported that the EL teacher was involved in language interventions, reading interventions, universal screening administration, WIDA testing, consulting, and data team meetings. One principal who reported sharing the EL teacher across buildings reported that the EL teacher was involved in language interventions, contacting parents, consultation for special education decisions, and consultation for reading interventions. The third principal, who also reported sharing an EL teacher across buildings, reported that the EL teacher was available for some consultation, but this was typically rare, "she seems like she has a ton on her plate already, and in past experiences we might be able to rely on what we've learned from other ELL kids to try first, before we contact her." No language interventions were available at this school.

Rules

Principals identified two minor themes within the major theme of rules: language support rules, and rules regarding how ELLs are included in MTSS.

Language Support Rules. Each principal discussed the rules surrounding how and when ELLs receive EL services. All three principals talked about criteria for entering services, such as parents marking that English is not the home language on enrollment paperwork. Two principals also discussed exit criteria for services, such as passing the MSTEP and additional language tests. Finally, one principal discussed how ELLs are required to transfer buildings in order to receive language supports. Parents must opt-out of EL services if they wish to stay in the school.

How ELLs Are Included in MTSS. Each principal discussed school rules or norms surrounding how ELLs are included in MTSS practices. Principals mainly discussed how the processes and rules are the same for ELLs and non-ELLs. As one principal stated regarding

inclusion in progress monitoring, “They would always be monitored the same as everyone else.” However, the principals also noted some changes to what they would typically do in order to accommodate for ELLs’ unique needs. When asked if an ELL who flagged on a universal screener would ever not receive an intervention, one principal discussed how students who are brand new to English might receive a different intervention than is typical:

> I think the only time would have been that one student, the one student who spoke no English, and actually what I think we ended up doing was putting her on...maybe Lexia or something like that where it was individual. She had headphones because she wasn’t able to work with anybody because she didn’t understand.

Principals also talked specifically about ELLs in special education referrals. They mainly discussed the need to use different types of data to determine whether to refer or qualify an ELL for special education, such as testing in the student’s home language or using English language intervention data. The need for more data than typical to distinguish between a language barrier and a reading barrier was also discussed. As one principal noted, “ELL can be an exclusionary factor, but it’s not 100 percent exclusionary. You just have to come with lots of data showing that you tried multiple interventions and they were unsuccessful.” One principal stated that he has never had an ELL come up for a special education referral, which is attributed to his district’s EL services all being housed in another building. He noted that ELLs who struggle would often be referred for a transfer to the other building:

> So they start out in the same pool as everyone else, and if we find that there’s a language barrier that’s when we would go through the process of a REED to consider working with parents if they want to go to the ELL program to get those specific supports in the other building.

Community

Principals identified four minor themes: culture and attitudes regarding ELLs, local ELL population, family cultures, and school culture of collaboration.

Culture and Attitudes Regarding ELLs. Each principal discussed whether there was a specific culture or attitude in their schools regarding ELLs. Principals mainly talked about how they could not identify any unique culture or attitudes regarding ELLs, but rather that ELLs were largely seen the same as "every other child". One principal stated, "overall, the culture is pretty welcoming and warm...the attitudes are positive and [the teachers] just treat them like every other kid, just wanting to get them to excel."

Local ELL Population. Principals discussed their local populations of ELLs. Two of the principals described their ELL population as large. One principal estimated it was around four percent of the total student population, while the other principal estimated it was around ten percent. Two principals also described the population as growing, and how this impacts their services and structures surrounding ELLs. One principal discussed the structure of the district's current ELL services:

> I know that there's general conversations of how [the structure] may change as the population of ELL students continues to grow. I think at the building that houses [ELL services] that it's over 700 kids on [the] caseload, that's a lot for anyone to be servicing. So, I think we may have to come up with some creative solutions to what we could do.

Principals also described their ELL populations by the variety of languages spoken, with one noting that their population mainly spoke Spanish, another noting that their ELLs mainly spoke Hindi and Spanish, and the third noting that over 15 languages were spoken. All three principals talked specifically about their ELL population's English language proficiency, specifically cases

of ELLs having little to no English ability. Language proficiency was discussed by each principal as a factor that may change certain procedures, exclude the ELL from typical practices, or change the way the principal analyzes data for the student.

Family Culture. Principals also discussed the cultures of their ELL families, how the school communicates with families and for what purposes. Parents were described as giving input regarding student history, language skills, and home life. The principals reported that schools and families communicated through newsletters, phone calls, and meetings. One principal talked about the challenges of having families who are transient, stating:

> Rarely is it ever K through Five that we've had to be able to work with them. So, that's the hard part, is the time we get them isn't enough for us. And then they move on to a new school where you have to build those relationships to help him succeed. I couldn't name one of my students who was English as a Second Language that has gone K-Five.

School Culture of Collaboration. All three principals discussed how personnel in their school collaborated with each other. One principal described the relationships between the staff as highly positive, noting that the EL teacher was intentionally scheduled to be included in reading intervention times and that WIDA data were shared with everyone who worked with ELLs. The second principal described the culture of collaboration as somewhat positive, noting that the ELL teacher was somewhat involved in decisions, but that general education teachers needed to reach out and that the EL teacher did not attend MTSS meetings. This principal also noted that teachers and psychologists worked well together on special education evaluations for ELLs, but that collaboration across buildings regarding ELL services could be improved. The third principal also noted a somewhat positive culture of collaboration, stating that WIDA data are shared with teachers, although teachers may not understand how to analyze those data. The

principal also noted that the reading interventionist and EL teacher have collaborated in previous years, although this principal was unsure of whether that collaboration had continued in the most recent year due to staffing changes. A lack of instructional collaboration between teachers and the EL teacher was also discussed as an area of concern, resulting in teachers not knowing what reading or language skills the EL teacher was focusing on with students.

Division of Labor

Principals identified three minor themes: who provides assessment, who provides intervention, and who makes decisions.

Who Administers Assessments. Principals discussed who was responsible for administering assessments to ELLs within the MTSS framework. Each principal indicated that the person(s) responsible for assessing did not differ for ELLs compared to non-ELLs. One principal noted the exception that if a student did not know any English, an interpreter or Spanish-speaking staff member may be used. Each principal discussed the use of a team to administer universal screening tools. These teams consisted of staff such as reading interventionists, paraprofessionals, EL teachers, special education teachers, school psychologists, teachers, retired teachers, and/or teacher consultants. In regard to progress monitoring tools, principals stated that teachers or reading interventionists typically were responsible for administration.

Who Provides Intervention. Principals discussed who was responsible for providing tiered reading interventions to ELLs. Two principals discussed how the EL teacher supported Tier Two or Tier Three interventions. However, one principal noted concerns with the qualifications of the EL teacher, noting that students who failed to make progress were typically

transferred to an intervention with a more highly qualified interventionist, such as the general education teacher:

> [The EL teacher] just doesn't always have the same intuition or knowledge of a teacher....and so that's typically what we do, is we arrange it so our students that are making the least gains, or struggling the most, or are the furthest behind, are working with my most certified, qualified people."

Another principal noted that while his EL teacher was involved in providing reading intervention, that the lack of communication between the EL teacher and other teachers made it difficult to monitor intervention effectiveness. The third principal did not mention the EL teacher being involved in providing reading interventions to ELLs; instead, this principal solely discussed the roles of teachers and reading specialists. Indeed, regardless of whether EL teachers were involved in providing reading interventions, each principal also discussed teachers and reading interventionists as parties responsible for providing reading interventions to ELLs.

Who Makes Decisions. Each principal discussed who makes decisions in the MTSS structure, both in regard to data-based decision making for instructional/special education purposes, and in regard to resource allocation. All three principals talked about a team approach to data-based decision making, such as the use of MTSS teams. These teams were discussed as the means to which ELLs changed interventions, and/or moved on to an evaluation referral to determine eligibility for special education. Principals reported that these teams did not change for ELLs in comparison to non-ELLs, although two principals did note that the EL teacher is added to the team when discussing an ELL. All three principals noted how resource-related decisions at the district or county level impacted MTSS. One principal discussed a reading intervention he wanted to purchase for ELLs at his school, stating "We looked into it and saw the data and said,

‘okay, let’s get this.’ Well, you know, when the district says we can’t afford that, then you have to find other ways.” The second principal discussed how a bond proposal might impact EL services across the district, and the third principal discussed how the county-wide EL service consortium dictated how and when the school could use their EL teacher.

Objects

Principals briefly identified two minor themes within the major theme of objects: reading objects and non-reading objects.

Reading. Two principals discussed reading goals as an object of including ELLs in MTSS reading systems. Both talked about the desire for ELLs to continue to grow in their reading skills, with one principal stating, “We have the overall goal just like every other kid, that they continue to grow. You know, the whole, one year’s growth in one year’s time.”

Non-Reading. Two principals also discussed non-reading objects of including ELLs in MTSS reading systems. One principal discussed the goal of improving ELLs’ English language skills overall, such as hoping that ELLs would be able to have conversations in English with their peers and staff. The second principal discussed positive social-emotional objects, such as growing in social skills and building positive relationships with ELL families. This principal stated, “We do [MTSS] for every child, so it really can build a really strong relationship, a positive relationship, between families and the school.”

Outcomes

Principals identified two minor themes within the major theme of outcomes: student-based outcomes and non-student-based outcomes.

Student-Based. Each principal discussed student-based outcomes of including ELLs in MTSS processes. All three principals discussed positive reading outcomes as a result of

inclusion. One principal noted that MTSS is "a pretty intensive structure of support, and we've found that it's been pretty beneficial." None of the principals discussed negative reading outcomes, although one noted that scheduling difficulties have created a significant barrier for communication between the EL teacher and the general education teachers. This principal discussed concerns that this communication "disconnect" may be preventing ELLs from fully benefitting from the MTSS structure. In addition to reading outcomes, one principal also discussed positive social outcomes for ELLs included in the MTSS process. This principal noted that by including ELLs in MTSS, that "an ELL child is looked on and treated as every other child. Even amongst peers, they're friends and they play and they interact."

Non Student-Based. Principals also discussed school and staff outcomes from implementing MTSS with ELLs. All three principals discussed an increase in their staff's knowledge of MTSS and ELLs, with one principal noting that the staff now understand how MTSS is for all students: "When we first started the MTSS process, I think that there were some students that were excluded...so I think the more we have become familiar with MTSS, it really is truly for all students." One principal also discussed how staff are improving their skill of identifying individual student needs and providing interventions that focus on those needs, noting that, "I think that with MTSS, it's really helping us kind of narrow our focus when it comes to what is keeping a student from progressing." Principals also noted that MTSS data reviews allowed them to identify student achievement gaps, and learn new approaches and strategies to use with ELLs.

All three principals also discussed frustrations as an outcome of ELL inclusion in MTSS practices. One principal noted frustrations with translating interventions and assessments, while another principal noted frustrations with coordinating interventions between the EL teacher,

interventionists, and general education teachers. One principal discussed frustrations with relying on parents to consent to EL services, and the stress it can place on teachers to try and help ELLs improve their reading skills through MTSS services alone.

Finally, one principal noted a negative outcome with resource allocation. This principal was concerned that money used to help struggling students in general was now being used to help ELLs as well, potentially spreading limited funds too thinly:

> Students who are part of our Tier Three program are students who typically have a difficult time learning. ELL students don't necessarily have a difficult time learning, they just need more exposure. So, some of the resources that we use for students who have learning disabilities or just haven't been able to learn, get moved to students that could be the smartest kid in the class, they just don't speak English.

Table 36

Principal Interview Code Frequency

Final coding scheme	Number of principals discussing code	Total references
Instruments		
• Assessment	3	30
• Instruction/intervention	3	21
• Professional development/knowledge	3	9
• Time	3	13
• Resources for family communication	3	7
• EL teacher supports	3	27
Rules		
• Language support	3	8
• How ELLs are included in MTSS	3	30
Community		
• Culture and attitudes regarding ELLs	3	15
• Local ELL population	3	18
• Family culture	3	13
• School culture of collaboration	3	12

Table 36 (cont'd)

Final coding scheme	Number of principals discussing code	Total references
Division of Labor		
• Who provides assessment	3	6
• Who provides intervention	3	12
• Who makes decisions	3	18
Objects		
• Reading	2	3
• Non-reading	2	5
Outcomes		
• Student-based	3	7
• Nonstudent-based	3	12

MiBLSi Interview

Subject

Some participant details for the MiBLSi representative are approximations in order to protect confidentiality. The MiBLSi representative identified as a Caucasian female in her 40s. She reported over 15 years of educational experience, over 10 years of postsecondary education, and earned her doctorate. She reported no endorsements, and has received professional development on ELLs and on MTSS. When asked to rate the confidence MiBLSi and their schools have in providing quality education to ELLs, she stated that she did not know.

Instruments

The MiBLSi representative identified four minor themes: tangible resources for ELLs, professional development/knowledge, high quality MTSS components, and time.

Tangible Resources for ELLs. Tangible resources for ELLs were discussed as one type of resource. The representative often mentioned the Spanish version of DIBELS, IDEL (Indicadores Dinámicos del Éxito en la Lectura), as a tangible resource that schools can access. She also discussed reading interventions that includes differentiation for ELLs:

> We might be able to point people in the direction of research studies that look at like the Rewards intervention program, which is for decoding multisyllabic words...I even know in one of the phonological awareness intervention programs that we recommend, that's the Michael Heggerty's Phonemic Awareness, there actually is a version in Spanish.

Professional Development/Knowledge. The MiBLSi representative also discussed the importance of professional development and knowledge across many aspects of MTSS with ELLs. The representative discussed the need for improvement in teacher preparation programs, stating "very few teacher prep programs sadly have actually taught, in my opinion, have taught teachers how to provide reading instruction to students whose first language is English, let alone students whose second language is English." She also discussed the need for teachers to receive high quality professional development so that they "feel comfortable knowing what they are supposed to be teaching and how to teach it." The importance of schools having the necessary expertise to select and implement quality assessment and intervention programs was also emphasized, with the representative discussing the importance of schools knowing their student population needs, and knowing how to critically analyze research, seek out appropriate guidance documents, and select tools to meet those needs.

High Quality MTSS Components. Another critical instrument discussed by the MiBLSi representative was high quality MTSS components, such as the assessments and interventions used within the MTSS process. The representative noted:

> The biggest thing to mention is that MTSS is a framework. What you put in that framework matters...if you don't have high quality resources that align with research validated methods to teach kids how to read or to prevent social emotional behavioral issues...if you don't have the right stuff you are not going to get the outcomes.

The need for high quality core reading curricula, reading interventions, data analysis methods, and for all of these components to be completed with fidelity was emphasized by the representative as necessary for successful MTSS implementation.

Time. Finally, the MiBLSi representative briefly discussed the importance of time. She noted the need for teachers to have the time to get appropriate professional development, and how the substitute teacher shortage in Michigan makes this time a rarity. When asked about teachers having difficulty differentiating instruction for ELLs, she stated:

> Nor do they have time to write something that is very intentionally designed, has a specific scope and sequence and is very explicit with the instructional routines. I mean who has time for that? They are already putting in 80 hours a week. It's just so unfair.

Rules

The MiBLSi representative identified two minor themes within the major theme of rules: legal rules, and MTSS process rules.

Legal Rules. The MiBLSi representative discussed the third-grade reading law in Michigan that is set to take effect with the 2019-2020 third grade class. She stated "the ramifications are huge" and that "the third-grade reading legislation has actually helped people look more at the strength of the materials they're using to provide core reading instruction to all students." In regard to the retention aspect of the law, she stated that increased high-quality programs could "prevent kids from even needing to be considered for retention...there's ways that kids can be exempt from having to be retained."

MTSS Process Rules. In addition to legal rules, the representative also discussed the rules within the MTSS system. She discussed how MTSS is for all students, but that "hard and fast" process rules should not necessarily be applied or over-generalized either, such as with non-

verbal students being required to take the DIBELs. The representative also discussed MTSS process decision making rules, such as how to use flow charts to determine instructional and special education decisions.

Community

The MiBLSi representative identified three minor themes within the major theme of community: vocabulary needs, Michigan district concerns, and national concerns.

Vocabulary Needs. The MiBLSi representative briefly discussed the unique vocabulary needs of ELLs, stating, "a lot of the issues with English Language Learners is really a vocabulary issue...it's a heavy vocabulary issue." She also noted that reading curricula designed to be differentiated for ELLs typically places a heavier emphasis on vocabulary.

Michigan District Concerns. The MiBLSi representative discussed Michigan school districts' concerns with ELLs in MTSS processes. Overall, the representative noted that "very few of our local school districts have high English Language Learner populations," and that none of the districts, to her knowledge, have reached out and asked for any kind of support regarding ELLs in MTSS processes. When asked about ELL resources that MiBLSi may have available for schools, the representative described a few resources and stated, "if we have people that are asking those questions, we absolutely can point them to those resources, but nobody has asked for specific training in that from us." And when asked specifically about universal screeners for ELLs, the representative noted, "we don't have one school that has that [need] though. I mean seriously, of all of our partners they don't have that issue...they don't have [concerns about] English Language Learners."

National Concerns. In addition to concerns in Michigan, the MiBLSi representative also discussed ELL concerns at a national level. When discussing the appropriateness of DIBELS as a

universal screener with ELLs, the representative stated, “I can’t think of one of our schools where they have raised that as an issue. I do know places where it has been an issue, not in our state.” The representative later discussed national movements through the United States Department of Education Office of Special Education:

> There’s some model demonstration grants where people are actually trying out how best to support students, English Language Learners. I mean in California was one of the districts. I mean these are model demonstration pilots because I think that you can make a case, the need is great.

Division of Labor

The MiBLSi representative identified two minor themes: the role of providing MTSS structure, and the role of providing expertise.

Role of Providing MTSS Structure. The representative from MiBLSi often discussed the role of MiBLSi in implementing MTSS across schools and districts. She emphasized that the role of MiBLSi is providing systems support and a structure for MTSS, rather than dictating specific tests or interventions that schools must include in their MTSS system:

> The value you get from working with our project is that we have a district model, districts apply to work with us, we help the district implement or install to implement an infrastructure that supports the schools in their use of the components of an integrated behavior and reading MTSS model.

She highlighted this role again, stating, “we really want to develop systems so people can ensure that the supports they are providing to all students are efficient, effective, and equitable.” When asked about the goal of MiBLSi, the representative noted that they would like districts to be able to “take the core features of an MTSS model and overlay it into their schools.”

Role of Providing Expertise. While emphasizing that MiBLSi plays the role of providing the structure for districts, the representative also discussed who should provide expertise specific to a district's population. She often discussed how schools need to be experts in their population and student needs, in order that they may create an MTSS system that will work for them. She summarized this idea when she stated:

> One of the biggest misunderstandings about our project is if you participate with MiBLSi, they tell you that you must adopt a core basal reading program, you must use these assessments, and that's not the case at all. What we do is we work on teaching people how to be savvy consumers, understand the need of your students, understand-based on that need-what would fit with what the data is suggesting.

In regard to schools with ELL populations, she stated:

> I would ask the question of, who can you access that specializes in how to intensify instruction based on the needs of instruction? I think that's where ISDs are tremendous supports. Many ISDs have folks that specifically focus on English Language Learners...I think the big idea in my mind in the MTSS frame is to seek the expertise from other folks that can take the concept of a three-tiered model that increases in intensity and now overlay it on students given their specific needs.

For example, when asked if she could think of a reason why an ELL student should not be screened on a universal screener, she again highlighted the role of local districts in making these decisions:

> I would leave that to the experts in the district. They know more about the unique skill deficits of needs of students, and I would leave it to them to make a decision that's in the best interest of the student...I would feel very uncomfortable holding people to hard, fast

rules. I would always say that you have people in the building who understand the unique needs of students and need to make appropriate decisions.

Objects

The MiBLSi representative identified two minor themes within the major theme of objects: having a solid MTSS framework, and students getting what they need.

Solid MTSS Framework. The MiBLSi representative discussed her goal of creating a solid, integrated, MTSS process in schools across Michigan, including those with ELLs. The representative also discussed the goal of having schools implement solid intervention systems and data-based decision-making processes. Overall, this would lead to an appropriate MTSS system with expected student percentages in each Tier:

> The overall goal is that you have all students that are making progress. So, any MTSS model you ideally want 80 percent or more of your kids to be at or above grade level. You want at least 10-15 percent should have, need targeted assistance, with only 1 to 5 percent needing the most intensive supports.

Students Getting What They Need. In addition, the MiBLSi representative also discussed the goal of students getting what they need, such as increasing their skills, preventing future reading difficulties, and providing students with the best supports possible. When asked to describe MTSS, she stated, "an integrated model that deals with supporting students academically and behaviorally." She also stated that she hopes MiBLSi helps schools "provide the best of best supports for students within a three-tiered model".

Outcomes

The MiBLSi representative identified two minor themes within the major theme of outcomes: student outcomes, and system outcomes.

Student Outcomes. The representative discussed student-based outcomes of ELL inclusion in MTSS processes. She discussed how current practices that don't address the needs of diverse learners are leading to negative student outcomes. She emphasized that in schools or districts where MTSS is not being implemented appropriately, student reading outcomes are not positive.

System Outcomes. In addition to discussing outcomes for students, the representative also discussed system-based outcomes. She discussed how poor implementation of MTSS can lead researchers, schools, and districts to believe that MTSS is not an effective approach. She also discussed how this can lead to frustration among staff and teachers.

Table 37

MiBLSi Interview Code Frequency

Final coding scheme	Total references
Instruments	
• Tangible resources for ELLs	8
• Professional development/knowledge	12
• High quality MTSS components	7
• Time	2
Rules	
• Legal rules	1
• MTSS process rules	3
Community	
• Vocabulary needs	2
• Michigan district concerns	9
• National concerns	3
Division of Labor	
• Role of providing MTSS structure	5
• Role of providing expertise	9
Objects	
• Solid MTSS framework	3
• Students getting what they need	6
Outcomes	
• Student outcomes	3
• System outcomes	2

Summary of Stakeholder Interviews

In general, principals discussed many of the same themes as teachers did in regard to ELL inclusion in MTSS practices. They brought up concerns with testing validity, noted that instruction and interventions were not tailored specifically for ELLs, and noted a need for more time, professional development, and translator services. A need for more qualified and more readily available EL teachers was also emphasized. Principals discussed criteria for receiving ESL services, and how the rules for MTSS decision-making were generally the same for ELLs and non-ELLs, except when moving to a special education referral or evaluation. Indeed, principals discussed how the culture of ELLs in their schools was to treat them just like any other student. Collaboration between school personnel was regarded as generally positive. ELL populations were described as large and growing, and family involvement was discussed. Principals described the division of labor as the generally the same for ELLs and non-ELLs, with highly qualified teachers leading interventions for lower performing students and a team-based approach to decision making. Principals noted that their goals for inclusion included positive reading, language, and social outcomes. Actual outcomes included increased reading skills, but also teacher frustrations and limited resources.

The MiBLSi representative generally had a much broader outlook on ELL inclusion in MTSS practices. She discussed tangible resources available for schools, such as IDEL or specific curricula, and emphasized that high quality MTSS components are critical for effective practices. She noted that teachers and schools need more professional development, such as better teacher preparation programs, but also indicated that time as a barrier for teachers and schools. She discussed legal rules schools must follow, specifically the recent Third Grade Reading Law in Michigan, as well as MTSS process rules, which she noted should not be “hard and fast” rules.

She described the ELL population as needing vocabulary support, and discussed the national platforms where ELL academic achievement was being presented as a concern. However, she also discussed how ELLs were not being brought to MiBLSi as a concern within Michigan districts. The MiBLSi representative often discussed how the role of MiBLSi is to provide the structure for MTSS, and the role of the schools is to apply that structure to their unique student population. She discussed goals of creating solid MTSS structures in schools and providing all students with what they need. However, she described actual outcomes of MTSS as somewhat poor due to a lack of proper implementation, especially for diverse learners.

Research Question Five

Research question fives asked: What contradictions exist within the system of ELL inclusion in MTSS? The six general procedures outlined by Creswell and Plano Clark (2007) were used as a starting point for the inner contradiction analysis. Interview transcripts, minor themes, and major themes were reviewed in order to identify tensions within the system. Inner contradictions within teachers' activity systems (ELL inclusion in MTSS practices) are organized by contradiction type (primary, secondary, tertiary, and quaternary). Stakeholder perspectives are used to complement teachers' perspectives in order to help identify inner contradictions, both by highlighting differences in perspectives and by noting similarities. It is important to note that the term "contradictions" in the CHAT frameworks does not necessarily constitute a disagreement between parties, but rather represents a point of change in the system.

Inner Contradictions

Inner contradiction analyses are part of the CHAT framework that allow for an analysis of tensions within and between activity systems. Although all interview participants stated that increasing reading skills for ELLs is important, conflicts were identified in the system regarding

how to accomplish that task. These conflicts are represented in the CHAT framework as inner contradictions, which, when identified, can help inform positive change in the system. This section identifies and describes these contradictions using the four levels described in research.

Primary Contradictions

Primary contradictions occur when different parties do not share a common value on some element within the activity system (Yamagata-Lynch & Haudenschild, 2009) and exist within a single element/component of an system (Roth, 2004). One primary contradiction was noted from the interview data: MTSS team rules.

MTSS Team Rules

This primary contradiction exists within the rules component, and represents a difference in value between MTSS teams and teachers regarding process rules for ELLs in the MTSS system. Teachers often expressed frustration regarding the strict rules that MTSS teams followed, such as mandatory intervention waiting periods. One teacher stated:

> We try to revisit that student within 6 weeks of the initial form being filled out. And after that conversation occurs, we try to, within 6 weeks, so that there are 6 more weeks of data, then look at that data and then try to make some determinations. Sometimes I don't feel that that process is fast enough. There are some students that that data remains the same and I think there are some barriers ...this kid has had the most interventions in the last 3 years at what point can we just say we've exhausted it and go to that special ed route...With ELL it becomes a little more challenging because we have to really decipher is it the ELL or is it the reading before we take it to that step of special ed so it just adds just another layer to it. But I do think sometimes the process is too long for some students.

Another teacher emphasized that the process can be repetitive and ongoing:

> I show and speak on the child and I think we have 15-20 minutes. Um, and then…previously, it's been, "oh well, all first graders learn at different rates" and I said "uh-huh, they do. You're right." So, then it's probably, they say, "alright let's try more Title support," or "let's try using this intervention in the classroom, progress monitor this more in the classroom for another four to six weeks." Generally I want to say it's about four, they try and fit us in on their calendar, and then from there it's either the child's making [progress] and you just keep going and going and going through the rest of the year, or they say that they're going to test them for special ed services.

Another teacher commented on how the process to get ELLs support can take years, at the detriment to the students:

> (L)ike when I've brought students who have an ELL label to behavior review teams or to a referral process, there are so many hoops to get through to decide if it's a cognitive impairment or if it's a language barrier. And I've been told if they haven't been here for three years don't even do the process yet because…they can't be identified yet as if it's more than a language barrier...So I think that's really hard then 'cause then you don't know, especially for those younger kids, and then you feel like those years are lost if you could have capitalized on some additional intervention... Because what ends up happening a lot of times is…you have all the data that says there's a huge deficit area but then they just often say well it's, it's because, it's because they're ELL. We're gonna wait another year, or two years until they get then some special ed services or…you know anything like that. So, we have to like do, basically do everything to rule out that it's not

> an ELL rather than saying like, “you’re ELL what other supports can we put in place”... so it’s kind of ass-backwards. But, that’s what happens.

Finally, another teacher noted that the rules prevent students from getting the help they need:

> So, when you’re not making progress and you’ve had all these interventions, then, the hard part is if you make any little ounce of progress, they say that you're making progress. Even though you're like significantly leaps and bounds behind all the other kids. So, any sort of progress is progress in MTSS... So, I feel like, the MTSS team is not…I understand the purpose of what MTSS is for, but I don’t think it's effective. And I don't really know how to fix it, but I don't think it's an effective process.

Schools using an MTSS process often implement procedural rules in order to organize how they provide services. Best practice for MTSS procedures indicates that having set processes, including rules for intervention length, can be beneficial for student outcomes and create school-wide efficiency for making decisions. However, teachers included in this sample perceived these rules to be a hindrance for their ELLs, delaying additional services that the teachers believed to be potentially more effective. If teachers perceive that these procedural rules have a potentially negative impact on their students, this is likely to create a barrier for effective MTSS inclusion. Procedural rules may need to be re-assessed, and/or professional development regarding intervention length may be necessary.

Secondary Contradictions

A secondary contradiction occurs when assimilation of a new element in the system brings about conflict between multiple components (Roth, 2004; Yamagata-Lynch & Haudenschild, 2009). Two secondary contradictions were noted: the availability of professional development focused on ELL inclusion in MTSS practices and the availability of translators.

Availability of Professional Development

This contradiction is a result of the increasing ELL population causing conflict between the instruments teachers have available (i.e., expertise in ELLs as provided by professional development) and the division of labor for educating ELLs (i.e., general education teachers report being largely responsible for ELL reading growth). Teachers and principals both indicated a desire for professional development in ELL inclusion in MTSS. When asked if she had previously received training, one teacher stated the following, "I've never had an ELL professional development. We've had some cultural things but nothing that is about teaching students that are ELL… I would just say that would probably be of great benefit." Another teacher highlighted the need for this type of training:

> I think that that every teacher obviously wants their children, well hopefully, wants their children to succeed, so giving us training, helping us to figure out how to help, because I feel like sometimes, it's just assumed that we know how to support a lot of kids and we don't, you know, so we're not offered the professional development to help those kids.

Finally, a third teacher reiterated this need for training:

> I think it's still kind of a foreign topic like I don't think that we have enough training to really give any ideas that are geared specifically toward English Language Learners.... we don't get any additional training... there's a really high opportunity for us to have lots of migrant workers that are going to be then be stationed here more often, and so we have to be prepared for that.

Principals also expressed a desire for more ELL professional development. When asked if they had ever received professional development focused on ELLs, one principal stated, "No,

but I would love that. I would love that." Another principal discussed the lack of training available for their school.

> I don't think I ever took a class to help ELL students. And so, there's not a lot of training, there's not a lot of professional development...I don't think in my six years I've ever seen a professional development geared towards, struggling ELL students. I could be wrong, that's one of the things I look for, so I would be surprised if I'm wrong, but I could be...so having, having some more either programs, or trainings to help us to, to work with students that are learning English, would be helpful.

However, the MiBLSi representative did not seem aware of schools' desire for professional development focused on ELLs. When asked about training resources for local schools focused on ELLs in MTSS, the representative stated the following.

> (I)f we have people that are asking those questions, we absolutely can point them to those resources, but nobody has asked for specific training in that from us... The resources I would send them to would be, I would send them to IES practice guides. I would send them to, I mean know exactly where on my bookshelf I have some information on English language learners. It's just not, it's not a common question that I've gotten in the sites, in the places that I provide training.

The MiBLSi representative reported spending a significant amount of time in schools, closely working with schools to implement MTSS. It is unlikely that the representative is out of touch with what schools need. However, there does seem to be a breakdown in communication regarding ELL training. It may be that the schools are not prioritizing this need, and only discuss it when directly asked. Indeed, one teacher stated that she had never previously thought about this type of training. The presence of this contradiction, however, represents a tension in the

system where teachers may need additional support to effectively include ELLs in MTSS. Teachers are taking responsibility for educating ELLs and, when asked, do not often feel completely confident in doing so.

Availability of Translators

This contradiction is a result of the increasing ELL population causing conflict between the instruments available (translators) and the division of labor for communicating with ELLs and their families (untrained personnel must often take on the role of translating). Teachers and one principal discussed a desire that more available translators, both for use in the classroom and for family communications. One teacher stated, “I would definitely like to have a translator or someone available”, and another, “if I could wave a magic wand, I wish we had someone that spoke fluent Spanish that could translate, and then translate her to me, and me to her, as far as to ask...[a translator] is not available.” When asked about desired supports, one teacher stated:

> (H)aving a way to communicate with [ELLs] so for example if they don't speak English, knowing how to communicate them with them so having resource like that either just like Google translator I mean something as, as easy as that or an actual translator someone to support the child so that they can…work through what we're learning and be able to understand.

Finally, one teacher reflected on a challenging meeting with parents she had earlier in the year.

> I don’t know that they would have allowed it, but if we could have had a translator, I think that would have been helpful, but they were pretty confident in their English ability. But it was difficult for us to understand often what they were trying to say, and then I don’t think they understood what we were saying. I know they didn’t understand our intentions, so that was hard.

One principal also discussed the availability of translators, noting that the school relied on volunteers, which could make things difficult at times:

> We have had to have difficult conversations through the translator, and then we're at the mercy of the translator. Particularly since ours are almost always volunteer, and you're not 100% sure how accurate they are. And so that is a challenge, for sure.

This principal also indicated that professional translators were difficult to find. It is unclear whether this is the case across all schools, or whether funding for such translators also has an effect on the situation. Based on the interview data, however, the lack of professional translators is perceived by educators as a challenge to ELL inclusion in MTSS practices. Teachers and principals discussed how the available resources, such as Google translate and older siblings, failed to meet their needs for accurately and confidentially translating information. Interviewees discussed how this impacts numerous activities, such as communicating directions to students for a reading test or conveying reading skill concerns to a parent during team meetings.

Tertiary Contradictions

A tertiary contradiction occurs when a new method is developed to achieve the object, and conflicting situations arise (Yamagata-Lynch & Haudenschild, 2009). One tertiary contradiction was noted from the interview data: the value of classroom data.

Value of Classroom Data

This contradiction represents the use of CBM data (a new method of testing to achieve increased reading outcomes for ELLs) in contrast to classroom data. MTSS models typically use CBM data as it is a quick, standard way to screen many students and sensitively monitor growth. Before using CBM data to monitor progress, many teachers used classroom data, such as LLI

data, to gauge student progress. Interviewed teachers often emphasized the importance of using classroom data in contrast to the use of CBM data. One teacher stated the following.

> (T)he MTSS team really relies a lot on that DIBELS data, and as a classroom teacher we rely on that, but we also rely on our guided reading assessments that we do in our classrooms... I personally think the classroom stuff really needs to be looked at and considered by everyone...classroom performance and color, guided reading levels need to be weighted a little bit higher.

Another teacher noted, "Yeah I think honestly the classroom, the guided reading levels I think sometimes speak more than the NWEA." And another stated, "teachers are very passionate about using what they're doing in the classroom to show, it might not be this perfect clean graph from a DIBELs report or NWEA report but it's definitely some real data that we collect." Finally, another teacher stated, "I focus more on DRA because it's a one-on-one assessment with a human, versus like the NWEA because they can just click through NWEAs."

MTSS systems do not dismiss the use of classroom data, such as DRA or LLI scores. Rather, the use of multiple data sources is encouraged to inform decision making. However, if teachers perceive this type of data to be at odds with CBM data, it creates a contradiction in the system where the newly advanced method for achieving the objective (using CBM data to improve ELL reading outcomes) is juxtaposed against the older method (using classroom data to improve ELL reading outcomes). This juxtaposition may create teacher frustrations.

Quaternary Contradictions

A quaternary contradiction exists when a change in the activity causes conflict with another, adjacent activity (Yamagata-Lynch & Haudenschild, 2009). One quaternary contradiction was noted form the interview data: scheduling.

Scheduling

The change of including ELLs in MTSS reading interventions causes conflict with other scheduled activities during the school day. Teachers and principals noted that rearranging the schedule to be able to provide MTSS was very difficult, especially for ELLs who typically also receive EL intervention. One teacher discussed the impact of intervention on other classwork:

> (T)hat can be a lot of time out of the classroom when you add it up over time... Just kind of the logistics, so the scheduling between the two pull-out teachers and then between the gen ed teacher and what we're doing, it's always where do you pull somebody out of when everything is very important. We don't have an MTSS, an RTI hour or anything like that so it's always well you take from here, but you're missing out on this.

Another teacher also discussed this concern, along with the concern that scheduling can sometimes prevent students from getting services.

> [The ELL] misses out on part of my math and my writing lesson, to go and do reading skills that she missed with the reading interventionist...I thought she got too little this year but there wasn't any more available to her as far as the way the schedule was. The [interventionist] had her hands full with K, 1, 2. She had no more open spots.

A third teacher talked about the difficulties of scheduling, and how her school was working on improving the scheduling process.

> (N)ext year we're building our master schedule kind of around Tier-3 intervention so that we can make it better for our kids because what happens is we all build our classroom schedules and then somebody says 'Oh I'm gonna pull for reading at this time,' and you're like 'but you can't do it during my instruction so now I have to change my whole schedule around.' 'Oh, but I'm going to pull them for ELL during this time,' well that's

> when I'm reading chapter book, and that's really good time for them to like hearing a different language and higher-level stuff! So, you know, this year we're trying to say like, this is your ELL time, this is your reading intervention time, so now build your schedule after that so that we don't get frustrated and have to change everything around.

Two principals also discussed the difficulty of scheduling intervention time for ELLs. One stated, "scheduling is kind of a tough thing right now with our kids... I think the biggest challenge is truly just the schedule." This principal later also noted:

> (S)cheduling is a nightmare...throughout the district we share specials teachers... So, specials have to go first which is frustrating to me, so we schedule that, we layer that down, and then we layer interventions, that Tier 2 time, and that's when we want to layer that ELL time too. And then we layer the reading blocks... if we didn't have all that in place, it just gets to be a mess when we're trying to do Tier 2 and then ELL services on top of that, and speech and language and I mean it is just incredible.

Another principal discussed ELLs needing to miss classwork for intervention time:

> (I)t's usually during science, or social studies, morning work, right after lunch, so times that, it's not a whole core instruction. If it's a big need, so like my students that came from China, we, we pulled them out of some, even reading and math that were in the classroom ...time is the variable.

The comments by teachers and principals highlight how ELLs present additional challenges to scheduling, as they often require multiple different interventions, provided by different personnel, who sometimes service multiple schools. Scheduling is a complex challenge for schools as teachers only have so many hours to cover a wide range of subjects.

Summary

The current research question aimed to identify inner contradictions within teachers' activity system of ELL inclusion in MTSS practices. To do so, additional perspectives from principals and a MiBLSi representative were included in the analysis.

One primary contradiction was noted; teachers reported frustrations with MTSS teams' process rules for ELLs. Teachers perceived the process to often take too long, especially when considering special education for ELLs, as their language skills often complicated the process. Teachers found these rules to be detrimental for ELLs. Two secondary contradictions were noted: availability of professional development and availability of translators. Teachers and principals both noted a need for more ELL-based professional development, both for ELLs in general and ELLs in MTSS. However, the availability of these training opportunities was unknown or scarce, and the MiBLSi representative did not perceive this to be a type of training schools in Michigan desired. Teachers and principals both also noted a need for translators, which were perceived as very difficult to find. One tertiary contradiction was noted: the value of classroom data. Teachers reported a high value on using classroom data to make decisions, but indicated that they did not believe other school personnel (such as MTSS teams) also valued these data. Classroom data were perceived to be somewhat at odds with CBM data. Finally, one quaternary contradiction was noted: scheduling. Scheduling MTSS reading interventions for an elementary school can be very complicated. This is especially true for ELLs, as they often also require language-based interventions, and the EL teacher responsible for these interventions is often shared between buildings.

CHAPTER 6: DISCUSSION

This chapter reviews the quantitative and qualitative results of the current study and places these results in context with previous research. An overview of the activity system and a discussion on how to potentially improve on the current system is then presented. Limitations of the study, educational implications, and future research recommendations are also discussed.

Overview of Study

With a convergent parallel-databases variant study design, quantitative and qualitative results are synthesized in the discussion section in order to gain a more complete understanding of the topic (Creswell & Plano Clark, 2007). As such, the following sections examine notable topics in the data that were evident across quantitative and qualitative data. These include the physical inclusion of ELLs in MTSS processes, a desire for professional development, concerns with assessment tools, the influence of number of ELLs in a classroom on perceptions and inclusion, the need for and frustrations with EL teachers, and fidelity of MTSS process implementation. Table 38 below briefly summarizes the results of these notable topics.

Table 38

Joint Display of Quantitative and Qualitative Results

Variables of Interest	QUAN results	QUAL results
Inclusion of ELLs in MTSS Processes	Teachers report that ELLs are included in many aspects of MTSS processes. ELLs tend to be over-included in services rather than under-included. Teachers tended to report that inclusion was normal/expected of them.	Teachers and principals discussed how ELLs are largely included in the MTSS process in the same way that non-ELLs are included. This process slightly differs when considering an evaluation for special education services.

Table 38 (cont'd)

Variables of Interest	QUAN results	QUAL results
Professional Development	Although many teachers reported receiving professional development in MTSS, only about half had received training on ELLs, and only about one third had received training on ELL inclusion in MTSS.	Teachers and principals emphasized a desire for more training in ELL inclusion in MTSS. A desire for more professional development was identified as a minor theme in all three interview analyses.
Assessment Tools	DIBELS was reported as the most commonly used assessment tool. Teachers with ESL endorsements and teachers with reading endorsements tended to follow traditional MTSS process rules differently.	Teachers and principals indicated some concern with the validity of the scores from CBMs with ELLs, although paper-based CBMs were preferred over computer-based assessments.
Number of ELLs in the Classroom	Teachers with few ELLs in their classrooms considered CBMs to be more valuable for making decisions compared to teachers with more ELLs. Teachers with fewer ELLs also tended to rigidly follow benchmark decision-making rules, while those with more ELLs tended to be more flexible.	Teachers and principals often referred to their ELL population as either large or growing, and indicated that resources were becoming scarcer as populations increased.
English Language Teachers	Percentage of teachers reporting that EL teachers were responsible for: • Administering universal screeners: 23.7% • Providing tiered intervention: 32.0% • Administering progress monitoring: 20.6%	Many teachers and principals discussed frustration with a lack of support from EL teachers, either as a result of poor EL teacher training or large caseload sizes for EL teachers.
Fidelity of MTSS Processes	No noticeable trends between fidelity groups were observed in the data.	Teachers discussed valuing fidelity in administration of CBM, but also discussed frustration with rigid decision-making rules.

Inclusion of ELLs in MTSS Processes

Overall, the results of the study largely suggest that ELLs were being included in MTSS reading processes across classrooms included in the sample. Survey data indicate that almost all ELLs were included in universal screenings of reading skills, and that ELLs tended to be over-included in other aspects rather than under-included (such as receiving tiered intervention despite already meeting benchmark). Survey results also indicated that, for teachers who included ELLs in MTSS processes, that inclusion was what was normal/expected of them. Most teachers also reported that they found MTSS processes to be one important step toward improving ELL reading outcomes. In interviews, teachers and principals discussed how ELLs were largely included in MTSS processes in the same manner as non-ELLs. The process slightly differed when considering an evaluation for special education services, in which there was typically an addition of EL teacher input and the use of additional data.

Although the topic of ELL inclusion in MTSS processes is relatively new, previous research regarding general inclusion practices shows some patterns that align with the current findings. For example, research suggests that general education teachers who believe it is their responsibility to teach students with special education needs tend to include these students more often in engaged learning time (Jordan, 2019). Indeed, teachers in the current study often indicated that it was their responsibility to include ELLs, referring to them as “my students” and taking ownership over their learning. This ownership may have contributed to the high inclusion rates of the current study. Previous research also indicates that inclusion for students with disabilities has increased steadily since 2002 (Morningstar et al., 2017), suggesting a potential cultural norm right now that leans toward increased inclusion of students with diverse needs.

However, it should be noted that inclusion in MTSS processes as defined in the current study does not necessarily indicate inclusive teaching practices. As discussed in Coady and de Jong (2015), "inclusive teaching in mainstream classrooms requires that teachers go beyond good general education practices and including ELLs physically in classroom activities. In an inclusive classroom, ELLs' language and literacy development and cultural learning needs are addressed through systematic and planned instruction" (p. 22). Although ELLs are being included in MTSS reading practices, this does not necessarily mean that teachers are systematically addressing ELLs' unique needs through inclusive instruction.

Professional Development

One of the overarching findings from the research was the lack of professional development focused on ELLs and ELLs in MTSS, despite a desire for related opportunities. Survey results indicated that many teachers reported receiving professional development in MTSS. However, only about half had received training on ELLs, and only about one third had received training on ELL inclusion in MTSS. Interview results indicated that teachers and principals desire more professional development in this area. This aligns with previous research indicating that there is a lack of professional development to provide teachers with the knowledge necessary to implement MTSS with ELLs (Dougherty Stahl et al., 2012; J. Klingner & Harry, 2006; Orosco & Klingner, 2010; Xu & Drame, 2007). In one such study, researchers investigated ELL professional development in a large district of 15,000 students, with ten percent of the students classified as ELL (Hopkins et al., 2019). The researchers found that 93% of teachers did not have access to ELL-related information or advice.

However, teachers' may not be communicating their need for ELL-related professional development with stakeholders such as MiBLSi. Furthermore, although the administrators in the

current study indicated an interest in ELL-related trainings, this had not yet come to fruition. One reason for this may be that administrators do not consider ELL training to be a priority compared to other professional development needs. This may be the reason that the MiBLSi representative was unaware of schools' desire for professional development focused on ELLs in MTSS. Research suggests that although administrators recognize the need for ELL training, they may not fully understand the complexity of ELL needs (de Jong & Harper, 2005; Hopkins et al., 2019). Teachers require more than "just good teaching" when working with ELLs, including an understanding of the L2 learning process, the ability to build on cultural experiences, high expectations for ELLs, and more (de Jong & Harper, 2005). Indeed, teachers and principals often referred to treating ELLs as "any other student" during interviews, and one principal indicated that although they would like more professional development, that all of their teachers were qualified to work with ELLs. Furthermore, the majority of teacher survey participants reported feeling confident or very confident with teaching ELLs, suggesting that perhaps they do not advocate for this type of training unless directly asked, such as in the interviews.

It should be noted that one principal did explicitly indicate that they had intentionally, and unsuccessfully, looked for professional development focused on ELLs. It may be the case that the lack of reported teacher training in this area is a result of both lower prioritization and a lack of available trainings. Recent research indicates that professional development focusing on ELLs has not yet developed a clear means of effectively training educators (National Academies of Sciences, Engineering, and Medicine, 2017). Therefore, a lack of available professional development may be a reflection of the need for more research in this area.

Assessment Tools

Another common finding across the survey and interview data was the widespread use of DIBELS, and the mixed feelings teachers and principals had about the use of these tests with ELLs. In the survey, DIBELS was the most widely reported universal screener and progress monitoring tool used by teachers, and this was reiterated in the interview data as well. Teachers expressed concerns about using any single data source or data point, and had particular concerns for ELLs. Teachers described the unique culturally-laden background knowledge necessary for students to understand some DIBELS passages, and how this might put ELLs at a disadvantage. Some teachers also noted nonsense word fluency as being particularly difficult for ELLs, discussing how the lack of meaning for the words seemed confusing for non-native speakers. For teachers who indicated that they did not highly value CBM data, a lack of appropriate CBM tools at their school was the highest rated reason for this. However, teachers generally preferred paper CBMS such as AIMSweb and DIBELS to computer-based testing, such as NWEA.

The concerns teachers have regarding the validity of assessment tools for ELLs have been mimicked by experts in the field, who have expressed concern regarding the cultural sensitivity of these measures (Hernandez Finch, 2012; Klingner & Edwards, 2006; Linan-Thompson et al., 2007). The lack of research on these tools and lack of ELL inclusion in norming samples also makes their validity unclear for practitioners. As Cummings and colleagues (2019) note, "Academic screeners offer educators an important first step in the process of identifying students with learning disabilities. Few literacy screeners, however, have been developed with English Learners (ELs) in mind. Most often, developers have designed their screeners, evaluated them, and established cut scores (decision thresholds) with samples that consist of primarily, if not entirely, English proficient students" (p. 1).

However, recent research indicates that the use of CBM tools to identify ELLs who need further instruction may be appropriate (Cummings et al., 2019). In a three-year study of 34 schools, Cummings and colleagues found that the DIBELS 6th Edition screening measures for kindergarten through third grade were effective at identifying ELLs at different levels of risk for a reading disability. Oral reading fluency produced the highest predictive validity, especially in first grade. Nonsense word fluency, with which some teachers in the current study expressed concerns, was also found to be an accurate screener. The only measure that failed to accurately identify ELLs in need of additional support was Phoneme Segmentation Fluency.

It is important for schools to understand the research behind assessment tools, and to select tools that make sense for their population. Assessment tools should match population needs, as emphasized by the MiBLSi representative. Recent research suggests that CBM tools may be appropriate to make certain decisions for many ELLs, and this research may need to be communicated with teachers in order to ease anxiety and increase buy-in for the use of CBM data. However, it is also important for schools to understand that the CBM tools they have selected may not make sense for every learner, and this awareness seemed apparent across some interviewees. For example, teachers and principals noted concerns about using standard assessment tools with a student who cannot read any English, and the MiBLSi representative discussed how "hard and fast" rules should not always be followed for every student. Although it is important to implement MTSS with fidelity with the large majority of students, there will always be students for which exceptions to standard procedures must be made. Individual student needs, especially for unique and low incidence populations (such as ELLs who do not yet understand any English) are important to consider throughout the MTSS process.

Reading Endorsement Versus ESL Endorsement

Teachers with an ESL endorsement tended to value CBM data less often, while teachers with a reading endorsement tended to value CBM data more often. This is an interesting distinction, suggesting that expertise in reading is associated with valuing CBM data (such as DIBELS) for ELLs, while expertise in ESL is associated with not valuing CBM data for ELLs. When including ELLs in MTSS reading processes, both reading expertise and ESL expertise is required. So why might teachers with training in one or the other seemingly have contradictory attitudes toward CBM testing? One explanation may be that teachers with reading expertise do not have the background knowledge necessary to have concerns about using CBMs with ELLs. They may treat ELLs as any other student, differentiating in the same way they do for a non-ELL with reading difficulties. These teachers may view ELLs who struggle with reading primarily as struggling readers, rather than as ELLs, and therefore value the use of CBM data, which is well researched for helping teachers gather formative data for reading instruction. In contrast, teachers with ESL expertise may not have the necessary background knowledge in reading research to appreciate the value of CBM data, or may not be familiar with recent research supporting its technical adequacy with ELLs. They may have particular and somewhat appropriate concerns regarding the cultural sensitivity of the tools, and therefore believe the tools are not adequately equipped to appropriately identify concerns and/or measure reading growth in ELLs.

How teachers with ESL endorsements and teachers with reading endorsements view the helpfulness of CBM data for ELLs will be important for researchers and practitioners to understand. Having different values of CBM data will likely influence teachers' willingness to use the data to guide decision-making. Indeed, research indicates that teacher perceptions can influence buy-in and fidelity (Castro-Villarreal et al., 2014), and that successful system change

within schools begins at the teacher level (Greenfield et al., 2010). Teachers with differing expertise and perceptions of CBM data may need to be approached and trained differently in order to prepare them for data-based decision making with ELLs. Practitioners and researchers may benefit from more cross-disciplinary collaboration, as both reading and ELL experts are likely to have input that would be beneficial to effective data-based decision-making for ELLs.

Number of ELLs in Classroom

Teachers and principals who participated in interviews indicated that their ELL populations were either large and/or growing. The number of ELLs that teachers had in their classroom tended to relate to how they included ELLs in certain aspects of the MTSS process. Teachers with only one or two ELLs in their classrooms considered CBMs to be more valuable for making instruction/intervention decisions and special education decisions compared to teachers with three or more ELLs. Teachers with fewer ELLs also tended to rigidly follow benchmark decision-making rules, while those with more ELLs tended to be more flexible with decision-making rules. For example, teachers with fewer ELLs tended to provide intervention only to ELLs who had not met benchmark, and provide progress monitoring only to ELLs receiving intervention. In comparison, teachers with higher numbers of ELLs tended to provide or not provide intervention to ELLs in a manner inconsistent with ELLs' benchmark scores. Teachers with higher numbers of ELLs also tended to administer or not administer progress monitoring in a manner inconsistent with whether the ELLs were receiving intervention.

Because research on the effectiveness of MTSS with ELLs is limited, it is difficult to discern whether rigid adherence to benchmark rules (such as only providing intervention to students who fail to meet benchmark) is more or less beneficial than flexibility in rule applications for ELLs. In other words, it is difficult to determine whether following the

traditional fidelity rules of MTSS is beneficial for ELLs. Research suggests that, in general, high fidelity in MTSS is critical to positive student outcomes (Balu et al., 2015; Johnson et al., 2006; Keller-Margulis, 2012; Shinn & Brown, 2016). However, transferring programs from one population to another is complex (Ingraham & Oka, 2006). It is important that core components are maintained while appropriately modifying for cultural differences. The use of data to make decisions is a core component of MTSS practices (Fuchs et al., 2003). However, adjustments to the type of data that are used may be appropriate when considering the needs of ELLs.

There are various potential explanations for why the number of ELLs in a classroom may be related to teacher behaviors regarding MTSS inclusion. Previous research indicates that schools with lower numbers of ELLs tend to have less ELL training (Cosentino de Cohen et al., 2005; Flynn & Hill, 2005), and that less ELL training tends to correlate with a lack of recognition of system barriers (e.g. appropriate resources) (Gandara et al., 2005). This may lead teachers to be unsure of how or whether they need to adapt MTSS processes for ELLs, and as such they not make any adaptations. However, research on low-incidence versus high-incidence ELL populations is limited, and tends to focus on ELL populations in rural settings. Another explanation may be that teachers with fewer ELLs find it easier to individualize instruction for only one or two ELLs, and may have an easier time following MTSS processes with their ELLs because of this. Research indicates that teachers report frustration with their ability to address their varying ELLs' skill levels (Gandara et al., 2005). Indeed, one teacher in the interviews noted that it was easier to work with ELLs when she only had one versus when she had four, because the four students would often talk in Spanish together and made slower gains in English reading skills. In contrast, teachers with more ELLs may better understand the limitations of MTSS resources for ELLs and adjust their inclusion accordingly. Because they may be

accustomed to differentiating tasks for ELLs, they may not believe that standard CBM tests are valid representations of ELL reading skills. As such, they may be hesitant to rely on these data to inform intervention. Teachers with more ELLs may also be in schools that have greater resources allocated to ELLs, and may have access to additional types of data regarding their students, such as input from the EL teacher, or native language reading tests.

English Language Teachers

Data from the survey indicate that EL teachers were involved in administering universal screeners or progress monitoring tools for about one fifth of teachers included, and responsible for providing tiered reading intervention for approximately one third. Interview data indicate that teachers and principals had difficulty finding high quality EL teachers, and that EL teachers were often spread thin across multiple buildings or districts. Six teachers expressed frustration with these supports, and all three principals described limited EL teacher availability. Two of the three principals also expressed concerns with the background and training of their EL teachers.

There is a national shortage of highly qualified ESL teachers, with 32 states reporting critical shortages in the 2016-2017 school year, including Michigan (Cross, 2016). Although ELLs make up approximately nine percent of the US student population, EL teachers account for only two percent of the K-12 teacher workforce (NCES, 2016). Experts have advised that universities may need to adapt their teacher preparation programs in order to increase graduation rates of teachers with EL specializations in order to improve the ratio of EL teachers to ELLs (National Academies of Sciences, Engineering, and Medicine, 2017).

However, increasing the number of EL teachers alone will not resolve the concerns indicated by educators in the current study (i.e., the lack of high quality EL teachers). The Committee on Fostering School Success for English Learners (2017) released a report on ELLs,

concluding that, “The educator workforce, including [Early Childhood Education] providers, educational administrators, and teachers, is inadequately prepared during preservice training to promote desired educational outcomes for dual language learners/ELs.” (National Academies of Sciences, Engineering, and Medicine [NASEM], 2017, p. 12). This dilemma is critical to address, as teacher quality is strongly associated with educational success for ELLs (Ballantyne et al., 2008; Boyd et al., 2009; Loeb et al., 2014; Samson & Collins, 2012). One way to do this may be to provide professional development. However, as noted earlier in this chapter, quality professional development focused on ELLs is hard to find. As discussed in the committee’s consensus report, “professional development, coaching, and continuing education for educators serving DLLs/ELs have not yet developed as a coherent set of strategies for improving the effectiveness of these providers with DLLs/ELs.” (NASEM, 2017, p. 460).

When considering the role of EL teachers, one may not initially recognize their involvement in MTSS. EL teachers may often be thought to only provide language intervention that is separate from MTSS. Indeed, research suggests that EL teachers are often isolated from other teachers (Arkoudis, 2006; DelliCarpini, 2011). However, findings from the current study indicate that EL teachers are involved in MTSS processes, such as administering universal screening tools and providing reading interventions. When EL teachers are involved in MTSS reading practices, their role goes beyond language intervention. EL teachers who administer DIBELS, for example, must be trained on administration. The current study did not examine EL teacher expertise in MTSS practices, and so the degree to which they may or may not need support in this role is unknown.

EL teachers can be of great benefit to schools. As potential experts in ELLs and language development, they could bring a knowledge-base to the MTSS process that may foster culturally

competent practices, increase integration of services, and promote collaboration. However, current teachers and principals are not indicating that these beneficial outcomes are occurring. Rather, they are frustrated with current EL teacher supports due to few EL teachers and a lack of appropriate training for these EL teachers. Stakeholders may want to consider the potential benefits of increasing the number of EL teachers within a district. Furthermore, future research should continue to investigate teacher training and professional development programs.

Fidelity of MTSS Processes

The fidelity of MTSS processes were highlighted in both the interviews and the survey. In the interviews, teachers discussed valuing MTSS process fidelity, specifically CBM test fidelity. They noted that it was important for the test to be administered in a standardized way. Specifically, teachers noted concerns with how multiple test administrators (teachers, paraprofessionals, etc.) may administer the test slightly differently, therefore negatively influencing the validity of the data. The MiBLSi representative also discussed valuing MTSS process fidelity. The representative tended to discuss fidelity in broader terms, and emphasized how MTSS would not give positive results unless implemented with fidelity.

Despite valuing fidelity for CBM test administration, teachers expressed frustration with the fidelity of decision-making rules implemented by the MTSS team. These rules, such as requiring six weeks of intervention before changing the intervention, were likely created to standardize how teams make decisions, remove biases from the decision-making process, and ensure that interventions have time to be effective. However, teachers discussed concerns with how these rules were too rigid, and did not take the needs of ELLs into account. The MiBLSi representative also discussed the need for schools to have flexibility in these decision-making processes, noting that it would not be best practice to apply rigid rules to all students.

Data from the R-TFI indicated no noticeable trends between fidelity and ELL inclusion rates. This was true across each of the MTSS components examined. Although one may expect that greater overall fidelity with MTSS would lead to greater fidelity with ELLs in MTSS, this was not the case. One explanation for this may the limited sample size of the current study. Only 18 teachers in the current study worked in schools that completed the R-TFI. Furthermore, the range of R-TFI scores was limited (34.0 to 85.5), and no school scored higher than 86 on a scale of 100. It is possible that this range of scores does not allow for sensitive discrimination, or that a score higher than 86 may be needed to indicate high fidelity.

Although the importance of implementation fidelity is evident across the educational literature (Johnson et al., 2006; Keller-Margulis, 2012; O'Donnell, 2008; Swanson et al., 2011), the relationship between ELL inclusion and fidelity has not previously been examined in the research. Indeed, current research on MTSS fidelity in general is limited. A review of the RTI literature over the past ten years indicates very few published articles that examine the fidelity of MTSS as a whole, rather than only examining individual parts (Gischlar et el., 2019).

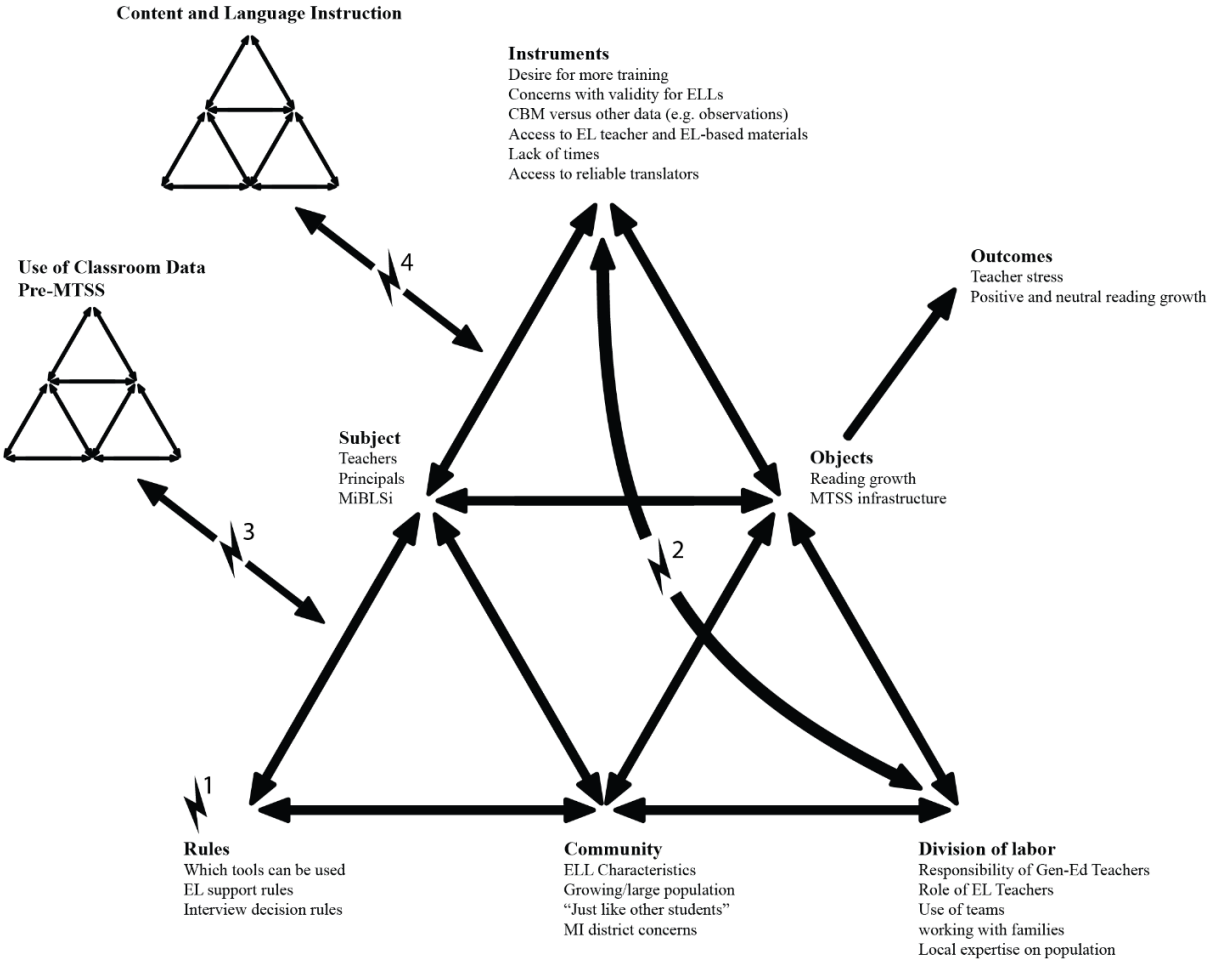
Results from the current study indicate that ELL inclusions rates do not noticeably differ between school with high, medium, or low MTSS implementation fidelity. This is surprising, as one may expect that schools with higher fidelity would have higher inclusion rates, as MTSS is considered a universal system (i.e. all students are generally included). However, the sample in the current study only included 18 teachers from MiBLSi schools. Furthermore, the range of average R-TFI scores was limited, so differences in bands may not be meaningful. More research will be necessary to further explore the potential relationship between fidelity and inclusion.

Improving the System

The system of ELL inclusion in MTSS processes is a complex network containing multiple contradictions. Each element in the system is important to identify and understand. However, identifying the elements and contradictions out of context from each other does not allow for a complete understanding of the system. Furthermore, the system does not exist in isolation, but rather interacts with a myriad of other systems. In order to better understand the system as a whole, it is helpful to view all the pieces together. Figure 9 conveys the activity system described by the data, which includes both beneficial and detrimental aspects for ELLs.

Figure 9

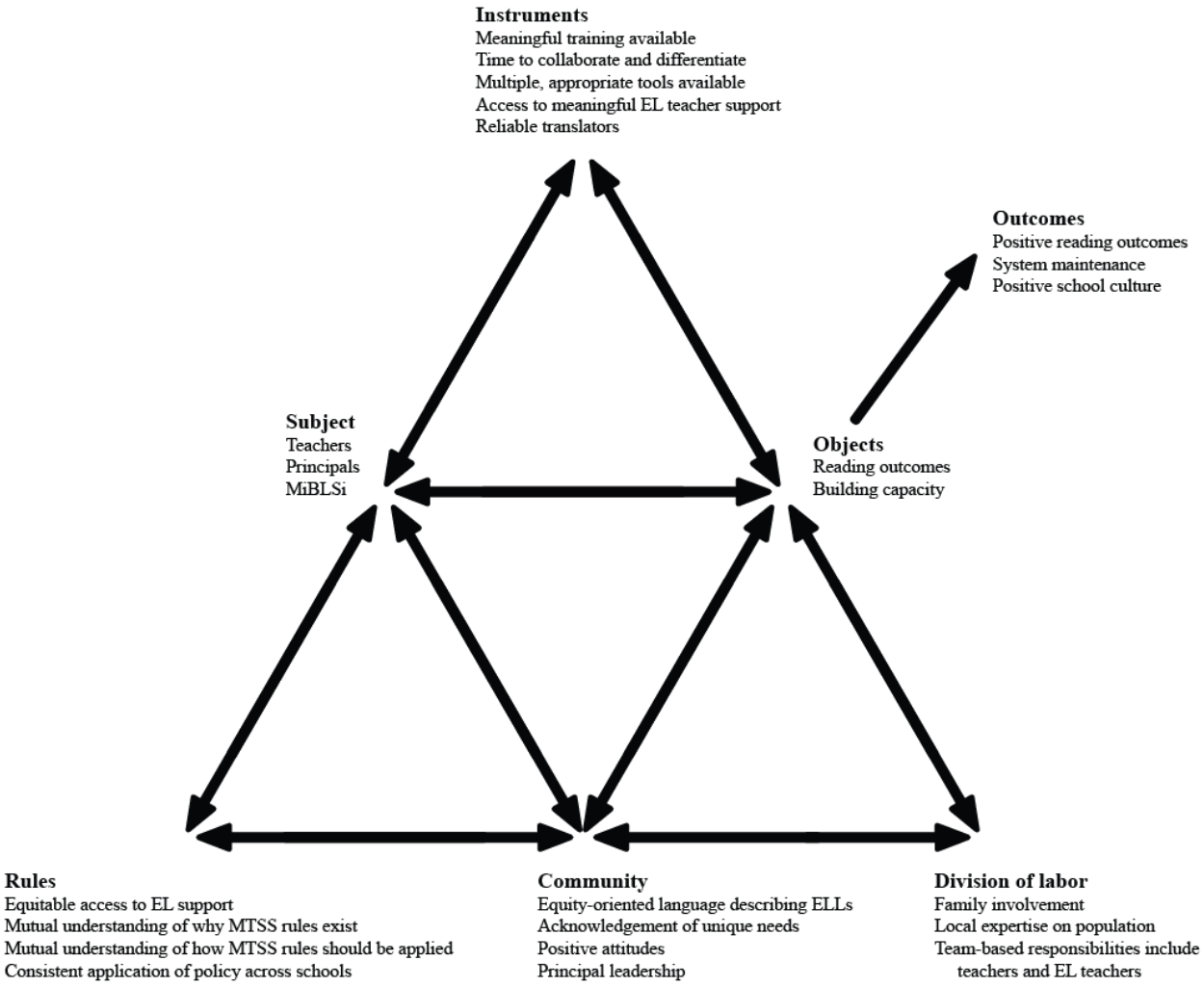
Overarching CHAT Model From Current Study



Focusing on the beneficial aspects of the system may help practitioners and researchers to understand what the system is capable of looking like, and may help these systems to flourish. Indeed, positive psychologists argue in favor of studying that which is positive in order to help communities thrive (Seligman & Csikszentmihalyi, 2000). As such, Figure 10 highlights the positive findings from the current study, and also hypothesizes additional potentially beneficial aspects that could address the contradictions noted in Figure 9. Figure 10 demonstrates what a potentially superior system of ELL inclusion in MTSS practices may look like.

Figure 10

Potentially Superior CHAT Model for ELL Inclusion in MTSS Practices



The instruments element includes the availability of multiple appropriate tools for teachers to use, such as curricula that have differentiated resources for ELLs, and CBM tools that teachers value. Having valuable CBM tools will, in part, also be a result of increased training. This increased training could focus on how to meaningful assess and use data, as well as training for principals and teams on how to convey the value of this data to teachers. Training would also be available for ELL best practices, MTSS inclusion, and additional data interpretation (such as for the WIDA). It indicates time for staff to collaborate with each other, such as general education teachers collaborating with reading interventionists and EL teachers. It shows access to an EL teacher who is well-trained and not overstrained by a high caseload across multiple buildings. And it shows access to reliable translators so that educators can effectively communicate with students and families, without worrying about conflicts of interest or reliability.

The rules element indicates equitable access to EL support, removing the barrier of needing to transfer schools in order for teachers and ELLs to access the EL teacher. It shows a mutual understanding of why MTSS rules exists and how they should be applied. This means that the rules are well communicated, and that the rationale is understood by all parties. This will also rely on the training made available in the instruments element. It also denotes a consistent application of policy across schools. EL students should not receive a reading intervention at one school, but then not be eligible for a reading intervention at another school based on the same data. This is more easily controlled within districts then between districts or between states, but administrators and state stakeholders can work together with local schools to create more reliable processes for ELLs.

Within the community element, the proposed activity system recognizes the positive attitudes toward ELLs that were wide-spread across participants in the study. However, it also indicates equity-oriented language describing ELLs and an acknowledgement from educators of ELLs' unique needs. While many educators in the current study described ELLs as "any other student", the proposed system would have educators acknowledge the unique needs of ELLs and use language to promote equity rather than deemphasize differences. Finally, principals would also be more aware of how they impact culture and equity-based practices, and use their leadership to promote positive change.

The division of labor element indicates ELL family involvement, which may require the increased translator services noted in the instruments element. Local expertise on the population is also noted as discussed by the MiBLSi representative. An ideal model would place the responsibility for knowing and advocating for local needs on the local educators, rather than on state-stakeholders who may not know what each school needs. Finally, teams (who often have many responsibilities in this system) would meaningfully include general education teachers and EL teachers in the decision-making process.

The objects of the proposed system indicate what many educators conveyed in the current study: they participate in the system in order to improve reading outcomes for ELLs. Building capacity is also an important goal as indicated by the MiBLSi representative. In an ideal system, actual outcomes would mirror these goals, with students actually making reading growth and the system moving toward maintenance rather than capacity building. An additional outcome of an ideal model would be a positive school culture, where educators feel both supported by leadership and supportive of students.

This proposed activity system represents what could exist within schools to best support ELLs, and gives practitioners an "answer key" of sorts in order to know which aspects of the system they may need to focus on in order to improve the system. How schools achieve this activity system is likely to vary, as is how close schools are to a system such as this.

Limitations

There are several limitations for the current study which are important to note. Primarily, the ability to generalize findings based on the current data to other contexts and students is limited due to the sample demographics and size. Only early elementary teachers in Michigan were included in the study. This limits how the conclusions can be generalized nationwide, as MTSS and ELL laws and processes vary across states. Furthermore, results cannot be considered to generalize across grade levels. Results may vary considerably for other grade levels given the different measures that are used within MTSS systems for different grade levels. In addition, the achievement gap between ELLs and non-ELLS tends to grow as students age, making it difficult to determine how adaptations to MTSS may function at higher grade levels. Qualitative data were limited to the perceptions of twelve educators. Although this information is important and insightful, readers should be cautious as to not assume the qualitative data represent the wide array of educator perceptions that exist in practice.

Educational Practice Implications

The goal of practice-based research is to create research that is useful and meaningful for practitioners, so that the research-practice gap may be reduced. The current study aimed to accomplish this by investigating how ELLs are included in MTSS and teachers' perceptions about this inclusion. The results of this investigation provide insights that may be helpful for schools and stakeholders. First, data indicate that teachers and principals would like more

professional development focused on how to include ELLs in MTSS practices. Administrators and relevant stakeholders should examine what trainings are currently available, whether trainings are sufficiently advertised, and what trainings may need to be developed to meet these needs. It is recognized that research on ELL reading outcomes from inclusion in MTSS is limited. Moreover, professional development aimed at improving teacher effectiveness with ELLs more broadly has not yet developed a clear set of strategies (NASEM, 2017). However, in order to meet practitioner needs, perhaps current trainings could focus on ELL best practices, how to differentiate instruction for students with unique needs, and cultural competency until more coherent professional development strategies are developed and found to be effective.

Second, the results indicate that greater, more intentional communication regarding ELL inclusion in MTSS practices is needed between schools and state-wide decision-makers. When specifically asked about ELLs, teachers and principals had a lot to talk about, and made a lot of requests—such as professional development, time to plan, more EL teacher support, etc. However, the MiBLSi representative was unaware of these needs. This lack of communication is likely the result of multiple factors, such as schools not communicating these needs, MiBLSi not specifically asking about these needs, and schools and MiBLSi prioritizing other needs ahead of ELLs. However, if ELLs are indeed a concern for teachers and principals, as indicated in the current study, then more intentional communication between schools and stakeholders such as MiBLSi may be warranted. This could be achieved by stakeholders sending out an annual survey asking teachers and principals for feedback on support, and may include specific questions on unique populations such as ELLs. This could also be achieved by principals reaching out with specific requests for training, such as to their local educational agency. The responsibility will

likely need to fall on both schools and stakeholders in order for effective communication of needs and supports to be achieved.

Future Research

In addition to practical implications, the results of the current study provide a foundation for future research. The current study indicates that ELLs are being included in MTSS processes, and that a large majority of teachers believe MTSS reading interventions are effective for ELLs. Future research will need to further examine the effectiveness of ELL inclusion in MTSS practices. This should include investigating ELL reading outcomes (rather than teacher perceptions of outcomes), and studying outcomes from full MTSS inclusion (rather than looking at independent aspects of MTSS). In addition to how MTSS inclusion impacts student outcomes, future research should also examine how to support schools in this inclusion in order to foster positive reading outcomes for ELLs. This may include investigating MTSS best practices for ELLs, so that schools can have a larger evidence-base to consider and reference. It may also include further investigation of school resource needs, so that stakeholders can better understand what resources are needed to promote positive reading outcomes for ELLs.

More research is also needed to better understand the reasons behind the different inclusion behaviors of teachers. The current results indicate varying inclusion behaviors based on the number of ELLs teachers have in their classroom, and based on whether the teacher has a reading or ESL endorsement. Researchers may want to examine why teachers in these groups tend to deviate from typical MTSS practices, or why they tend to follow the practices more rigidly. For example, teachers with many ELLs may have difficulty adapting reading instruction for the varying language proficiencies and cultural backgrounds in their classroom, and may over-provide intervention because they believe intervention services will compensate for the lack

of differentiated Tier One instruction. In this instance, teachers may require increased resources for supporting diverse student needs at a Tier One level. Alternatively, teachers with more ELLs may believe that MTSS reading screeners are not accurate for ELLs, and these teachers may be determining intervention placements based on other data. In this instance, teachers may need professional development on appropriate assessment tools for ELLs in order to ensure that the data they are using to inform interventions is sensitive and specific enough for ELLs. By better understanding how teacher and classroom factors correspond with MTSS inclusion, researchers and stakeholders can better support teachers and better meet the needs of ELLs.

Conclusions

The results of the current study indicate that teachers are currently including ELLs in many aspects of MTSS. ELLs were almost always included in universal screening of reading skills. ELLs were often included in tiered reading interventions and progress monitoring, including when traditional MTSS processes would indicate that a student might not be included (such as providing tiered reading intervention to a student who is already meeting benchmark standards). Teachers highly valued CBM data for special education decisions, but less so for instructional decisions. Teachers also generally reported that MTSS practices were important for ELL reading outcomes. Teachers, principals, and a representative from MiBLSi discussed many aspects of ELL inclusion in MTSS practices, such as some concerns with CBM data, a desire to support ELLs, and frustrations with rigid decision-making rules.

When investigating the effectiveness of ELL inclusion in MTSS practices, it would be beneficial for researchers and practitioners to understand how classroom systems are functioning and what potential tensions and challenges may exist in these systems. The contradictions identified in this study include differing values on MTSS team decision-making rules, teachers

reporting responsibility for educating ELLs while also reporting a desire for more training, teachers needing to communicate with ELLs and their families while indicating that they do not have translation resources, teachers feeling that their classroom data is being dismissed in favor of CBM data, and general scheduling difficulties for ELL reading interventions. Understanding and accommodating for these contradictions could help the system move closer toward its ultimate goal, which was defined by educators as helping ELLs improve their reading skills.

This exploratory study sought to contribute to the literature by examining current ELL inclusion practices and educator perceptions of this inclusion through a CHAT framework. CHAT is a new way of looking at ELL instructional practices and MTSS implementation in schools, and proved to be a powerful tool by allowing for the systematic analysis of ELLs and MTSS through the identification of specific elements and inner contradictions. By identifying each element while maintaining the whole of the system, researchers and practitioners can understand specific areas of need and how these needs interact with other elements within the system. Future researchers may want to strongly consider the use of the CHAT framework when studying ELLs, MTSS, and related topics. Notable topics that may benefit from further clarification in the research include professional development focused on effective ELL teaching practices, frustration with EL teacher availability and support, teacher concerns with the use of CBM data for ELLs, and a lack of valuing CBM data for ELL instructional decisions.

APPENDICES

Appendix A: Elementary Reading Tiered Fidelity Inventory

Elementary Reading Tiered Fidelity Inventory (R-TFI)
Scoring Form

School: District: Date:
School Leadership Team Members:

Facilitator:
Notetaker:

Directions: The school leadership team completes the R-TFI together by using the *R-TFI Scoring Guide* to discuss each item and come to **consensus** on the final score for each item. Scores are recorded on this *Scoring Form* below and then entered into pbisapps.org (or webapps.miblsimtss.org/midata for schools in Michigan)

Tier 1				
Teams				
Item	**Item Description**	**Score**		
1.1	A School Leadership Team is established to support the implementation of a Tier 1 reading system	2	1	0
1.2	The School Leadership Team uses an effective team meeting process.	2	1	0
1.3	The School Leadership Team's work is coordinated with other school teams.	2	1	0
1.4	Grade-Level Teams are established to support the implementation of a Tier 1 reading system.	2	1	0
1.5	Grade-Level Teams use an effective team meeting process.	2	1	0
Implementation				
1.6	The school uses a formal procedure for selecting programs and materials to provide core reading instruction.	2	1	0
1.7	Written guidelines are available for teaching the **core reading program**.	2	1	0
1.8	The school has a **reading implementation plan**.	2	1	0
1.9	Grade-level **instructional plans** include an emphasis on Tier 1 instruction.	2	1	0
1.10	**School-wide expectations** for student behavior are established and taught.	2	1	0
1.11	**Behavioral routines** are implemented for common reading activities.	2	1	0
Resources				

1.12	The school allocates **adequate time for core reading instruction**.	2	1	0
1.13	The school has identified individual(s) to assist in data coordination for reading assessments.	2	1	0
1.14	Professional learning is purposely selected for supporting the implementation of a **school-wide** reading model.	2	1	0
1.15	The School Leadership Team uses system-level coaching.	2	1	0
1.16	All staff have access to instructional coaching.	2	1	0
Evaluation				
1.17	**Universal screening** assessments have been purposely selected.	2	1	0
1.18	The school uses a data system that allows access to **universal screening** assessment reports.	2	1	0
1.19	A **school-wide assessment schedule** is available for the current school year.	2	1	0
1.20	Staff collect reading **universal screening** data with **fidelity**.	2	1	0
1.21	The School Leadership Team collects Tier 1 system **fidelity** data.	2	1	0
1.22	Classroom observations are conducted to assess implementation of the **core reading program**.	2	1	0
1.23	The School Leadership Team has a process for using data for decision-making.	2	1	0
1.24	Grade-Level Teams have a process for using data for decision-making.	2	1	0
1.25	The School Leadership Team monitors implementation of the **school-wide** reading plan.	2	1	0
1.26	Grade-Level Teams monitor implementation of the grade-level **instructional plans**.	2	1	0
1.27	The School Leadership Team provides a status report on student reading performance to stakeholders.	2	1	0
Tier 2				
Teams				
2.1	The School Leadership Team maintains the infrastructures to support students with reading skill deficits.	2	1	0
2.2	Grade-Level Teams work to support students who are not making adequate progress in the core reading curriculum.	2	1	0

Intervention Implementation				
2.3	The school uses a formal process for selecting **evidence-based** reading interventions.	2	1	0
2.4	The school uses a data-based process for matching student needs to specific reading interventions.	2	1	0
2.5	Intervention groups are appropriate for students receiving reading intervention.	2	1	0
2.6	The school collaborates with parents/guardians regarding student intervention plans.	2	1	0
Resources				
2.7	The scheduling of reading interventions is coordinated with core reading instruction.	2	1	0
2.8	All staff providing reading interventions receive implementation supports.	2	1	0
Evaluation				
2.9	The school monitors data on student access to reading intervention supports.	2	1	0
2.10	The school uses a data system to display student progress.	2	1	0
2.11	Staff collect progress-monitoring data with **fidelity**.			
2.12	The school monitors the percentage of students who are responding to Tier 2 supports.	2	1	0
2.13	The school monitors the **fidelity** of Tier 2 interventions.	2	1	0
2.14	Grade-Level Teams adjust reading intervention supports based on individual student progress.	2	1	0
Tier 3				
Teams				
3.1	Grade-Level Teams work to support students with intensive reading needs.	2	1	0
3.2	Grade-level teachers access the assistance of Student Support Teams.	2	1	0
3.3	Student Support Teams are established to improve students' reading performance.	2	1	0

3.4	Student Support Teams use an effective team meeting process.	2	1	0
Intervention Implementation				
3.5	The school uses a variety of data sources to design intensive reading intervention plans.	2	1	0
3.6	The school alters intervention variables to intensify reading intervention supports.	2	1	0
3.7	The school collaborates with parents/guardians regarding intervention plans for students with intensive reading needs.	2	1	0
Resources				
3.8	All staff supporting students with an intensive reading intervention plan receive implementation supports.	2	1	0
3.9	Staff collect diagnostic assessment data with **fidelity**.	2	1	0
Evaluation				
3.10	The school monitors the percentage of students who are responding to Tier 3 supports.	2	1	0
3.11	There is a protocol to monitor the **fidelity** of Tier 3 interventions.	2	1	0
3.12	Intensive reading intervention plans are adjusted based on decision rules.	2	1	0

Appendix B: Teacher Survey

Welcome! This survey is focused on your use of Response to Intervention (RTI), also known as Multi-Tiered Systems of Support (MTSS), with English Language Learners (ELLS). The survey will take roughly 25 minutes to complete, and you will be compensated with a $10 Amazon gift card for your time. All information shared in this survey will be kept anonymous; only the researchers involved will be able to connect names with responses. Survey results will be reported in aggregate form; no individual names or names of schools will ever be publicly attached to these results. Please feel free to reach out to me at cookeli4@msu.edu if you have any questions about this.

What is your name?

Which grade (s) do you currently teach?

- ❑ K
- ❑ 1
- ❑ 2
- ❑ Other _____

Where do you currently teach? (Please provide the school's name)

Response to Intervention (RTI) and Multi-Tiered Systems of Support (MTSS) is defined as the following process:

1. Students are provided with generally effective instruction by their classroom teachers.
2. Their progress is monitored.
3. Those who do not respond get something else, or something more, from their teacher of someone else.
4. Again, their progress is monitored; and
5. Those who still do not respond either qualify for special education or for special education evaluation (Fuchs, Mock, Morgan & Young, 2003).

Does your classroom participate in all or some Response to Intervention (RTI) or Multi-Tiered Systems of Support (MTSS) practices for reading?

- ❍ Yes
- ❍ No
- ❍ Not Sure

If No Is Selected, Then Skip To End of Survey

An English Language Learner is defined by the federal government as a student who meet one of the following criteria:

- who was not born in the United States or whose native language is a language other than English
- who is a Native American or Alaska native, or a native resident of the outlying areas; and who comes from an environment where a language other than English has had a significant impact on the individual's level of English proficiency
- who is migratory, whose native language is a language other than English, and who comes from an environment where a language other than English is dominant

As well as the following criteria:

- whose difficulties in speaking, reading, writing, or understanding the English language may be sufficient to deny the individual:
    - the ability to meet the State's proficient level of achievement on State assessments
    - or the ability to successfully achieve in classrooms where the language of instruction is English
    - or the opportunity to participate fully in society.

English Language Learners can be born in any country (including the United States), and may have conversational English skills.

Examples of English Language Learners include:

- A student who primarily speaks Spanish and recently moved to the US from Mexico
- A student born in the US, whose primary language is Arabic, and who has had little exposure to English
- A student whose native language is German, who has lived in the US for four years and has conversational English, but who still has not mastered academic English

Non-examples of English Language Learners include:

- A student who primarily speaks English
- Any student who has mastered academic English

How many English Language Learners do you currently have in your classroom? (please provide an exact numeric response such as 4)

Do you currently have at least one English Language Learner in your classroom?

❍ Yes
❍ No

If No Is Selected, Then Skip To End of Survey

We would like to know which languages ELLs in your classroom speak. Please indicate how many ELLs currently in your classroom speak each of the following languages by dragging the slider to the number of ELLs in your classroom that speak each language. If a language is not listed, please write it in one of the last five boxes and then drag the slider to the appropriate number. EXAMPLE: If you have 2 ELLs that speak Spanish, and 1 ELL that speaks Arabic, then you would drag the slider next to the word "Spanish" to "2", and then drag the slider next to the word "Arabic" to "1". The total number of ELLs across all languages should equal ${q://QID5/ChoiceTextEntryValue}.

- Spanish
- Chaldean
- Arabic
- Hmong
- Hindi
- Chinese
- Tagalog
- Japanese
- Korean
- Unknown
- Other
- Other
- Other
- Other
- Other

If you have any additional comments or clarifications, please use space below.

The total amount of students you reported on the previous page is ${q://QID68/TotalSum}. If this is not correct, please go back one page. Otherwise, please continue.

Now we would like to know how many years the ELLs in your classroom have been learning English. Please indicate how long the ELLs in your classroom have been learning English by dragging the slider to the number of ELLs in your classroom that fall into each category. EXAMPLE: If you have 2 ELLs that have been learning English for less than 1 year, and 1 ELL that has been learning English for 3 years, then you would drag the slider next to the words "Less than 1 year" to "2", and then drag the slider next to the words "3 to 4 years" to the "1".The total number of ELLs should equal ${q://QID5/ChoiceTextEntryValue}.

- Less than 1 year
- 1 to 2 years
- to 4 years
- 5 or more years
- Unknown

If you have any additional comments or clarifications, please use the space below.

The total amount of students you reported in the previous page is ${q://QID70/TotalSum}. If this is not correct, please go back one page. Otherwise, please continue.

During the course of instruction, schools may use universal screenings in essential academic areas to identify students' level of proficiency (usually three times per year). (Batsche et al, 2006)

Two examples of comprehensive screening systems of children's reading skills at the primary level are DIBELS and AIMSweb.

How many English Language Learners did you have in your classroom during the most recent universal reading screener assessment?

Please list the total number of ELLs in your classroom at that time, regardless of whether or not they participated in the screener administration.

If you do not administer a universal reading screener, please indicate how many ELLs you currently have in your classroom.

(please provide an exact numeric response, such as 4)

How many total students (including ELLs and non-ELLs) did you have in your classroom during the most recent universal reading screener administration?

Please list the total number of students in your classroom at that time, regardless of whether or not they participated in the screener administration.

Please provide an exact numeric response, such as 23.

If you have any additional comments or clarifications, please use the space below.

Please provide the totals below when thinking about the English Language Learners (ELLs) that were in your classroom during the last universal reading screening. Your total should add up to ${q://QID26/ChoiceTextEntryValue}

— Number of ELLs in your classroom who participated in the most recent reading universal screening
— Number of ELLs in your classroom who did not participate in the most recent reading universal screening
— Total

If you have any additional comments or clarifications, please use the space below.

Display IF: Number of ELLs who participated in screener >0

Do you know the number of ELLs in your classroom who met proficiency/benchmark standards on the most recent reading universal screener?

- ❍ Yes
- ❍ No

Display IF: Number of ELLs who participated in screener >0

If you have any additional comments or clarifications, please use the space below.

Display IF: Know number of ELLs who met benchmark = Yes

Please provide the totals below when thinking about the English Language Learners (ELLs) who participated in the most recent universal reading screening. Your total should add up to ${q://QID2/ChoiceNumericEntryValue/2}

Number of ELLs in your classroom who met proficiency/benchmark standards
Number of ELLs in your classroom who did not meet proficiency/benchmark standards
Total

Display IF: Know number of ELLs who met benchmark = Yes

If you have any additional comments or clarifications, please use the space below.

Display IF: Number of ELLs who participated in screener >0

Which of the following universal literacy screeners were administered to ELLs in your classroom during the most recent universal screening administration?

- ❑ DIBELS First Sound Fluency (FSF)-Typically administered in kindergarten
- ❑ DIBELS Letter Naming Fluency (LNF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Initial Sound Fluency (ISF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Phoneme Segmentation Fluency (PSF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Nonsense Word Fluency (NWF)-Typically administered in kindergarten through 2nd grade
- ❑ DIBELS Word Use Fluency (WUF)-Typically administered in kindergarten through 3rd grade
- ❑ DIBELS Oral Reading Fluency (ORF)-Typically administered in 1st through 6th grade
- ❑ DIBELS Retell Fluency (RTF); administered with DIBELS ORF-Typically administered in 1st through 6th grade
- ❑ DIBELS DAZE-Typically administered in 3rd through 6th grade
- ❑ AIMSweb Letter Naming Fluency (LNF)
- ❑ AIMSweb Letter Sound Fluency (LSF)
- ❑ AIMSweb Phoneme Segmentation Fluency (PSF)

- ❑ AIMSweb Nonsense Word Fluency (NWF)
- ❑ AIMSweb Reading CBM (Oral Reading Fluency)-Typically administered in kindergarten through 8th grade
- ❑ AIMSweb MAZE CBM-Typically administered in 1st through 8th grade
- ❑ IDEL Fluidez en Nombrar Letras (FNL)
- ❑ IDEL Fluidez en la Segmentación de Fonemas (FSF)
- ❑ IDEL Fluidez en las Palabras sin Sentido (FPS)
- ❑ IDEL Fluidez en la Lectura Oral (FLO)
- ❑ IDEL Fluidez en el Relato Oral (FRO)
- ❑ IDEL Fluidez en el Uso de las Palabras (FUP)
- ❑ Other _____
- ❑ Unsure/Don't Know

Display IF: Number of ELLs who participated in screener >0

Which personnel at your school administered the above universal screening tools to the ELLs in your classroom? (select all that apply)

- ❑ Myself
- ❑ Another general education teacher
- ❑ ESL or ELL teacher
- ❑ Special education teacher
- ❑ Intervention provider/educational assistant/reading support specialist
- ❑ Student support staff (speech pathologist, psychologist, social worker, OT)
- ❑ Other

Display IF: Number of ELLs who participated in screener >0

If you have any additional comments or clarifications, please use the space below.

Display IF: Number of ELLs who participated in screener >0

You reported that you included ${USPart/ChoiceNumericEntryValue/1} ELLs in the most recent universal screening. Which of the following factors influenced your decision to include these ELLs in the universal screening? (1-5 scale presented)

- My school has appropriate universal screening assessment available for measuring the reading skills of these ELLs
- The appropriate personnel is/are responsible for screening these ELLs
- Including these ELLs is what is normal/expected of me
- There is a supportive school environment for screening these ELLs
- My own beliefs about how administering universal screeners is one important step toward better outcomes for these ELLs

Display IF: Number of ELLs who did not participate in screener >0

You reported that you did not include ${USPart/ChoiceNumericEntryValue/2} ELLs in the most recent universal screening. Which of the following factors influenced your decision to not include these ELLs in the universal screening? (1-5 scale presented)

- My school does not have appropriate universal screening assessment available for measuring the reading skills of these ELLs
- I do not believe that the appropriate personnel is/are responsible for screening these ELLs
- Not including these ELLs is what is normal/expected of me
- There is an unsupportive school environment for screening these ELLs
- My own beliefs about how administering universal screeners is not an important step toward better outcomes for these ELLs

Please indicate the extent you agree with the following statement:
In general, including ELLs in universal screening can be one important step toward improving their reading outcomes.

❍ Strongly disagree
❍ Somewhat disagree
❍ Neither agree nor disagree
❍ Somewhat agree
❍ Strongly agree

If you have any additional comments or clarifications, please use the space below.

Tiered Reading Interventions occur when supplemental instruction is provided to those students who display poor response to the group instruction and/or students who continue to lag behind the group on critical measures of performance. These services are provided in addition to core instruction (also known as Tier 1 instruction). (Batsche et al, 2006)

Please note that Tiered Interventions may be different from English as a Second Language (ESL) instruction. A student may be receiving ESL services but not receiving a Tiered Reading Intervention. It is possible that a student may be receiving Tiered Reading Interventions in the ESL classroom, but the Tiered Intervention would need to be occurring in addition to any typical ESL instruction they would be receiving in order to be considered a Tiered Reading Intervention.

Below are some questions regarding the use of Tiered Reading Interventions with students in your classroom.

Please provide the totals below when thinking about the English Language Learners (ELLs) in your classroom. Your total should add up to the total number of ELLs in your classroom who were a part of your classroom during the most recent universal reading screener administration, which you reported as ${TotELLs/ChoiceTextEntryValue}

— Number of ELLs in your classroom who receive a Tiered Reading Intervention (beyond Tier One/typical instruction)
— Number of ELLs in your classroom who do not receive a Tiered Reading Intervention
— Total

If you have any additional comments or clarifications, please use the space below.

Display IF: Number of ELLs who received reading intervention >0

You reported that ${i1/ChoiceNumericEntryValue/1} ELLs in your classroom receive a Tiered Reading Intervention. Thinking about the ELLs who receive a Tiered Reading Intervention, for how many ELLs is/was the intervention effective?

Your total should add up to ${q://QID12/ChoiceNumericEntryValue/1}

— Number of ELLs for whom the Tiered Reading Intervention is/was effective
— Number of ELLs for whom the Tiered Reading Intervention is NOT/was NOT effective
— Number of ELLs for whom you are not sure if the Tiered Reading Intervention is/is not effective
— Total

Display IF: Number of ELLs who received reading intervention >0

Which personnel at your school provide tiered reading intervention to the ELLs in your classroom? (select all that apply)

❑ Myself
❑ Another general education teacher
❑ ESL or ELL teacher
❑ Special education teacher
❑ Intervention provider/educational assistant/reading support specialist
❑ Student support staff (speech pathologist, psychologist, social worker, OT)
❑ Other

Display IF: Number of ELLs who received reading intervention >0

You reported that you included ${i1/ChoiceNumericEntryValue/1} ELLs in tiered reading interventions. Which of the following factors influenced your decision to include these ELLs in tiered reading interventions (1-5 scale presented)

- My school has appropriate reading interventions available for these ELLs
- The appropriate personnel is/are responsible for providing tiered intervention to these ELLs
- Including these ELLs is what is normal/expected of me
- There is a supportive school environment for providing reading intervention to these ELLs
- My own beliefs about how providing tiered interventions is one important step toward better outcomes for these ELLs

Display IF: Number of ELLs who do not receive reading intervention >0

You reported that you did not include ${i1/ChoiceNumericEntryValue/2} ELLs in tiered reading interventions. Which of the following factors influenced your decision to not include these ELLs in tiered reading interventions (1-5 scale presented)

- My school does not have appropriate reading interventions available for these ELLs
- I do not believe that the appropriate personnel is/are responsible for providing tiered intervention to these ELLs
- Not including these ELLs is what is normal/expected of me
- There is an unsupportive school environment for providing reading intervention to these ELLs
- My own beliefs about how providing tiered interventions is not an important step toward better outcomes for these ELLs

☐ Please check this box if at least one ELL was not included in tiered reading interventions because he/she met benchmark on a universal screening measure.

Please indicate the extent you agree with the following statement:
In general, including ELLs in tiered reading interventions can be one important step toward improving their reading outcomes.

❍ Strongly disagree
❍ Somewhat disagree
❍ Neither agree nor disagree
❍ Somewhat agree
❍ Strongly agree

If you have any additional comments or clarifications, please use the space below.

Reading Progress Monitoring Tools are used to determine if a reading intervention is producing the desired effects. This is typically done with assessments that can be collected frequently and that are sensitive to small changes in student performance (Batsche et al, 2006). Progress monitoring occurs more frequently than universal screening. Below are some questions regarding the use of progress monitoring tool with ELLs in your classroom.

Please provide the totals below when thinking about the English Language Learners (ELLs) currently in your classroom. Your total should add up to the total number of ELLs in your classroom who were in your classroom at the time of the most recent universal screening, which you reported as ${TotELLs/ChoiceTextEntryValue}

— Number of ELLs in your classroom who receive reading progress monitoring
— Number of ELLs in your classroom who do not receive reading progress monitoring
— Total

If you have any additional comments or clarifications, please use the space below.

Display IF: Number of ELLs who receive progress monitoring >0

Which of the following progress monitoring tools are administered to ELLs in your classroom?

- ❑ DIBELS First Sound Fluency (FSF)-Typically administered in kindergarten
- ❑ DIBELS Letter Naming Fluency (LNF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Initial Sound Fluency (ISF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Phoneme Segmentation Fluency (PSF)-Typically administered in kindergarten through 1st grade
- ❑ DIBELS Nonsense Word Fluency (NWF)-Typically administered in kindergarten through 2nd grade
- ❑ DIBELS Word Use Fluency (WUF)-Typically administered in kindergarten through 3rd grade
- ❑ DIBELS Oral Reading Fluency (ORF)-Typically administered in 1st through 6th grade
- ❑ DIBELS Retell Fluency (RTF); administered with DIBELS ORF-Typically administered in 1st through 6th grade
- ❑ DIBELS DAZE-Typically administered in 3rd through 6th grade
- ❑ AIMSweb Letter Naming Fluency (LNF)
- ❑ AIMSweb Letter Sound Fluency (LSF)
- ❑ AIMSweb Phoneme Segmentation Fluency (PSF)
- ❑ AIMSweb Nonsense Word Fluency (NWF)
- ❑ AIMSweb Reading CBM (Oral Reading Fluency)-Typically administered in kindergarten through 8th grade
- ❑ AIMSweb MAZE CBM-Typically administered in 1st through 8th grade

- ❑ IDEL Fluidez en Nombrar Letras (FNL)
- ❑ IDEL Fluidez en la Segmentación de Fonemas (FSF)
- ❑ IDEL Fluidez en las Palabras sin Sentido (FPS)
- ❑ IDEL Fluidez en la Lectura Oral (FLO)
- ❑ IDEL Fluidez en el Relato Oral (FRO)
- ❑ IDEL Fluidez en el Uso de las Palabras (FUP)
- ❑ Other _____
- ❑ Unsure/Don't Know

Display IF: Number of ELLs who receive progress monitoring >0

Which personnel at your school provide tiered reading intervention to the ELLs in your classroom? (select all that apply)

- ❑ Myself
- ❑ Another general education teacher
- ❑ ESL or ELL teacher
- ❑ Special education teacher
- ❑ Intervention provider/educational assistant/reading support specialist
- ❑ Student support staff (speech pathologist, psychologist, social worker, OT)
- ❑ Other

Display IF: Number of ELLs who receive progress monitoring >0

You reported that you included ${P1/ChoiceNumericEntryValue/1} ELLs in progress monitoring. Which of the following factors influenced your decision to include these ELLs in progress monitoring (1-5 scale presented)

- My school has appropriate progress monitoring assessments available for measuring the reading skills of these ELLs
- The appropriate personnel is/are responsible for progress monitoring these ELLs
- Including these ELLs is what is normal/expected of me
- There is a supportive school environment for progress monitoring these ELLs
- My own beliefs about how progress monitoring is one important step toward better outcomes for these ELLs

Display IF: Number of ELLs who do not receive progress monitoring >0

You reported that you did not include ${P1/ChoiceNumericEntryValue/2} ELLs in progress monitoring. Which of the following factors influenced your decision to not include these ELLs in progress monitoring (1-5 scale presented)

- My school does not have appropriate progress monitoring assessments available for measuring the reading skills of these ELLs
- I do not believe that the appropriate personnel is/are responsible for progress monitoring these ELLs
- Not including these ELLs is what is normal/expected of me
- There is an unsupportive school environment for progress monitoring these ELLs
- My own beliefs about how progress monitoring is not an important step toward better outcomes for these ELLs

☐ Please check this box if at least one ELL was not included in progress monitoring because he/she does not receive a tiered reading intervention.

Please indicate the extent you agree with the following statement:
In general, including ELLs in progress monitoring can be one important step toward improving their reading outcomes.

❍ Strongly disagree
❍ Somewhat disagree
❍ Neither agree nor disagree
❍ Somewhat agree
❍ Strongly agree

If you have any additional comments or clarifications, please use the space below.

What types of information are commonly used in your classroom to inform whether changes are made in instruction and/or interventions with ELLs? Examples of change can include the amount of instruction, length of instruction, focus of instruction, and style of instruction

❑ Standardized achievement tests
❑ Curriculum-based measurements (such as universal screeners and progress monitoring tools)
❑ Professional judgment (using personal discretion to make a decision)
❑ Running records
❑ Reading level
❑ Classroom tests/quizzes
❑ Observations of student
❑ Reading specialist input
❑ Parent input
❑ Other _____
❑

If you have any additional comments or clarifications, please use the space below.

CARRY FORWARD ONLY SELECTED CHOICES FROM ABOVE

Thanks for letting us know what types of data you use!

Now, please select the three most important types of information used in your classroom to inform whether changes are made in instruction and/or interventions with ELLs. Examples of change can include the amount of instruction, length of instruction, focus of instruction, and style of instruction

- ❑ Standardized achievement tests
- ❑ Curriculum-based measurements (such as universal screeners and progress monitoring tools)
- ❑ Professional judgment (using personal discretion to make a decision)
- ❑ Running records
- ❑ Reading level
- ❑ Classroom tests/quizzes
- ❑ Observations of student
- ❑ Reading specialist input
- ❑ Parent input
- ❑ Other _____

If you have any additional comments or clarifications, please use the space below.

Display IF: Top three choice includes CBM

You reported that that the most important types of data you use to inform changes in instruction/intervention for ELLs are: {Q54/ChoiceGroup/SelectedChoices}. Which of the following factors influenced your decision to include Curriculum-Based Measurements, or CBMs (such as universal screeners and progress monitoring tools) on this list? (1-5 scale presented)

- The availability of high-quality curriculum-based measurement data for ELLs
- The appropriate personnel is/are involved in using this data
- Using CBM data for this is what is normal/expected of me
- There is a supportive school environment for using curriculum-based measurement data with ELLs
- My own beliefs about how using CBM data to inform instruction/intervention decisions is one important step toward better outcomes for these ELLs

Display IF: Top three choice does not include CBM

You reported that that the most important types of data you use to inform changes in instruction/intervention for ELLs are: {Q54/ChoiceGroup/SelectedChoices}. Which of the following factors influenced your decision to not include Curriculum-Based Measurements, or CBMs (such as universal screeners and progress monitoring tools) on this list? (1-5 scale presented)

- The lack of high-quality curriculum-based measurement data for ELLs
- I do not believe the appropriate personnel is/are involved in using this data
- Not using CBM data for this is what is normal/expected of me
- There is an unsupportive school environment for using curriculum-based measurement data with ELLs
- My own beliefs about how using CBM data to inform instruction/intervention decisions is not an important step toward better outcomes for these ELLs

Please indicate the extent you agree with the following statement:
In general, using CBM data to make instruction/intervention decisions about ELLs can be one important step toward improving their reading outcomes.

- ❍ Strongly disagree
- ❍ Somewhat disagree
- ❍ Neither agree nor disagree
- ❍ Somewhat agree
- ❍ Strongly agree

If you have any additional comments or clarifications, please use the space below.

What types of information are commonly used in your classroom to inform whether an ELL student is referred for a special education evaluation and/or special education services?

- ❑ Standardized achievement tests
- ❑ Curriculum-based measurements (such as universal screeners and progress monitoring tools)
- ❑ Professional judgment (using personal discretion to make a decision)
- ❑ Running records
- ❑ Reading level
- ❑ Classroom tests/quizzes
- ❑ Observations of student
- ❑ Reading specialist input
- ❑ Parent input
- ❑ Other
- ❑ Other
- ❑ None of the above, we have a policy that does not allow ELLs to be referred to special education at this grade level

If you have any additional comments or clarifications, please use the space below.

CARRY FORWARD ONLY SELECTED CHOICES FROM ABOVE

Thanks for letting us know what types of data you use!

Now, please select the three most important types of information used in your classroom to inform whether an ELL student is referred for a special education evaluation and/or special education services.

- ❑ Standardized achievement tests
- ❑ Curriculum-based measurements (such as universal screeners and progress monitoring tools)
- ❑ Professional judgment (using personal discretion to make a decision)
- ❑ Running records
- ❑ Reading level
- ❑ Classroom tests/quizzes
- ❑ Observations of student
- ❑ Reading specialist input
- ❑ Parent input
- ❑ Other
- ❑ Other
- ❑ None of the above, we have a policy that does not allow ELLs to be referred to special education at this grade level

If you have any additional comments or clarifications, please use the space below.

Display IF: Top three choice includes CBM

You reported that that the most important types of data you use to determine whether an ELL is referred for a special education evaluation and/or special education services are: {3Sped/ChoiceGroup/SelectedChoices}. Which of the following factors influenced your decision to include Curriculum-Based Measurements, or CBMs (such as universal screeners and progress monitoring tools) on this list? (1-5 scale presented)

- The availability of high-quality curriculum-based measurement data for ELLs
- The appropriate personnel is/are involved in using this data
- Using CBM data for this is what is normal/expected of me
- There is a supportive school environment for using curriculum-based measurement data with ELLs
- My own beliefs about how using CBM data to inform special education decisions is one important step toward better outcomes for these ELLs

Display IF: Top three choice do not include not CBM

You reported that that the most important types of data you use to determine whether an ELL is referred for a special education evaluation and/or special education services are: {3Sped/ChoiceGroup/SelectedChoices}. Which of the following factors influenced your decision to include Curriculum-Based Measurements, or CBMs (such as universal screeners and progress monitoring tools) on this list? (1-5 scale presented)

- The lack of high-quality curriculum-based measurement data for ELLs
- I do not believe the appropriate personnel is/are involved in using this data
- Not using CBM data for this is what is normal/expected of me
- There is an unsupportive school environment for using curriculum-based measurement data with ELLs
- My own beliefs about how using CBM data to inform special education decisions is not an important step toward better outcomes for these ELLs

Please indicate the extent you agree with the following statement:
In general, using CBM data to make special education decisions about ELLs can be one important step toward improving their reading outcomes.

❍ Strongly disagree
❍ Somewhat disagree
❍ Neither agree nor disagree
❍ Somewhat agree
❍ Strongly agree

If you have any additional comments or clarifications, please use the space below.

Is there anything else you would like to share regarding how ELLs are or are not included in RTI/MTSS practices in your classroom?

Have you had professional development focused on ELLs?

❍ Yes
❍ No

Have you had professional development focused on RTI or MTSS?

❍ Yes
❍ No

Have you had professional development focused on how to include ELLs in RTI/MTSS?

❍ Yes
❍ No

How confident do you feel in providing effective instruction to ELLs in general?

❍ Not at all confident
❍
❍ Neutral
❍
❍ Very confident

If you have any additional comments or clarifications, please use the space below.

Please answer a few questions about yourself.

How many years of experience do you have teaching?

Please select any or all of the degrees you have earned:

- ❑ Vocational degree
- ❑ Associate's degree
- ❑ Bachelor's degree
- ❑ Second bachelor's degree
- ❑ Master's degree
- ❑ Second Master's degree
- ❑ Educational specialist degree (Master's plus at least one year)
- ❑ Certificate of Advanced Graduate Studies
- ❑ Doctoral degree
- ❑ Other _____

How many years of education (beyond 12th grade) have you completed?

Please select any or all of the endorsements you have earned:

- ❑ English and language arts
- ❑ Early childhood
- ❑ Educational technology
- ❑ Reading/Reading specialist
- ❑ Special education
- ❑ English as a second language/TESOL
- ❑ Specific language (such as Spanish, French, etc.); please list language

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If you have any additional comments or clarifications, please use the space below.

Please indicate your gender?

- ❍ Male
- ❍ Female
- ❍ Other _____

Please indicate your age:

- ❍ 20-30 years old
- ❍ 31-40 years old
- ❍ 41-50 years old
- ❍ 51-60 years old
- ❍ 60+ years old
- ❍

Please indicate each race/ethnicity that you identify as:

- ❑ White or Caucasian

- ❑ Black or African American
- ❑ Asian
- ❑ Hispanic or Latino/a
- ❑ Native Hawaiian or Pacific Islander
- ❑ American Indian or Alaska Native
- ❑ Other _____

If you have any additional comments or clarifications, please use the space below.

First grade teachers are also invited to take part in a 90-minute focus group session or a 45-minute individual interview to be held later this school year or in the early summer to discuss English Language Learner inclusion in RTI practices. Additional compensation ($40) will be provided for focus group/interview participation, and locations will be selected based on teachers' geographic location. If you are interested in participating or learning more about the focus groups or interviews, please indicate this below.

- ❍ Yes, I am interested in potentially participating in a focus group or interview. Please send me more information.
- ❍ No, I am not interested in participating in a focus group or interview.

Please click the arrow below to submit the survey and access the survey payment page.

Thank you for your time and participation!

Appendix C: Teacher Survey Changes Based on Pilot Data

Issue	Solution
The logic for the data-based decision question forces all survey takers to respond to the DID NOT option, even when they selected a CBM.	Edited the question logic
Survey software does not register surveys as being complete if respondents do not click the link to the final page, so surveys stay in "not finished" section of Qualtrics and payments are not processed.	Changed payment link to be on "thank you" page
Schools are starting to administer spring benchmark, and initial survey included only references to winter benchmark	Changed "most recent" to "winter" when referring to universal screeners
The final CHAT question in each section says "leads to", which causes concern about over-emphasizing testing	Change the wording to: "can be one important step toward"
The federal definition of ELL is too verbose and hard to follow/understand	Definition edited for clarity. Examples and non-examples of ELLs added.
Respondents aren't answering the Top Three question	Fixed question logic to mandate a response
The sliding questions are often correct, but it seems like a few teachers accidently moved a bar too far	Created a page where teachers must double check their responses
The question that asks "please check this box if one or more ELL did not receive XXX because they met XXX" can't be unchecked if accidentally checked	Changed so it can be unchecked
Some teachers are answering 0 for "number of students in your class who do XXX", but then not putting in the expected number for the number of students who do not do that thing. This is probably because they aren't reading the whole question	Bolded the words "do" and "do not"
The CHAT matrix questions sometimes go unanswered	Fixed question logic to mandate a response
Teachers might be confused or not fall neatly into a category on any given page	Comments section added to each survey page to provide teachers opportunity to explain further if needed

Appendix D: Teacher Interview Protocol

Today I will be asking you some questions about RTI/MTSS reading practices, and why English language learners (ELLs) are or are not included in these practices. Response to Intervention (RTI) and Multi-Tiered Systems of Support (MTSS) is defined as the following process (Fuchs, Mock, Morgan & Young, 2003):

1. Students are provided with generally effective reading instruction by their classroom teachers
2. Their progress is monitored (universal screening, often done with AIMSweb or DIBELS)
3. Those who do not respond get something else, or something more, from their teacher of someone else (tiered reading interventions)
4. Again, their progress is monitored (progress monitoring, often done with AIMSweb or DIBELS)
5. Those who still do not respond either qualify for special education or for special education evaluation.

Please note that there are no right or wrong answers for why English language learners may or may not be included in these practices. I am here because I want to understand teachers' perspectives on this topic.

I'm anticipating today's session will take about 60 minutes. Today's session will be audio taped; but only I and my research team will listen to the contents. No one from your schools, ISD, ESA, or anyone else will have access to these tapes, nor will I discuss what is said here today except in the write up of the study, which will not include your name or the name of your schools. Do you have any questions before we begin?

Question
1. What is your name? And could you please describe your position at [insert school name].
Begin Audio Recording
2. Thinking about reading practices, what is the first thing that comes to mind when you hear the phrases Response to Intervention, or RTI, and Multi-Tiered Systems of Support, or MTSS?
3. What is the first thing that comes to mind when you think about ELLs being included in RTI/MTSS reading practices?
4. What does universal screening of reading skills look like in your classroom? a. Are ELL students included?

5. Now, take a moment to think about an English Language Learner in your classroom, either from this year or from previous years. Did this student participate in the universal screening?
    a. IF YES:
        i. Why was this student included?
        ii. Are there any circumstances that would have led to this student not being included in universal screening?
    b. IF NO:
        i. Why was the student not included?
        ii. Are there any circumstances that would have led to this student being included in universal screening?

6. Now that we've talked a little about ELLs participating or not participating in universal screening, what is your reaction to including ELLs in tiered reading interventions?
    a. Why would an ELL be included in a tiered reading intervention?
    b. Why would an ELL not be included in a tiered reading intervention?

7. What is your reaction to including ELLs in progress monitoring?
    a. Why would an ELL be included in a progress monitoring?
    b. Why would an ELL not be included in progress monitoring?

8. Think again about the ELL in your classroom that you thought of earlier. Suppose you were wondering whether this student was receiving enough support, or possibly too much support. How would you make this determination?
    a. What steps would you take to get this ELL more or less support?
    b. Would you use universal screening/progress monitoring data in making this determination?
        i. Why/Why not?

9. Now, suppose you were wondering whether this student would benefit from special education services. How would you make the decision on whether or not to refer this student for an evaluation?
    a. What steps would you need to take to potentially qualify this student for special education?
    b. Would you use universal screening/progress monitoring data in making this determination?
        i. Why/Why not?

10. What else would you like to share about ELLs and RTI at your school?

11. Suppose you had one minute to summarize your thoughts about including ELLs in RTI or MTSS, what would you say?

CHAT Questions (Prompts used as needed for teacher interviews)

- Tools
    - What resources are available for assessing/providing interventions to ELLs?
    - How much time do you have for that?
    - Who at your school is qualified to work with ELLs?
- Rules
    - Are there school or district policies and procedures that relate to ELL inclusion in MTSS practices? If so, what are they?
    - Are there procedures for moving ELLs between tiers of interventions? If so, what are they?
    - Are the procedures associated with special education evaluations for ELLs in your school based on RTI/MTSS data? If so, how so?
- Community
    - Does school culture, for instance an overall positive or negative attitude toward RTI/MTSS, influence that?
    - Do student demographics influence that? If so, how?
    - Do administration attitudes toward ELLs influence ELL inclusion in MTSS practices? If so, how?
- Division of Labor
    - Which staff members are included in administering MTSS practices to ELLs?
    - How are ELL families included in MTSS practices?
    - Do RTI/MTSS providers and ELL/ESL providers collaborate? If so, how do they do so?
- Object
    - What overall goal for you or the student did you have in mind when deciding to include/not include/ him or her?
    - What was your biggest reason for choosing to do it that way?
    - What did you hope would happen as a result?
- Outcome
    - In your experience, what did the outcome of that look like?
    - Did it increase stress? How so?
    - Did it create more positive outcomes for ELLs? How so?

Appendix E: Principal/MiBLSi Interview Protocol

Today I will be asking you some questions about RTI/MTSS reading practices, and why English language learners (ELLs) are or are not included in these practices. Response to Intervention (RTI) and Multi-Tiered Systems of Support (MTSS) is defined as the following process (Fuchs, Mock, Morgan & Young, 2003):

1. Students are provided with generally effective reading instruction by their classroom teachers
2. Their progress is monitored (universal screening, often done with AIMSweb or DIBELS)
3. Those who do not respond get something else, or something more, from their teacher of someone else (tiered reading interventions)
4. Again, their progress is monitored (progress monitoring, often done with AIMSweb or DIBELS)
5. Those who still do not respond either qualify for special education or for special education evaluation.

Please note that there are no right or wrong answers for why you may or may not be including ELLs in these practices. I am here because I want to understand schools' perspectives on this topic.

I'm anticipating today's session will take about 60 minutes. Today's session will be audio taped; but only myself and other researchers will listen to the contents. No one from your schools, ISD, ESA, or anyone else will have access to these tapes, nor will I discuss what is said here today except in the write up of the study, which will not include your name or the name of your schools. Do you have any questions before we begin?

Question
1. What is your name? And could you please describe your position at [insert school name/MIBLSI]. a. Can you describe the ELL population at your school?
Begin Audio Recording
2. What is the first thing that comes to mind when you hear the phrases Response to Intervention, or RTI, and Multi-Tiered Systems of Support, or MTSS? a. How long has your school been implementing this?

3. What does universal screening of reading skills look like at your school?
    a. Who is included?
    b. Are ELL students included?
    c. Who administers the screeners?
    d. What screeners do you use?

4. What do tiered reading interventions look like at your school?
    a. Why would an ELL be included in a tiered reading intervention?
    b. Why would an ELL not be included in a tiered reading intervention?

5. What does progress monitoring look like at your school?
    a. Why would an ELL be included in a progress monitoring?
    c. Why would an ELL not be included in progress monitoring?

6. What kind of data do you use to determine whether ELLs at your school are progressing appropriately?
    a. Why do you use/not use universal screening/progress monitoring data?

7. What kind of data do you use to determine whether ELLs at your school at should be referred to special education services or a special education evaluation?
    a. Why do you use/not use CBM data?

8. What else would you like to share about ELLs and RTI at your school?

9. Now I would just like to ask some demographic questions.
    a. How many years of experience do you have in education?
    b. What degrees have your earned?
    c. How many years of education have you completed?
    d. Do you have any additional endorsements?
    e. Have you had professional development focused on ELLs?
    f. Have you had professional development focused on RTI/MTSS?
    g. Have you had professional development focused on including ELLs in MTSS?
    h. On a scale of 1-5 with 1 being not at all confident and 5 being very confident, how confident do you feel about your school providing effective instruction to ELLs?
    i. What is your gender?
    j. How old are you?
    k. What is your race/ethnicity?

CHAT Questions (Prompts used as needed)

- Tools
    - What resources are available for assessing/providing interventions to ELLs?
    - Is finding enough time an issue for this?
    - Who at your school is qualified to work with ELLs?
- Rules
    - Are there school or district policies and procedures that relate to ELL inclusion in MTSS practices? If so, what are they?
    - Are there procedures for moving ELLs between tiers of interventions? If so, what are they?
    - Are the procedures associated with special education evaluations for ELLs in your school based on RTI/MTSS data? If so, how so?
- Community
    - Does school culture, for instance an overall positive or negative attitude toward RTI/MTSS, influence that?
    - Do student demographics influence that? If so, how?
    - Do teacher attitudes toward ELLs influence ELL inclusion in MTSS practices? If so, how?
- Division of Labor
    - Which staff members are included in administering MTSS practices to ELLs?
    - How are ELL families included in MTSS practices?
    - Do RTI/MTSS providers and ELL/ESL providers collaborate? If so, how do they do so?
- Object
    - What overall goal for you or the student did you have in mind when deciding to include/not include/ him or her?
    - What was your biggest reason for choosing to do it that way?
    - What did you hope would happen as a result?
- Outcome
    - In your experience, what did the outcome of that look like?
    - Did it increase stress? How so?
    - Did it create more positive outcomes for ELLs? How so?

Appendix F: Consent Documents

Administrator Permission Form

Dear Administrator,

My name is Elizabeth Snyder and I am a School Psychology doctoral student at Michigan State University. I am currently partnering with MiBLSi on a research project regarding MTSS practices with English Language Learners. I am asking your permission to:

- Access data from MiBLSi's database regarding your school
- Ask early elementary teachers in your school if they would like to participate in an online survey and/or a focus group.
- Ask about your interest in potentially participating in a one-on-one interview

If you are willing to provide permission for me to access the school's MiBLSi data and contact early elementary teachers at your school, please sign and return the attached consent form or complete the electronic version of the consent at the link below. If you have any questions/concerns, please feel free to contact me using the contact information below.

Consent form link: [Consent form link to be embedded here]

Thank you for your consideration!

Elizabeth Snyder, MA
Doctoral Student in the College of Education
Michigan State University
Email: cookeli4@msu.edu
Phone: XXX-XXX-XXXX

Research Participant Information and Consent Form

You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: English language learners in MTSS reading implementation: An exploratory study of inclusion and teacher perceptions

Researcher and Title: Elizabeth Snyder, MA, Doctoral Student in School Psychology; and Dr. Sara E. Witmer (formerly Sara E. Bolt), Associate Professor of School Psychology

Department and Institution: Department of Counseling, Educational Psychology, and Special Education, Michigan State University

Address and Contact Information: 620 Farm Lane, Rm 434
Michigan State University
East Lansing, MI 48824-1034
(517)432-9621

Sponsors: Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi); Michigan State University College of Education

1. PURPOSE OF RESEARCH

- You are being asked to participate in a research study on the inclusion of English language learners in multi-tiered system of supports (MTSS) practices
- This study consists of analyzing school data collected by MiBLSi, surveying/interviewing teachers, and interviewing administrators
- From this study, the researchers hope to have a better understanding of current MTSS practices within schools and how ELLs are included in these practices.

2. WHAT YOU WILL DO

As a participant in the research study, you are giving permission for the researchers to access your school's data through the MiBLSi database and to contact first grade teachers requesting their participation in an online survey, focus group, or both. You can also give permission for the researchers to interview you regarding ELL inclusion in MTSS practices. No other actions from you or your school are required for participation in the study.

3. POTENTIAL BENEFITS

You will not directly benefit from your participation in this study. However, your school's participation in this study may contribute to researchers' understanding of how schools implement MTSS and how ELLs are involved in these practices.

4. POTENTIAL RISKS

There are no foreseeable risks associated with participation in this study.

5. PRIVACY AND CONFIDENTIALITY

- The data for this project are being kept strictly confidential.
- Only researchers, trained research assistants and the Institutional Review Board (IRB) will have access to your school's MiBLSi data, as well as survey/interview/focus group results
- Although we will make every effort to keep your data confidential there are certain times, such as a court order, where we may have to disclose your data.
- The results of this study may be published or presented at professional meetings, but your identity and those of all research participants will remain anonymous.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

- Participation is completely voluntary. Refusal to participate will involve no penalty and you may discontinue participation at any time.
- You have the right to say no.
- You may change your mind at any time and withdraw.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

There are no costs or compensation for the administration for being in the study. (Teachers are compensated $10 for participating in the survey, and $40 for participating in a focus group. Administrators who are selected for an interview will also be compensated $40)

8. CONTACT INFORMATION

If you have concerns or questions about the purposes or functions of this study, please contact the Mrs. Elizabeth Snyder at cookeli4@msu.edu or XXX-XXX-XXXX. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at Olds Hall, 408 West Circle Drive #207, MSU, East Lansing, MI 48824.

9. DOCUMENTATION OF INFORMED CONSENT

Your signature below means that you voluntarily agree to participate in this research study, which allows the researcher(s) to:

- Access MiBLSi data regarding your school
- Ask early elementary teachers if they are interested in participating in a survey and potential focus group

---

Signature Date

Your signature below means that you voluntarily agree to participate in this research study, which allows the researcher(s) to:

- Contact you regarding a one-on-one interview

_____

Signature Date

Teacher Permission Form: Teacher Survey

Dear Teacher,

My name is Elizabeth Snyder and I am a School Psychology doctoral student at Michigan State University. I am currently partnering with MiBLSi on a research project regarding MTSS practices with English Language Learners, and I am asking for your participation in this study. Specifically, I am asking for your participation in an online survey which takes about 25 minutes to complete. Amazon gift cards worth $10 will be provided to each teacher who completes the survey as compensation for your time. If you are interested in participating, please follow the link below to the survey. If you have any questions/concerns, please contact me using the information provided below.

Survey link: [Survey link to be embedded here]

Thank you for your consideration!

Elizabeth Snyder, MA
Doctoral Student in the College of Education
Michigan State University
Email: cookeli4@msu.edu
Phone: XXX-XXX-XXXX

Research Participant Information and Consent Form

You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: English language learners in MTSS reading implementation: An exploratory study of inclusion and teacher perceptions

Researcher and Title: Elizabeth Snyder, Doctoral Student in School Psychology; and Dr. Sara E. Witmer (formerly Sara E. Bolt), Associate Professor of School Psychology

Department and Institution: Department of Counseling, Educational Psychology, and Special Education, Michigan State University

Address and Contact Information: 620 Farm Lane, Rm 434
Michigan State University
East Lansing, MI 48824-1034
(517)432-9621

Sponsors: Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi); Michigan State University College of Education

1. PURPOSE OF RESEARCH

- You are being asked to participate in a research study on the inclusion of English language learners in multi-tiered system of supports (MTSS) practices
- This study of consists surveying teachers.
- From this study, the researchers hope to have a better understanding of current MTSS practices within schools and how ELLs are included in these practices.

2. WHAT YOU WILL DO

As a participant in the research study, you will take an online survey that is approximately 25 minutes long.

3. POTENTIAL BENEFITS

You will not directly benefit from your participation in this study. However, your participation in this study may contribute to researchers' understanding of how schools implement MTSS and how ELLs are involved in these practices.

4. POTENTIAL RISKS

- There are no foreseeable risks associated with participation in this study.

5. PRIVACY AND CONFIDENTIALITY

- The data for this project are being kept strictly confidential.
- Although we will make every effort to keep your data confidential there are certain times, such as a court order, where we may have to disclose your data.
- The results of this study may be published or presented at professional meetings, but your identity and those of all research participants will remain anonymous.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

- Participation is completely voluntary. Refusal to participate will involve no penalty and you may discontinue participation at any time.
- You have the right to say no.
- You may change your mind at any time and withdraw.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

- You will receive compensation in the form of a $10 Amazon gift card for your completion of the survey.

8. CONTACT INFORMATION

If you have concerns or questions about the purposes or functions of this study, please contact the Mrs. Elizabeth Snyder at cookeli4@msu.edu or XXX-XXX-XXXX. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at Olds Hall, 408 West Circle Drive #207, MSU, East Lansing, MI 48824.

9. DOCUMENTATION OF INFORMED CONSENT

Your signature below means that you voluntarily agree to participate in this research study.

_____

Signature Date

Teacher Permission Form: Interview

Research Participant Information and Consent Form

You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: English language learners in MTSS reading implementation: An exploratory study of inclusion and teacher perceptions

Researcher and Title: Elizabeth Snyder, Doctoral Student in School Psychology; and Dr. Sara E. Witmer (formerly Sara E. Bolt), Associate Professor of School Psychology

Department and Institution: Department of Counseling, Educational Psychology, and Special Education, Michigan State University

Address and Contact Information: 620 Farm Lane, Rm 434
Michigan State University
East Lansing, MI 48824-1034
(517)432-9621

Sponsors: Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi); Michigan State University College of Education

1. PURPOSE OF RESEARCH

- You are being asked to participate in a research study on the inclusion of English language learners in multi-tiered system of supports (MTSS) practices
- This study consists of interviewing teachers via interviews
- From this study, the researchers hope to have a better understanding of teacher perceptions toward the inclusion of ELLs in current MTSS practices within schools

2. WHAT YOU WILL DO

As a participant in the research study you will participate in an interview, which will be approximately 40-60 minutes long. Interview sessions will be audio recorded.

3. POTENTIAL BENEFITS

You will not directly benefit from your participation in this study. However, your participation in this study may contribute to researchers' understanding of teacher perceptions of ELL inclusion in MTSS these practices.

4. POTENTIAL RISKS

- There are no foreseeable risks associated with participation in this study.

5. PRIVACY AND CONFIDENTIALITY

- The data for this project are being kept strictly confidential. No teacher names or places of work will be reported in the data.
- Only researchers, trained research assistants and the Institutional Review Board (IRB) will have access to your school's MiBLSi data.
- Although we will make every effort to keep your data confidential there are certain times, such as a court order, where we may have to disclose your data.
- The results of this study may be published or presented at professional meetings, but your identity and those of all research participants will remain anonymous.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

- Participation is completely voluntary. Refusal to participate will involve no penalty and you may discontinue participation at any time.
- You have the right to say no.
- You may change your mind at any time and withdraw.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

- You will receive compensation in the form of a $40Amazon gift card for your participation in the interview, if you decide to participate in this aspect of the study and are selected for participation in this aspect of the study.

8. CONTACT INFORMATION

If you have concerns or questions about the purposes or functions of this study, please contact the Mrs. Elizabeth Snyder at cookeli4@msu.edu or XXX-XXX-XXXX. If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at Olds Hall, 408 West Circle Drive #207, MSU, East Lansing, MI 48824.

9. DOCUMENTATION OF INFORMED CONSENT

Your signature below means that you voluntarily agree to participate in this research study.

_____

Signature Date

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