



Western Michigan University
ScholarWorks at WMU

Masters Theses

Graduate College

4-2016

Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support

Carla N. Osborn
Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/masters_theses



Part of the Educational Leadership Commons, and the Elementary Education and Teaching Commons

Recommended Citation

Osborn, Carla N., "Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support" (2016). *Masters Theses*. 693.

https://scholarworks.wmich.edu/masters_theses/693

This Masters Thesis-Open Access is brought to you for free and open access by the Graduate College at ScholarWorks at WMU. It has been accepted for inclusion in Masters Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



STRENGTHENING TIER 1 ELEMENTARY READING WITHIN A MULTI-TIERED
SYSTEM OF SUPPORT

by

Carla N. Osborn

A project submitted to the Graduate College
in partial fulfillment of the requirements
for the degree of Specialist in Education
Educational Leadership, Research and Technology
Western Michigan University
April 2016

Specialist Project Committee:

Dennis McCrumb, Ed.D., Chair

Brett Geier, Ed.D.

Jeanine Mattson-Gearhart Ed.D.

STRENGTHENING TIER 1 ELEMENTARY READING WITHIN A MULTI-TIERED SYSTEM OF SUPPORT

Carla N. Osborn, Ed.S.

Western Michigan University, 2016

Training teachers about the foundational reading skills is an important step in creating students who are proficient readers. However, training is not enough. Teachers need support through instructional coaching. Even with coaching support, sustainability of these practices will be a challenge if systems are not in place throughout the district to support ongoing implementation. By combining the processes of creating a Multi-Tiered System of Support, reading training, and instructional coaching, sustainability of practices can be possible. Research does not currently exist as to whether the combination of these efforts has increased student achievement in reading at the elementary level. This paper will provide the research to determine whether the integration of these practices will improve student achievement for students in kindergarten through third grade.

Copyright by
Carla Osborn
2016

ACKNOWLEDGMENTS

My Colleagues-Thank you to my colleagues for your patience, offering of advice, and encouragement during this process. I am thankful to have such a wonderful team of educators devoted to helping students be successful.

My Family & Friends- Thank you to my husband and two children for your patience and understanding while I completed this project. I know that it required a lot of time away from each of you. I know that, in time, that this will help my children to understand and appreciate the importance of higher education. Thank you to those who provided me with friendship and social time throughout this process.

My Specialist Committee- Thank you to my committee chair and two other members of my specialist committee for your guidance and feedback during this project. Without your support, this project would not have made it to completion.

Staff within the District in Southwest Michigan- I appreciate your willingness to allow me to complete research in your district. Thank you for your acceptance of me as an educator who is willing to work side-by-side district leaders, building administrators, and teachers, so that students can have the best education possible. I am grateful to be able to work with the dedicated staff in your district.

TABLE OF CONTENTS

ACKNOWLEDGMENTS	ii
LIST OF TABLES	v
LIST OF FIGURES	vii
INTRODUCTION	1
Background	1
Overview of School Reform	1
Overview of Multi-Tiered Systems of Support	2
Student Achievement within a Multi-Tiered System of Support.....	3
Training Teachers in Effective Reading Instruction	4
Training Followed by Instructional Coaching for Teachers	6
Statement of the Problem.....	7
Purpose Statement.....	8
Research Questions	9
METHOD	9
Participants.....	9
Measures and Timeline	10
Qualitative Design	13
RESULTS	14
Data Analysis: Baseline	14
Data Analysis: Implementation.....	20
Data Analysis: Monitoring.....	38

Table of Contents-Continued

CONCLUSIONS	51
Research Question 1	52
Research Question 2	57
Additional Data Analyzed.....	59
DISCUSSION	61
Recommendations.....	62
Conclusion	64
REFERENCES	66
APPENDICES	71
A. Specialist Project & Measurement Timeline.....	71
B. Building Codes.....	74
C. Coaching Pilot Model	75
D. Informed Consent	81
E. Phases of Implementation Overview for District in Southwest Michigan	84
F. Descriptions of DIBELS Next Measures.....	89
G. HSIRB Approval with Signed Consent Form.....	90
SEPARATE APPENDICES	
H. Approved Committee Appointment Form	
I. Specialist Project Proposal Approval Form	
J. HSIRB Initial Application	
K. HSIRB Online Modules-Certificate of Completion	

LIST OF TABLES

1: Reading Skills Measured by DIBELS Next Indicators	12
2: Phonological Awareness Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015.....	24
3: Alphabetic Principle & Phonics Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015	26
4: Accurate & Fluent Reading Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015	28
5: Comprehension Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015	30
6: Composite Scores during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015	33
7: Pilot Building (Building A), Highest Percentage Growth as Compared to Buildings C-D, Winter 2015-Spring 2015	34
8: Pilot Building (Building A), Highest Percent Proficient as Compared to Buildings C-D, Spring 2015	36
9: Phonological Awareness Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016	41
10: Alphabetic Principle & Phonics Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016	42
11: Accurate & Fluent Reading Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016	44
12: Comprehension Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016	45
13: Composite Scores during Monitoring, Percent Proficient, Fall 2015-Winter 2016	46

List of Tables-Continued

14: Reading Tiered Fidelity Inventory Process Data, Tier 1 Scores, Winter 2016	49
15: DIBELS Fidelity Checks, Winter 2016	50
16: Overall Impact on Phonological Awareness Skills	53
17: Overall Impact on Alphabetic Principle & Phonics Skills	55
18: Overall Impact on Accurate & Fluent Reading Skills	57
19: Overall Impact on Comprehension Skills	59
20: Overall Impact on Composite Scores	61

LIST OF FIGURES

1: Kindergarten Trend Data-% at Benchmark on DIBELS Next Composite	16
2: 1 st Grade Trend Data-% at Benchmark on DIBELS Next Composite.....	16
3: 2 nd Grade Trend Data-% at Benchmark on DIBELS Next Composite.....	17
4: 3 rd Grade Trend Data-% at Benchmark on DIBELS Next Composite	17

Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support

Introduction

Background

Overview of school reform.

Comprehensive school reform models are often used in schools as a process of school improvement. These models provide a coherent vision of the district's mission and educational philosophy and emphasizes that school improvement efforts are complex and difficult to implement without outside guidance and assistance (Vernezy, et al., 2006). Comprehensive school reforms are found to be effective when every teacher is trained and every teacher is continually supported during implementation. Aladjem & Borman (2006) and Vernezy, et al. (2006) conducted research on a variety of comprehensive school reform models. Findings from this research shows that very few schools fully implemented their reform model as it was intended (Aladjem & Borman, 2006). In fact, Vernezy, et al. (2006) found that over the first three years of implementation of a new comprehensive school reform, fewer than 50% of teachers received some training and less than 25% of those teachers received support during implementation. This resulted in fewer than 10% of the schools implementing a new school reform as it was intended. Therefore, the majority of students in the schools did not benefit from the reform.

Through their research, Aladjem & Borman (2006) found that comprehensive school reform models work when implemented with fidelity as directed. Additionally, they found that it takes three to five years for the effects of implementation to be shown in student achievement data. The success of comprehensive school reform models is impacted by the buy-in of school principals and staff during implementation.

Overview of multi-tiered systems of support.

Multi-Tiered Systems of Support, or MTSS, is a “data-driven, prevention-based framework for improving learning outcomes for all students through a layered continuum of evidence-based practices & systems” (MiBLSi, 2014b, PowerPoint slide). MTSS is commonly referenced as RtI, which has a similar, but different definition: “RtI promotes a Multi-Tiered system focused on providing students with increasing levels of instructional support, usually represented by three Tiers” (Allain & Eberhardt, 2011, p. 3). According to the Kansas Multi-Tier System of Supports (2010b), “The principles and practices of a MTSS are based upon what research has shown to be effective in both creating successful and sustainable system change as well as what is necessary in providing the most effective instruction for all students” (p. 1). For the purposes of this paper, further analysis of a Multi-Tiered System of Support will be called MTSS.

Many MTSS models are used, but common features can be found across all of the reform models. One model describes the features as: universal screening, data-based decision making and problem solving, continuous progress monitoring, continuum of evidence-based practices, and a focus on fidelity of implementation (MiBLSi, 2014a). According to the Kansas Multi-Tier System of Supports (2010a), a focus should be put on Tier 1 instruction, which is explicit, systematic, and provides scaffolding and differentiated support to students. Once Tier 1 is in place, students who do not attain adequate achievement through core instruction, should receive additional support through a comprehensive intervention system, known as Tiers 2 and 3. Many MTSS guidelines strive for 80% of the students to reach the benchmark guideline on universal screeners for

Tier 1, less than 15% who need a second Tier of support, and less than 5% who need a third Tier of support. (Kansas Multi-Tier System of Supports, 2010; MiBLSi, n.d.).

MiBLSi (2014a) lists four elements of MTSS: alignment, capacity, sustainability, and durability. The process of district MTSS assists in aligning goals, priorities, resources, and use of personnel among the ISD, local districts, and schools. The role of the district in a MTSS framework is to standardize the process, while the role of the buildings is to customize implementation (MiBLSi, 2013). The intention is for districts to build the capacity to support implementation, which eventually will be embedded into practice, and become a part of the fabric of the district which will cause it to be sustainable over time. Not only will it be sustained, the practices will withstand the test of time, staff turnover, and the addition of other initiatives (VanDerHeyden & Tilly, 2010).

Student achievement within a multi-tiered system of support.

Creating and sustaining a Multi-Tiered System of Support for reading within a district is of utmost importance. The literacy knowledge and skills that are developed in kindergarten through third grade predict later literacy achievement (Sparks, Patton, & Murdoch, 2014). The statistics concerning early reading skill acquisition and the overall impact on achievement are startling. The evidence in various studies (Juel, 1988, and Francis, Shaywitz, Stuebing, Shaywitz, & Fletcher, 1996) indicates that a poor reader in first grade will most likely remain a poor reader unless instruction is focused on their skill deficit. Unfortunately, students who are poor readers at the end of elementary school are likely to have encountered literacy problems as early as preschool (National Reading Panel, 2000). Through the process of data analysis, schools can detect these problems

early and ensure that all children receive effective instruction at Tier 1 and provide additional support as needed (Kansas Multi-Tier System of Supports, 2010a).

Training teachers in effective reading instruction.

A large impact on the development of literacy knowledge and skills can occur through classroom instruction (Connor, Morrison, & Katch, 2004). Effective and efficient teaching occurs through explicit and systematic instruction (Archer & Hughes, 2011).

Explicit instruction consists of

a series of supports or scaffolds, whereby students are guided through the learning process with clear statements about the purpose and rationale for learning the new skill, clear explanations and demonstrations of the instructional target, and supported practice with feedback until independent mastery has been achieved (Archer & Hughes, 2011, p. 1).

This process guides students through the learning with modeling by the teacher, opportunities to practice with the teacher, and independent practice, while the teacher checks for understanding.

In 2000, the National Reading Panel (NRP) released its findings related to best practices in reading instruction, which are still relevant today. Five areas of reading instruction were studied: (a) phonemic awareness, (b) phonics, (c) fluency, (d) vocabulary, and (e) comprehension. The panel found that a combination of explicit instruction in phonemic awareness, systematic phonics instruction, strategies to improve fluency, and methods to enhance comprehension were needed in beginning reading instruction (National Reading Panel, 2000).

In 2010, the Common Core State Standards were introduced and were adopted by states across the nation (Common Core State Standard Initiative, 2014). Within the Common Core State Standards for kindergarten through fifth grade, focus is put on the foundational skills in the early grades. In kindergarten and first grade, the foundational skills consist of (a) print concepts, (b) phonological awareness, (c) phonics & word recognition, and (d) fluency. Standards for vocabulary and comprehension are also introduced in these grades, but are not the focus. However, in second through fifth grade, print concepts and phonological awareness are no longer a focus of reading instruction (Kosanovich & Verhagen, 2012). At this level, the focus of the standards transitions to advanced phonics skills, vocabulary, and comprehension (Common Core State Standard Initiative, 2014). Therefore, the need for students to master these important foundational skills in kindergarten and first grade become increasingly important and overlap with the finding of the NRP related to beginning reading instruction.

Phonemes are the smallest units in spoken language. Phonemic awareness is the ability to hear and manipulate phonemes in spoken words. The NRP found that teaching phonemic awareness to children significantly improves their reading when compared to instruction without any attention to phonemic awareness (National Reading Panel, 2000). Phonics instruction focuses on the relationship between the letters of written language and the individual sounds of spoken language in order to read words. As noted by Archer & Hughes (2011), systematic phonics instruction can be accomplished through a set of pre-determined associations between letters and sounds and taught in a logical sequence. According to the NRP (2000), students in kindergarten through sixth grade, who receive systematic phonics instruction will have significant advantages, particularly for those

who have difficulty learning to read. These students will gain the ability to decode and spell words. Fluency is reading with accuracy, speed, and proper expression (Archer & Hughes, 2011). The NRP found that guided repeated oral reading practice had a positive impact on word recognition, reading fluency, and comprehension for students of all ages (National Reading Panel, 2000).

Training followed by instructional coaching for teachers.

Understanding what and how to teach is just the beginning for effective instruction and increased student achievement. Sometimes a gap exists between knowing what to do, and actually doing it. According to Knight (2007), the implementation rate for traditional forms of professional development is only 10%. When Knight interviewed teachers regarding professional development, the teachers criticized those trainings that lacked follow-up. “Intervention failure should be a rare event. Where it is not rare, implementation error should be the first suspect” (VanDerHayden & Tilly, 2010). A strategy that some districts use to bridge the gap between professional development and classroom implementation is coaching support from a trained professional (Fisher & Frey, 2010). Instructional coaching has been proven to improve the quality of student learning. Knight (2007) found there to be a 90% implementation rate for teachers who received additional support through instructional coaching beyond the training session. Research has shown that “professional development that addresses the specific, daily needs of teachers and their students is more likely to produce changes in teachers’ practice” (Boatright & Gallucci, et al., 2008, p. 4). These researchers determined that professional development that is supported over time, through repeated and varied exposure, can be a resource to the teacher’s learning.

The research conducted by Boatright et al. (2008), found that coaching can benefit educators by providing reflection on current practices, application of new concepts to their work environments, a sense of community of practice, and fostering professionalism among colleagues. This was found to be most effective when the coaching occurs within the actual work setting. According to Rebore (2015), in-class coaching by experienced teachers from the same subject areas or grade levels as the teacher who is being coached produces the most success.

The principal, as the instructional leader for the building, sets the climate for a learning atmosphere and a commitment to ongoing professional development. Teachers need relevant professional development that supports what happens in the classroom. “Learning communities that bring together experienced and new teachers build teacher capacity while providing a structure for student learning” (Moir, 2009, p. 17). According to Rebore (2015), professional learning communities are an effective staff development process, which promotes learning over teaching, collaboration, viewing all members of the community as learners, and encourages self-accountability. This process prioritizes student learning, which teachers focus on during interactions with their peers. Having the opportunity to share experiences with others and to network provides teachers with the support that is sometimes missing as they make instructional decisions.

Statement of the Problem

“The ultimate goal of all school districts is to educate children and adolescents” (Rebore, 2015, p. 208). However, structures often exist within schools and districts that cause barriers to implementation. Having a focus on district MTSS which works on breaking down barriers and creating structures of support across buildings is important

for the success of all students within a district. Research shows that a large number of students are less likely to need an additional Tier of support when they receive appropriately targeted instruction (Lipson, 2010). Since students today are diverse in their learning needs, teachers are overwhelmed as to how to meet the needs of their students (Knight, 2007). Often, teachers attend a training to learn new strategies, but without accountability and coaching support, they do not actually implement what they learn. According to Fowler (2013), “Many policies, perhaps most, are never really implemented. Among those policies that are implemented, a watered-down version is often put in place” (p. 248). Through a focus on district MTSS, teacher training, and instructional coaching, teachers can receive the support they need to integrate the new strategies into their instruction.

Purpose Statement

For many years, schools have put too much emphasis on providing support to students through interventions (Kansas Multi-Tier System of Supports, 2010a). Though providing focused interventions at Tiers 2 and 3 can be effective for some children, it will not meet the needs of the majority of the students in a school (Lipson, 2010). However, having a framework that focuses on prevention through Tier 1 can make a difference (Kansas Multi-Tier System of Supports, 2010a). The research on MTSS, reading, and instructional coaching demonstrates the need to focus on strengthening core, Tier 1 reading instruction within a Multi-Tiered System of Support. However, significant research does not exist as to whether the combination of these efforts has increased student achievement in reading at the elementary level.

The purpose of this action research project is to determine if the integration of district MTSS, a focus on professional development in effective foundational reading routines for kindergarten through third grade teachers, and instructional coaching to provide support to teachers is effective in increasing student achievement.

Research Questions

1. Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in the *foundational skills* in kindergarten through third grade?
2. Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in *comprehension* in first through third grade?

Method

Participants

Research will be conducted in a K-12 school district in Southwest Michigan. *MI School Data* listed this district as having 2,699 students in their district during the 2013-2014 school year (Michigan Department of Education, 2015a). In this district, there are four elementary school buildings. During the 2013-2014 school year, this district had 274 kindergarten students, 206 first graders, 229 second graders, 206 third graders, and 214 third graders. The district currently has 56% of their students who are economically disadvantaged (Michigan Department of Education, 2015a).

This district in Southwest Michigan has been selected to be a part of this research study because of the pre-existing professional relationship between myself and the district. I work closely with the district to support MTSS, reading implementation, school improvement, and the instructional coaching process as the ISD MTSS coordinator. The district curriculum director/MTSS liaison will be contacted to inform her of the option to conduct research around MTSS, foundational reading routines training, and instructional coaching in the district. Others involved in the processes described will include the District Implementation Team (DIT), the elementary building leadership teams, kindergarten through third grade teachers, and others as determined necessary during the process.

Upon informal approval, I will begin the process of collecting background information and pertinent research related to MTSS, foundational reading routines, and instructional coaching. The curriculum director will receive status updates throughout the process. Teachers will be selected to become a part of the instructional coaching as determined during the process. Changes to the research and implementation plan will be put forth as necessary. When appropriate, approval will be obtained from HSIRB and informed consent will be obtained from the district's curriculum director so that I can collect and disaggregate student data for research purposes. The informed consent document can be found in Appendix D.

Measures and Timeline

For this research project, I will obtain district background information, school processing data, and student achievement results. Data sources include DIBELS.net, VPort, and *Mi School Data*. Student data will be disaggregated according to grade levels

within buildings, across the district, and based on the foundational and comprehension reading skills. Data will not be analyzed at the student or teacher level. The data will be collected and analyzed following the Specialist Project & Measurement Timeline in Appendix A.

The district uses a universal screener three times a year to measure their student's reading progress. The screener used is called Dynamic Indicators of Basic Early Literacy Skills (DIBELS). DIBELS is a criterion-referenced assessment based on a set of indicators associated with emergent literacy (Fisher & Frey, 2010). Three of the elementary buildings utilize DIBELS.net and one building uses VPort to store their screening data. During data review sessions, data is collected via these systems along with the MiBLSi MiData System. I will collect and analyze DIBELS data by grade, building, and at the district-level for the various foundational reading skills, comprehension, and using the composite score, using data stored in DIBELS.net and VPort. Table 1 displays the reading skills in relation to the DIBELS Next measures that I will collect and analyze. Refer to Appendix F for the Descriptions of DIBELS Next Measures.

Table 1
Reading Skills Measured by DIBELS Next Indicators

Reading Skills	DIBELS Next Indicator(s)
<i>Foundational Skills</i>	
Phonological Awareness	First Sound Fluency (FSF)
	Phoneme Segmentation Fluency (PSF)
Alphabetic Principle & Basic Phonics	Nonsense Word Fluency (NWF)
	Correct Letter Sounds (CLS)
	Whole Words Read (WWR)
Accurate & Fluent Reading	DIBELS Oral Reading Fluency (DORF)
	Accuracy
	Words Correct
<i>Comprehension Skill</i>	
Comprehension	DIBELS Oral Reading Fluency (DORF)
	Retell
	DAZE
<i>Overall Score</i>	
Composite Score	

Source: DIBELS.net

Qualitative Design

According to Fixsen, Naoom, Blasé, & Wallace (2007), implementation is a process that takes two to four years to complete in complex systems. These researchers describe six functional stages of implementation:

1. Exploration. During exploration, readiness is assessed by the Implementation Team and activities are completed to ensure the group understands the need for the change and is ready for installation.
2. Installation. It is in the installation phase that the team allocates resources, selects staff who will take part in the process, and trains this staff in the new learning.
3. Initial implementation. During initial implementation, the staff begins to implement the new learning strategies. It is important during this phase for the staff to have support in order to maintain the fidelity of implementation and establish new routines and processes.
4. Full implementation. Full implementation occurs when at least 50% of the staff implementing the processes are doing this as common practice with fidelity and good outcomes.
5. Innovation. At times, implementers may decide to make use of an innovative technique or strategy to enhance implementation. When this occurs, the staff would be in the innovation stage.
6. Sustainability. Sustainability of the practices occur even with changes in staff, economy shifts, and with new resource allocations (Fixsen, et al., 2007).

Results

As described by Fixsen, Naoom, Blasé, & Wallace (2007), it can take two to four years to progress through the stages of implementation. The process of implementation of district MTSS for this district began in 2013 with my assistance as ISD MTSS coordinator. An overview of the phases of implementation for this district are outlined in Appendix E and are described in detail below along with the corresponding data and analysis.

Data Analysis: Baseline

Phase 1: Exploration & installation.

According to the National Implementation Research Network (NIRN, n.d.), there are three implementation drivers: (a) competency, (b) organization, (c) leadership that lead to successful implementation when in place in an organization. Research has found that implementation teams who use the implementation drivers are essential to success. In fact, Fixsen, Blasé, Timbers, & Wolf (2001) found that implementation teams have an 80% success rate over three years. However, according to Balas & Boren (2000), attempting to implement without an implementation team takes seventeen years and only has a 14% success rate.

In June 2013, the district in Southwest Michigan began a partnership with their local ISD, and Michigan's Integrated Behavior & Learning Support Initiative (MiBLSi) in order to improve their structures through a focus on district MTSS. The district created a District Implementation Team (DIT) at this time, in order to focus on implementation. The district also identified a MTSS coordinator. According to NIRN (n.d.), identifying a person to lead the work of the DIT is vital to implementation success. During the 2013-

2014 school year, the DIT took part in a series of MTSS implementation team trainings, which included the major components of creating alignment, capacity, sustainability, and durability (MiBLSi, 2014a). By creating this team, the district was addressing the organization component of implementation (NIRN, n.d.). During this process, the DIT conducted an analysis of behavior and reading data for the district. The team determined that they would have two school-based focus topics, one of which, Strengthening K-3 Reading is analyzed here. The DIT determined that though they continued to have favorable progress on their reading results, they have not reached the level of reading achievement that they want for their students. Figures 1-4 highlight the DIBELS Next composite scores by grade level across each elementary building and the district averages. Refer to Appendix B for the Building Codes that align with the codes used throughout this paper.

The district is striving for 80% of the students to be proficient through Tier 1 supports. As the figures show, only a few grade levels within a few of the buildings met the 80% goal. Additionally, kindergarten had an overall decrease of percentage of students meeting the benchmark from spring 2012 through spring 2014 (89% to 82%). For 1st through 3rd grades over this same time period, there was only a slight increase (1st grade: 71% to 72%; 2nd grade: 68% to 73%; 3rd grade 69%-73%).

Particularly concerning was the variation in scores across elementary buildings. For example, in the spring of 2012, kindergarten composite scores ranged from 79% to 96%. In the spring of 2014, 3rd grade composite scores had a range from 58% to 83% meeting the benchmark. It was mainly due to the analysis of this data that the DIT chose to focus on Strengthening K-3 Reading in their elementary buildings.

Figure 1. *Kindergarten Trend Data -% at Benchmark on DIBELS Next Composite*

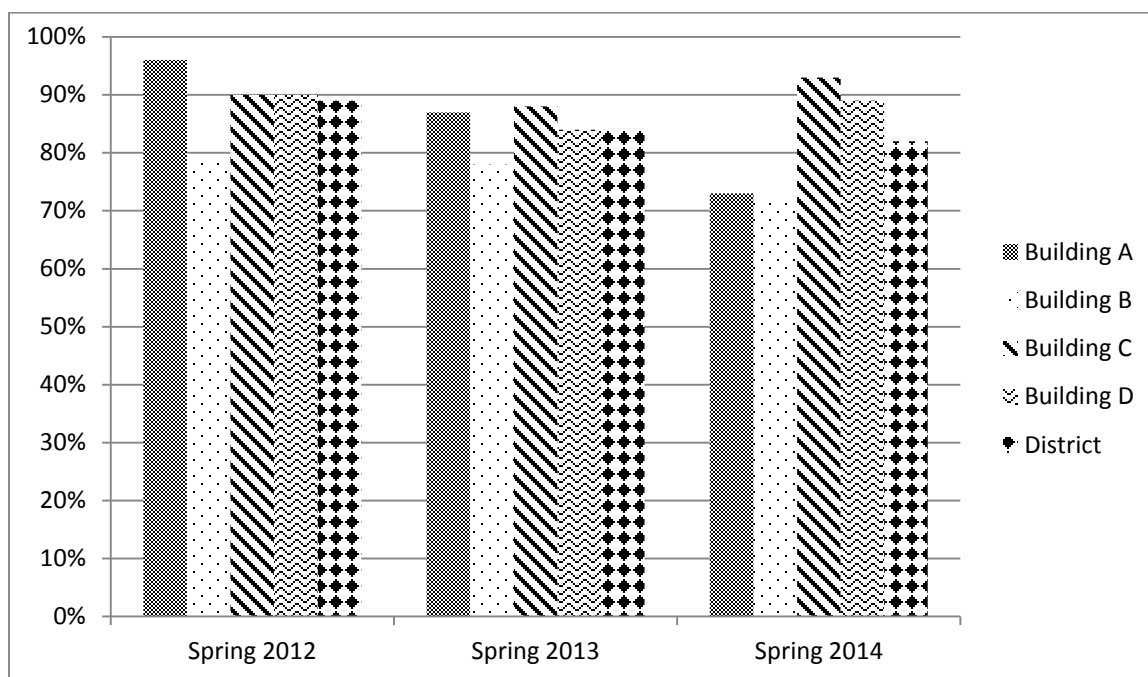


Figure 2. *1st Grade Trend Data -% at Benchmark for DIBELS Next Composite*

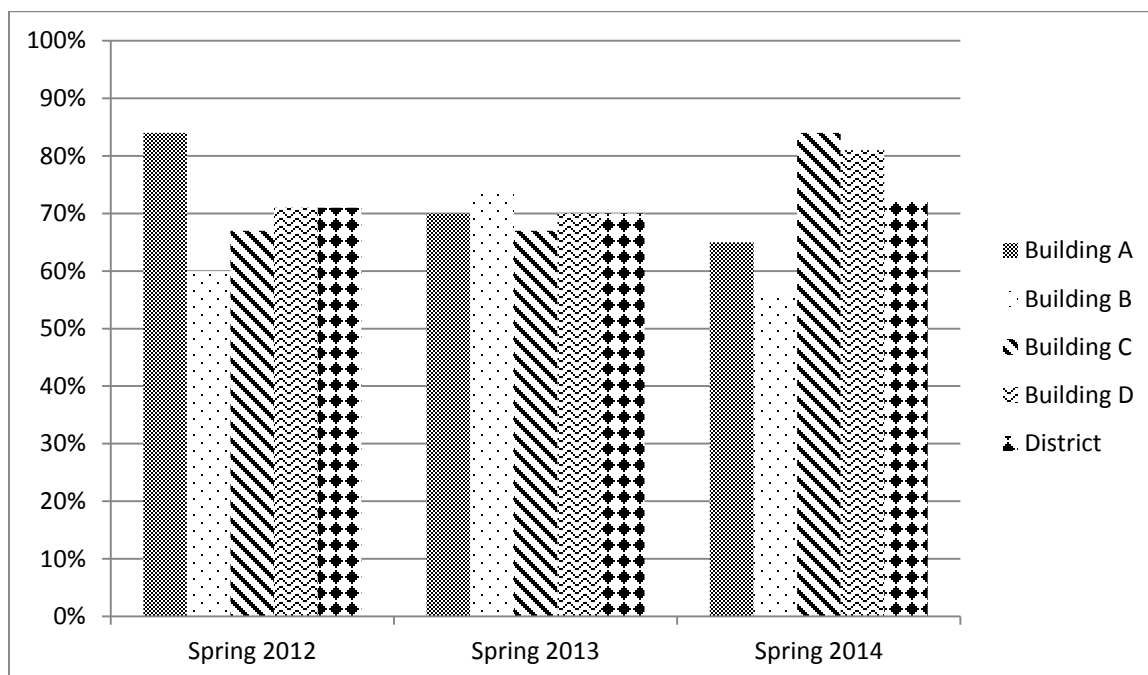


Figure 3. 2nd Grade Trend Data- % at Benchmark for DIBELS Next Composite

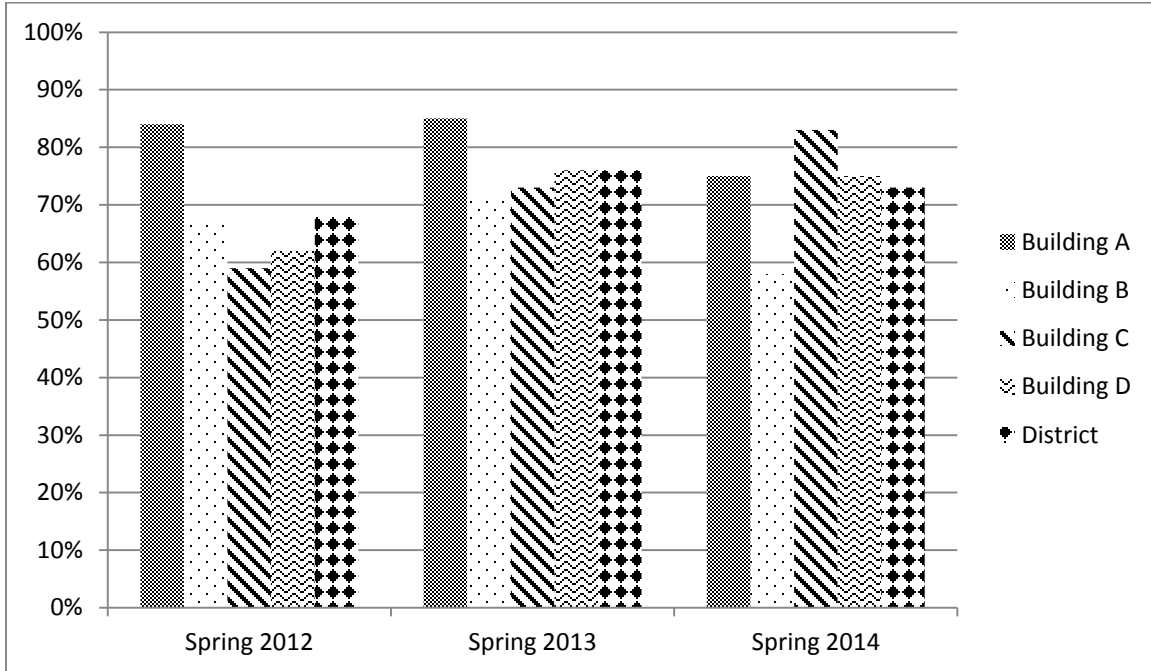
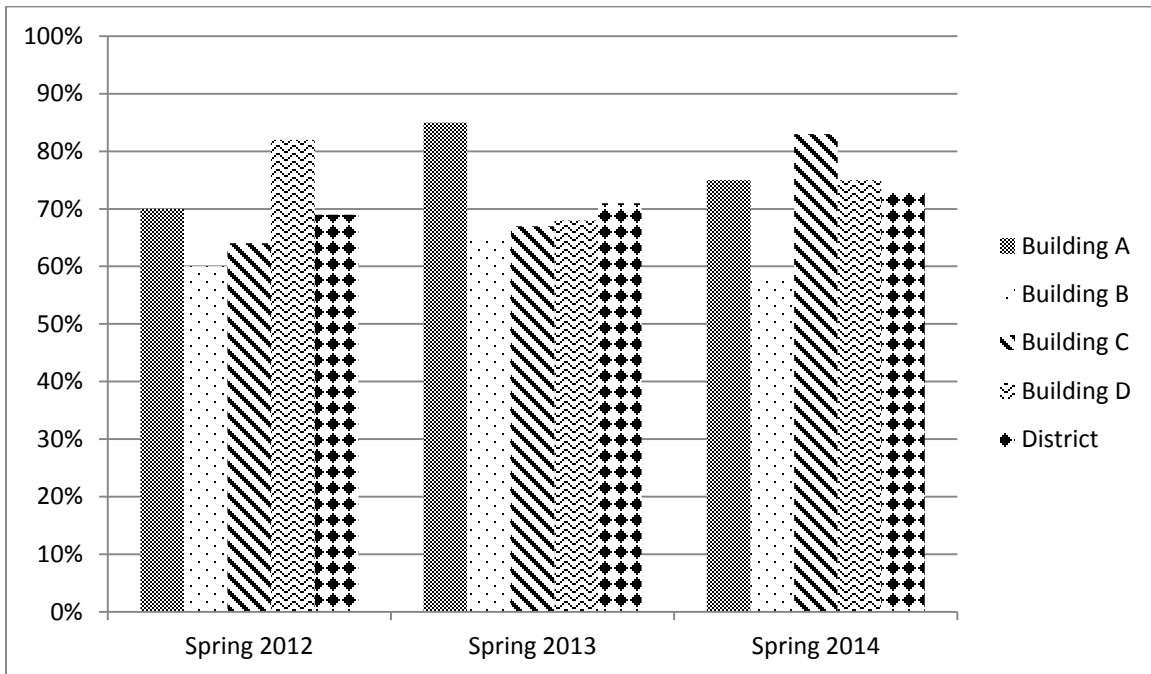


Figure 4. 3rd Grade Trend Data-% at Benchmark for DIBELS Next Composite



In the spring of 2014, the DIT took part in exploration activities and prepared for installation to ensure that structures of support were created, which would ensure implementation of reading instruction in kindergarten through third grade is effective and sustainable. In order to build the competency of the staff and create building experts, the district MTSS liaison, who is also the curriculum director, selected five teacher-leaders to undergo extensive knowledge-building of the reading content and preview of the reading routines through professional development sessions in the spring of 2014 (NIRN, n.d.). The teacher-leaders consisted of a district MTSS coordinator, who is also an intervention teacher, a special education teacher, and three elementary classroom teachers. The ISD MTSS coordinator also attended the professional development as a way to build my own capacity to support implementation of the reading routines and support the teacher-leaders and district MTSS coordinator. The sessions were led by a MiBLSi trainer.

After these training sessions, the teacher-leaders began piloting the routines in their classrooms and with intervention groups during the rest of the 2013-2014 school year. According to Fisher and Frey (2010), “every school needs people who are skilled at brokering conversations, demonstrating instructional approaches, and providing technical assistance in collecting and analyzing data” (p. 133). Providing the teacher-leaders with an opportunity to pilot the routines ensured that they were an embedded source of support for teachers who began implementation during the 2014-2015 school year.

In June 2014, all kindergarten through third grade classroom teachers, special education teachers, and building principals attended two days of mandatory training in the Tier 1 reading content and reading routines as part of a three-day series co-led by the ISD MTSS coordinator and MiBLSi trainer. Including the building principals in the

training helped to build leadership competency and embedded ongoing support for teachers (NIRN, n.d.). The five teacher-leaders who received additional training in the spring played a vital role in supporting teachers during the training process (Rebore, 2015). Since these teacher-leaders had already received the training and began implementing the routines, they were able to share their first hand experiences regarding the hurdles, problems, and successes of implementation during the June trainings. For example, teacher-leaders shared the importance of having decodable text materials available and the time that is needed to complete the routines within a reading block. Having these supports in place assisted the district in sustainability of the practices by working on the competency factor of implementation (NIRN, n.d.). For Kindergarten and 1st grade, the content focused on phonemic awareness and phonics, which are critical components of early literacy in these grades (Archer & Hughes, 2011). Phonics and fluency were the focus for 2nd and 3rd grades as these are the critical skills needed at this level (Kosanovich & Verhagen, 2012).

During the summer of 2014, small groups of teachers at each kindergarten, first grade, and second grade level integrated the applicable reading routines and sequence of instruction into their reading curriculum by creating weekly lesson plans for use by their grade level peers. Allain & Eberhardt (2011), found that having a created curriculum for teacher use “is the vehicle that translates standards and scope and sequence into classroom instruction” (p. 14). In August 2014, kindergarten through third grade teachers had the option to attend an additional half-day training in order to review and practice the routines prior to the start of school. The training was facilitated by the ISD MTSS coordinator. The five teacher-leaders led sessions in a center format highlighting the main

reading routines. Because these teacher-leaders had previously piloted the routines, they were able to draw from their experiences while modeling for their colleagues. In September 2014, an analysis of the research, district and student background information, and baseline reading data was collected. The baseline data can be found in Figures 1-4 above.

Data Analysis: Implementation

Phase 2: Initial implementation & full implementation.

With the start of the 2014-2015 school year, all kindergarten through third grade teachers were expected to use the weekly lesson plans while implementing the reading routines in their daily instruction. Taking the time to progress through the beginning stages helps to ensure that implementation will be aligned across all elementary buildings in the district for kindergarten through third grade, builds competency of the teacher leaders and the teaching staff, and shapes the capacity of the district to ensure that these strategies are sustainable and durable over time (NIRN, n.d.). In order to be at full implementation, the district needs to continue putting the instructional practices into place, monitor implementation with fidelity, and create a process for instructional coaching. The district's goal is to eventually progress to innovation and sustainability.

In October 2014, the district MTSS coordinator/coach and I, as the ISD MTSS coordinator, started informal coaching some of the kindergarten through third grade teachers and monitoring implementation of the reading routines. Teacher-leaders within each elementary building served as an additional resource and support to teachers. As we have learned, continued support for teachers that meets their needs and the needs of their students is more likely to produce change in teacher practice (Boatright & Gallucci, et.

al., 2008). By providing this informal coaching support and monitoring, implementation was more likely to occur.

Three types of teams are needed in order to effectively implement MTSS: collaborative teacher teams, school leadership team, and school intervention team (Buffum, Mattos, and Weber, 2012). Also in October 2014, all kindergarten through third grade teachers took part in grade-specific training in data analysis for making instructional decisions for the final day in the three-day reading training co-led by the ISD MTSS coordinator and a MiBLSi trainer. The purpose of the training was to demonstrate a data analysis process to each grade level of teachers. The teachers learned a process to analyze their classroom DIBELS Next data, which can be used after each benchmarking period as part of their collaborative teacher teams (Buffum, Mattos, and Weber, 2012).

During the 2014-2015 school year, each elementary school's leadership team and the DIT attended a fall, winter, and spring data review in order to gather, study, analyze and make a plan using their achievement and processing data. According to the Michigan Department of Education (2015b), analyzing data in this way can be an effective process for school improvement. As the ISD MTSS coordinator, I co-led the data reviews for the purpose of supporting the process. Building grade level teams were encouraged to review their data during their grade level meetings for continued data analysis and instructional planning throughout the school year (Buffum, et. al, 2012). As noted by (Aladjem & Borman, 2006), the success of comprehensive school reform models is impacted by the buy-in and involvement of school staff. For the purposes of this research project, the school intervention team process was not addressed, though it may have been in place in

the buildings. Additionally, the DIT began monthly meetings in-between data reviews for the purpose of addressing MTSS components, monitoring data and implementation, addressing barriers, and celebrating successes across the district.

After data analysis in the fall 2014 and further discussions between the district liaison/curriculum director, district MTSS coordinator/coach and myself, it was determined that a more formal process of coaching was needed. Providing the classroom teachers with intentional coaching support is a strategy to increase fidelity of implementation (Aladjem & Borman, 2006). In order to provide this formal assistance to teachers, a coaching model was piloted in one elementary building by the district MTSS coordinator/coach. The details of the Coaching Pilot Model can be found in Appendix C.

The Coaching Pilot Model occurred from January 2015 through June 2015. A schedule for instructional coaching was determined by the district MTSS coordinator/coach. Teacher observation sessions varied in time and were 15 to 30 minutes in length, followed by 15 to 30 minute feedback meetings. Coaching support also consisted of modeling by the district MTSS coordinator/coach. Participants from the pilot building were informed about the instructional coaching process by the district MTSS coordinator/coach. Teachers across the four buildings continued to have their own building's teacher-leader available for support and had the option of coaching by the ISD MTSS coordinator/coach or the district MTSS coordinator/coach.

In June 2015, data in the pilot building was collected and analyzed in order to determine whether this process should be used across the district. For comparison purposes, the building where the pilot program was held, Building A, is set beside that of

Buildings B-D and is displayed and analyzed by reading skill. Please refer to Tables 2-6 for data and analysis by grade, skill, and building.

Phonological awareness.

The phonological awareness skills measured are First Sound Fluency (FSF) and Phoneme Segmentation Fluency (PSF) (Dynamic Measurement Group, 2010). These two skills are measured in kindergarten and first grade. FSF is measured only at the beginning and middle of kindergarten. PSF is measured in the middle and end of kindergarten and at the beginning of first grade.

Table 2 displays the phonological awareness skills for the four buildings for the 2014-2015 school year. From the fall of 2014 through the winter of 2015, Building A increased their percentage of kindergarten students who were proficient on FSF by 26%, Building B increased 20%, Building C increased 51%, and Building D increased 17%. Building C had the most increase, but it also started with the lowest number of students proficient at the beginning of the year. Building A, the pilot building, had the second highest increase in this area. However, the pilot coaching model did not begin until the winter 2015.

For PSF in kindergarten, Building A had a 7% increase from winter 2015 to spring 2015, Building B had no increase, Building C had a 5% increase and Building D had a 5% increase in proficiency levels. During this pilot coaching model, Building A had a slight advantage over the other buildings. In 1st grade, the PSF scores were only measured in the fall 2014, so an increase cannot be determined during this time period.

Table 2

*Phonological Awareness Skills during Initial Implementation Year & Pilot Program,
Percent Proficient, 2014-2015*

Measures	Building A Pilot Building			Building B			Building C			Building D		
	Foundational Skills											
	F	W	S	F	W	S	F	W	S	F	W	S
FSF Kindergarten	59	85	NA	54	74	NA	44	95	NA	68	85	NA
PSF Kindergarten	NA	93	100	NA	83	83	NA	95	100	NA	88	93
PSF 1st Grade	65	NA	NA	67	NA	NA	54	NA	NA	75	NA	NA

Source: DIBELS.net & VPort; FSF=First Sound Fluency, PFS=Phoneme Segmentation Fluency, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Alphabetic principle & phonics skills.

Nonsense Word Fluency (NWF) is the measurement used for alphabetic principle and phonics skills (Dynamic Measurement Group, 2010). It has two components, Correct Letter Sound (CLS) and Whole Words Read (WWR). Students are measured in NWF-CLS beginning in the middle of kindergarten and ending at the beginning of 2nd grade. For NWF-WWR, a proficiency goal begins in 1st grade and end in the beginning of 2nd grade.

Table 3 displays the alphabetic principle and phonics skills for the four buildings, during the implementation year. Even though a benchmark goal is not set for NWF-

WWR during kindergarten, DIBELS does indicate the average score received for winter and spring. The pilot building, Building A, grew from an average of 3 whole words read in winter 2015 to 8.3 in spring 2015. In comparison, Building B went from 3 to 8.8; Building C went from 1.9 to 6.5; Building D went from 1.4 to 4.2. Overall, the pilot building had one of the greatest increases as compared to the other buildings for whole words read.

For NWF-CLS in kindergarten, Building A decreased 5% from winter 2015 through spring 2015, Building B increased by 10%, Building C decreased 8%, and Building D decreased by 5%. This data was not favorable toward the pilot program in Building A. Looking at the NWF-CLS in first grade from fall 2014 through spring 2015, Building A increased 4%, Building B increased 14%, Building C decreased 9%, and Building D decreased 8%. Building B had the greatest increase on this measure, even though it had started the lowest at the beginning of the year. This measure was not favorable for the pilot building. On NWF-WWR in 1st grade, Building A increased 15%, Building B increased 10%, Building C stayed the same, and Building D increased by 37%. Once again, the building that started with the lowest percentage of proficient students in the fall made the most progress by the end of the year. However, Building A, the pilot building, did have an advantage over two of the buildings in terms of progress made. Because NWF is only measured in the fall of 2nd grade and not beyond that, a percentage increase cannot be stated for this school year.

Table 3

Alphabetic Principle & Phonics Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015

Measures	Building A Pilot Building			Building B			Building C			Building D		
	Foundational Skills											
	F	W	S	F	W	S	F	W	S	F	W	S
NWF-CLS Kindergarten	NA	80	75	NA	57	67	NA	93	85	NA	82	77
NWF-CLS 1st Grade	69	78	73	53	48	67	63	67	54	66	71	58
NWF-WWR 1st Grade	72	85	87	63	63	73	72	57	72	29	55	66
NWF-CLS 2nd Grade	56	NA	NA	55	NA	NA	62	NA	NA	67	NA	NA
NWF-WWR 2nd Grade	54	NA	NA	56	NA	NA	68	NA	NA	72	NA	NA

Source: DIBELS.net & VPort; NWF=Nonsense Word Fluency, CLS=Correct Letter Sounds, WWR=Whole Words Read, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Accurate & fluent reading.

DIBELS Oral Reading Fluency (DORF) is used to measure accurate and fluent reading (Dynamic Measurement Group, 2010). To determine the level of a student's accuracy and fluency, the measure is calculated into Accuracy (DORF-Acc) and Words Correct (DORF-WC) based on a one minute reading of a passage. This measure is begun in the middle of 1st grade and continues through 3rd grade and beyond.

Table 4 displays the accurate and fluent reading skills for the four buildings, during the 2014-2015 implementation year. On the DORF for 1st grade accuracy from winter 2015 through spring 2015, Building A had a 5% decrease, Building B had a 2% decrease, Building C had a 2% increase, and Building D had a 2% increase. This data is favorable towards Buildings C and D, however the increase was not significant. During this same time period in first grade, the words correct component of DORF showed that Building A had a 6% increase, Building B had a 7% decrease, Building C had a 7% increase, and Building D had a 10% increase. Though the pilot building did have an increase from winter to spring, the other three buildings had a slightly higher increase.

On 2nd grade DORF, accuracy from fall 2014 through spring 2015 showed that Building A increased by 12%, Building B had a 9% increase, Building C had an 8% decrease, and Building D had a 5% decrease. The pilot building had the highest increase for accuracy in 2nd grade. On the words correct section in 2nd grade, Building A had a 13% increase, Building B had a 9% increase, Building C had a 2% decrease, and Building D had a 1% increase. The data for 2nd grade words correct shows us that the pilot building again made the greatest impact on proficiency levels as compared to the other buildings.

Looking at the 3rd grade accuracy data on DORF, Building A increased by 2%, Building B increased by 3%, Building C increased by 7%, and Building D decreased by 2% from the fall 2014 through the winter 2015. Building C had the highest increase in proficiency for 3rd grade accuracy. The words correct component for 3rd grade DORF showed an 8% decrease for Building A, a 1% increase for Building B, an 11% increase

for Building C, and a 6% increase for Building D. For this measure, Building C had the greatest improvement.

Table 4

*Accurate & Fluent Reading Skills during Initial Implementation Year & Pilot Program,
Percent Proficient, 2014-2015*

Measures	Building A Pilot Building			Building B			Building C			Building D		
	Foundational Skills											
	F	W	S	F	W	S	F	W	S	F	W	S
DORF-Acc 1st Grade	NA	78	73	NA	67	65	NA	65	67	NA	59	61
DORF-WC 1st Grade	NA	74	60	NA	65	58	NA	63	70	NA	55	65
DORF-Acc 2nd Grade	64	68	76	58	64	67	80	74	72	77	74	72
DORF-WC 2nd Grade	54	60	67	50	56	59	72	77	70	67	79	70
DORF-Acc 3rd Grade	67	75	69	68	82	71	60	64	67	66	70	64
DORF-WC 3rd Grade	62	46	54	73	69	74	58	72	69	55	59	61

Source: DIBELS.net & VPort; DORF=DIBELS Oral Reading Fluency, WC=Words Correct, Acc=Accuracy, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Comprehension.

After the student reads a passage, they are asked to retell the story. This retell is scored and displayed as DORF-R (Dynamic Measurement Group, 2010). A cut score, or proficiency level, is begun during 2nd grade and continues through 3rd grade and beyond. The DIBELS maze comprehension task (DAZE) provides additional information on a student's comprehension and begins in 3rd grade.

Table 5 shows the comprehension skills during the implementation year for the four buildings. The 2nd grade DORF-R shows that Building A improved 2% from fall 2014 through spring 2015, Building B improved 5%, Building C declined 7%, and Building D improved 5%. Both Building B and D had the greatest improvements during this time period. On the 3rd grade DORF-R, Building A increased 4%, Building B decreased 10%, Building C increased by a whopping 30%, and Building D increased by 3%. Clearly, Building C had the most increase during this school year on the 3rd grade DORF retell. On the 3rd grade DAZE, Building A had a 3% increase, Building B decreased 1%, Building C increased 12%, and Building D increased 14%. On the 3rd grade DAZE, building both Building C and D had the most growth

Table 5

Comprehension Skills during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015

Measures	Building A Pilot Building			Building B			Building C			Building D		
	<i>Comprehension Skills</i>											
	<i>F</i>	<i>W</i>	<i>S</i>	<i>F</i>	<i>W</i>	<i>S</i>	<i>F</i>	<i>W</i>	<i>S</i>	<i>F</i>	<i>W</i>	<i>S</i>
DORF-R 2nd Grade	76	78	78	66	62	71	74	61	67	78	80	83
DORF-R 3rd Grade	81	90	85	86	65	76	54	84	84	63	70	66
DAZE 3rd Grade	60	60	71	63	64	62	37	40	49	56	78	70

Source: DIBELS.net & VPort; DORF=DIBELS Oral Reading Fluency, DAZE=DIBELS maze comprehension task, R=Retell, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Composite scores.

The DIBELS Composite Score combines multiple DIBELS scores and provides an overall estimate of the student's early literacy skills and/or reading proficiency (Dynamic Measurement Group, 2010). A composite score is given for all grades, Kindergarten through 3rd grade and beyond. The Composite Score is determined based on a weighing of the measures that are critical early literacy skills for that time of year and grade.

Table 6 highlights the overall composite scores for the four buildings and the district averages by grade, during the 2014-2015 school year. Looking at the composite score for kindergarten shows us that Building A grew 35%, Building B grew 19%, Building C grew 42%, and Building D grew 11% during the 2014-2015 school year. Though Building C had the greatest increase on the overall composite in kindergarten, the pilot building was in a close 2nd place for growth. During this school year, the district average growth for kindergarten was 27%. Previous spring trend data for the kindergarten composite in the district was 89% in 2012, 84% in 2013, and 82% in 2014. The spring 2015 district data in kindergarten shows 81% proficient on the composite score, which is a 1% decline from the previous spring and continues to show a decline since 2012.

The composite score for first grade during the 2014-2015 school year shows that Building A grew 2%, Building B grew 16%, Building C grew 10%, and Building D grew 9% during the 2014-2015 school year. Building B had the greatest increase for first grade, at 16%. During the 2014-2015 school year, the district average growth for first grade was 9%. Looking at the previous spring trend data on the first grade composite in the district was 71% in 2012, 70% in 2013, and 72% in 2014. The spring 2015 district data in first grade shows 67% proficient on the composite score, which is a 5% decline from the previous spring. Trends since 2012 for first grade show an up and down pattern throughout the years.

During the 2014-2015 school year, looking at the composite score for second grade shows that Building A grew 5%, Building B grew 4%, Building C declined 7%, and Building D declined 8% during the 2014-2015 school year. The pilot building, Building A, had the most growth for second grade, at 5%. The district had an overall

decline for second grade of 2% for the 2014-2015 school year. Previous spring trend data for the second grade composite in the district was 68% in 2012, 76% in 2013, and 73% in 2014. The spring 2015 district data in second grade shows 70% proficient on the composite score, which is a 3% decline from the previous spring. Looking at the trend data for second grade shows growth and decline on the composite scores since 2012.

During the 2014-2015 school year, the composite score for third grade during the 2014-2015 school year shows that Building A had a decline of 2%, Building B had a decline of 5%, Building C had a significant decline of 21%, and Building D actually grew 4%. Building D was the only one to show growth during the 2014-2015 school year, at 4%. During this school year, the district average growth for third grade was 5%. Previous spring trend data for the third composite in the district was 69% in 2012, 71% in 2013, and 73% in 2014, and 71% for 2015. Third grade data shows a 2% decline from the previous spring and demonstrates both positive and negative growth since 2012.

Table 6

Composite Scores during Initial Implementation Year & Pilot Program, Percent Proficient, 2014-2015

Skills	Building A Pilot Building			Building B			Building C			Building D			District		
Overall Scores															
	F	W	S	F	W	S	F	W	S	F	W	S	F	W	S
Kindergarten	59	78	94	46	61	65	46	90	88	66	77	77	54	77	81
1st Grade	67	76	69	51	62	67	57	61	67	55	59	64	58	65	67
2nd Grade	64	74	69	61	65	65	83	76	76	78	79	70	72	74	70
3rd Grade	71	67	69	78	75	73	53	71	74	63	67	67	66	70	71

Source: DIBELS.net & VPort; F=Fall, W=Winter, S=Spring

Implementation conclusions.

The impact that the pilot program had on student achievement data as compared to the rest of the elementary buildings is displayed in Tables 7-8. Refer to Table 7 for measures where the pilot building (Building A) has the highest percentage growth as compared to the other three elementary buildings for the pilot period. As noted in the table, PSF in kindergarten, NWF-WWR in kindergarten, DORF-Acc in second grade and DORF-WC in second grade had the highest growth in the foundational skills in the pilot building. There were no comprehension scores in the pilot building which had the highest growth as compared to the other three buildings. The kindergarten composite score had the highest growth in the pilot building as compared to the other elementary buildings.

Table 7

*Pilot Building (Building A), Highest Percentage Growth as Compared to Buildings C-D,
Winter 2015-Spring 2015*

Measures	Percentage Growth
<i>Foundational Skills</i>	
PSF Kindergarten	7%
NWF-WWR Kindergarten	5.3 WWR
DORF-Acc 2 nd Grade	12%
DORF-WC 2 nd Grade	15%
<i>Comprehension Skills</i>	
NA	
<i>Composite Score</i>	
Kindergarten	16%

Source: DIBELS.net & VPort; PSF=phoneme segmentation fluency, NWF=nonsense word fluency, DORF=DIBELS Oral Reading Fluency, WC=Words Correct, Acc=Accuracy, WWR= whole words read, NA=not applicable

Table 8 shows the measures where the pilot building (Building A) has the highest percent proficient as compared to the other three elementary buildings at the end of the pilot period. The table shows that PSF in kindergarten (tied with Building C), NWF-CLS

in first grade, NWF-WWR in first grade, DORF-Acc in first grade, and DORF-Acc in second grade had the highest percent proficient in the pilot building for the foundational skills. For the comprehension skills, third grade DORF-R and the third grade DAZE demonstrated the highest proficiency for the pilot building. Both the kindergarten and first grade composite scores in the pilot building had the highest proficiency at the end of the pilot period.

Table 8

*Pilot Building (Building A), Highest Percent Proficient as Compared to Buildings C-D,
Spring 2015*

Measures	Percent Proficient
<i>Foundational Skills</i>	
PSF Kindergarten	100%
NWF-CLS 1 st Grade	73%
NWF-WWR 1 st Grade	87%
DORF-Acc 1 st Grade	73%
DORF-Acc 2 nd Grade	76%
<i>Comprehension Skills</i>	
DORF-R 3 rd Grade	85%
DAZE 3 rd Grade	71%
<i>Composite Score</i>	
Kindergarten	94%
1 st Grade	69%

Source: DIBELS.net & VPort

The 2014-2015 school year data indicated that the Pilot Coaching Model had been successful in the pilot building for several DIBELS Next measures. For example, the pilot building had the highest percentage growth on the foundational skills for two kindergarten measures and two second grade measures. Additionally, the pilot building had the highest proficiency in the foundational skills for one kindergarten measure, three first grade measures, and two second grade measures. The pilot building did not demonstrate higher growth in comprehension than the other buildings. However, it did have the highest proficiency for two of the third grade comprehension measures. The kindergarten composite scores in the pilot building showed the most growth as compared to the other buildings. Additionally, the composite scores for kindergarten and first grade had the greatest proficiency in the pilot building during the winter through spring 2015 pilot period.

Once data was collected from the Pilot Coaching Model, the results were analyzed and discussed with the district to determine if the coaching pilot had been successful. The results indicate that the Pilot Coaching Model was successful for some skills, but not on all skills as measured by DIBELS Next. Even though not all of the data from the Coaching Pilot Model was favorable, it did point out to the district that there was a need across all elementary buildings to provide support for teachers. In educational settings, Fixsen, Blasé, Horner, Sims & Sugai (2013), describe scaling up as when “at least 60% of the students who could benefit from an innovation are experiencing that innovation in their education setting” (p. 1). For the district in Southwest Michigan, scale-up of the instructional coaching process to all elementary buildings was determined

to be a need in the district since teachers from only one of the four elementary buildings was receiving intentional and structured coaching support.

Data Analysis: Monitoring

Phase 3: Innovation & sustainability.

The district determined that, though it was helpful to have curriculum for the foundational reading routines, they needed a more comprehensive reading program to ensure quality curriculum was being used and alignment existed across the elementary buildings. The 2014-2015 data from across the elementary buildings supported this need. Alignment is an important element of MTSS (MiBLSi, 2014a) as is having a comprehensive core reading program (Allain & Eberhardt, 2011). Therefore, at the end of the 2014-2015 school year, the district purchased a comprehensive reading program, for use by classroom teachers across K-6.

Before the details of the scale-up of instructional coaching across the four elementary buildings could be developed, a significant personnel loss occurred. The MTSS coordinator/coach whom had conducted the Coaching Pilot Model, left the district for other employment. Though this was a loss for the district, it created an opportunity to re-establish the job position description. The position was titled an instructional specialist. The district hired one of the teacher leaders whom had additional training in the reading routines and success with implementation. The main role of the instructional specialist was to support teacher implementation of the new reading program (Fisher & Frey, 2010). Additionally, a few classroom teachers switched grade levels and new principals were hired in two of the elementary buildings. Because of the change in

personnel, the district was left without a designated MTSS coordinator to facilitate the district MTSS work.

During the summer of 2015, teacher representatives from kindergarten, second grade, and third grade integrated the current lesson plans, which made use of the reading routines, with the new comprehensive core reading program. As a way to support the teachers, the newly hired instructional specialist assisted with this curriculum work (Fisher & Frey, 2010). This way, the instructional specialist would have an understanding around the integration as support was provided during instructional coaching.

In the fall of 2015, the comprehensive core curriculum began to be implemented by the kindergarten through third grade teachers. The newly hired instructional specialist began providing instructional coaching support to some of the kindergarten through third grade teachers throughout the four elementary buildings, while also supporting fourth through sixth grade teachers. The instructional specialist followed a coaching model similar to the Coaching Pilot Model, which is based on the work of Knight (2007). Her main role was to support kindergarten through sixth grade teachers in implementing the new comprehensive reading program.

During the 2015-2016 school year, I continued to assist the district in implementation of district MTSS as well as implementation of Tier 1 reading strategies, through support days, data reviews, and attendance at some of the monthly DIT meetings. The DIT and elementary building leadership teams continued to attend data reviews. Additionally, the DIT continued monthly meetings to address the components of MTSS, monitor data and implementation, to break down barriers to implementation, and to celebrate successes

Progress was monitored during the fall 2015 and winter 2016 elementary and district data reviews and analyzed for this project. According to VanDerHeyden and Tilly (2010), monitoring implementation and systematically removing barriers is an important step in sustainable change. Despite the personnel and curriculum changes, teams were able to analyze problems that existed for reading implementation, and problem solve strategies to correct these issues during the data reviews.

A final analysis of student reading data was conducted in February and March 2016. The data below highlights the percentage of students that were proficient on DIBELS Next indicators from fall 2015 through winter 2016 during the monitoring phase for each building. The data is displayed in Tables 9-13 and analyzed by reading skill.

Phonological awareness.

Table 9 shows the phonological awareness skills for the four buildings, during the monitoring time period of fall 2015 through winter 2016. The district is hoping to have 80% of their students proficient at the end of the school year. The four elementary buildings started out with varied percent proficient on these skills in the fall 2015. However, significant progress has been made in the buildings on the phonological awareness skills. If progress continues to be made for the phonological awareness skills, 80% proficiency is a good possibility for the end of the school year. Currently, only Building B has one measure, kindergarten PSF, below that goal. For the kindergarten FSF measure from fall 2015 through winter 2016, Building A had 13% growth, Building B had 27% growth, building C had 11% growth, and Building D had 30% growth. For the first grade PSF scores, all buildings were below 80% in the fall 2015. This is a skill that is not measured again after that time period.

Table 9

Phonological Awareness Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016

Measures	Building A		Building B		Building C		Building D	
	Foundational Skills							
	F	W	F	W	F	W	F	W
FSF Kindergarten	67	80	49	76	73	84	58	88
PSF Kindergarten	NA	90	NA	89	NA	84	NA	86
PSF 1st Grade	76	NA	65	NA	39	NA	69	NA

Source: DIBELS.net & VPort; FSF=First Sound Fluency, PFS=Phoneme Segmentation Fluency, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Alphabetic principle & phonics skills.

Table 10 shows the alphabetic principle and phonics skills for the four buildings, during the monitoring phase of fall 2015 through winter 2016. Buildings B & D had much lower fall scores than the other two buildings. For instance, on first grade NWF-CLS, Building B was about 20% different than the other buildings. Additionally, Buildings B and D started significantly lower on the first and second grade NWF-WWR measures. On the first grade NWF-CLS measure, Buildings A and D had a decline in percent of students proficient during the fall 2015 through winter 2016 time span. Overall, the mid-year proficiency for the alphabetic principle and phonics skills are not as high as the phonological awareness skills. Two buildings have above 80% proficiency on

kindergarten NWF-CLS, zero buildings are above 80% on first grade NWF-CLS, and two buildings are at or above 80% proficiency for first grade NWF-WWR. During the fall 2015 through winter 2016 time period, there was a decline in proficiency on the first grade NWF-CLS for Buildings A and D, but no decline was shown on the first grade NWF-WWR in any building.

Table 10

Alphabetic Principle & Phonics Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016

Measures	Building A		Building B		Building C		Building D	
	Foundational Skills							
	F	W	F	W	F	W	F	W
NWF-CLS Kindergarten	NA	82	NA	55	NA	90	NA	79
NWF-CLS 1st Grade	74	67	52	71	71	76	72	68
NWF-WWR 1st Grade	81	81	54	67	80	80	43	52
NWF-CLS 2nd Grade	68	NA	52	NA	62	NA	58	NA
NWF-WWR 2nd Grade	66	NA	60	NA	70	NA	58	NA

Source: DIBELS.net & VPort; NWF=Nonsense Word Fluency, CLS=Correct Letter Sounds, WWR=Whole Words Read, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Accurate & fluent reading.

Table 11 highlights the accurate and fluent reading skills for the four elementary buildings, during the monitoring phase of fall 2015 through winter 2016. Once again, there is a misalignment of fall scores across the buildings. Buildings B started the year with much lower scores on second grade DORF-WC, third grade DORF-Acc, and third grade DORF-WC. From fall 2015 through winter 2016, three buildings had a decline on second grade DORF-Acc. The majority of other accuracy and fluency measures showed an increase across the four buildings from fall 2015 through winter 2016. Only third grade DORF-Acc has two buildings that are already above the 80% goal heading towards the end of the year. Most of the first grade DORF measure scores in the buildings need about 30% increase in order to hit the 80% mark at the end of the year. The second grade measures range from 8% to 25% away from the goal of 80% and the majority of third grade measures have a range of 9% to 21% from that goal.

Table 11

Accurate & Fluent Reading Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016

Measures	Building A		Building B		Building C		Building D	
	Foundational Skills							
	F	W	F	W	F	W	F	W
DORF-Acc 1st Grade	NA	65	NA	53	NA	51	NA	53
DORF-WC 1st Grade	NA	54	NA	51	NA	56	NA	52
DORF-Acc 2nd Grade	77	72	63	55	81	71	63	68
DORF-WC 2nd Grade	61	70	47	61	74	73	61	68
DORF-Acc 3rd Grade	74	88	58	65	64	61	74	87
DORF-WC 3rd Grade	67	71	54	60	66	59	72	70

Source: DIBELS.net & VPort; DORF=DIBELS Oral Reading Fluency, WC=Words Correct, Acc=Accuracy, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Comprehension.

Table 12 displays the comprehension skills for the four elementary buildings, during the monitoring phase of fall 2015 through winter 2016. For the comprehension skills, Building A started with the highest percent of students proficient in the fall 2015 as compared to the other building. However, this building also showed a decline on the

same measures from fall 2015 through winter 2016. From fall 2015 through winter 2016, all building showed a decline on second grade DORF-R, three buildings declined for 3rd grade DORF-R, and two buildings declined on third grade DAZE. On the second grade DORF-R, one building is 5% away from the 80% proficient goal in the winter 2015. For the third grade DORF-R, one building is already above 80% in the winter 2016, and two are nearing 80%. On the third grade DAZE, one building is already at 80% and the others range from 18% to 28% from the 80% end of year target.

Table 12

Comprehension Skills during Monitoring, Percent Proficient, Fall 2015-Winter 2016

Measures	Building A		Building B		Building C		Building D	
	Comprehension Skills							
	F	W	F	W	F	W	F	W
DORF-R 2nd Grade	88	75	72	69	64	58	66	64
DORF-R 3rd Grade	88	85	74	75	44	36	79	77
DAZE 3rd Grade	62	56	48	62	60	52	59	80

Source: DIBELS.net & VPort; DORF=DIBELS Oral Reading Fluency, DAZE=DIBELS maze comprehension task, R=Retell, NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Composite scores.

Table 13 provides the overall composite scores for the four elementary buildings and the district averages by grade, during the monitoring phase of fall 2015 through

winter 2016. A variation in scores at the beginning of the year for the buildings can be noted in the data. In fall 2015, Building B had lower composite scores for all of kindergarten through third grade as compared to the other buildings. All buildings saw an increase in composite scores for kindergarten from fall 2015 through winter 2016. For kindergarten composite scores, three of the buildings are at or near the 80% proficiency goal in winter 2016 and all four are nearing 80% on the second grade composite scores. On the first and third grade composite scores, the range of scores varies greatly for winter 2016. The district average for the kindergarten composite from fall 2015 through winter 2016 increased 13%, first grade composite increased 2%, second grade composite grew 1%, and the third grade composite declined 3%.

Table 13

Composite Scores during Monitoring, Percent Proficient, Fall 2015-Winter 2016

Grade	Building A		Building B		Building C		Building D		District	
Overall Scores										
	F	W	F	W	F	W	F	W	F	W
Kindergarten	65	75	44	58	63	80	61	71	58	71
1st Grade	67	63	42	55	51	56	61	53	55	57
2nd Grade	71	74	62	71	85	73	68	72	72	73
3rd Grade	76	71	60	63	63	43	70	80	67	64

Source: DIBELS.net & VPort; F=Fall, W=Winter, S=Spring

Reading fidelity.

The district in Southwest Michigan has been creating systems for MTSS, focusing on Tier 1 instruction, and created a process for instructional coaching across the four elementary buildings. To be at full implementation, a process to monitor implementation is important (NIRN, n.d.). Through the process of initial implementation and continued monitoring, it was determined that collecting reading process data was needed to further analyze fidelity of MTSS practices. Tables 14-15 highlight the data that was collected in the winter 2016.

A tool that assists teams in analyzing their school-wide reading practices is the Reading-Tiered Fidelity Inventory (St. Martin, Nantais, Harms, & Huth, 2015). The Reading-Tiered Fidelity, or R-TFI, is a rubric-style analysis of MTSS reading practices that are in place at Tier 1, Tier 2, and Tier 3. According to St. Martin, et al. (2015), the purpose of the R-TFI “is to provide School Leadership Teams with a tool to assess the implementation of a School-Wide Reading Model” (p. 3). The creators of the R-TFI recommend that all members of the School Leadership Team are present and participate in the completion of the R-TFI.

During the winter 2016 data review, building leadership teams completed the R-TFI for all three Tiers. However, not all members of each building leadership team were able to be present at the data review, so team numbers varied by building and consisted of one to six members. Since Tier 1 is the focus of this research project, it is displayed below in Table 14. The intention is to use the results of the R-TFI in a data-based decision-making process along with student outcome data (St. Martin, et al., 2015). The

goal for Tier 1 is 80% on the R-TFI. Until this goal is met, focus should continue to be put on creating systems of support to students at the building level.

Table 14 displays the R-TFI Tier 1 subscale and total scores for the four elementary buildings and the district average, from winter 2016. When addressing team components on the R-TFI, three of the four buildings are at or above the 80% goal in Tier 1. For the area of implementation, one school is above 80% and two are within 5% of this goal. All four elementary buildings are above 80% on Tier 1 resources. Three out of the four buildings have a score above 80% for Tier 1 evaluation and for the total score. Looking at the overall district average shows a score above 80% for all areas except implementation. According to the total score for three out of the four buildings, systems of support to students are in place for Tier 1 reading, because they scored above 80%. However, this does not align with the student achievement results across Tier 1 reading according to DIBELS Next indicators trend data and winter 2016 data.

Table 14

Reading Tiered Fidelity Inventory Process Data, Tier 1 Scores, Winter 2016

Subscale	Building A	Building B	Building C	Building D	District
<i>Tier 1</i>					
Teams	100%	80%	70%	100%	88%
Implementation	75%	67%	100%	75%	79%
Resources	83%	83%	83%	100%	87%
Evaluation	90%	55%	85%	95%	81%
Total Score	87%	70%	85%	93%	84%

Source: District in Southwest Michigan (2016)

An additional source of fidelity data was also collected during the winter 2016 DIBELS benchmarking assessments. The instructional specialist in the district conducted DIBELS fidelity checks, while staff administered the measures with students (Dynamic Measurement Group, 2010). She measured the overall percentage for accuracy of consistency in the administration of the measures per person by building. Additionally, as a district, she measured the scoring of booklets and the data entry as the staff members transferred the data. The results of the DIBELS fidelity checks, from winter 2016, are displayed below in Table 15.

These fidelity checks show that all four elementary buildings have above 80% accuracy of administration of measures. The range for this fidelity check was from 83% to 91% amongst the buildings, with a district average of 87%. For accuracy of scoring of the booklets, the district average is 80%. The district average for accuracy of data entry

was 97%. Though there is always human error and room for improvement during benchmark assessments, overall, the fidelity checks show over 80% for accuracy of administration measures, accuracy of scoring of the booklets, and accuracy of data entry. The scoring of the booklets had the lowest of the three types of data collected, at 80%.

Table 15

DIBELS Fidelity Checks, Winter 2016

Subscale	Building A	Building B	Building C	Building D	District
<i>Accuracy of Administration of Measures</i>					
	83%	86%	91%	88%	87%
<i>Accuracy for Scoring of Booklets</i>					
					80%
<i>Accuracy of Data Entry</i>					
					97%

Source: District in Southwest Michigan (2016)

Monitoring conclusions.

During the 2014-2015 school year, all kindergarten through third grade teachers implemented new foundational reading routines into their classrooms. The following year, beginning in fall 2015, these same teachers began implementing a new comprehensive reading program which also integrated the foundational routines. Both the

Reading-Tiered Fidelity Inventory and the DIBELS benchmarking assessments fidelity checks demonstrate that processes are in place to support DIBELS administration as well as systems to support students in Tier 1 reading.

However, the student achievement data does not show adequate growth so far during the 2015-2016 school year. The variation in scores for the foundational skills, comprehension skills, and composite scores shows lack of alignment to Tier 1 reading implementation amongst the four buildings. According to data from the foundational skills, comprehension skills, and the composite scores, students are on their way to reach 80% proficiency at the end of the year on some measures. For other measures, much progress will need to be made from winter 2016 through spring 2016 to reach 80% proficiency. Also, a decline from fall 2015 through winter 2016 was noted for some of the measures from kindergarten through third grade.

Conclusions

Tables 16-19 below display the overall impact on the foundational skills and comprehension skills and are grouped according to research question. Since the monitoring phase was only conducted across the fall and winter time span, this is how part of the data is displayed for comparison purposes of overall progress from 2014-2015 school year to 2015-2016 school year. Additionally, growth from fall 2014 through spring 2015 is displayed. The impact on the percent proficient in the district is displayed for fall, winter, and spring from the 2014-2015 school year and for the fall and spring during the 2015-2016 school year.

Research Question 1

For this research project, the first question that I wanted to determine is: “Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in the *foundational skills* in kindergarten through third grade?”

Phonological awareness.

The overall impact to the district in percentage growth and percent proficient for the phonological skills can be seen in Table 16. Kindergarten PSF data shows that there was a 29% increase in proficient students from fall 2014 through winter 2015 and a 20% increase from fall 2015 through winter 2016, which shows a 9% decline from one year to the next. Both winter periods demonstrate proficiency rates above 80% on the measurable phonological awareness skills. The kindergarten PSF measure also indicates that both showed proficiency scores well above 80% in the winter. Since the first grade PSF is not administered after the fall benchmarking period, we cannot determine a mid-year proficiency for this measure.

Fall 2014 through spring 2015 growth cannot be determined for the phonological awareness skills. Kindergarten PSF scores went from 90% proficient to 94% proficient, which is a 4% increase from winter 2014 through spring 2015. The other measures are not obtained during the spring benchmark period, so we cannot determine growth for this time period. The percent proficient on the spring 2015 measures were above the 80% target. Since the winter 2016 measures are already above 80%, there is a good possibility of obtaining over 80% in spring 2016 if continued progress is made.

Table 16

Overall Impact on Phonological Awareness Skills

Measures	District Fall 2014- Spring 2015	District Fall 2014- Winter 2015	District Fall 2015- Winter 2016	District 2014-2015			District 2015-2016	
	Percentage Growth Over Time Period			Percent Proficient				
				F	W	S	F	W
FSF Kindergarten	NA	29	20	56	85	NA	62	82
PSF Kindergarten	NA	NA	NA	NA	90	94	NA	87
PSF 1st Grade	NA	NA	NA	65	NA	NA	62	NA

Source: DIBELS.net & VPort; NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Alphabetic principle & phonics skills.

The overall impact for percentage growth and percent proficient in the district for the alphabetic principle and phonics skills can be seen in Table 17. First grade NWF-CLS data from the 2014-2015 school year as compared to the 2015-2016 school year shows a 1% increase in growth from fall to winter and a 1% decrease on first grade NWF-WWR. Growth cannot be determined from fall 2014 through winter 2015 or from fall 2015 through winter 2016 for kindergarten NWF-CLS, second grade NWF-CLS, or second grade NWF-WWR. For this same data, a percent increase cannot be determined for kindergarten NWF-CLS. However, there was a 3% increase in proficient students from fall 2014 through winter 2015 and a 4% increase from fall 2015 through winter 2016 on first grade NWF-CLS, which shows a 1% increase from one year to the next. The first

grade NWF-WWR showed a 6% increase from fall 2014 through winter 2015 and a 5% increase from fall 2015 through winter 2016, indicating a 1% decline amongst the two years. Because second grade NWF-CLS and NWF-WWR are not administered during the winter benchmarking period, growth in percentage of proficient students cannot be determined.

No winter benchmarking average district scores are above 80% for either the 2014-2015 school year or the 2015-2016 school year. However, the winter 2016 proficiency data shows slightly higher scores for two of the three kindergarten and first grade measures. Since the second grade NWF-CLS and NWF-WWR are not administered after the fall benchmarking period, we cannot determine a mid-year proficiency for this measure. Growth cannot be determined for kindergarten NWF-CLS, second grade NWF-CLS, or second grade NWF-WWR from fall 2014 through spring 2015. First grade NWF-WWR showed a 16% increase from fall 2014 through spring 2015. Spring 2015 proficiency data for the alphabetic principle and phonics skills did not reach 80%, but two were near this target. The percent proficient on the spring 2016 measures have the capability of reaching 80% if continued progress is made that has occurred so far during the 2015-2016 school year.

Table 17

Overall Impact on Alphabetic Principle & Phonics Skills

Measures	District Fall 2014- Spring 2015	District Fall 2014- Winter 2015	District Fall 2015- Winter 2016	District 2014-2015			District 2015-2016	
	Percentage Growth Over Time Period			Percent Proficient				
				F	W	S	F	W
NWF-CLS Kindergarten	NA	NA	NA	NA	78	76	NA	77
NWF-CLS 1st Grade	0	3	4	63	66	63	67	71
NWF-WWR 1st Grade	16	6	5	59	65	75	65	70
NWF-CLS 2nd Grade	NA	NA	NA	60	NA	NA	60	NA
NWF-WWR 2nd Grade	NA	NA	NA	63	NA	NA	64	NA

Source: DIBELS.net & VPort; NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Accurate & fluent reading.

For accurate and fluent reading in the district, the overall impact in percentage growth and percent proficient is highlighted in Table 18. Comparing the fall 2014 through winter 2015 data to the fall 2015 through winter 2016 data shows that the second grade DORF-Acc had a 4% decline, second grade DORF-WC stayed the same, third grade DORF-Acc had a 1% decline and third grade DORF-WC had a 5% increase. We cannot determine growth for first grade DORF-Acc or DORF-WC. None of the winter

periods demonstrate proficiency rates above 80% on the measurable accurate and fluent reading skills.

Fall 2014 through spring 2015 growth cannot be determined for first grade DORF-Acc or DORF-WC. Second grade DORF-Acc scores in the fall 2014 increased from 70% proficient to 72% proficient in spring 2015, and second grade DORF-WC increased from 61% to 67% proficient. From fall 2014 through spring 2015, third grade DORF-Acc scores increased from 65% proficient to 73% proficient and third grade DORF-WC declined from 66% proficient to 66% proficient during this time period. Spring 2015 accurate and fluent reading district data did not have any measures that met the 80% target.

Table 18

Overall Impact on Accurate & Fluent Reading Skills

Measures	District Fall 2014- Spring 2015	District Fall 2014- Winter 2015	District Fall 2015- Winter 2016	District 2014-2015			District 2015-2016	
	Percentage Growth Over Time Period			Percent Proficient				
				F	W	S	F	W
DORF-Acc 1st Grade	NA	NA	NA	NA	67	67	NA	56
DORF-WC 1st Grade	NA	NA	NA	NA	64	63	NA	53
DORF-Acc 2nd Grade	2	0	-4	70	70	72	71	67
DORF-WC 2nd Grade	6	7	7	61	68	67	61	68
DORF-Acc 3rd Grade	3	8	7	65	73	68	68	75
DORF-WC 3rd Grade	3	-5	0	66	61	65	65	65

Source: DIBELS.net & VPort; NA=not applicable at this grade/time of year, F=Fall, W=Winter, S=Spring

Research Question 2

The second question that I wanted to determine is: “Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in *comprehension* in first through third grade?”

Comprehension.

The overall district impact in percentage growth and percent proficient for the comprehension skills can be seen in Table 19. Fall 2014 through winter 2015 second grade DORF-R data had a 4% decrease as compared to fall 2015 through winter 2016 data which had a 6% decrease. Third grade DORF-R demonstrated a 6% increase from fall 2014 through winter 2015 and a 3% decrease from fall 2015 through winter 2016. On the third grade DAZE, a 7% increase in growth occurred from fall 2014 through winter 2015 with a 6% increase from fall 2015 through winter 2016. None of the winter district averages were at the 80% goal for percent proficient, though the third grade DORF-R was nearing it at 77%.

The third grade DAZE showed the most percentage growth from fall 2014 through spring 2015, going from 54% to 63% for a total of 9%. The third grade DORF-R increased 7%, from 71% in the fall 2014 to 78% in spring 2015. The second grade DORF-R improved 1% from fall 2014 through spring 2015. Both second grade DORF-R and third grade DORF-R were near 80% in spring 2015, but none of the measures hit the target.

Table 19

Overall Impact on Comprehension Skills

Measures	District Fall 2014- Spring 2015	District Fall 2014- Winter 2015	District Fall 2015- Winter 2016	District 2014-2015			District 2015-2016	
Percentage Growth Over Time Period				Percent Proficient				
				F	W	S	F	W
DORF-R 2nd Grade	1	-4	-6	74	70	75	73	67
DORF-R 3rd Grade	7	6	-3	71	77	78	71	68
DAZE 3rd Grade	9	7	6	54	61	63	57	63

Source: DIBELS.net & VPort; F=Fall, W=Winter, S=Spring

Additional Data Analyzed

Though the composite score data is not related to a specific research question that was being answered for this project, it is notable data that began to be collected when the project began. It provides an overall analysis of progress for the foundational and comprehension early literacy skills. Table 20 displays the overall impact on the composite scores by grade for the district. It shows progress from the fall and winter time spans as well as fall 2014 through spring 2015. For each type of data, the impact on the percentage growth from fall to winter and percent proficient from fall to winter is displayed for each time period monitored, along with the fall 2014 through spring 2015 data.

Composite scores.

As noted in Table 20, each year has an increase in growth for the majority of composite scores from fall to winter. The kindergarten district average on the composite score showed the most overall growth from the fall to winter time periods each year. For the kindergarten composite score, there was a 23% increase in proficient students from fall 2014 through winter 2015 and a 13% increase from fall 2015 through winter 2016, which shows a 10% decline from one year to the next. First grade composite scores had a 7% increase from fall 2014 through winter 2015 and a 2% increase from fall 2015 through winter 2016, for a decrease of 5% between the years. On the second grade composite, there was a 2% increase from the fall 2014 through the winter 2015 and a 1% growth from fall 2015 through winter 2016. This shows a decline of 1% between the two years. The composite scores in the winter 2015 for the four grades ranged from 65% to 77% proficient, and between 57% and 73% proficient during winter 2016. None of the winter scores either year hit 80%, but many were closing in on this target.

On the composite score from fall 2014 through spring 2015, there was a 27% increase for kindergarten, a 9% increase for first grade, a 2% decline for second grade, and a 5% increase for third grade. The spring composite scores ranged from 67% proficient to 81% proficient across the grade levels, with the highest in kindergarten at 81%.

Table 20

Overall Impact on Composite Scores

Grade	District Fall 2014- Spring 2015	District Fall 2014- Winter 2015	District Fall 2015- Winter 2016	District 2014-2015			District 2015-2016	
Percentage Growth Over Time Period				Percent Proficient				
				F	W	S	F	W
Kindergarten	27	23	13	54	77	81	58	71
1st Grade	9	7	2	58	65	67	55	57
2nd Grade	-2	2	1	72	74	70	72	73
3rd Grade	5	4	-3	66	70	71	67	64

Source: DIBELS.net & VPort; F=Fall, W=Winter, S=Spring

Discussion

“Imagine a place where innovation and continuous improvement occur spontaneously” (Kline & Saunders, 1998, p. 156). This district in Southwest Michigan has a focus on improving achievement for students, and are currently in the innovation and sustainability phase of implementation of district MTSS (Fixsen, et al., 2007). In June of 2013, they began their journey of implementing district MTSS. Comprehensive school reform models have been shown to be effective when implemented with fidelity, however, it can take three to five years for these reform strategies to be seen in student achievement data (Aladjem & Borman, 2006). The district is currently in the middle of their third year of implementation.

During these three years, this district has put a lot of systems in place to support students through a focus on district MTSS, strengthening Tier 1 reading through training for teachers, and processes to support teachers during implementation. Though the district has a focus on student achievement, barriers exist in their district that come up in many educational organizations during implementation (VanDerHeyden & Tilly, 2010). The goal is to continue to build their district capacity to support MTSS while addressing these barriers, provide teachers with the tools necessary to implement high quality Tier 1 reading instruction, and support these teachers during implementation and beyond. Once the high quality Tier 1 reading practices are an integral part of each kindergarten through third grade teachers' everyday instruction, reading achievement will reach the level that the district is seeking for their students. Not only will this reading achievement be sustained over time, but it will withstand staff changes and turnover, and the addition of other initiatives (VanDerHeyden & Tilly, 2010). Improving achievement and helping students to be successful is the ultimate goal in school reform.

Recommendations:

After analysis of elementary trend data, data collection during the first year of implementation of the foundational reading routines, and continued monitoring of progress as they integrated the routines with the comprehensive reading program, some conclusions and recommendations for sustainability can be made.

District MTSS.

As noted by Aladjem & Borman (2006), it can take three to five years for reform strategies to be seen in student achievement data. Since this district is in the middle of their third year with district MTSS, I encourage them to continue to focus on this reform

strategy. The district is currently in the innovation and sustainability phase of implementation for district MTSS (Fixsen, et al., 2007). Continued focus on the implementation drivers: (a) competency, (b) organization, (c) leadership will help them with successful implementation (NIRN, n.d.) This will be especially helpful as they address barriers that exist in the district during the implementation process.

Continuation of leadership across the district by their DIT will also increase their chance of success in the long term (Fixsen, et al., 2001). Additionally, the DIT is encouraged to continue monthly meetings and data reviews three times a year (VanderHeyDen & Tilly, 2010). Along with this, the building leadership teams would find success by continuing the data reviews three times a year for the purposes of analyzing achievement and processing data and making decisions using this data. Though the district at one point had an identified MTSS coordinator, they are currently without one who has designated responsibilities. It is important to have someone lead the work of the implementation team (NIRN, n.d.). If it is not possible to designate one person, the role can be a shared responsibility as long as those chosen have the capability and time to accomplish the work that is needed.

Training for teachers.

Extensive training occurred in explicitly teaching the foundational reading routines (Archer & Hughes, 2011). However, teachers were not able to have as much training in integration of the new comprehensive reading program with the routines. Follow-up training for reading routines integration with the comprehensive reading program may be necessary. This training could be led by the ISD MTSS coordinator, the district instructional specialist, the teacher-leaders, or a combination of these educators,

which may help with buy-in from the teachers (Knight, 2007 & Rebore, 2015).

Kindergarten through third grade teachers may also benefit from strategies that increase differentiation during Tier 1 reading instruction, while using the comprehensive reading program (Lipson, 2010). Teachers are also encouraged to continue to work in collaborative teams and conduct data analysis during grade level meetings (Buffum, et al., 2012). Additionally, there appears to be a need for alignment of Tier 1 reading practices across the four elementary buildings (MiBLSi, 2014a). By increasing alignment in practices across the buildings, it may increase the district averages for student reading achievement.

Support to teachers.

As we know, training teachers is not sufficient (Fisher & Frey, 2010 & Knight, 2007). I encourage this district to continue the process of instructional coaching. The coaching process has been scaled-up to include all four elementary buildings (Fixsen, et al., 2013). Continue to determine ways to best meet the needs of all kindergarten through third grade teachers as they implement effective Tier 1 reading practices. Additionally, having a structured process for building administrators to provide support and accountability for implementation will lend assistance to the instructional coaching process (NIRN, n.d.). Another suggestion is to determine a more clarified process so that teacher-leaders can provide ongoing, embedded support to teachers across all elementary buildings as they implement Tier 1 reading strategies.

Conclusion

Putting forth the continued effort of implementing a large-scale school reform model can be a strenuous process. Change takes time, especially in organizations like

school districts that are ever changing (Aladjem & Borman, 2006). While continuing to implement this initiative, a motto for this district could be, “You are so valuable and worthy, our mission is so vital, and the future lives of our students are so precious, that we have a joint responsibility to one another to be the best we can be” (Reeves, 2009, p. 11). Even though the process does take time, it is worthwhile in the end to see students become successful.

References

- Aladjem, D. K., & Borman, K. M. (2006). *Summary of findings from the National Longitudinal Evaluation of Comprehensive School Reform*. Paper presented at the Annual meeting of the American Educational Research Association, San Francisco, CA. Retrieved September 13, 2015, from http://www.successforall.org/SuccessForAll/media/PDFs/AIR_STUDY_CSR.pdf
- Allain, J.K. & Eberhardt, N.C. (2011). *RtI: The forgotten Tier: A practical guide for building a data-driven Tier 1 instructional process*. Stockton, KS: Rowe Publishing & Design.
- Archer, A., & Hughes, C. (2011). *Explicit instruction: Effective and efficient teaching*. New York: Guilford Press.
- Balas, E. & Boren, S. (2000). Managing clinical knowledge for healthcare improvements. In V. Schattauer (Ed.). *Yearbook of Medical Informatics* (p. 65-70). Stuttgart, Germany.
- Boatright, B. & Gallucci, C., et al. (2008). Coaching for Instructional Improvement: Themes in Research and Practice. *Washington State Kappan*, 3-5.
- Buffum, A., Mattos, M., & Weber, C. (2012). *Simplifying response to intervention: Four essential guiding principles*. Bloomington, IN: Solution Tree Press.
- Common Core State Standard Initiative (2014). Retrieved October 19, 2014, from <http://www.corestandards.org/>
- Connor, C. M., Morrison, F. J., & Katch, L. E. (2004). Beyond the reading wars:

- Exploring the effect of child-instruction interactions on growth in early reading. *Scientific Studies of Reading*, 8, 305-336.
- District in Southwest Michigan. (2016). *Reading TFI Data-Winter 2016* [Data file]. Retrieved from https://docs.google.com/document/d/1VIfUAFM5V1KFboejA8GLpGQ0MhjN_AYvCebK1FMuhAg/edit
- Dynamic Measurement Group. (2010). *DIBELS Next Benchmark Goals and Composite Score*. Retrieved January 31, 2016, from <http://dibels.org/papers/DIBELSNextBenchmarkGoals.pdf>
- Fisher, D. & Frey, N. (2010). *Enhancing RTI: How to ensure success with effective classroom instruction & intervention*. Alexandria, VA: ASCD.
- Fixsen, D., Blase, K., Horner, R., Sims, B., & Sugai, G. (2013). *Scaling up brief*. Retrieved from <http://sisep.fpg.unc.edu/sites/sisep.fpg.unc.edu/files/resources/SISEP-Brief3-ReadinessForChange.pdf>
- Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In G. A. Bernfeld, D. P. Farrington & A. W. Leschied (Eds.), *Offender rehabilitation in practice: Implementing and evaluating effective programs* (pp. 149-166). London: Wiley.
- Fixsen, D., Naoom, S., Blase, K., & Wallace, F. (2007, Winter/Spring). Implementation: The missing link between research and practice. *The APSAC Advisor*, 4–10.
- Fowler, F. C. (2013). *Policy studies for educational leaders: An introduction* (4th ed.). Upper Saddle River, NJ: Pearson Education Inc.
- Francis, D. J., Shaywitz, S. E., Stuebing, K. K., Shaywitz, B. A., and Fletcher, J. M.

- (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology*, 88(1), 3-17.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London & NY: Routledge.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first to fourth grades. *Journal of Educational Psychology*, 80(4), 437-447.
- Kansas Multi-Tier System of Supports (2010a). *MTSS brief: Consideration of replacement core*.
- Kansas Multi-Tier System of Supports (2010b). *The integration of MTSS and RtI*.
- Kline, P., & Saunders, B. (1998). *Ten steps to a learning organization* (2nd ed.). Arlington, VA: Great Ocean Publishing, Inc.
- Knight, J. (2007). *Instructional coaching: A partnership approach to improving instruction*. Thousand Oaks, CA: NSDC.
- Kosanovich, M. & Verhagen, C. (2012). *Building the foundation: A suggested progression of sub-skills to achieve the reading standards: Foundational skills in the common core state standards*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Lipson, M. (2010). *Successful approaches to RTI: Collaborative practices for improving K-12 literacy*. Newark, DE: International Reading Association.
- Michigan Department of Education (2015a). *MI school data*. Retrieved February 8, 2015, from <https://www.mischooldata.org/DistrictSchoolProfiles/Student>

Information/StudentCounts/StudentCount.aspx

Michigan Department of Education (2015b). *School improvement*. Retrieved January 24, 2015, from http://www.michigan.gov/mde/0,1607,7-140-28753_38959---,00.html

Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi). (2014a). *An abstract regarding multi-tier system of supports (MTSS) and Michigan's integrated behavior and learning support initiative (MiBLSi)*.

Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi). (2014b). *Tier 1 Elementary Strengthening Reading Implementation Day 3 – Kindergarten* [PowerPoint slides].

Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi). (2013). *Leading Learning: Keeping the Focus on What Works* [PowerPoint slides].

Michigan's Integrated Behavior and Learning Support Initiative (MiBLSi). (n.d.). *What's Your Plan? Accurate Decision Making within a Multi-Tier System of Supports: Critical Areas in Tier 1*.

Moir, E. (2009). Accelerating Teacher Effectiveness: Lessons Learned from Two Decades of New Teacher Induction. *Phi Delta Kappan*, 14-21.

National Implementation Research Network (NIRN). (n.d.). *Learn Implementation*.

Retrieved November 1, 2014, from <http://nirn.fp.unc.edu/learn-implementation>

National Reading Panel. (2000). *Report of the National Reading Panel. Teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Retrieved September 27, 2014, from [https://www.NationalReadingPanel.nih.gov/publications/pubs/nrp/Documents/report.pdf#search=teaching children to read](https://www.NationalReadingPanel.nih.gov/publications/pubs/nrp/Documents/report.pdf#search=teaching%20children%20to%20read)

- Rebore, R. W. (2015). *Human resources administration in education* (10th ed.). Boston: Pearson Education, Inc.
- Reeves, D.B. (2009). *Leading change in your school: How to conquer myths, build commitment, and get results*. Alexandria, VA: ASCD.
- Sparks, R. L., Patton, J., & Murdoch, A. (2014). Early reading success and its relationship to reading achievement and reading volume: Replication of ‘10 years later.’ *Reading and Writing*, 27(1), 189-211.
- St. Martin, K., Nantais, M., & Harms, A., Huth, E. (2015). *Reading Tiered Fidelity Inventory (Elementary-Level Edition)*. Michigan Department of Education, Michigan’s Integrated Behavior and Learning Support Initiative.
- VanDerHeyden, Amanda M., and Tilly, W. D. (2010). *Keeping RTI on Track: How to Identify, Repair and Prevent Mistakes That Derail Implementation*. Horsham, PA: LRP Publications.
- Vernez, G., Karam, R., Mariano, L. T., & DeMartini, C. (2006). *Evaluating comprehensive school reform models at scale: Focus on implementation*. Santa Monica, CA: RAND Corporation.

Appendices

Appendix A Specialist Project & Measurement Timeline

June 2014-August 2014

- Train all kindergarten through third grade teachers in foundational reading routines

September 2014- June 2015

- Collect District Background Information
- District MTSS coordinator/coach will begin to coach & monitor teacher implementation
- Receive HSIRB Approval
- Gain Consent from district in Southwest Michigan
- Train all kindergarten through third grade teachers in data analysis to align with the reading routines (1 day training per grade level)

June 2015-January 2016

- District MTSS coordinator/coach will continue to coach teachers and monitor implementation
- Begin data collection-trend data by grade & building & district
 - K-3rd DIBELS Next Benchmark Composite Scores
- Collect & analyze implementation data-fall 2014, winter 2015, spring 2015 by grade & building & district
 - K-3rd DIBELS Next Benchmark Composite Scores
 - K-3rd DIBELS Next Foundational Skills
 - Phonemic Awareness
 - First Sound Fluency (FSF)
 - Phoneme Segmentation Fluency (PSF)

- Alphabetic Principle & Phonics
 - Nonsense Word Fluency-Correct Letter Sounds (NWF-CLS)
 - Nonsense Word Fluency-Whole Words Read (NWF-WWR)
 - Accurate & Fluent Reading
 - DIBELS Oral Reading Fluency-Accuracy (DORF-Acc)
 - DIBELS Oral Reading Fluency-Words Correct (DORF-WC)
- 1st-3rd DIBELS Next Comprehension Skills
 - Retell (DORF-Retell)
 - Cloze Reading (DAZE)
- Once spring 2015 data is collected, analyze pilot building's data for scale-up of coaching model across the district
- Collect monitoring data for fall 2015 & winter 2016 by grade & buildings & district
- K-3rd DIBELS Next Benchmark Composite Scores
- K-3rd DIBELS Next Foundational Skills
 - Phonemic Awareness
 - First Sound Fluency (FSF)
 - Phoneme Segmentation Fluency (PSF)
 - Alphabetic Principle & Phonics
 - Nonsense Word Fluency-Correct Letter Sounds (NWF-CLS)
 - Nonsense Word Fluency-Whole Words Read (NWF-WWR)
 - Accurate & Fluent Reading
 - DIBELS Oral Reading Fluency-Accuracy (DORF-Acc)
 - DIBELS Oral Reading Fluency-Words Correct (DORF-WC)
- 1st-3rd DIBELS Next Comprehension Skills
 - Retell (DORF-Retell)

- Cloze Reading (DAZE)

- Collect and analyze process data by building & district

February 2016-April 2016

- Analyze collected data
- Answer research questions
- Complete research project
- Prepare project for submission
- Consider presenting research at an educational conference

Appendix B
Building Codes

Code	School Name
Building A (Pilot Bldg.)	Andrews Elementary
Building B	Hoppin Elementary
Building C	Norton Elementary
Building D	Park Elementary
District	Three Rivers Community Schools

Appendix C

Coaching Pilot Model

Instructional Coaching Model

District in Southwest Michigan

Introduction

- A. Purpose
- B. Research
- C. Principles of Instructional Coaching

Instructional Coaching

- A. Roles of the Instructional Coach
- B. Roles of the Principal
- C. Roles of the Teacher
- D. Coaching Continuum

Introduction

A. Purpose

The objective of implementing an Instructional Coaching Model is provide coherence across the district by promoting professional development experiences that will improve the teaching and learning process.

The Instructional Coaching Model is aligned with the District's MTSS Implementation Plan and has a goal of closing the achievement gap by increasing educator's effective instructional strategies.

B. Research

Educators and researchers generally believe and promote the concept that one of the best ways to improve the teaching and learning process is by providing teachers with quality professional development experiences. Coaching provides learning opportunities that can be adapted to the particular classroom setting; therefore, coaching can aid the transfer and application of new learning in teacher's daily classroom instruction. Coaching develops trust, instills collective responsibility, imparts an innovative orientation, and provides an example of professionalism around instructional practice (*Analysis of an Instructional Coach's Role as Elementary School Language Teachers' Professional Developer*, Chin-Wen Chien, 2013).

C. Principles of Instructional Coaching

Equality - Instructional Coaches and teachers are equal partners.

Choice - Teachers should have choice regarding what and how they want to learn.

Voice - Professional learning should empower and respect the voices of teachers.

Praxis - Teachers should apply their learning to their real-life practice as they are learning.

Dialogue - Professional learning should enable authentic dialogue.

Reflection - Reflection is an integral part of professional learning.

Reciprocity - Instructional coaches should expect to receive as much as they give.

Instructional Coaching - A Partnership Approach

A. Roles of Instructional Coach

- Classroom Supporter
 - Purpose: To increase the quality and effectiveness of classroom instruction based on using the gradual release model and may include but is not limited to: *collaborating, co-planning, modeling, co-teaching, and providing descriptive feedback based on teacher-requested observation.*
- Instructional Supporter
 - Purpose: To support the implementation of effective instructional strategies including but not limited to: *assessment for learning, differentiation of instruction, standards based grading, building teacher*

capacity by working with intervention groups for short periods of time in elementary classrooms.

- Curriculum or Content Facilitator
 - Purpose: To promote implementation of state standards through adopted curricula including but not limited to: *increasing teacher content knowledge, facilitating a better understanding of the structure of the written, taught, and tested curriculum, dissecting standards to guide identification of essential knowledge and skills.*
- Data Coach
 - Purpose: To facilitate conversations using data to drive instructional decisions including but not limited to: *collaborating with teachers to analyze formative and summative student achievement data, assisting teachers with the use of data to improve student learning.*
- Facilitator for Change
 - Purpose: To engage teachers in reflective thinking while looking at their own instructional practices critically and analytically including but not limited to: *fostering a safe, trusting environment for teachers, introducing alternatives and refinements for teacher instructional practices.*
- Learner
 - Purpose: To engage in continuous learning in order to keep current including but not limited to: *engaging in professional development opportunities and professional reading, practicing and reflecting about what is learned.*
- Professional Learning Facilitator
 - Purpose: To design and facilitate effective professional development learning opportunities aligned with District School Improvement Plan including but not limited to: *providing professional development, facilitating other forms for professional development.*
- Resource
 - Purpose: To identify a variety of resources to enhance classroom instruction and student achievement including but not limited to: *identifying instructional and assessment resources requested by teachers, sharing research and instructional best practices.*
- School Leader
 - Purpose: To support and communicate school and district initiatives with the school community including but not limited to: *involving stakeholders in the implementation of the School Improvement Plan, connecting with community stakeholders by sharing instructional practices that impact students, acting as a strong advocate for student learning.*

- The role of the coach does not include:
 - Evaluating teachers, providing information that would be used for evaluation, disciplining students in an administrative capacity.

B. Roles of the Principal

- Communicator
 - Purpose: To build understanding of the interconnectedness of the coaching model, school improvement plans, and district initiatives including but not limited to: *articulating the purpose and components of the coaching model to staff, leading and communicating to staff about the district and building initiatives in relation to the coaching model, maintaining the fidelity of the coaching model.*
- Facilitator
 - Purpose: To collaboratively plan and coordinate professional learning including but not limited to: *fostering a safe and trusting environment, aligning professional learning with the building's School Improvement Plan, facilitating access to the coaching model process.*
- Instructional Leader
 - Purpose: To support coaches and teachers in the coaching model including but not limited to: *implementing the school and district initiatives, meeting with school coaches and leadership team on a regular basis to examine school data and assist in school-wide planning (including professional learning), acting as a strong advocate for student learning based on data used to inform instruction, sharing best practices research, committing to meet regularly with coach or coaches to support their roles.*
- Learner
 - Purpose: To promote and model professional learning including but not limited to: *engaging in professional reading and learning opportunities, participating actively in the teaching and learning cycle.*
- Evaluator
 - The principal is responsible for evaluating the coach.
 - The principal is responsible for evaluating the teacher.

C. Role of the Teacher

- Instructor
 - Purpose: Reflect, refine, and implement effective instructional practices to increase student achievement including but not limited to: *aligning instruction to standards, advocating for their students' learning needs, collaborating with coach.*
- Learner

- Purpose: To engage in continuous learning including but not limited to: *choosing learning opportunities supported by the instructional coach, creating learning goals consistent with the School Improvement Plan, exploring/implementing/ reflecting and adhering to best practices, learning and implementing intervention strategies in the classroom.*
- Learning Partner
 - Purpose: To engage in professional collaborative relationships including but not limited to: *fostering a safe, trusting environment, participating actively in the Coaching Continuum*
- Assessor
 - Purpose: To participate in data conversation that influence instructional decisions including but not limited to: *analyzing formative and summative assessment, using assessment data to inform instruction*

D. Coaching Continuum

The continuum begins with **DEVELOPING** a professional learning relationship between the coach and the teachers. The relationship is on-going and should include the examination of student work, planning of instruction, and establishment of common language.

A **COMMITMENT** of a professional relationship must be created between the coach and the teacher(s). The relationship should begin with shared knowledge and understanding of the instructional practices and implementation of coaching. When knowledge is solid, the coach and teacher(s) can begin to collaboratively articulate the purpose of the new teaching practice, use student assessment data, and plan for implementation. During this stage, the coach may develop and model a lesson as the teacher(s) observe. The teacher(s) should have multiple opportunities to see instructional demonstrations and modeling of new strategies. The stage should follow an “*I Do, We Do, You Do*” approach.

The coach then **SUPPORTS** the teacher(s) by developing the relationship into a partnership. The coach and teacher(s) co-plan lessons, the coach teaches a lesson with a teacher assisting, and then both coach and teacher(s) reflect on the lesson together.

IMPLEMENTATION occurs when the coach supports the teacher(s) through guided practice as they conduct the lesson. The coach and teacher(s) plan, reflect, and debrief together.

The final stage is **REFLECTION**. The teacher(s) uses assessment data to plan for instruction and determines the focus for the classroom visit by the coach. The teacher(s) debriefs with the coach and plans for further instruction.

Implementation

- Plan meetings with principals to discuss implementation plan
- Determine needs and identify how it fits within school (Assessment data and SIP)
 - Behavior, Content, Instruction, Assessment
- Present to staff members
- Schedule meetings/interviews with staff
 - Review Data
 - Choice
 - Calendar
 - Assess
- Develop a plan and schedule to assist staff that supports the Coaching Continuum

Training and Support

Knowledge and Skills

- Instructional Coaches that are hired will be trained in the “Instructional Coaching Model” by Jim Knight
- Instructional Coaches will be interviewed and meet Instructional Coach job qualifications

Adapted from Spokane Public Schools’ Instructional Coaching Implementation Model in conjunction with Jim Knight’s “Instructional Coaching: A Partnership Approach” book.

updated 12-4-14

Appendix D
Informed Consent Document

Western Michigan University
Department of Educational Leadership, Research & Technology

Principal Investigator: Dr. Dennis McCrumb
Student Investigator: Carla Osborn
Title of Study: Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support

You have been invited to participate in a research project titled "*Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support*." This project will serve as Carla Osborn's specialist project for the requirements of the Educational Specialist degree. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?

The purpose of this action research project is to determine if the integration of district MTSS, a focus on professional development in effective foundational skills reading routines for through third grade teachers, and instructional coaching to provide support to teachers is effective in increasing student achievement. Below are the research questions:

- Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in the foundational skills in kindergarten through third grade?
- Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in comprehension in first through third grade?
-

Who can participate in this study?

The study will take place in a district in Southwest Michigan. All teachers within the pilot building will be provided instructional coaching by the district MTSS coordinator/coach. However, data will not be analyzed at the student or teacher level. Student DIBELS data for kindergarten through third grade will be disaggregated according to grade level within buildings and across the district by grade level and K-3.

Where will this study take place?

The study will take place within the four elementary buildings in the district in Southwest Michigan. The goal is to determine whether a district focus on MTSS, teacher reading training, followed by instructional coaching will increase student achievement in the foundational skill and comprehension. Since one building is piloting an instructional

coaching model, that buildings' data will be analyzed and compared against the data in the other three buildings to determine if the instructional coaching model is needed in those buildings.

What is the time commitment for participating in this study?

The district will be involved with the study from fall 2014 through spring 2016. Trend data, including DIBELS, will be collected and baseline data will be obtained from fall 2014 prior to implementation of the reading routines. The instructional coaching pilot will occur January-June 2015. DIBELS data will be collected and disaggregated after each universal screening benchmark period for winter 2015, spring 2015, fall 2015, and finally winter 2016 at the conclusion of the project.

What will you be asked to do if you choose to participate in this study?

The district will be asked to provide DIBELS student data to the researchers. The data will then be disaggregated in order to be used for research purposes.

What information is being measured during the study?

The researcher will collect, disaggregate, and analyze DIBELS data by grade level within buildings and at the district-level for the foundational reading skills, comprehension, and using the composite score. The purpose of the data collection is to determine if the integration of district MTSS, teacher reading training, and instructional coaching increases student achievement.

What are the risks of participating in this study and how will these risks be minimized?

Minimal risk exists by participating in this study. The district will be sharing their data, but it will not have identifying factors for individual students or teachers. Risk will be minimized by disaggregating the data according to grade level within buildings and across the district.

What are the benefits of participating in this study?

The district could benefit from this study by determining if the processes they put in place for district MTSS, teacher training, and instructional coaching have an impact on student reading achievement. Analyzing the data from the pilot building will help determine if instructional coaching is worth the time and money involved. Other universities and educators may benefit from the research that emerges from this study.

Are there any costs associated with participating in this study?

There will be no cost to participate in this study.

Is there any compensation for participating in this study?

No compensation will be provided to participants in this study.

Who will have access to the information collected during this study?

This study will be read by the researcher's specialist committee at Western Michigan University. After the study is complete, it may be published in an educational journal or

presented at an educational conference. Participants names and the district name will be kept confidential and will be coded so that they cannot be identified.

What if you want to stop participating in this study?

You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study. The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the primary investigator, Dr. Dennis McCrumb at (269) 387-1720 or dennis.mccrumb@wmich.edu or the student investigator, Carla Osborn at (269) 492-4692 or carla.n.osborn@wmich.edu . You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant's signature

Date

Appendix E
Phases of Implementation Overview for District in Southwest Michigan

Phase 1: Exploration & Installation

(June 2013-September 2014)

- Summer 2013:
 - Partnership between district in Southwest Michigan, local ISD, and MiBLSi began
 - Creation of district implementation team (DIT)
- 2013-2014 School Year:
 - DIT took part in a series of MTSS implementation team trainings, which included learning the implementation stages, implementation drivers, and the major components of creating alignment, capacity, sustainability, and durability
 - DIT analyzed behavior and reading data for the district and chose two focus topics, one of which, Strengthening K-3 Reading is analyzed here
 - DIT underwent exploration activities and prepared for installation, including training sessions for the district MTSS coordinator/coach, teacher-leaders, and ISD MTSS coordinator/coach
 - Spring 2014, the teacher-leaders piloted the routines in their classrooms
 - June 2014, all kindergarten through third grade classroom teachers, special education teachers, and building principals attended two days of mandatory training in the reading content and reading routines as part of a three-day series co-led by the ISD MTSS coordinator and a MiBLSi trainer

- Summer & Fall 2014:
 - Summer 2014, small groups of teacher representatives from kindergarten, first grade, and second grade integrated the applicable reading routines and sequence of instruction into their reading curriculum by creating weekly lesson plans for use by their grade level peers
 - August 2014, kindergarten through third grade teachers had the option to attend an additional half-day training in order to review and practice the routines
 - September 2014, specialist proposal began and an analysis of the research and district/student background information was collected

Phase 2: Initial Implementation & Full Implementation

(September 2014-June 2015)

- 2014-2015 School Year:
 - September 2014, all kindergarten through third grade teachers were expected to use the weekly lesson plans, which made use of the routines daily
 - October 2014, all kindergarten through third grade teachers took part in grade-specific training in data analysis for making instructional decisions for the final day in the three-day reading training co-led by the ISD MTSS coordinator and MiBLSi trainer and teams were encouraged to review their data during their grade level meetings throughout the year
 - October 2014, the ISD MTSS coordinator/coach and the district MTSS coordinator/coach started informal coaching for some of the kindergarten through third grade teachers and monitoring implementation of the reading

routines; teacher-leaders provided support to the kindergarten through third grade teachers within buildings

- October 2014, January 2015, May 2015, each elementary school's leadership team and the DIT attended a fall, winter, and spring data review in order to gather, study, analyze and make a plan using the data
- DIT began monthly meetings to address components of district MTSS and monitor implementation and data
- Through data analysis and follow-up discussions, it was determined that a Coaching Pilot Model would be conducted in one of the elementary buildings
- January-June 2015, the Coaching Pilot Model was implemented in one elementary building by the district MTSS coordinator/coach
- May 2015, the ISD MTSS coordinator/coach obtained HSIRB approval, gained consent from the district in Southwest Michigan, began student data collection
- End of the 2014-2015 school year, analysis of student data in the pilot building was conducted in order to determine whether this process should be scaled-up across the district

Phase 3: Innovation & Sustainability

(July 2015-April 2016).

- Summer 2015:
 - New comprehensive core reading curriculum was determined to be a need in the district across K-6 and was purchased

- Personnel changes occurred (MTSS coordinator/coach left, new instructional specialist hired, changes in teaching staff, two new principals hired)
- Lesson integration for kindergarten through third grade curriculum, integrating foundational routines with the new comprehensive core reading curriculum
- 2015-2016 School Year:
 - The ISD MTSS coordinator continued to assist the district in implementation of strategic and systematic Tier 1 reading strategies and monitored the progress during data reviews and support days
 - Data reviews for the elementary leadership teams and DIT continued; data was monitored and analyzed during these data reviews and implementation barriers were discussed
 - DIT continued monthly meetings to address components of district MTSS and monitor implementation and data
 - Kindergarten through third grade teachers implemented the new comprehensive reading curriculum; the instructional specialist provided instructional coaching support to some kindergarten through third grade teachers in all four elementary buildings
 - February-March 2016, an analysis was conducted to determine the success of the implementation of Tier 1 reading strategies on achievement in the foundational skills, comprehension skills, and on the overall composite score across kindergarten through third grade

- Based on collected data, recommendations for innovation and sustainability of practices were made and the research paper was finalized

Appendix F
Descriptions of DIBELS Next Measures

Foundational Skills:

Phonological Awareness:

- First Sound Fluency (FSF) is a standardized, individually administered assessment that provides a measure of phonemic awareness skills.
- Phoneme Segmentation Fluency (PSF) is a standardized, individually administered test of phonological awareness which assesses a student's ability to segment three- and four-phoneme words into their individual phonemes fluently.

Alphabetic Principle & Basic Phonics:

- Nonsense Word Fluency (NWF) is a measure that is standardized and individually administered. It is a test of the alphabetic principle including letter-sound correspondence in which letters represent their most common sounds and of the ability to blend letters into words in which letters represent their most common sounds. It is comprised of two components, the first being Correct Letter Sound (NWF-CLS) which measures letter sounds in isolation. The second part, Whole Words Read (NWF-WWR) measures whether students can read unfamiliar words as whole words.

Accurate & Fluent Reading:

- DIBELS Oral Reading Fluency (DORF) is a standardized, individually administered test of accuracy and fluency with connected text. It measures the Accuracy within the words that were read (DORF-Acc) as well as the Words Correct (DORF-WC)

Comprehension Skill:

Comprehension:

- DIBELS Oral Reading Fluency (DORF) is a standardized, individually administered test of accuracy and fluency with connected text, as noted above. The Retell provides a comprehension check for the DORF assessment.
- DAZE, or the DIBELS maze comprehension task, is a group-administered measure of reading comprehension. Daze is an indicator of reading comprehension, as completing the maze task requires students to understand what they are reading.

Composite Score:

The DIBELS Composite Score combines multiple DIBELS scores and provides an overall estimate of the student's early literacy skills and/or reading proficiency.

Source: Dynamic Measurement Group (2010)

WESTERN MICHIGAN UNIVERSITY



Human Subjects Institutional Review Board

Date: May 12, 2015

To: Dennis McCrumb, Principal Investigator
Carla Osborn, Student Investigator

From: Amy Naugle, Ph.D., Chair

Re: HSIRB Project Number 15-04-37

This letter will serve as confirmation that your research project titled "Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support" has been **approved** under the **exempt** category of review by the Human Subjects Institutional Review Board. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the application.

Please note: This research may **only** be conducted exactly in the form it was approved. You must seek specific board approval for any changes in this project (e.g., *you must request a post approval change to enroll subjects beyond the number stated in your application under "Number of subjects you want to complete the study."*) Failure to obtain approval for changes will result in a protocol deviation. In addition, if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

Reapproval of the project is required if it extends beyond the termination date stated below.

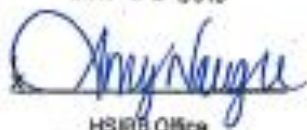
The Board wishes you success in the pursuit of your research goals.

Approval Termination: May 11, 2016

Western Michigan University
H.S.I.R.B.

Approved for use for one year from this date:

MAY 18 2015



HSIRB Office

Informed Consent Document

Western Michigan University
Department of Educational Leadership, Research & Technology

Principal Investigator: Dr. Dennis McCrumb
Student Investigator: Carla Osborn
Title of Study: Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support

You have been invited to participate in a research project titled "*Strengthening Tier 1 Elementary Reading Within a Multi-Tiered System of Support*." This project will serve as Carla Osborn's specialist project for the requirements of the Educational Specialist degree. This consent document will explain the purpose of this research project and will go over all of the time commitments, the procedures used in the study, and the risks and benefits of participating in this research project. Please read this consent form carefully and completely and please ask any questions if you need more clarification.

What are we trying to find out in this study?

The purpose of this action research project is to determine if the integration of district MTSS, a focus on professional development in effective foundational skills reading routines for through third grade teachers, and instructional coaching to provide support to teachers is effective in increasing student achievement. Below are the research questions:

1. Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in the foundational skills in kindergarten through third grade?
2. Will having a district focus on MTSS with reading foundational skills training and intentional support to kindergarten through third grade teachers have an impact on student reading achievement in comprehension in first through third grade?

Who can participate in this study?

The study will take place in Three Rivers Community Schools. All teachers within the pilot building will be provided instructional coaching by the district MTSS coordinator/coach. However, data will not be analyzed at the student or teacher level. Student DIBELS data for kindergarten through third grade will be disaggregated according to grade level within buildings and across the district by grade level and K-3.

Where will this study take place?

The study will take place within the four elementary buildings in Three Rivers Community Schools. The goal is to determine whether a district focus on MTSS, teacher reading training,

Western Michigan University
H.S.I.R.B.
Approved for use for one year from this date:

MAY 12 2015


HSIRS Office

followed by instructional coaching will increase student achievement in the foundational skill and comprehension. Since one building is piloting an instructional coaching model, that buildings' data will be analyzed and compared against the data in the other three buildings to determine if the instructional coaching model is needed in those buildings.

What is the time commitment for participating in this study?

Three Rivers Community Schools will be involved with the study from Fall 2014 through Spring 2016. Trend data, including DIBELS, will be collected and baseline data will be obtained from Fall 2014 prior to implementation of the reading routines. The instructional coaching pilot will occur January-June 2015. DIBELS data will be collected and disaggregated after each universal screening benchmark period for Winter 2015, Spring 2015, Fall 2015, and finally Winter 2016 at the conclusion of the project.

What will you be asked to do if you choose to participate in this study?

Three Rivers Community Schools will be asked to provide DIBELS student data to the researchers. The data will then be disaggregated in order to be used for research purposes.

What information is being measured during the study?

The researcher will collect, disaggregate, and analyze DIBELS data by grade level within buildings and at the district-level for the foundational reading skills, comprehension, and using the composite score. The purpose of the data collection is to determine if the integration of district MTSS, teacher reading training, and instructional coaching increases student achievement.

What are the risks of participating in this study and how will these risks be minimized?

Minimal risk exists by participating in this study. Three Rivers Community Schools will be sharing their data, but it will not have identifying factors for individual students or teachers. Risk will be minimized by disaggregating the data according to grade level within buildings and across the district.

What are the benefits of participating in this study?

Three Rivers Community Schools could benefit from this study by determining if the processes they put in place for district MTSS, teacher training, and instructional coaching have an impact on student reading achievement. Analyzing the data from the pilot building will help determine if instructional coaching is worth the time and money involved. Other universities and educators may benefit from the research that emerges from this study.

Are there any costs associated with participating in this study?

There will be no cost to participate in this study.

Western Michigan University
H.S.I.R.B.
Approved for use for one year from this date:

MAY 12 2015


HSIRB Office

Is there any compensation for participating in this study?

No compensation will be provided to participants in this study.

Who will have access to the information collected during this study?

This study will be read by the researcher's specialist committee at Western Michigan University. After the study is complete, it may be published in an educational journal or presented at an educational conference. Participants names and the district name will be kept confidential and will be coded so that they cannot be identified.

What if you want to stop participating in this study?

You can choose to stop participating in the study at any time for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. You will experience NO consequences either academically or personally if you choose to withdraw from this study. The investigator can also decide to stop your participation in the study without your consent.

Should you have any questions prior to or during the study, you can contact the primary investigator, Dr. Dennis McCrumb at (269) 387-1720 or dennis.mccrumb@wmich.edu or the student investigator, Carla Osborn at (269) 492-4692 or carla.n.osborn@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study.

This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Judy Wordelman
Please Print Your Name

Judy Wordelman
Participant's signature
Director of Curriculum
and Instruction

6-2-15
Date