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HOW HIGH ACHIEVING ELEMENTARY SCHOOLS
IMPROVE STRUGGLING READERS

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ABSTRACT

The purpose of this qualitative study was to explore educational elements that explain how high-achieving elementary schools improve struggling readers. The perceptions of the principals and teachers in three high achieving elementary schools were investigated in three areas of interest: (a) student achievement as it relates to literacy instruction, (b) early intervention leading to success, and (c) the role of school leaders who build a culture for success through change. All three schools that participated in the study were located in the state of Indiana. The topics of the related literature reviewed included a connection of reading instruction to student achievement as it relates to early literacy intervention and the dynamics of the school leadership and building a culture for success. In this study, findings of contributing factors of the manner in which high performing elementary schools improve struggling readers included data driven instruction, reflective practice, 90-minute literacy block with strong core instruction, planning and collaboration, and highly effective people. Aspects that emerged from the topic of early intervention revealed establishing a literacy framework of tiered instruction beginning in kindergarten, conducting benchmark assessments, analyzing data to identify sub skill deficits, developing and implementing an intervention plan, and monitoring student progress. In studying the role of school leadership in achieving success, three aspects surfaced: maintaining high expectations, trust, and respect; support for materials and resources; and strategic scheduling. Understanding obtained from this study should assist teachers and school leaders in their attempts to improve the overall academic achievement of

elementary students who struggle in the area of reading.

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CHAPTER 1

THE PROBLEM

Reading is the brick and mortar of a child's education and has far-reaching lifelong effects (Brian & Welding, 2007). Without a strong foundation in reading, no other content area or skill can be acquired at an optimal level. Technological advancements demand that students communicate effectively with reading and writing. A student will have 14 jobs before the age of 38, according to the U.S. Department of Labor (Fisch, 2007), and many of these jobs do not currently exist. Educators are preparing students for jobs that do not even exist yet. The world has been significantly altered by globalization and technology, and schools must work to develop a diversity of talents, global competence, and digital competencies for students in this new age (Zhao, 2009). Strong literacy skills will be more important than ever before. Technology is driving the world in this digital age and adults must possess the skills necessary to function in a society that is increasingly dependent upon technology as a communication vehicle (Zhao, 2009). Students are coming to school with fewer readiness skills, which puts them at risk before they even begin the educational process. The lack of readiness skills that exists among student populations puts educators at a disadvantage before they have opportunities to begin teaching (Fielding, Kerr, & Rosier, 2007). How can educators overcome these handicaps and achieve the needed catch-up growth at the same acceleration as the expected annual growth without causing students to fall farther behind the expected rate of growth each year? How can school leaders

build capacity among teachers to make the changes necessary to accelerate reading performance? Time is of the essence and one must approach literacy acquisition with a sense of urgency and a relentless approach which consists of effective methodologies that will accelerate reading achievement and overcome the deficits that are the obstacles to student learning (Brian & Welding, 2007). The problem being investigated is how to achieve high levels of literacy acquisition for struggling students who have not met grade level proficiencies on benchmark assessments.

A national reading panel was convened at the request of Congress in 1997 by the National Institute of Child Health and Human Development (NICHD) to research the effectiveness of several different approaches used to teach children to read (NICHD, 2000). The National Reading Panel reviewed research for over two years and submitted the “The Report of the National Reading Panel: Teaching Children to Read” (NICHD, 2000). A partnership in literacy was formed by the NICHD with the National Institute for Literacy and the U.S. Department of Education to work on continued implementation and distribution efforts of the national reading panel’s report to continue the mission of effective research-based reading practices. The NICHD (2000) described its findings with an analysis and review in five areas of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. In the report they defined the skill, reviewed evidence from research, provided implications for the classroom, and described proven strategies for teaching reading (Armbruster, Lehr, & Osborn, 2010).

Early Intervention

In the medical field, preventing and diagnosing issues early is a major goal to obtain wellness and has been for quite some time (Brian & Welding, 2007). People try to be proactive

to learn more about new information what to do to protect themselves, and what to look for to keep themselves out of a hospital emergency room to avoid long-term damage or possibly even death. Early prevention/intervention is not an idea that is exclusive to the medical field. The idea of children struggling to be good readers is just as urgent an issue. Although having the ability to be a strong reader is not a life and death situation, it is certainly crucial in the overall ability to be successful in education and life in the digital age of the 21st century. Educators need to be trained with systematic and sequential steps in teaching literacy in order to build a strong foundation which may prevent a reading problem from developing for those students who are just starting down the path of learning how to read. Response to Intervention (RtI) is a preventative framework that utilizes a universal screening to identify children who are not meeting benchmarks (National Center on Response to Intervention, 2010). The assessment data determines the instructional plans that need to be delivered with fidelity and monitored regularly to teach students and will narrow the achievement gap. In 2010, The National Center on Response to Intervention defined intervention as

a rigorous prevention system provides for the early identification of learning and behavioral challenges and timely intervention for students who are at risk for long-term learning problems. This system includes three levels of intensity or three levels of prevention, which represent a continuum of supports. Many schools use more than one intervention within a given level of prevention.

1. Primary prevention: high quality core instruction that meets the needs of most students
2. Secondary prevention: evidence-based intervention(s) of moderate intensity that addresses the learning or behavioral challenges of most at-risk students

3. Tertiary prevention: individual intervention(s) of increased intensity for students who show minimal response to secondary prevention

At all levels, attention on fidelity of implementation, with consideration for cultural and linguistic responsiveness and recognition of student strengths. (p. 4).

The Purpose of the Study

If the instructional practices of teaching reading impact the overall success of student achievement, then the development of these practices should be a high priority of the administration. The school leadership is responsible for creating a sense of urgency and high level of expectation to improve instructional strategies and to develop an intervention program to serve as a catalyst for growth through accountability. The purpose of this qualitative study was to determine how high achieving schools improve struggling readers. This study examined three high performing elementary schools that have done an outstanding job accelerating early reading achievement by implementing effective instructional strategies in literacy around the five components of reading, early intervention, and the role of the school leadership in achieving success.

Research Questions

This qualitative study focused on effective instructional strategies in the area of reading, RTI framework, and the dynamics of leadership, and specifically the research question, How do high achieving elementary schools improve struggling readers? To determine how these schools improve reading skills in struggling elementary students, these five questions will be studied:

1. How do you improve struggling readers in your school?
2. How do you identify struggling readers? Why?
3. Does administration play a role in accelerating student achievement in struggling

- readers? Why or why not?
4. Does staff play a role in accelerating student achievement in struggling readers? Why or why not?
 5. Does training play a role in accelerating student achievement in struggling readers? How do high achieving schools identify struggling readers?

Limitations

1. Data were collected for the study through interviews and observations.
2. The study was limited by the quality of interviewing skills exhibited by me.
3. The participants' responses may not have been completely accurate or might not portray factual information.
4. Observations may have been skewed by the observer's beliefs and experiences.
5. The sample may have been too narrow to generalize to the broader population.

Personal Statement

After 23 years as a teacher, principal, and Executive Director of Elementary Education, I have had the privilege to work with hundreds of students who have struggled to learn to read at expected benchmark levels. Many of these students had difficulty learning to read and achieving the expected annual levels of growth due to foundational weaknesses in their oral processing abilities and gaps in their skill development. Most teachers, whether veteran or rookie, have not been trained in specific protocol to teach the hard to reach to read outside of the core instruction. I was one of those teachers. It was frustrating because I had the passion and drive to learn what my students needed, but I had to search and research for the appropriate resources on my own. Remediation and intervention is costly and most school settings did not provide for these small group sessions with intense and specific plans to overcome the obstacles for students in learning

how to read. My passion led me to seek out teachers, professors, and state agencies who I classified as reading experts to learn what I could about phonological awareness and phonics in beginning reading. I learned in my quest to be a better reading teacher and principal that the five important components of the reading process must be taught in a systematic, consistent, and sequential hierarchy at the earliest levels in the primary grades. Thus, my preference for this protocol might have skewed the findings. I learned how assessments and data can provide information to guide instructional decisions to accelerate reading abilities. I want to learn and share more about teaching literacy in order to enhance the lives of children with the gift of reading.

Definition of Terms

Elementary school, for the purpose of this study, is defined as a public institution encompassing pre-school or kindergarten through at least fifth grade. The school may go up to sixth grade but does not need to include grades past the fourth grade.

Reading intervention is a program supplementary to an existing literacy curriculum that is provided to students for the primary purpose of increasing reading levels. Such programs can be administered both in and out of the traditional classroom environment.

High-achieving schools, for the purpose of this study, are those schools with at least 90% of students achieving grade-level mastery in English language arts.

Summary

Reading is the core of all learning. Educators play a vital role in a student's ability to read. Student achievement is impacted by reading methodologies, early intervention programming, as well as leadership and staff roles and expectations. Attention should thus be given to the five essential components of reading and the role of school leadership in building

capacity to achieve success in literacy. Chapter 1 provided an introduction, statement of the problem, purpose of the study, research questions, personal statement, and definition of terms. Chapter 2 presents a current literature review and topical research. Chapter 3 will provide information regarding the research methodology, qualitative inquiry, strategy of inquiry, data collection process, procedures, and validity and reliability of the study. Chapter 4 presents study findings and addresses the study's research questions. Chapter 5 provides a summary of the findings, results, discussions of the findings, and recommendations for further study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

America holds the promise of a quality public education for students. Schools are under fire like never before in this age of accountability with standardized test scores and student growth models. There are too many children who are struggling to read. Educators have an obligation to overcome reading failure. Reading failure provides a litany of consequences for children including a lack of self-confidence and motivation to learn that will carry over to later school performance and overall ability to be successful in life. The review of literature reveals a connection of reading instruction to student achievement as it relates to early literacy intervention and the dynamics of the school leadership and building a culture for success. Harn summarized these two areas of concentration when she stated,

School wide beginning reading improvement involves the integration of two complex systems: (a) the scientific knowledge base of reading in an alphabetic writing system and (b) the design implementation of the knowledge base in a complex host environment (i.e., schools) comprising people, practices, pedagogy, and policy. (as cited in Simmons et al., 2002, p. 565)

Multiple variables are required to create annual growth for all students and catch-up growth for those who are behind (Fielding et al., 2007). In order to accelerate student achievement, better execution in the traditional areas of leadership, quality instruction and

organized data systems is required to create and sustain annual growth (Fielding et al., 2007).

Excellent Leadership, excellent initial instruction, and excellent data systems have always been essential pieces of high performance schools. The four-step Targeted Accelerated Growth loop processes are new. Diagnostic testing, proportional increase in instructional time, focused teaching to the deficient sub-skill, and retesting to assure learning has actually occurred are common-sense strategies and central to how we catch up students who are behind. (Fielding et al., 2007, p. 19)

There is a growing agreement that literacy is the center of all learning today. Educators play a vital role in helping students meet the rising expectations for what it means to be literate (National Center for Literacy Education [NCLE], 2013). The NCLE (2013) reported that the new Common Core State standards, adopted by 46 states and the District of Columbia, require more complex literacy skills in order for students to be college and career ready. According to the NCLE, it is more important now more than ever to consider how schools are organized to implement them.

Student Achievement as it Relates to Literacy Instruction

The field of education is flooded with information in regard to reading research and its implications for instruction. School districts can no longer afford to maintain status quo when it comes to student achievement and struggling readers. It is more important than ever to embrace this knowledge and engage students in meaningful literacy instruction that will cultivate strong readers to ensure high levels of learning for all . . . including the adults.

The Historical Aspect of Teaching Reading in the Classroom

Students who are not proficient readers will struggle in school across all other content areas and will be challenged to satisfactorily realize his /her goals in life. Historically, reading

has been taught through a myriad of methods beginning with the Horn Book and New England primers followed by Webster's spellers with an emphasis on spelling before reading (Camacho, 2012). Camacho (2012) also reported that in 1844, Horace Mann began to promote a whole word method for teaching reading and later, teachers began to read passages orally and students would learn by recitation and memorization. In the late 1800s, the McGuffey Reader first focused on phonics, syllables, alphabet, and sight words (Brown, 2011).

Oral reading dominated reading instruction in the 19th century (Rasinski, 2003). Rasinski (2003) explained there was a rich history of oral reading in the United States as reading was the primary form of entertainment and information sharing prior to the days of computers, televisions, and radio in most American homes. Typically, only one person could read in a family and one person would read aloud so all could benefit from limited numbers of books (Rasinski, 2003). Oral reading became the focus of classroom instruction due to its prominence in daily life (Rasinski, 2003).

Through the first decade of the 20th century, oral reading continued to dominate the education scene (Rasinski, 2003). This was the onset of "Blab Schools" (Rasinski, 2003, p. 10) where students were required to read orally, reread, and memorize lessons. Students read assigned texts simultaneously aloud and often were reading different texts (Rasinski, 2003).

Textbooks began to be popular by the middle of the 19th century and were used for reading instruction particularly in oral reading (Rasinski, 2003). McGuffey was a popular author of the time and placed great emphasis on decoding and recitation (Rasinski, 2003). According to Rasinski (2003), eloquent oral reading became the aim for instruction and teachers began to focus on elocution and correct pronunciation. Rasinski explained that the lessons began to involve the teacher reading a text orally followed by the students practicing the text orally on

their own. The teacher would provide assistance and feedback on the student's performance and eventually the students' reading was judged on the quality of the oral reading and the ability to recall what had been read (Rasinski, 2003).

Near the end of the 19th century and beginning of the 20th century the popularity of oral reading began to wane and it shifted from an emphasis on pronunciation and inflection to one of reading for understanding (Hyatt, 1943). Hyatt (1943) explained that Francis Parker, who is associated with the *language experience approach*, began to question the use of oral reading for instructional purposes. Parker argued that based on the educational theories of Friedrich Froebel in Germany, oral reading in schools placed too much emphasis on elocution over understanding (Hyatt, 1943).

Around the turn of the 20th century, researchers such as Edmund Huey noted that oral reading had become a task that was only found in schools and that silent reading was a more predominately used skill in everyday life (Rasinski, 2003). "The focus on abstracting meaning from text over oral production of the text began to take hold. And silent reading became the primary vehicle for teaching comprehension among students" (Rasinski, 2003, p. 14). Printed material was much more readily available during this time period and in order to take advantage of it, silent reading became the norm (Hyatt, 1943). Silent reading focused the reader's attention on grasping meaning while oral reading focused on accurate recitation of the text (Rasinski, 2003). Rasinski (2003) shared in his book that scholars felt that the number of texts students read was maximized with popularity of silent reading. The beginnings of round robin reading emerged with these changes in reading instruction and this technique was primarily used to check students' word recognition after silent reading (Rasinski, 2003). This turn-taking reading method was integrated in basal reading programs and has assumed the preeminent position in

elementary reading instruction from the 1950s to present (Rasinski, 2003). Round robin reading is an embedded part of classroom culture in the United States today (Rasinski, 2003). Rasinski (2003) stated that despite its widespread use, round robin reading has never been advocated by reading scholars, in fact, it is far inferior to shared book experiences that promote word recognition accuracy, fluency, vocabulary acquisition, and comprehension. The question is why is it so heavily utilized? The answer lies in the fact that teachers have not been provided many viable alternatives (Hoffman, 1987).

Brown (2011) reported that the *Dick and Jane* books entered the reading scene in the mid-1900s, and in the mid-1950s there was a return to phonics. The pendulum swung back to the whole language approach in the 1980s. Brown concluded her timeline of reading instruction by information reported in the 1990s by Dr. Reid Lyon from the National Institute of Health included the importance of phonics and phonemic awareness for teaching reading. In 2001, the No Child Left Behind (NCLB) legislation passed with the Reading First portion of the NCLB mandating phonics instruction.

The Implications of Reading Research in the Classroom

According to the National Reading Panel, which was formed in 1997 by the NICHD (2000) and the U.S. Department of Education, the following information was disclosed:

The National Reading Panel developed recommendations based on the findings in reading research on the best way to teach children to read. They found that specific instruction in the major parts of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension) was the best approach to teaching most children to read. They also noted that instruction should be systematic (well planned and consistent) and explicit (National Institute of Health, 2012, para. 1).

Many teachers, veteran and novice alike, do not possess the knowledge and training required to implement quality reading instruction that is supported by research. “Instead of looking to authoritative and valid evidence of what works, teachers frequently rely on experience and anecdotal information to guide their teaching” (Lyon & Chhabra, 2004, p. 13). This previous experience and habitual way of instructional implementation will not achieve the gains needed to meet grade level benchmarks. Lyon and Chhabra (2004) explained that teachers need to have a solid understanding of scientific evidence and how it supports the reading programs and methodologies they implement in the classroom. Teachers must be able to recognize effective research. Lyon and Chhabra discussed the major research criteria that should be evident to necessitate trustworthiness and effectiveness. This criterion includes the following: appropriate methodologies, peer review, converging evidence, and practical application.

There is much debate over the findings of scientific research and whether the National Reading Panel’s conclusions should be considered axioms or downgraded to hypotheses. Some will argue that scientific findings will only be effective in a differentiated classroom with a print-rich literacy program that delivers individualized lessons that are comprehensive in nature.

What is known is that teaching reading is a very challenging and complex process. Moats (1999) made a correlation between teaching reading and rocket science and teachers need to be experts. In order to be effective reading teachers, the experts need to be able to answer the following two questions: (a) How does reading develop? and (b) How can we prevent reading failure?

Reading develops during the preschool years and is determined by the quality and quantity of language and early literacy interactions which impact the acquisition of language. Children from disadvantaged environments are more susceptible to reading failure. Lonigan

(2003) found that children from low-income homes suffer in identifying and manipulating the sound structure of language which is referred to as *phonological sensitivity*. This deficit is primarily due to little knowledge of phonemes, letter names, and letter sounds. Children from impoverished homes lag in vocabulary development, phonological sensitivity, and alphabetic skills which are strong predictors of reading proficiency in later years (Snow, Burns, & Griffin, 1998).

The NCLE (2013) recently conducted a study entitled *Remodeling Literacy Learning, Making Room for What Works*. The NCLE (2013) stated, “Our goals were to establish a national baseline for the use of effective professional collaboration around literacy learning and to document the most critical needs” (p. 4). Key findings from the survey yield the following conclusions about how teachers are currently working collectively to meet the rising literacy expectations and how to best support them in the future (NCLE, 2013). The first finding from the NCLE survey revealed that literacy is not just the English teacher’s job anymore. Teachers are taking shared responsibility for developing student literacy skills (NCLE, 2013). The second finding from the NCLE survey is that working together is working smarter. It was reported that the most powerful professional learning experiences come from collaborating with colleagues (NCLE, 2013). The third finding revealed that schools are not structured to support the kinds of professional collaboration that educators find to be beneficial (NCLE, 2013). The amount of time educators are allotted for collaborative work is limited (NCLE, 2013). The fourth finding in the NCLE study states that capacity building around complex literacy practices does exist in many U.S. schools. These practices consist of data teams being established in most schools, digital tools are made available to build networks online, educators use their own time for collaboration, and educators utilize data to ground collaborative work, and collaboration is

supported by specialized skills of literacy coaches (NCLE, 2013). The fifth and final finding from the NCLE survey revealed that effective collaboration needs systemic support. The NCLE report stated, “Our data also highlight the crucial role that principals and other school leaders play in facilitating effective staff collaboration by modeling and providing tools, training, and time to support it” (p. 6). The data show that schools where collaboration is the norm reap many benefits including higher levels of trust and the quicker spread of new learning and effective practices (NCLE, 2013).

Reading failure can be prevented if children at risk of reading difficulties are identified early. Strategic interventions which target the reading sub-skills of phonemic awareness, phonics, fluency, vocabulary, and reading comprehension strategies are preventive practices to strengthen the skills necessary to be successful readers. These preventive practices must be driven by data and monitored regularly to track student progress.

Early Intervention Leads to Success

According to Fielding et al. (2007), “Irony is discovering that the most cost-effective way to diminish low student achievement in high school occurs between birth and age five” (p. 205). The National Children’s Reading Foundation established basic skills that children need to know and be able to do when entering kindergarten that will result in reading on grade level by the end of third grade (Fielding et al., 2007). Many studies support students’ acquisition of early literacy as the foundation of later academic success. Early intervention in the primary grades had positive outcomes that lasted into Grade 3 (Vellutino, Scanlon, Small, & Fanuele, 2006), and failure to respond to early interventions can be a vehicle to assist in the identification of learning disabilities (Torgesen, 2004; Vaughn, Linan-Thompson, & Hickman, 2003). According to Ardoin and Christ (2008), “Prevention is often more cost efficient, more effective, and more

beneficial to students than delay remediation” (p. 109). When students received support for reading deficits in first-grade, positive results were noted in two different studies. Harn, one of the researchers, stated,

The study certainly has implication in how schools approach their instruction and interventions. Schools may want to allocate more instructional resources earlier for struggling students, rather than waiting until later grades when it becomes more difficult to catch up struggling readers (Linan-Thompson, Roberts, & Harn, 2008, p. 1)

Table 1 reflects educational targets for incoming kindergarteners at the 50th percentile. These targets allow educators the ability to know and understand what skills will be indicators of success in literacy.

Table 1

The National Children’s Reading Foundation Incoming Kindergarten Targets

Developmental Skills	Targets
Language and Reading	Enjoys being read to and can retell a story; Recognizes and names 10-15 alphabet letters and their sounds; Repeats beginning and ending sounds in words; Speaks in complete sentences and prints his/her first name; Understands 4,000 to 5,000 spoken words.
Social and Emotional	Settles into new groups or situations; Concentrates on a task for 5 minutes; Follows simple three-step instructions.
Bilingual	Comes to school speaking English if other languages are spoken in the home.

Fielding et al. (2007) listed several maxims of achievement and growth. “Catch-up growth is easiest to make early. It is easiest from birth to kindergarten. It is more difficult from kindergarten to Grade 3. It is more challenging still in middle school. It is hardest in high school” (Fielding et al., 2007, p. 228). The achievement gap is not created by public schools; “100% of the achievement gap in reading originates in the home before a student’s first day of kindergarten” (Fielding et al., 2007, p. 226).

In 1975, the U.S. Congress passed the Education of All Handicapped Children Act to accommodate the needs of all children in public schools (Brown-Chidsey, 2007). Brown-Chidsey (2007) shared two trends that began to surface with this historic legislation. First, the number of handicapped children began to increase at to higher levels than expected and secondly, the percentages of minority groups who were found to be eligible for special education were much higher than the percentages of minorities in the U.S. population (Brown-Chidsey, 2007). RtI made a quick dash on the educational scene as a result of these concerns and as an alternative method for determining a students’ eligibility for special education (Brown-Chidsey, 2007).

The Florida Center for Reading Research provided evidence that intervening early is beneficial (Torgesen et al., 2001). An eight-week intensive intervention program was conducted with 60 children. One of two reading programs was randomly assigned that differed in depth and extent of instruction and concentrated on the basic alphabetic principles of reading. Both programs were considered to be effective in the outcomes. Targeted instruction was provided daily during two 50-minute sessions. The results of both groups’ reading scores indicated a dramatic improvement, which was still evident at the end of the two-year period. Fluency was the only component that showed a distinct lag, but all other assessment measures revealed

performance in the average range. At the end of two years, 40% of the participants no longer required special education services (Torgesen et al., 2001).

Response to Intervention

The 2004 Individuals with Disabilities Education Improvement Act, the most recent reauthorization of federal special education law, states that schools may no longer utilize the traditional method of identifying learning disabilities with severe discrepancies between achievement and intellectual ability (Brown-Chidsey, 2007). Brown-Chidsey (2007) outlined that instead schools may implement preventive practices and use evidence of a student's failure to respond.

The Institute of Education Sciences, a federally funded initiative responsible for What Works Clearinghouse, labeled RtI in February of 2009 as an effective process for helping students in grades K-2 with early reading difficulties (Gersten et al., 2009). In order for children to be successful readers, it is imperative to believe in their ability to learn and to use systemic and intentional instruction along with intervention to explicitly guide their learning in literacy (Fischer & Frey, 2010).

This cycle—from assessment to instruction—enables teachers to observe student's responsiveness to the targeted interventions and to proceed with instruction that is supported by ever-evolving performance data. This Response to Instruction and Intervention (RTI²) system is designed to change learner performance as a function of targeted instruction. (Fischer & Frey, 2010, p. 1)

RtI is a three-tiered model of intervention to accommodate students of varying needs. Instruction and time are constant in many schools—they do not vary on a student-by-student basis. It is the intent of RtI to encourage teachers to vary instruction and time to create an

environment of constant learning (Fischer & Frey, 2010). “A core assumption of RTI is that all students can reach high levels of achievement if the system is willing (and able) to vary the amount of time students have to learn and the type of instruction they receive” (Fischer & Frey, 2010, p. 15).

Tier 1 students are served with the general curriculum and include universal instruction and assessment (National Center on Response to Intervention, 2010). The focus is on providing explicit instruction and implementing management systems to determine which students are not being successful in the regular classroom setting. Pearson and Gallagher (1983) described responsive teaching as the heart of good instruction and the gradual release of responsibility model, which provides scaffolded instruction to acquire new learning.

Tier 2 students are those identified from the screenings that are not able to make the required growth through the regular core instruction with the classroom teacher (National Center on Response to Intervention, 2010). This phase can be provided in the classroom with the general education teacher or an adjunct setting with an interventionist trained in more specific skill sets. Educators monitor in this phase to determine how students respond to various interventions that are matched with the specific sub-skill deficits. Those students are monitored until they have exhibited growth to warrant a transition back into Tier 1 instruction or need a more intense Tier 3 support.

Tier 3 students are those who require the most intensive level of instruction (National Center on Response to Intervention, 2010). Typically a learning coach or curriculum specialist provides the direct instruction in a group of three or smaller and even possibly one-to-one. Frequent assessments are conducted and may also include diagnostic testing (Fischer & Frey, 2010). Students who are identified as needing Tier 3 support will have diagnostic assessments

conducted to provide a comprehensive plan in which to attack the needs of the student. This information will be coupled with data from Tier 1 and Tier 2 to determine why a student is performing at significant lower levels than that of his/her peers.

Students in need of intervention and/or enrichment are identified with a universal screening. The screening reflects the effectiveness of the core curriculum and instruction. All students participate in the administration of the universal screening two to three times per year in a school. Results are compared to a benchmark to identify prevalence and severity of specific deficits in the reading process. “Examples of sub-skill deficits are phonemic awareness, phonics, fluency, vocabulary, and comprehension” (Fielding et al., 2007, p. 231). “Teaching to the deficient sub-skill requires nimbleness, flexibility, and a high level of ability to adapt material (or create it, if necessary) for the targeted reading student” (Fielding et al., 2007, p. 235).

Students are placed in a tier group reflective of skill deficits and appropriate to need. Tier one meets the needs of 80% of the students. The teachers use core curriculum to prepare students with preventive and proactive measures and assessments. Tier 2 interventions meet the needs of 15% of the students and provide strategic, targeted extensions to the core curriculum in small groups with additional time to the core instructional minutes. Tier 3 intervention groups service the most severe students and provide the most intense levels of small group instruction designed to meet individual needs for 5% of the overall student population. Training is done with few students and with increased frequency for a longer duration of time. “Growth is directly proportionate to the quality and quantity of instructional time” (Fielding et al., 2007, p. 48). “Catch-up growth is rarely achieved by pressuring students who are behind to *run faster* in the same amount of time. Catch-up growth is typically achieved by allowing them to “run longer” and “run smarter,” i.e., dramatically increasing direct instructional time and using it

wisely” (Fielding et al., 2007, p. 233). Scheduling must be intentional and creative to allow for this additional instructional time to occur.

Intervention must be delivered with fidelity and progress monitored regularly in order to be effective and to determine the growth of the students and to make adjustments in the plan. The plan must be monitored and appropriate. The data about the student’s responsiveness to intervention are the driving force at each tier level. The progress monitoring accelerates learning because more appropriate instruction has been differentiated for individual needs. Progress monitoring allows for more informed instructional decisions and documents progress of the students for accountability purposes (National Center on Student Progress Monitoring, n.d.). The documentation accumulated from progress monitoring leads to collaborative conversations between educators and other stake holders. The following criteria should be used in selecting progress monitoring instruments “easily administered to groups of students, brief in administration time, repeatable over time, sensitive to change, valid and reliable” (Ikeda, Neesen, & Witt, 2008, slide 22).

Assessment, Data, and Monitoring Student Progress

“An excellent data system is predicated upon an excellent assessment system” (Fielding et al., 2007, p. 229). “An excellent assessment system measures growth and achievement by student, classroom, building, and district” (Fielding et al., 2007, p. 229). A student’s reading ability is measured with an array of assessments. These assessments provide a plethora of information to the general education teacher. The quality of effective educational assessments is evaluated by eight standards. The American Educational Research Association and the American Psychological Association recommended these eight standards (Robinson & McKenna, 2008): validity; reliability; test development; fairness in testing; scales, norms, and

score comparability; standardized administration, scoring, and reporting; test individuals of diverse linguistic backgrounds; and responsibilities of policy decision makers.

A test is defined as being valid if it measures the skills or standards it is intended to measure (Torgesen, Houston, Rissman, & Kosanovich, 2007). It is suggested throughout the literature that assessments possessing high levels of validity and reliability need to be administered in the primary grades. This key information from valid and reliable tests allows teachers to plan and implement targeted instruction to support individual needs and to determine further adaptations required due to minimal progress in reading ability (Torgesen et al., 2007, p. 3).

Valid and reliable assessments are mentioned as being imperative by many researchers in the area of early literacy when outlining key components of effective early intervention, (Abbott, Walton, & Greenwood, 2002; Ardoin & Christ, 2008; Baker et al., 2008; Chard et al., 2008; Hall, 2008; Lyon & Chhabra, 2004; Simmons et al., 2002). Some assessments have a high degree of predictive validity, but educators do not consistently view this information as a valuable tool in determining instructional needs (Invernizzi, Landrum, Howell, & Warley, 2005). For example, overall reading achievement levels in many studies are highly correlated to the predictive value of nonsense word reading (Good, Wallin, Simmons, Kame'enui, & Kaminski, 2002; Speece, Mills, Ritchey, & Hillman as cited in Invernizzi et al., 2005). Both the Test of Word Reading Efficiency (Torgesen, Wagner, & Rashotte, 1999) and Dynamic Indicators of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2002) include a measure of nonsense word fluency, and both met standards to prove reliability and validity, however, not all classroom teachers value the usefulness of a measure of nonsense word fluency in daily instruction.

This disconnect is warned about in several citations. Professional development opportunities must be provided to explain how to use test results to drive instruction or else the result may be an ineffective use of instructional time and a loss in opportunities to use the information to support struggling readers (Simmons et al., 2002; Torgesen et al., 2007). Flowcharts have been developed to provide appropriate guidance for educators in utilizing research-based assessments in the classroom to plan early literacy instruction (Diamond, 2005).

Several researchers have questioned the use of an assessment like DIBELS, which is composed of a variety of subtests, as an inadequate indicator of comprehension (Goodman, 2006; Manzo, 2005). This information leads to an interesting point in that both supporters and critics of DIBELS agree that the ultimate goal of reading lies in comprehending the text (Goodman, 2006; Snow et al., 1998; Torgesen, 2004). There is a high correlation between the results or oral reading fluency and reading comprehension in multiple studies (Fuchs, Fuchs, Hosp, & Jenkins, 2001; Torgesen, 2004). In a study including 26 inner-city schools, Riedel (2007) discovered a strong correlation between the DIBELS oral reading fluency measure in first and second-grade comprehension as measured by two different standardized measures. The author stated, "Reading too slowly may be a more likely contributor to poor comprehension. Cognitive resources that could be used for comprehension are consumed by slow decoding of connected text" (Riedel, 2007, p. 567). With the high pressure of accountability at the state and federal levels increasing, many educators view assessments as burdensome and counterproductive rather than a positive source of data to drive instruction. This fact creates a potential disconnect with data and assessment. In a recent article describing literacy assessments, the authors stated, "It is important to clarify that a focus on the empirical base in designing literacy assessment and instruction is long overdue and is clearly an essential

foundational step toward improved literacy” (Robinson & McKenna, 2008, p. 199). The emphasis for assessment “may create a disconnect between what the assessments tell us about students’ performance and what teachers need to know to instruct them” (Invernizzi et al., 2005, p. 611).

“Data are intelligible to students and parents. Scoring and reporting occurs within a week” (Fielding et al., 2007, p. 229). “There is no point in testing if you don’t look at the data, don’t understand it, and don’t change” (Fielding et al., 2007, p. 230). Data substantiates what instruction needs to be differentiated. Leaders need to appreciate the value of assessment data to determine instructional and placement decisions of the students. “Without data, you are just another person with an opinion” (Schleicher, n.d.). Scores are ranked in order to determine students with intense or strategic needs. “Most tests are least accurate for the students who are furthest behind. Educators often have the poorest data for the students for whom they need the most precision” (Fielding et al., 2007, p. 229). Perhaps the most important conclusion to draw from recent intervention research is that intervention instruction should encompass the same major dimensions of content and essential skills that are taught in the core instruction but must be more explicit and intensive than regular classroom instruction to prevent reading difficulties (Torgesen, 2004).

It is not enough to provide a solid intervention program. In addition to the interventions, it is imperative that educators determine if students are progressing enough in their performance levels. Intervention programs must periodically gauge student progress in order to be successful. Data analysis must be utilized to reveal if a child’s improved performance is above established criteria. The difficult questions must be asked to determine if the slope of improvement is

comparable to that of the student's peers, and to decide if the student's progress is on track to achieve grade-level proficiency (Buffum, Mattos, & Weber, 2009).

Valuable internal instruments that assess student progress should be accompanied by external ones, such as DIBELS or the Qualitative Reading Inventory. Using external assessments will allow schools to monitor student progress and the efficacy of the interventions. "Literacy educators can use these tools to assess students' progress in phonemic awareness, phonics, fluency, and comprehension; these tools also help educators listen to and record students' reading ability" (Buffum et al., 2009, p. 129).

The results of regular progress monitoring needs to be recorded in a clear and organized fashion and readily accessible to administrators, teachers, psychologists, and parents so that the data is easily understood (Buffum et al., 2009). Dates need to be recorded to illustrate when specific programs were initiated as well as the frequency and duration of the intervention, and the learning targets the student is trying to achieve.

Buffum et al. (2009) shared that an individualized learning plan should be designed by an intervention team to plot out the plan of action and the targeted skills. Space needs to be provided to record past assessment data and current progress monitoring. This plan should include the academic goal that students are expected to meet by the end of the year. Team meetings need to be documented with dates at which students are discussed and the dates of the school's communication to parents when changes are made to the student's intervention plan (Buffum et al., 2009).

The Five Essential Components of Reading

The NICHD issued a report in 2000 to assisted parents, politicians, and educators in identifying the key skills and methodologies that are essential to reading achievement. "These

skills provide the basis for sound curriculum decisions and instructional approaches that can help prevent the predictable consequences of early reading failure” (Armbruster et al., 2010, p. 1).

The NICHD described its findings with an analysis and review in five areas of reading instruction: phonemic awareness, phonics, fluency, vocabulary, and comprehension. In the report they define the skill, review evidence from research, provide implications for core instruction, and describe proven strategies for balanced literacy framework (Armbruster et al., 2010)

Phonemic Awareness Instruction

Phonemic awareness is the ability to identify phonemes of spoken language and how they can be separated, manipulated, or blended together to make words (Vaughn & Linan-Thompson, 2004). A phoneme is the smallest identifiable unit of sound that makes a difference in words.

For example, the word *cat* has three phonemes: /c/, /a/, and /t/.

Children who enter school with phonemic awareness have a very high likelihood of learning to read successfully. Children who lack phonemic awareness have a great difficulty learning to read. Obviously, children who come without phonemic awareness need to develop it! The question is not if but how. (Cunningham, 1999, p. 69)

Armbruster et al. (2010) define phonemic awareness as the ability to notice, think about, and work with individual sounds in spoken words. Children must understand that words are made up of speech sounds, how to manipulate the sounds in the words and how the sounds work within words. Phonemes are the smallest units composing spoken language. Phonemes are the sounds you hear in words. For example, the word *she* has two sounds—sh and e. Children will have an easier time learning to read and spell if they possess phonemic awareness skills.

Phonemic awareness is one of the best predictors of how well students will learn to read during the first two years of school (Learning First Alliance, 2000; NICHD, 2000). “Children who begin school with little phonological awareness have trouble acquiring alphabetic coding skill and thus have difficulty recognizing words” (Stanovich, 2000, p. 393). According to Ehri, Nunes, and Willows (2001), teaching phonemic awareness instruction in kindergarten will have far greater benefits for students than waiting to teach the first lessons in first or second grade. Kindergarten teachers might spend the first portion of the year teaching students how to manipulate sound units into words, segment words into syllables, and then blend syllables into words. This routine should be followed the second half of the year by teaching students how to segment words into phonemes and blending phonemes into words (Vaughn & Linan-Thompson, 2004). Effects of phonemic awareness training on reading lasted well beyond the end of training. “Phonemic awareness instruction produced positive effects on both word reading and pseudo word reading, indicating that it helps children decode novel words as well as remember how to read familiar words” (NICHD, 2000, pp. 2-5).

Phonics Instruction

The NICHD (2000) report explained phonics instruction as a way to teach reading using the relationships between the letters of written language and the individual sounds of spoken language. The goal of phonics instruction is to help children understand the systematic and predictable relationships between letters and spoken sounds. Children will be able to automatically decode new words by knowing these alphabetic principle relationships.

Beginning readers need to have an effective strategy for decoding words and identifying words automatically (Bos & Vaughn, 2002; NICHD, 2000; Snow et al., 1998). In order to attain this task, students have to know and understand the relationships between 44 speech sounds and

more than 100 spellings used to represent them (Blevins, 1998). They then have to apply this knowledge to reading words that are familiar and unfamiliar words, in isolation as well as in context, and learn to read words with irregular patterns (Vaughn & Linan-Thompson, 2004).

An effective phonics program needs to follow a defined sequence and include direct teaching of a set of letter-sound relationships. “Phonics instruction provides key knowledge and skills needed for beginning reading” (Vaughn & Linan-Thompson, 2004, p. 31). Phonics needs to be integrated with other elements of a reading program such as language activities, read alouds, and small group instruction to create a balanced reading program. As Stahl and Kapinus (2001) noted, “Early and systematic instruction in phonics seems to lead to better achievement in reading than later and less systematic instruction (p. 333). Adams (2001) pointed out that to learn to read,

all students must know the letters of the alphabet, understand their linguistic significance (phonemic awareness), and learn the logic and conventions governing their use (phonics); and . . . ensuring students’ grasp of these basics must be a serious goal of any responsible program of beginning reading instruction. (pp. 67-68)

Fluency Instruction

Fluency is defined by the NICHD (2000) as having the ability to read a text quickly, automatically, and accurately. When a child reads with good fluency they are able to read effortlessly and sound very natural as if they are speaking. Readers who have not developed good fluency read slow and choppy and one word at a time. Students will become more fluent readers when they learn to decode words rapidly and accurately in isolation as well as in connected text (Vaughn & Linan-Thompson, 2004). Armbruster et al. (2010) shared that fluency is the bridge between word recognition and comprehension. Fluent readers are able to focus

their attention on comprehension by making connections between his or her background knowledge and the big ideas within the text. Armbruster et al. discussed a recent large scale study by the National Assessment of Educational Progress (NAEP), which found that 44% of the nation's fourth graders were low in fluency. A close relationship between fluency and reading comprehension was also discovered in the study. Students who scored lower on measures in fluency also scored lower on measures of comprehension, this information would suggest that fluency is a neglected skill in the United States, affecting comprehension (NICHD, 2000) .

It was suggested by Perfetti (1977, 1985) that slow word reading interferes with automaticity and thus impairs reading comprehension. Research indicates that students who struggle in reading have significant problems with fluency and continue to be struggling readers in the teenage years and adulthood (Shaywitz & Shaywitz, 1996).

Often times it is fluency that is the missing piece in reading instruction for many educators (Vaughn & Linan-Thompson, 2004). "Fluency is an essential element that bridges the gap between word recognition and comprehension" (Vaughn & Linan-Thompson, 2004, p. 51).

In practice, a high number of words read correctly per minute, when placed in the proper developmental perspective, indicates efficient word-level processing, a robust vocabulary knowledge base, and meaningful comprehension of the text. In contrast, a low (fluency) rate suggests inefficient word recognition skills, a lean or impoverished vocabulary, and faulty text comprehension skills. (Kame'enui & Simmons, 2001, p. 208)

During fluency activities, students need to read a variety of text levels which include independent-level, instructional-level, and frustration-level. Vaughn and Linan-Thompson (2004) provide the following definitions for text levels:

1. Independent-level text—Students can read easily, making fewer than five mistakes for every 100 words (95 percent correct).
2. Instructional-level text—Students typically make fewer than 10 mistakes for every 100 words (90 percent correct).
3. Frustration-level text—Students make more than 10 mistakes for every 100 words (89 percent correct or less). (p. 51)

It is recommended that students utilize independent-level text when working alone or with peers in fluency activities. Instructional-level text should be used when working with teachers and frustration-level text should always be avoided when fluency is the objective.

Regardless of how book difficulty is determined, it is critical that all children in a classroom, including the least able readers, have easy “finger-tip” access to books that they can read accurately, fluently, and with good comprehension . . . easy reading material develops fluency and provides practice in using good reading strategies.

(Allington & Cunningham, 2002, p. 57)

Vocabulary Instruction

Vocabulary plays an important role in learning to read. Vocabulary usage is comprised of two parts—speaking vocabulary and reading vocabulary. Vaughn and Linan-Thompson (2004) explained that oral and written vocabulary instruction is a key component of early reading instruction, because reading comprehension is significantly dependent upon the student’s understanding of word meanings and how words are used in text. The tool that unlocks the meaning of text is knowledge of vocabulary. The NICHD (2000) explained that children have a more difficult time reading words that are not already a part of their oral vocabulary. There is a direct link with vocabulary to reading comprehension.

Readers cannot understand what they are reading without knowing what most of the words mean. As children learn to read more advanced texts, they must learn the meaning of new words that are not part of their oral vocabulary. . . . Children learn the meanings of most words indirectly through everyday experiences and written language.

(Armbruster et al., 2010, p. 1)

The most effective way for students to improve their vocabulary is to read more.

Students who have the poorest vocabularies are those who read the least. “There is evidence that language can be substantially affected by experiences in which children are exposed to a wider range of meaningful vocabulary and the meanings of unfamiliar words are explained” (Biemiller, 1999, p. 29).

Vaughn and Linan-Thompson (2004) classified vocabulary instruction practices supported by research into the following types:

1. **Explicit.** Students are given descriptions or definitions of the target words. For example, teachers may help students learn the meanings of key words prior to reading text.
2. **Indirect.** Students are encouraged to read widely and be exposed to different types of texts.
3. **Multimedia.** Students are provided with media other than text to help them understand word meanings. For example, the teacher might provide graphic organizers, Frayer models, or semantic maps.
4. **Association.** Students are encouraged to make connections between words and meanings they already know and new words they are learning. Visual imagery, context, or semantics are used to teach in this manner. (p. 77)

“Some words are not likely to become part of one’s own vocabulary without direct instruction. In addition, effective vocabulary instruction helps students understand what they must do and know in order to learn new words on their own” (Stahl & Kapinus, 2001, p. 13).

Comprehension

Comprehension is perhaps the most important foundational component when it comes to reading. It is the active process of constructing meaning from text. Comprehension involves understanding vocabulary, recalling previous knowledge, making inferences, and making connections within the text. Vaughn and Linan-Thompson (2004) discussed comprehension as requiring a series of strategies that influence understanding as follows:

1. Applying one’s background of experience to the text
2. Setting goals for reading and aligning the goals to the text
3. Using strategies and skills, before, after, and during reading to construct meaning
4. Adapting strategies that match the goals
5. Defining the author’s purpose
6. Distinguishing between fact and opinion
7. Drawing conclusions that are logical (p. 99)

The teacher’s role during reading comprehension instruction is to ensure students are actively engaged prior to reading, know the strategies and skills to use when reading, and use prior experiences with the author’s intention to make sense of the text (Vaughn & Linan-Thompson, 2004).

Children are routinely asked questions after reading but are infrequently provided with demonstrations of the comprehension strategies needed to answer the questions posed. In

short, too often assigning and asking are confused with teaching. (Cunningham, 1999, p. 47)

In the National Assessment of Educational Reading Progress (NAEP) report claimed that as many as 38% of all fourth graders cannot read well enough to comprehend a simple children's book (National Center for Education Statistics, 2003).

Learning to comprehend is an ongoing process that expands across time as the individual encounters different texts, in different ways, for different purposes. Students do not first learn to decode and then become readers; they must be engaged in reading, thinking about, and discussing interesting texts from the beginning. (Scharer, Pinnell, Lyons, & Fountas, 2005, p. 24)

Students need to be taught in a way that demonstrates and models what effective readers do while interacting with the text. Students need to understand that reading is thinking and the thinking is cued by the written language from the text. Scharer et al. (2005) explained that effective readers think within the text by absorbing the basic information to understand what the text is about. Readers do this by thinking beyond the text by making connections with their own background knowledge from life's experiences. Scharer et al. further explained that readers must think about the characters and imagine how they are feeling within the story and make predictions as they read to confirm or disprove them. Finally, readers have to think about the text. Scharer et al. defined this as noticing the organization of the text and using it to find information and recognizing structures within the text that the writer has used to convey information. The process requires readers to step back from the text in order to think about how the author crafted the writing, to appreciate the language used within the text, and to critique the work.

The NICHD published a culmination of reading comprehension intervention strategies which correlate with effective outcomes based on a review of over 200 articles (Vaughn & Linan-Thompson, 2004). The strategies included

1. Providing students with guided practice and suggestions for how to monitor their comprehension and adjust how they read when difficulties arise.
2. Encouraging cooperative learning practices for reading.
3. Using graphic and semantic organizers that help students draw connections, relationships, and word meanings.
4. Designing questions that address the story structure.
5. Providing extended feedback for student responses.
6. Allowing students to elaborate on one another's responses to questions.
7. Preparing students to ask and answer their own questions about what they read.
8. Teaching students to write key information about what they've read while they are reading and to summarize these key points after reading longer passages.
9. Teaching students strategies that can be combined to understand text. (Vaughn & Linan-Thompson, 2004, p. 104)

Solving reading problems before it's too late may translate in the leader launching a change initiative in order for improvement. Reeves (2002) suggested that "change represents abandoning the past in pursuit of an uncertain future, and it is change that a leader is most frequently required to pursue" (p. 24).

The Role of School Leadership in Building a Culture for Success Through Change

Behind any successful school is a leader willing to thrive on change and able to build capacity of the organization. Change is a constant force in education. Change can stem from

federal, state, or local levels. It can impact law, politics, human relations, data, budget, policy or crisis. An instructional leader cannot resist change but must embrace it through an action plan to lead change and new initiatives.

Burns (1978) drafted a compelling definition of leadership when he wrote,

I define leadership as leaders inducing followers to act for certain goals that represent values and the motivation—the wants and the needs, the aspirations and expectations of both leaders and followers. And the genius of leadership lies in the manner in which leaders see and act on their own and their followers' values and motivations. (p. 19)

Burns (1978) is thought of as the father of leadership theory. He made a distinction in two types of leadership: transactional and transformational. Transactional leadership is defined as trading one thing for another (*quid pro quo*) and transformational leadership is more focused on change. Transformational leadership is assumed to produce greater results beyond expectations and is the favored style of leadership (Bass, 1985; Burns, 1978).

Bass and Avolio (1994) noted that the four Is associated with transformational leadership are necessary skills for principals if they are to meet the challenges of the 21st century. Individual consideration must be given to those who need personal attention. Intellectual stimulation is required to think of old problems in new ways. Inspirational motivation is utilized to communicate high expectations for teachers and students. Idealized influence is demonstrated through character and modeling appropriate behaviors for the teachers.

The role of the principal was the first of three key elements cited by Hall (2008) that are visible in her observations of effective implementation. She discussed in the book that the first factor is “The principal is committed to systematically solving reading problems before it’s too late and plays a significant leadership and participatory role” (Hall, 2008, p. xv).

Principal as Participant

The principal's role as a participant is vital in the change process and sends a strong message to the stakeholders of the school community. Deal and Peterson (1999) indicated "everyone watches leaders in a school. Everything they do gets people's attention. . . . Their interests and actions send powerful messages. They signal the values they hold" (p. 90). Zemelman, Daniels, and Hyde (1998) presented characteristics of best practices by describing the principal as "a model and an encourager and celebrator of literacy, as an adult and professional in the school" (p. 67). In order to shape a school culture that values literacy with the utmost regard, Deal and Peterson (1990) outlined how the principal must demonstrate the following qualities:

1. Models values through demeanor and actions.
2. Uses time, a valued resource, to communicate what is important, and what should be attended to.
3. Realizes that what is honored, respected, and recognized signals the key values of what is admirable and achievable. (p. 90)

The Florida Center for Reading Research described the critical tasks for principals in a guide (Torgesen et al., 2007). To be effective literacy leaders, the following tasks are recommended.

1. Ensure excellent, ongoing, professional development is available to teachers.
 - a. Techniques of effective teaching, including follow-up in the classroom.
 - b. Program specific training.
2. Ensure teachers have adequate resources to support high quality instruction.
 - a. Interesting books written at different levels of difficulty.

- b. Supplemental materials and technology.
 - c. Core, or comprehensive, reading programs.
3. Principal walk-throughs are conducted to monitor classroom instruction.

Marzano, Waters, and McNulty (2005) examined 69 studies looking for specific behaviors related to principal leadership that directly affect student achievement. Twenty-one categories of behaviors were identified and referred to as *responsibilities* as shown in Table 2.

Table 2

21 Responsibilities and Their Correlation (r) with Student Academic Achievement

Responsibility	The extent to which the principal	Average r	95% CI	Number of Studies	Number of Schools
1. Affirmation	Recognizes and celebrates accomplishments and acknowledges failures	.19	.08 to .29	6	232
2. Change Agent	Is willing to challenge and actively challenges the status quo	.25	.16 to .34	6	466
3. Contingent Rewards	Recognizes and rewards individual accomplishments	.24	.15 to .32	9	465
4. Communication	Establishes strong lines of communication with an among teachers and students	.23	.12 to .33	11	299
5. Culture	Fosters shared beliefs and a sense of community and cooperation	.25	.18 to .31	15	819

Table 2 (continued)

Responsibility	The extent to which the principal	Average <i>r</i>	95% CI	Number of Studies	Number of Schools
6. Discipline	Protects teachers from issues and influences that would detract from their teaching time or focus	.27	.18 to .35	12	437
7. Flexibility	Adapts his or her leadership behavior to the needs of the current situation and is comfortable with dissent	.28	.16 to .39	6	277
8. Focus	Establishes clear goals and keeps those goals in the forefront of the school's attention	.24	.19 to .29	44	1,619
9. Ideals/ Beliefs	Communicates and operates from strong ideals and beliefs about schooling	.22	.14 to .30	7	513
10. Input	Involves teachers in the design and implementation of important decisions and policies	.25	.18 to .32	16	669

Table 2 (continued)

Responsibility	The extent to which the principal	Average <i>r</i>	95% CI	Number of Studies	Number of Schools
11. Intellectual Stimulation	Ensures faculty and staff are aware of the most current theories and practices and makes the discussion of these a regular aspect of the school's culture	.24	.13 to .34	4	302
12. Involvement of Curriculum, Instruction, and Assessment	Is directly involved in the design and implementation of curriculum, instruction, and assessment practices	.20	.14 to .27	23	826
13. Knowledge of Curriculum, Instruction, and Assessment	Is knowledgeable about current curriculum, instruction, and assessment practices	.25	.15 to .34	10	368
14. Monitoring/Evaluating	Monitors the effectiveness of school practices and their impact of student learning	.27	.22 to .32	31	1,129
15. Optimizer	Inspires and leads new and challenging innovations	.20	.13 to .27	17	724

Table 2 (continued)

Responsibility	The extent to which the principal	Average <i>r</i>	95% CI	Number of Studies	Number of Schools
16. Order	Establishes a set of standard operating procedures and routines	.25	.16 to .33	17	456
17. Outreach	Is an advocate and spokesperson for the school to all stakeholders	.27	.18 to .35	14	478
18. Relationships	Demonstrates an awareness of the personal aspects of teachers and staff	.18	.09 to .26	11	505
19. Resources	Provides teachers with materials and professional development	.25	.17 to .32	17	571
20. Situational Awareness	Is aware of the details and undercurrents in the running of the school and uses the information to address current and potential problems	.33	.11 to .51	5	91
21. Visibility	Has quality contact and interactions with teachers and students	.20	.11 to .28	13	477

Note. 95% CI stands for the interval of correlations within which one can be 95% sure the true correlation falls. *Number of studies* = the number of studies that addressed a responsibility, *Number of schools* = the number of schools involved in computing the average correlation. Adapted from Marzano, Waters, & McNulty, 2005, pp. 42-43. Copyright 2005 by Association for Supervision and Curriculum Development.

Reeves (2009) described how leaders must understand the challenges of both individual and organizational change to lead improvement processes in schools to increase student achievement. This essential change will not be possible without reflecting on the people that represent the organization and the leader's own behaviors and beliefs (Reeves, 2009). Change is an endless journey that never ends if you truly want to continue to get results.

Good leaders change organizations; great leaders change people. People are at the heart of any organization, particularly a school, and it is only through changing people – nurturing and challenging them, helping them grow and develop, creating a culture in which they all learn – that an organization can flourish. Leadership is about relationships. (Hoerr, 2005, p. 7)

A group's productivity is increased by the leader helping everyone become more effective. Hoerr (2005) advocated that the leader begins by setting the vision for the organization and also listens, understands, motivates, reinforces and makes the tough decisions. An effective leader is willing to accept responsibility when things fall apart and will shower the teachers with praise when goals are achieved and success has been made (Hoerr, 2005). Carly Fiorina, Hewlett-Packard's CEO, elaborated on the definition of leadership during a commencement address at the Massachusetts Institute of Technology:

Leadership in this new landscape is not about controlling decision-making. We don't have time anymore to control decision-making. It's about creating the right environment. It's about enablement and empowerment. It's about setting guidelines and boundaries and parameters, and then setting people free. Leadership is not about hierarchy, title, or status. It's about having influence and mastering change. Leadership is not about bragging rights or battles, or even the accumulation of wealth. It is about connection and engaging at

multiple levels. It's about challenging minds and capturing hearts. Leadership in this new era is about empowering others to decide for themselves. Leadership is about empowering others to reach their full potential. Leaders can no longer view strategy and execution as abstract concepts but must realize that both elements are ultimately about people. (as cited in Steil & Bommelje, 2004, p. 15)

Leaders listen to others and communicate well. A quality leader forges a vision by incorporating others' ideas and talents and energies (Hoerr, 2005). As Dwight D. Eisenhower stated, "Leadership is the art of getting someone else to do something you want done because he wants to do it" (Hoerr, 2005, p. 7). Steil & Bommelje (2004) embrace five important leadership facts:

1. Leadership is relational and positional. The key factor is the quality of the relationship between the leader and the followers.
2. Leadership is about "being" not just knowing or doing. True leadership comes from the desire to achieve by serving, helping, guiding, and teaching others.
3. Leadership has committed followers. The choice to follow defines leadership.
4. Leaders are learners. Leaders extend their learning by a commitment to teach others. As they learn, they teach, and as they teach, they learn. As they learn and teach, they lead.
5. Leaders are listeners. They commit themselves to become lifelong students of, and excellent practitioners of, listening leadership. (p. 18)

Creating Conditions for Change

Reeves (2009) concluded that failure in change strategies need not be inevitable. "In fact, it is avoidable if change leaders will balance their sense of urgency with a more thoughtful

approach to implementing change” (Reeves, 2009, p. 7). Reeves explained that leaders must articulate what needs to change, that is, what must be stopped before they expect colleagues to take on a new change initiative. In other words, the strategic leader must “pull the weeds before planting the flowers” (Reeves, 2009, p. 15). High levels of anxiety within an organization can actually halt change before it even begins. Opposition exists even in the most optimal situations. Each member of a faculty must somehow feel affirmed in what they are doing so the resulting trust serves as the first positive step toward change. “When change is reframed from a personal attack to a new, meaningful, and exciting opportunity, then the odds in favor of successful change are altered dramatically.” (Reeves, 2009, p. 11). Building capacities within the school may look like the pursuit of change, with the leader “defining a compelling need, advocating risk-taking, providing resources and professional development, establishing realistic goals, and establishing a slow pace for change” (Brower & Balch, 2005, p. 97).

Brower and Balch (2005) stated, “At best, change should be initiated and should occur at the level where the need naturally exists” (p. 97). The leader then serves as the catalyst of change at the classroom level. “Change where it counts most—in the daily interactions of teachers and students—is the hardest to achieve and the most important” (Tyack & Cuban, 1995, p. 10).

Reeves (2009) summed up cultural change noting, “If we have learned anything in the educational standards movement in the last decade, it is that policy change without cultural change is an exercise in futility and frustration” (p. 37). In order to change the culture, that is, the behaviors and beliefs of an organization, the leader must decide the catalysts necessary to manifest the desired change in that particular school. Reeves (2009) pointed out the following:

“Four Imperatives of Cultural Change:”

1. Define what will not change. Articulate to the school community what values and beliefs will be preserved. Change must be presented in the terms of building stability.
2. Organizational culture will change with leadership actions. It is the leader's actions that speak the most clearly to the staff.
3. Use the right change tools for your system. Leaders must be cognizant of the appropriate tools and strategies that will create the change to meet the needs of the system.
4. Change leaders must be committed to doing the "scut work." The leader must be willing to do the "scut work" and exemplify personal examples and public actions.
(Reeves, 2009, p. 39)

Reeves (2009) addressed seven myths that that "endure because they provide explanations for this phenomenon that can be challenging and confusing" (p. 54).

1. Myth #1 – Plan your Way to Greatness – Student achievement scores will not improve with plans only. It is the action that will make the difference. "Leaders must establish clear vision and values, expressing who they are and who they are not."
(Reeves, 2009, p. 43)
2. Myth #2 – Just a Little Bit Better is Good Enough – There must be a targeted approach with deep implementation to acquire the desired effect on student achievement. Staff must engage in the new behavior before they accept that it is beneficial; then they see results, and then believe it is the right thing to do.
"Implementation precedes buy-in; it does not follow it." (Reeves, p. 44)
3. Myth #3 – We Want You to Change Us . . . *Really* – The truth is that no one exhibits an abundance of enthusiasm over change. Change is loss to many of us (denial,

- anger, bargaining, depression, and acceptance). The measure of change's impact lies in the individual and the leader must gauge that as best as possible and be able to respond appropriately.
4. Myth #4 – People Love to Collaborate – Collaboration is challenging. It requires time, practice, and accountability. Collaboration meetings need to have defined results in order to be effective.
 5. Myth #5 – Hierarchy Changes Systems – Balanced leadership and relationships throughout all levels of the system are required for change to occur. Shared values must exist to support sustainable change.
 6. Myth #6 Volume Equals VOLUME – Universal buy-in is an illusion. A leader needs to take opposition into perspective. Expect collaboration with cooperative efforts. Typically about 2% of the faculty adamantly opposes the initiatives. Leaders need to devote their energy and appreciation with the majority of the faculty ready to grow, learn, and change.
 7. Myth #7 – The Leader is the Perfect Composite to Every Trait - There must be a team approach to make the necessary changes in an organization. The “Team” exhibits leadership characteristics and exercises leadership responsibilities in a way that no individual leader possibly could on their own. (Reeves, 2009, p. 54)

Planning, Implementing, and Sustaining Change

Fullan's (1993) theory on leadership is focused on the process of change and leadership for change. Fullan argued that educational reformers operate in a system that continually seeks change but is inherently averse to it. Fullan suggested new ways of viewing change that include seeing problems as new opportunities, realizing change cannot be mandated, ensuring that equal

power is given to individuals and collective groups, and that schools need to function as learning communities.

Change in schools is much more urgently needed than most teachers and school administrators realize. Indeed, I believe that if schools are not changed in dramatic ways very soon, public schools will not be a vital component of America's system of education in the 21st Century. (Schlechy, 1997, p. xi)

Reeves (2009) discussed the planning elements needed to productively effectuate change. Planning assignment, professional development, collaboration, time and meetings are necessary. Appropriate teacher assignment allows a school leader to place the right staff members in the seats to drive positive change. The professional development, collaboration and meetings offer opportunities for coaching to build capacity to make the plan work. Taking time to succinctly explain and build a foundation focused on student learning, creative teaching strategies, collaborative scoring, and the development of engaging assessments through individualized instruction is more powerful than endless discussion (Reeves, 2009).

The coaching model can be an effective practice and to support institutional change. The coach must be qualified and useful. Many different models and theories on coaching are available, but a leader needs to make the proper choice for the building or audience.

The next step in developing productive change is to develop a strategic plan which provides a thoughtful process to link the values, mission, and goals of a school system with a set of coherent strategies and tasks designed to achieve the goals of effective change (Reeves, 2009). The plan will be a tool the organization uses to implement change. Schmoker (2004) warned that while strategic planning is necessary, a plan without action is futile.

In order to implement change, a leader must be proactive. Implementing change requires focus, clarity and monitoring (Reeves, 2009). Leaders should seek affirmations of advocates for change and foster relationships and support with all stakeholders. It is important to clearly define the desired change and the steps to accomplish it with success. Short-term wins are important to gain support and momentum for the change.

A culture of commitment, practices and people are necessary for sustaining results. Teacher leaders are essential to act as a liaison with administrators and intervene to prevent failure. The cooperative efforts of teachers and administrators have led to remarkable progress for some of the most challenging students (Reeves, 2009). Leadership to sustain change is at every level. Lead by example and create conditions for successful change, planning, implementing and sustaining change in school.

Specific content-related suggestions were listed for principals as effective instructional leaders in the area of literacy (Torgeson, Houston, Rissman, & Kosanovich, 2007). These suggestions included:

1. Develop a school schedule that provides sufficient time for interventions.
2. Provide sufficient personnel to deliver the interventions in small groups.
3. Identify appropriate instructional programs and materials to support effective interventions, and provide appropriate training to those who will implement the program.
4. Provide oversight, energy, and follow-up managing the intervention system

(Torgeson et al., 2007, p. 21)

Characteristics of Successful Schools and Principals.

Implementation dip is what Fullan (2001) described as the undergoing change schools experience. A special skill set is required from the leader to address this issue. Fullan (2001) stated, “Leaders who understand the implementation dip know that people are experiencing two kinds of problems when they are in the dip—the social-psychological fear of change, and the lack of technical know-how or skills to make the change work” (p. 41).

Marzano, Waters, and McNulty (2005) identified skills which illustrated a high correlation between the responsibilities that match this need and student achievement in his research). *Flexibility*, adapting his/her behavior to the needs of the current situation, and *situational awareness*, an awareness of the details and undercurrents in the daily routines of the school and using this information to focus on existing problems, had the two highest correlations of the 21 identified responsibilities.

DuFour and Marzano (2009) contended that if principals would think of themselves as learning leaders rather than instructional leaders, student achievement could be increased. The authors advocate that if principals acted as capacity builders, instead of supervisors, they could use student learning as a rallying point for teachers instead of conducting teacher observations. It is the opinion of the authors that time would be better spent learning to evaluate student work consistently as a team instead of conducting formal teacher observations (DuFour & Marzano, 2009). This practice is reflective in nature and is viewed as being valuable collaboration that will lead to change. Schmoker (1999) wrote that if one reflects on practice and make revisions based on the results, improvements will be made. “Continuous, incremental improvements are the real building blocks of sweeping systematic change that is rapid- and attainable” (Schmoker, 1999, p. 56).

In effective schools, collaborative efforts are facilitated by the principal in the throes of change. Marzano et al. (2005) conducted a quantitative study consisting of a meta-analysis that revealed 21 responsibilities that characterize the job of an effective leader. The authors stated, “Taken at face value, this situation would imply that only those with superhuman abilities or the willingness to expend superhuman effort could qualify as effective school leaders (Marzano et al., 2005, p. 99). Collaboration is the key that effective schools and principals utilize to manage this endeavor.

A study by the Wallace Foundation revealed that collective leadership is a trait that is highly correlated to high student achievement in effective schools. In the study, successful principals were “setting the conditions that enable teachers to be better educators” (Samuels, 2010, p. 14).

Reflective practices are one of the most important shared responsibilities of an effective leadership team. York-Barr, Sommers, Ghore, and Montie (2001) described the reasons that reflective practices improved a school’s potential to accelerate student achievement:

1. Creates an opportunity for ongoing learning about educational practice.
2. Provides a greater variety of perspectives on which to draw.
3. Creates new knowledge and understandings to be applied to practice.
4. Develops efficacy.
5. The educators take responsibility for their ongoing learning and growth.
6. Increases staff relationships and reduces isolation.
7. Builds connections between theory and practice.
8. Reduces external mandates because educators are seen as addressing the challenge of practice. (pp. 8-9)

According to Fullan (2001),

Organizations that improve do so because they create and nurture agreement on what is worth achieving, and they set in motion the internal processes by which people progressively learn how to do what they need to do in order to achieve what is worthwhile. (p. 125)

Bryk and Schneider (2002) found in a longitudinal study of 400 Chicago elementary schools that school improvement efforts may be framed in terms of relational trust due to interrelated dependency in schools. Bryk and Schneider (2002) stated,

Embedded in the daily social routines of schools is an interrelated set of mutual dependencies among all key actors: students, teachers, principals, administrators, parents. These structural dependencies create feelings of vulnerability for the individuals involved. The vulnerability is especially silent in the context of asymmetric power relationships. (p. 20)

Summary

In summary, a review of the literature reveals research that can be categorized into student achievement as it relates to literacy instruction and the role of school leadership in building a culture for success in early-literacy intervention and achievement. When reviewing the impact of literacy instruction to student achievement, six topics emerged: (a) historical aspect of teaching reading, (b) implications of reading research in the classroom, (c) early intervention, (d) Response to Intervention, (e) assessment, data, and monitoring progress, and (f) five essential components of reading—phonemic awareness, phonics, fluency, vocabulary, and comprehension. When reviewing the role of school leadership in building a culture for success through change, four topics emerged: (a) principal as a participant, (b) creating conditions for

change, (c) planning, implementing, and sustaining change, and (d) characteristics of successful schools and principals.

CHAPTER 3

RESEARCH METHODOLOGY

The purpose of this qualitative study was to determine how schools improve struggling readers. This study examined three high performing elementary schools that had done an outstanding job accelerating early reading achievement by implementing effective instructional strategies in literacy around the five components of reading, early intervention, and the role of the school leadership in achieving success.

Research Questions

This qualitative study focused on effective instructional strategies in the area of reading, RtI framework, and the dynamics of leadership and specifically the research question, How do high achieving elementary schools improve struggling readers? To determine how these schools improved reading skills in struggling elementary students, these five questions were studied:

1. How do you improve struggling readers in your school?
2. How do you identify struggling readers? Why?
3. Does administration play a role in accelerating student achievement in struggling readers? Why or why not?
4. Does staff play a role in accelerating student achievement in struggling readers? Why or why not?
5. Does training play a role in accelerating student achievement in struggling readers?

Why or why not?

Qualitative Inquiry

Creswell (2007) defined qualitative research as a vehicle to explore and understand the way individuals ascribe to a social or human issue. The focus is on the process rather than the outcome. Merriam described four characteristics of qualitative research (Merriam, 2009). The intent of this research was to study the individuals' understanding of their experiences. The researcher collects and analyzes the data; therefore, the biases that exist from the researcher must be considered and monitored to determine the level of impact on the actual data collection and analysis (Merriam, 2009). This type of research honors an inductive process to establish theories from the information gathered. The data gleaned from qualitative research are very descriptive as it is in the form of words and pictures rather than numbers (Merriam, 2009). Constructivist perspectives make knowledge claims.

Merriam (2009) stated, "In contrast to quantitative research, which takes apart a phenomenon to examine component parts (which become the variables of the study), qualitative research can reveal how all the parts work together to form a whole" (p. 6). This study examined many elements that seemed woven together in order to develop meaning. According to Creswell (2003), "Field work in the natural setting examining 'lived experiences' marks phenomenology as a philosophy as well as a method" (p. 15).

Researchers use strategies to establish the credibility of their study to ensure procedures for validity (Creswell & Miller, 2000). This is referred to as the lens used by the researcher (Creswell & Miller, 2000). A holistic account of this study was reported through the theoretical lens; this study was conducted combining an interpretive lens with grounded theory. "Grounded theory research often builds theories based on the changes that occur over time with a certain

phenomenon as well as other process-oriented topics” (Merriam, 2009, p. 2).

Strategy of Inquiry

The strategy of inquiry was a combination of grounded theory and phenomenological research. In grounded theory inquiry the views of the participants are embedded with process, action, or interaction and the research often builds theories based on changes that occur over time (Creswell, 2003). The data were constantly compared to emerging categories in multiple stages of data collection (Creswell, 2003). Phenomenological research was utilized in the study to capture human experiences concerning phenomenon as described by the participants (Creswell, 2003).

Participants

The first step of the data collection process was to determine what schools would be selected to study, what exactly should be observed and interviewed, as well as where and when the research would be conducted (Merriam, 2009). A nonprobability sampling was chosen to utilize in the study, specifically purposeful sampling (Patton as cited in Merriam, 2009). “Purposeful sampling occurs when a certain sample is selected because researchers believe that the most information can be gathered by interviewing or observing the particular group” (Merriam, 2009, p. 3). Purposeful sampling requires the researcher to determine the process of how to select the participants according to specific selection criteria (Merriam, 2009). In order to select participants who were the most beneficial in exploring the research questions, this qualitative technique was used. The sample population used to explore educational aspects in how schools improve struggling readers must have exhibited these characteristics. Schools were selected using a variety of criteria:

1. The school's ISTEP+ test scores must show a gain over the last three years of test data from 2010-2013 of students achieving grade level proficiency in English language arts.
2. The elementary school had to have a focus on early intervention as it related to reading methodologies and identification of deficits.
3. The school could not have gone through a redistrict or reconfiguration in the past two years.
4. The elementary school could not have a minimal level of support or resources i.e. counselor, reading coach, asst. principals, etc.
5. The research sample included all socioeconomic levels from high-achieving schools representing a variety of demographic areas, including rural and metropolitan schools in Indiana.
6. The principal interviewed had to be at the school at least three years, but not limited to a particular number of years of experience or gender.

I found information on the Indiana Department of Education website to assist in the search for schools that met the study criteria. Standardized test scores were a determining factor since all schools selected were from the state of Indiana. Early intervention was the key but due to developmental factors results of intervention efforts were evident in Grades 3 through 5 ISTEP+ test scores. National Blue Ribbon Schools, cited for excellence in achievement, were cross-referenced with school websites to determine if the school used intervention programs as a strategy to accelerate student achievement. School improvement plans communicate the goals and action plans used to focus on reading interventions, methodologies, and identification of deficits. Many schools posted this information on websites. Selection protocols for interviewees

were one of the most important first steps in developing a qualitative research plan of action for this study. Participants interviewed included education directors, general education teachers in Grades K-5, resource teachers, interventionists, and the principal at each building. The pool of interviewees was selected from a pool of differing backgrounds, gender, experience level, and age. Potential interviewees were sent an invitation via email to participate and an informed consent form. No minors or individuals who were mentally incapacitated, or individuals whose ability to give voluntary informed consent participated in this study.

Data Collection

After schools were identified from various regions in Indiana that met the selection criteria outlined in the participants section, a school administrator was contacted to check for interest and permission in participating in this case study. The administrator was questioned to make certain the current principal of the school was the one present in the acquisition of high achievement in literacy and that the reading scores were obtained from the population of students where the interviews took place. If there was interest, two questions were asked:

1. Has the school gone through a redistricting or reconfiguration in the past two years?
2. Is the present principal new to the building?

The school was eliminated if the answer to either of these two questions was affirmative. It was important that the criterion of high achievement through gains in the ISTEP+ scores was not due to a reconfiguration but rather were obtained from the population of students in the school where the interviews took place.

The schools in the study were located in Indiana. Multiple data collection methods including semi-structured interviews, informal observations, and a review of documents were used to secure an in-depth understanding and exploration of contributors to how struggling

readers improve. Denzin and Lincoln (2005) stated, “Qualitative research is inherently multi-method in focus. However, the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question” (p. 5). Data collected included semi-structured interviews with participants, informal observations in the school setting, analysis of public documents regarding reading achievement, reading interventions utilized, and the dynamics of school leadership.

Semi-structured interviews were conducted to collect data on-site at a location determined by the principal. Interviews followed a standard protocol included in Appendix A and lasted approximately one hour. Open-ended questions, according to Creswell (2007), are the “core of the interview protocol, bounded on the front end by questions to invite the interviewee to open up and talk” (p. 133) and conclude the interview with questions that inquire, “Who should I talk to in order to learn more?” (p. 133).

Focus groups were used in conducting the interviews with the teachers. Focus groups of practicing teachers were formed at each school location. The focus group consisted of at least three teachers and provided for a method of qualitative research data collection where the group of qualified teachers possessed similar basic knowledge but unique knowledge inside the realm of literacy in order to gain perspective. The backgrounds of these educators included but were not limited to gender, age, urban, rural, and an employment record indicating the person had been employed for at least three years as a teacher. The focus group participants met one time for a length of 60-75 minutes. Additional focus group sessions were requested only if a need for additional information arose after transcription.

The grade level taught and willingness to participate was used to determine the teacher selection for the focus groups as indicated by the informed consent and invitation to participate.

I interviewed the principal and other district administrators individually. I also recorded information from the interviews by electronic notes and audiotaping. The participants' names and the names of the schools were changed to protect confidentiality during transcription.

Informal field observations in the school setting and informal classroom observations were conducted at each site. I spent at least a full day at each site to collect the data. I also took descriptive and reflective notes during the observations and followed the observational protocol in Appendix B.

Procedures

Data must be organized in a systematic approach in order to analyze it effectively in qualitative research. The data must be reduced to common themes in a process called coding, and finally represented in a graphic format to make meaningful conclusions (Creswell, 2007). The following data analysis steps were followed in this study.

I first organized and prepared the data for analysis using systematic methods to process the data. Information from the field notes and observations were electronically recorded and transcribed. The data were arranged by date and according to source. Next, I reviewed all of the data by re-reading and studying the information to ascertain an overall sense of what the participants were communicating in the observations and interviews during the site visits.

A detailed data analysis began with a coding process. Coding is the process of breaking down the information into chunks in order to make meaning of the information (Creswell, 2007). The data is put into categories and labeled with a term correlating with the actual language of the participants (Creswell, 2007). Creswell (2007) outlined in his recommendations that the researcher analyzes the data from the research by the following four areas: readers code the data from topics that readers expect to find, codes that were not anticipated or are surprising, codes

that are unusual, and finally codes that correlate with broad theoretical perspectives in the research.

Descriptions and themes were generated using the coding process. A within-case analysis was done by me to analyze themes within the case after first reporting the meaning with a detailed description of each case. Then a cross-case analysis was used to compare the themes between the different cases. Figure 1 represents Creswell's (2007) analysis.

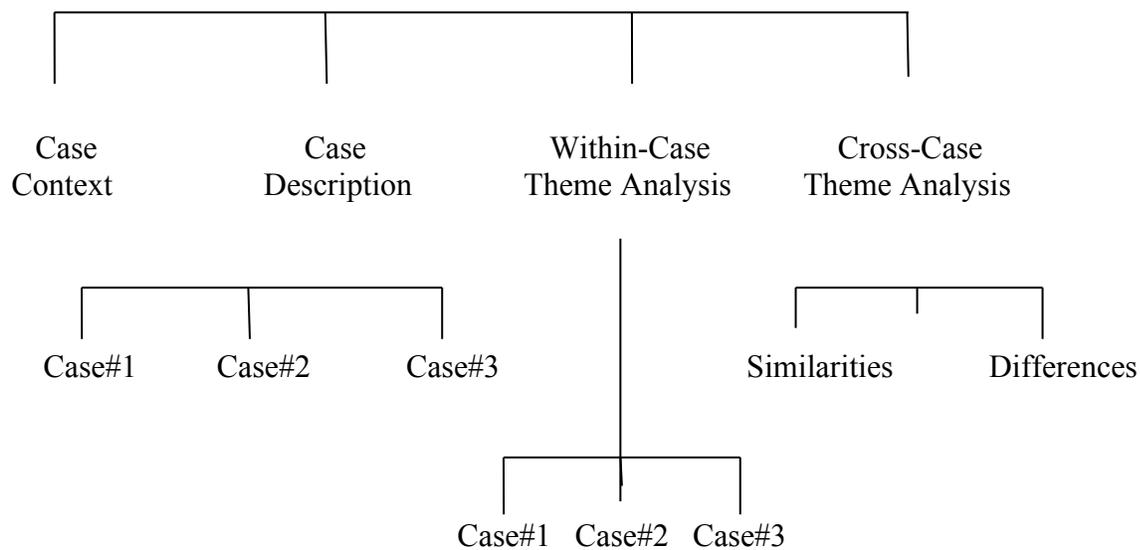


Figure 1. Analysis of themes.

A narrative representing the research findings was the final step. Merriam (1998) explained that the study commands holistic interpretation. “A study is an intensive, holistic description and analysis of a single, bounded unit. Conveying an understanding of the case is the paramount consideration in analyzing the data” (Merriam, 1998, p. 195). Lincoln and Guba (as cited in Creswell, 2007) advised that the key was to summarize the information gleaned from the data and to raise new questions raised by the synthesis of the data. According to Creswell (2007), the researcher aims to answer what had been learned from the study and to derive

meaning from the data by making a comparison of current theories.

Establishing Validity and Reliability

I conveyed the steps in the process that were taken to ensure the validity, accuracy, and credibility in their findings. The use of multiple methods, known as triangulation, is a well-known strategy in a qualitative design to ensure validity (Merriam, 2009). Validity is one of the strengths of qualitative research, and it is based the accuracy of the findings reported from the standpoint of the researcher, the participant, or the readers of an account (Creswell & Miller, 2000). The following methods were used in this study to increase the validity of the findings: a systematic protocol of observations, a semi-structured interview format, consistent procedures for data coding and analysis, and a review of public documents for background and descriptive information to identify major and minor themes.

Reliability, or consistency, refers to “the extent to which research findings can be replicated” (Merriam, 2009, p. 220). In qualitative research, the consistency of the findings with the data presented and the ethics of the researcher presenting them might be more important than replication (Merriam, 2009). These practices were employed in this study. Reflectivity is the core characteristic of qualitative research and clarifies the bias a researcher brings to the study (Creswell, 2007). The researcher’s self-awareness and critical self-reflection of potential biases and predispositions is defined as reflexivity that could influence the research study and the conclusions (Denzin & Lincoln, 2005). As mentioned in the personal statement, my background of experience in elementary education, reading, and early intervention could have biased perceptions if the strategies employed at the selected schools were different from those with which I was familiar. In order for me to interpret data in an unbiased manner, this awareness needed to exist.

Conclusion

To summarize, the following design components in this chapter were the research questions, qualitative inquiry, strategy of inquiry, data collection, procedures, and establishing validity and reliability. The main purpose of this qualitative study was to explore how elementary schools improve struggling readers with efficacious instructional strategies and reading methodologies and an RtI framework to accelerate learning as it connects to the dynamics of school leadership.

CHAPTER 4

FINDINGS OF THE STUDY

The purpose of this qualitative study was to focus on effective instructional strategies in the area of reading, early intervention, and the dynamics of school leadership, and specifically the research question, How do high achieving elementary schools improve struggling readers? To determine how these schools improved reading skills in struggling elementary students, the additional five questions were studied:

1. How do you improve struggling readers in your school?
2. How do you identify struggling readers? Why?
3. Does administration play a role in accelerating student achievement in struggling readers? Why or why not?
4. Does staff play a role in accelerating student achievement in struggling readers? Why or why not?
5. Does training play a role in accelerating student achievement in struggling readers? Why or why not?

Chapter 2 of this study documents many of the strategies necessary to improve the performance of struggling readers and how to provide the appropriate support to achieve academic success. The research targeted the strategy of early intervention. The research also addressed the role of school leadership. Studies have outlined what schools should do in terms

of identifying struggling readers and providing early intervention, however, what conclusions can be realized from an in-depth study of schools who have succeeded tremendously in improving struggling readers, despite the challenges that exist in achieving such an endeavor .

Presentation of Results

Chapter 4 presents and analyzes findings from interviews conducted in three high achieving elementary schools that met the study criteria. All of the schools were located in Indiana and met the study criteria. Two audio-taped interview sessions were conducted at each school using the semi-structured interview protocol outlined in Appendix A. The principal at each school was interviewed first. The interviews ranged from 29 to 38 minutes. Next, focus group participants were interviewed. Participants included teachers from an array of backgrounds, grade levels, and years of experience. The focus group interviews lasted from 53 minutes to one hour and nine minutes.

All participants were assured of confidentiality of the interviewees and schools. Direct quotations from interviewees were only altered for readability by imposing punctuation and removing filler words typical in conversation. I identified each school by letter names. Each of the three school cases are presented in this chapter with (a) a description of the school, using demographics and information gleaned from artifacts, public documents, and informal observations; (b) an analysis of the coded responses discovered within each case; and (c) a cross-analysis of the coded responses to compare the themes between cases.

Study Sample

Three schools were selected utilizing data from the Indiana Department of Education Compass website. Only schools with an increase in language arts scores on the Indiana

Statewide Testing for Educational Progress – Plus (ISTEP+) in the area of language arts were selected.

Schools were eligible to be included in the study if gains were made over the last three years from 2010-2013 of students achieving grade level proficiency in English language arts. Schools were removed from consideration if the principal had been at the school less than three years or if the school had experienced reconfiguration or redistricting in the past two years. Schools were selected if they had a focus on early intervention as it relates to reading methodologies and identification of skill deficits.

All three schools initially contacted agreed to be included in the study. One of the schools was located in a metropolitan area of Indiana, and two schools were located in rural areas of Indiana. Two schools were in the southern portion of the state, and one school was located in central Indiana. Table 3 depicts demographic data, achievement data, and ethnicity rates of the participating schools.

Table 3

Demographic Data, Achievement Data, Poverty Rates, and Ethnicity

School	Locale	% Poverty	% Minority	Language Arts Pass Rate-State Test (Grade 3)
A	Rural	56%	0%	89
B	Metropolitan	38%	22%	86
C	Rural	28%	6%	94

The educational background, as well as the number of years that each of the principals had been at his or her current position, is outlined in Table 4.

Table 4

Principal's Background

School	Tenure of Principal	Principal's Background
A	7 years	Math, Doctor of Education
B	7 years	Technology Education
C	18 years	Elementary Education

Summary of the Interviews and Field Observations

School A Description

School A, located in the rural area of central Indiana, served 161 students in Grades pre-K through 6. A total of 56% of the students received free or reduced lunch, and 0% of the students were minority. The native language of the all students was English. The school was in an enclosed building and was built in the late 1950s. The physical structure was in immaculate condition and had a very colorful, inviting, and child-friendly environment. The student population was small in comparison to the building size. There were a variety of rooms that did not house general education classrooms and those rooms were able to be utilized for “Reading Rooms” which housed leveled libraries of books for students to go to read in a literacy rich environment. Each classroom supported a motivating theme to increase school spirit and to promote a culture of success. The hallways and classrooms were decorated with motivating slogans and made for a very nurturing environment.

School A received Title I funds. A district Title I coordinator oversaw the Title I programming. Each of the seven classrooms had an instructional assistant during the 90-minute literacy block. The instructional assistants were funded by Title I and special education dollars.

One assistant was actually a retired teacher and she served as the coordinator of the intervention program in the school. The only administrator in the building was the principal. Class sizes were approximately 20 students per grade level. The school received an A letter grade for accountability in 2013 as measured by the Indiana Department of Education. Reading achievement data for each of the tested grade levels on the ISTEP+ as well as a summary of demographics of the school are represented in Table 5.

Table 5

School A Characteristics

Factor	Summary of Data
Percent growth*	54.5% (median growth percentage)
Number of students	161
Grade configuration	Pre-K-6
Percent poverty	56.0%
Percent minority	0.0%
Locale	Rural
Recognition	Received an A letter grade for school accountability from the IDOE

Note. *Percentage of students who met or exceeded standards in ELA

School A Analysis of Coded Responses: Principal interview

Principal A had been the principal at School A for seven years. Her background was mathematics in Grades 5-12. This position at School A was her first administrative position. Our interview lasted 38 minutes. The following coded responses emerged from the interview:

- Coded Response 1: Raising expectations and setting high goals for students was

the method used to improve struggling readers.

- Coded Response 2: In order to improve struggling readers, the principal established a structural framework of tiered instruction with a structured schedule allowing for additional time and flexible grouping with a focus on integrating data, goal-setting, and progress monitoring;
- Coded Response 3: In order to improve struggling readers, the principal established a system of collaboration.

Coded Response 1: Improving struggling readers occurred here by raising expectations and setting high goals for students. When asked to describe how School A improved struggling readers, the principal at School A began by stating that the school maintained extremely high expectations of its students. “If you always do the status quo, the results that you achieve from that practice will always be the same.” She raved about the quality of the staff members and described them as “dynamic.” The principal strategically assigned the teachers to grade level assignments in order to match the best teachers with the lowest performing students.

She emphasized that it was imperative to get teachers assigned to the correct grade levels and explained that teachers tend to get stagnant in what they are teaching if they are not moved around to different grade levels. It was mentioned that success was observed when teachers were moved from upper levels to the primary grades and this automatically increased expectations. She stated that teachers who moved to lower grade levels from upper levels had a better understanding of the big picture in regard to the hierarchy of skills. Teachers who moved down knew what the students needed to be successful in the upper levels; therefore, expectations are increased and students are pushed to achieve higher levels of success. She advocated for change in the grade levels and stated that teachers tend to work harder and apply

more effort when they are moved out of their comfort zones.

She went on to share that the school implemented a scientific-based computer program, “Fast For Word” which focuses on training the brain to make patterns necessary to build strong readers. Students work through a series of games that develop foundational reading skills such as phonics, decoding and fluency, and comprehension to catch-up students to narrow the achievement gap. The program is computer based and easily integrated through the use of iPods and iPads which were purchased in classroom sets. The iPad sets were purchased with funds sought through grant opportunities written by the principal. She stated, “However, the people are definitely the key and not the program.” She continued by explaining that a neighboring school in the same corporation was utilizing the same computer-based program, and the other school had not experienced results anywhere near the gains made at School A. She attributed that to the retired teacher who worked as a literacy consultant and coordinated the intervention program and goal setting at School A.

The people matter. Our coordinator is able to effectively trouble shoot, she is enthusiastic and make the program fun for the students by emphasizing goal setting and offering incentive plans to increase student motivation to build a culture of success.

A quote from the principal, “Teachers work to set high goals for students and work relentlessly with parents to provide support in order for students to accelerate his/her learning and achieve the goals set for them.”

Coded Response 2: In order to improve struggling readers, the principal established a structural framework of tiered instruction with a structured schedule allowing for additional time and flexible grouping with a focus on integrating data, goal-setting, and progress monitoring. Principal A realized some structural changes needed to be

put in place in order to accelerate student achievement. Principal A began by reflecting on the base of the core reading known as Tier 1. Core instruction was received by all students. After a year of monitoring core instruction with extreme pull-out scenarios for additional interventions, known as Tier 2 and Tier 3, she decided the school needed to take a different direction. School A was not experiencing the success they strived to achieve with this approach. The literacy block was reconfigured.

Strategic scheduling was done to align the entire school with an extreme focus on literacy, particularly in kindergarten through second grade but reaching all the way to Grade 5. The entire school maintained a 90-minute literacy block from 8:30 to 10:00 a.m. every day. This flexible scheduling allowed the teachers to assess and analyze the data to determine specific needs of the students and to pinpoint the sub-skill deficits in regard to the five components of literacy. The students were shifted to various grade-level groups throughout the school as appropriate to his or her literacy needs.

Cross grade level groups were implemented. The thought process behind this design was to assign students to a reading group at a level where they could experience success while being pushed academically at the same time in an attempt to achieve catch-up growth. Standards were followed carefully to ensure that all students were receiving the Tier I core instruction for their current grade levels.

The students worked on their instructional level during the 90-minute block on the core skills with the appropriate grade-level teacher who correlated with their level of performance. Instructional assistants were working in every classroom during the 90-minute block. The certified staff members worked with the most struggling students. The priority was to build an early foundation and to get students performing on grade-level benchmarks in order to narrow the achievement gap by the end of Grade 2. Principal A believed that if

School A could get students caught up by the end of Grade 2, the students were more likely to be stronger readers in the intermediate grades. This method has become the norm at School A, and it has helped build self-esteem and confidence levels in the students.

The culture of School A was that all students get what they need based upon the data. The teachers and students were open to this type of flexible instruction to accelerate student achievement. The teachers academically embraced each student and had ownership in the students' success. After the students worked in the 90-minute literacy block that equated with the students' skill level, students returned to the regularly assigned grade-level classroom and received instruction on the grade-level skills the student was currently assigned.

A universal screening was used with all students as a benchmark literacy assessment. Multiple data points were collected using various assessments at School A. DIBELS (Good & Kaminiski, 2002) was utilized in Grades K-2 (Indiana Department of Education, 2012), and Renaissance STAR (CompassLearning, n.d.) literacy in Grades 3-6. Acuity predictive tests which align to the standardized state test (ISTEP+; Indiana Department of Education, 2011) were also used in Grades 3-5 three times per year. IREAD K-2 is another data point conducted at the end of the school year in the primary grades which aligns to the state reading test (IREAD3) administered in Grade 3 in Indiana (Indiana Department of Education, 2012). Benchmark tests are administered at the beginning of the year to establish a baseline and are conducted quarterly to monitor students' progress.

Principal A carefully reviewed the data and conducted team meetings in conjunction with the Title I coordinator. Conversations were conducted about each student. A researched-based computer program entitled *Fast ForWord* (Scientific Learning Corporation, n.d.) was utilized for Tier II and Tier III interventions with students. This is a

45-minute program used on the iPads and iPod classroom sets in addition to the 90-minute literacy block. It was accessible to all students in the classroom and was implemented as a “literacy center” following the core instruction. This was seamlessly integrated into the classroom which saved time often lost in transition. Students were assigned essential reading skills surrounding the five components of reading where deficits existed. Interventions were delivered with fidelity and individual reading goals were set for each child. Incentives were tied to levels of achievement. Progress was monitored and achievement goals measured by Accelerated Reader tests (Renaissance Learning. (2014).

These interventions addressed the specific area of need. Principal A provided this example,

Students who struggle with phonics will be assigned instructional lessons and practice specifically related to the areas of need as reflected in the data points for Tier II and Tier III instruction. Fluency and decoding skills are provided for students who struggle in that area of the reading process. Each child is identified and assignments are made in *Fast ForWord* based on individual need.

Principal A shared that the teachers bought into the process and supported the system after the first year when they began to see growth and student success. The system was in place in School A, and they made adjustments based upon the results from the data. They taught intentionally and Principal A remarked, “Progress is monitored constantly. The teachers anxiously await the data with hopes of seeing how much the students have grown.”

Coded Response 3: In order to improve struggling readers, the principal established a system of collaboration. Principal A shared that one of the advantages of being in a small school is there is a great sense of family. She stated, “We could have a faculty

meeting every day, and not even think of it as a faculty meeting.” The teachers look to each other for advice and seek instructional recommendations from one another regularly. Teachers volunteered their time and stayed after school almost every day for an hour to collaborate. They were constantly sharing ideas, planning, and discussing strategies that work before, during, and after school. Principal A shared that she maintained high expectations and often knew the data before the teachers were aware of it. She impressed upon the teachers the importance of high expectations, and she supported their efforts every step of the way. She stated, “I feel like if I am not supportive of the efforts that are taken, they will not continue to make the effort to get better. We worked on this as a team.” Principal A promoted a team approach with the faculty to enhance levels of trust and conversation about students.

There was a common goal at school A, and everyone knew what the common goal was. Principal A remarked, “Naysayers are limited and their voices are not heard.” Even the 10-minute morning gym supervision became a time to collaborate among teachers. Principal A concluded by adding the following statement: “People are the key. The same programming was being run by another school in the district, and they had not had the same level of success. The people matter.”

School A Analysis of Coded Responses: Focus Group Interview

The teachers’ focus group consisted of two members. The third teacher scheduled to participate was unable to attend due to an unforeseen circumstance. Participants included the kindergarten and third grade teachers. The interviewees’ years of experience ranged from nine to 10 years. The interview lasted 59 minutes. These coded responses emerged from the interview:

- Coded Response 1: Improving struggling readers began with implementation of a tiered literacy system driven by data to support individual needs.

- Coded Response 2: Collaboration is vital to improve struggling readers.

Coded Response 1: Improving struggling readers began with implementation of a tiered literacy system driven by data to support individual needs. The teachers at School A perceived that they improved struggling readers first and foremost by the tiered literacy system employed at the school which was driven by student data. Credit was also attributed to the quality and fidelity of the implementation of the literacy system for the gains students made at School A. The data from the benchmark assessments drove the focus of the tiered levels of instruction. The system implemented at School A relied primarily on adjusting instruction based on students' needs, progress monitoring on a regular basis, and the students' level of response to the instruction.

One teacher explained, "First, we have to identify the students who are really struggling by using the STAR assessment in Grades 3-6 and using the DIBELS assessment in Grades K-2." The teacher went on to share how the students were grouped based on their level of need and not by grade level. Students at School A were shuffled from room to room and assigned to instruction according to the needs as indicated by the data. A third grade teacher said,

It really does make a difference. We move them to the appropriate level of instruction within the building regardless of the grade level to meet the needs of the kids. Instruction is intentional and pushes them to reach their potential. The core reading instruction is not over their heads. The reading is scheduled from 8:30-10:00 every day, and all students in the building are divided up and assigned to an appropriate setting. We teach in guided reading groups and an assistant is in every classroom.

After the 90-minute reading block, students returned to the grade-level classroom

and were taught grade-level standards. Students gained more confidence and performed better at their grade level as a result of this approach. Tier II and Tier III students then received additional intervention time on the *Fast For Word* computer-based program. Students could spend up to an additional 45 minutes on this program.

Teachers plugged in levels of skills from the STAR Reading and DIBELS assessments. Students were tested by reading Accelerated Reading Programs on these skill levels. Reading goals were set and progress monitored regularly. Accelerated readers were used in Grades K-6.

Goals were set by each student individually, and they were encouraged to reach a designated number of AR points and to reach an 85% percentage pass rate on the testing. The librarian posted the 85% Club and celebrated the success of each student. Students were motivated to do well by incentive programs and recognition parties. A kindergarten teacher stated, “Most awards are non-monetary privileges such as Principal for the Day, lunch with teachers, Wear a Hat for a day, or hold the bunny during story time.”

Coded Response 2: Collaboration is vital to improve struggling readers.

Collaboration was expected and a key element to improve struggling readers in School A. The third grade teacher remarked,

The principal drives our level of collaboration and culture in the building. He often knew the data before we did. We analyze and interpret the data as a team. We share how we got the results we did with one another. If we did not move kids to make the gains we wanted, we were not afraid to ask for help.

There was a culture of success in the building, and the teachers owned all of the students not just the ones assigned to their classroom. Relationships were strong among the staff in School A because of the small size. Teachers trusted each other and were receptive

to sharing ideas and being critical friends.

The principal was key in establishing this learning environment. One teacher remarked, “There is a fine line between a disciplinarian and a compassionate person, but our principal is both! He readily interacted personally with the children.” The teacher perceived the role of the principal as one of providing support to all the teachers and did not micromanage them. One teacher shared that he valued individual differences in both the staff and students. The kindergarten teacher concluded with this statement, “We share beliefs, and ownership of our students. We strive to be approachable and always show mutual respect to our students.”

School B Description

School B was located in metropolitan south central Indiana and served 565 students in Grades K-4. Thirty-seven percent of the students received free or reduced lunch, and 22% of the students were minority. The school was housed in a recently renovated one-story brick building. The classrooms were arranged by primary and intermediate grades within the building. The mission statement of the school was displayed in the entrance foyer. It read, *The mission of the students, staff, families, and community of School B is to interest students in lifelong learning by . . . Providing a positive and safe learning environment for all students and staff; Providing a variety of learning experiences that promotes students' academic, creative, emotional, social and physical development in order to achieve each individual's maximum potential; and Encouraging self-discipline, respect, responsible citizenship, and appreciation for the interdependence and diversity of all people; Good communication and cooperation between home, school, and community are essential to fulfill our mission.*

School B was a non-Title I school. Prime-time assistants supported the primary grade classrooms. A full-time counselor and a part-time literacy coach were employed at School B. There was an assistant principal and a principal in the building. Table 6 presents the English language arts achievement data for the Indiana state test (ISTEP+) and a summary of school demographics.

Table 6

School B Characteristics

Factor	Summary of Data
2013 ELA ISTEP Grades 3-4	86.7%
Percent growth	31.5% (median growth percentage)
Number of students	565
Grade configuration	K-4
Percent poverty	37.4%
Percent minority	22.1%
Locale	Metropolitan
Recognition	Received B letter grade for school accountability from IDOE

School B Analysis of Coded Responses: Principal Interview

Principal B had been working at School B for five years. His background was in technology education and he had administrative experience as an assistant principal for one year and a principal for six years. He served as the principal at another school for one year before

coming to School B. Our interview lasted 28 minutes. The following coded responses emerged from the interview:

- Coded Response 1: Improving struggling readers began with implementation of a strong core curriculum with pacing guides and Common Formative assessments.
- Coded Response 2: Collaboration and highly-effective people were vital to improving struggling readers.
- Coded Response 3: Improving struggling readers began with implementation of a tiered literacy system.

Coded Response 1: Improving struggling readers began with implementation of a strong core curriculum with pacing guides and Common Formative assessments.

Principal B was an elementary principal for one year prior to coming to School B. He began with the statement, “We work on identifying every name and every need in our building.” This was drilled over and over again with the teachers. Teachers were charged to know every student’s name and to be able to correlate that information with the specific needs of the child.

Principal B shared that a top priority of School B was to build solid core instruction with the best resources by following district pacing guides that are strategically designed to be targeted and specific. Principal B stated, “The focus is to have quality people to deliver instruction and ongoing professional development to support good instruction.” Weekly grade-level meetings were conducted to support instructional planning efforts and to develop ideas and instructional strategies to meet the needs of the students. Time was always a challenge. He remarked, “We delegate people to have a positive impact on the needs of the student.” Instruction is deliberate with a targeted and specific purpose.

Principal B explained that the school staff had worked on facilitating global initiatives with quality common formative assessments across the district. Quality conversations were held

with central office personnel to build and align the standards. Investments were made to bring in big names for professional development. Once the foundation was there, School B strove to grow with the new information and training that had been provided for the principal and staff. Principal B continued by saying, “Nothing can impact the students’ learning more than that of a high quality, highly effective teacher delivering a strong core curriculum, nothing . . .”

Coded Response 2: Collaboration and highly-effective people were vital to improving struggling readers. Principal B repeated, “People make a difference.” Principal B went on to explain the greatest influence on a teacher is that of a colleague. Collaboration time after school was set and was consistent. Teachers were committed and used before and after school time to work together to improve instruction. School B was a Professional Learning Community and the very nature of how they existed at School B is to support one another.

At School B time and people are honored as the two greatest resources in the education business. The teachers at School B were willing to trade time to create bigger blocks of time for collaboration to discuss instructional delivery or other branches of pedagogy. Teachers at School B traded 30 minutes for an hour after school to get to deeper levels of professional practice and reflection. One particular practice that had been a huge benefit to teachers was to work with the literacy coach. The literacy coach modeled a particular practice for a group of teachers. Then the teachers modeled for each other. The teachers worked as critical friends with meaningful reflections on the work that had been accomplished.

Coaching was a huge component of the work at School B. The teachers worked in small groups and discussion was initiated among the grade-level teams. The grade-level team members talked to each other. Discussion was also strong between the grade-level teams above and below the grade level. This was referred to as vertical articulation. Modeling took place on many levels including peer-to-peer, administrator-to-teacher, and modeling from central office

personnel to the principals. Principal B promoted a culture of celebrating each other to recognize success and to provide support to every teacher. This practice builds capacity, encourages risk-taking, and is a catalyst for change.

Coded Response 3: Improving struggling readers began with implementation of a tiered literacy system. Principal B described one key element of improving struggling readers was to embed a tiered model of literacy instruction consisting of a quality literacy block with an additional targeted intervention time consisting of 30 to 45 minutes every day.

Scheduling is a big part of making the intervention block work in School B. Data were utilized to determine the tiers of students. Tier 2 students worked with the classroom teachers on areas of the reading process in which there were deficits. The classroom teachers saw the struggles daily as well as the successes.

School B had an assistant principal with a strong literacy background as well as a part-time reading coach. The reading coach not only provided interventions to struggling students, but also had a portion of the day when he coached teachers, met with Principal B, analyzed data, and conducted collaborative meeting with grade-level teams.

Data were collected from multiple assessments to identify the needs of the students. Grade-level meetings were conducted each week to review the data with the principal and literacy coach as well as the assistant principal. Teachers drove the discussions and Principal B listened to guide the conversations. Principal B stated, “The teachers are the experts, they need to be the ones solving the problems.” Principal B shared that he supports the teachers and he makes certain the teachers have the resources needed in the classroom to accelerate learning. The literacy coach served as the expert to assist in identifying the sub-skill deficits of the reading process: phonemic awareness, phonics, fluency, vocabulary, and reading comprehension. Students are assigned to specific intervention groups based on the needs of the student.

Classroom teachers worked with the less severe students in a Tier 2 intervention group for 30 minutes a day in addition to the core reading instruction. The more severe Tier 3 students worked with the literacy coach and assistant principal.

School B Analysis of Coded Responses: Focus Group Interview

The teachers' focus group at School B consisted of three staff members. Participants included general education teachers from kindergarten, Grade 3, and Grade 4. Years of experience of the interviewees ranged from 5 to 18 years. The interview lasted 53 minutes. The following coded responses emerged from the interview:

- Coded Response 1: Improving struggling readers began with the effective teacher implementation of a tiered literacy system, along with common formative assessments and frequent progress monitoring;
- Coded Response 2: Collaboration was vital to improving struggling readers.

Coded Response 1: Improving struggling readers began with the effective teacher implementation of a tiered literacy system, along with common formative assessments and frequent progress monitoring. The teachers at School C described how they worked to improve struggling readers with a tiered model of reading instruction. The teachers conducted a 90-minute uninterrupted literacy block in core reading instruction. Pacing guides were used to direct this instruction that were created by experts in the district and were aligned to state standards. Describing the importance of the core instruction, the fourth-grade teacher stated, "Observations and walkthroughs are conducted to make certain the pacing guides and instructional framework are followed." Teachers used a lesson planning framework that requires a mini-lesson with explicit instructions and follows an I do, we do, and you do process leading up to independent practice. Teachers were monitored through observations and classroom walkthroughs. This framework was part of the teacher evaluation process. The

third-grade teacher elaborated with this statement,

We started seeing the shift when we began using very good pacing guides. These helped to keep the teachers on track. When you saw it on paper it really helped to get everyone on the same page. This pacing guide coupled with the CFAs made a big difference. It helped to know what we are striving for.

The students who were not performing at grade-level benchmarks were provided a second tier of support in literacy in the form of an extra 30-40 minutes of daily instruction referred to as Response to Intervention. This extra tier of instruction was specific to the student's needs and reading skills that were weak. Multiple assessments were administered throughout the year to collect student performance data.

DIBELS and the Developmental Reading Assessment are administered with students in Grades K-4. Common Formative Assessments (CFAs) created by the district were administered each grading period. Students were assessed four times throughout the year with formative and summative benchmark assessments. The data were analyzed and interpreted by grade-level teams. The data from these benchmark assessments were used to identify students in need and guided decision making to support the Tier 2 instruction. Every four weeks students were monitored for progress toward the benchmark goals to see if they fell below the goal set for each benchmark assessment. The third-grade teacher stated, "We strive to know every name and every need." The fourth-grade teacher elaborated,

I will go a step further to speak for fourth grade. When we are looking at the DRAs and the kids need help in comprehension, we are breaking down those skills so that the kids who need help on inferences go in one group. If they need work on summarizing, they go in another group. If they need help on reflection, they work in a group. These are very targeted groups specifically focusing on those skills that the child needs to

work on. The skill may change through the course of the year and they will move to a different group.

The third-grade teacher added, “Basically, we give them another reading group.” The certified teachers delivered the interventions and instructional assistants supported the students who did not need the highest level of support. Special area teachers were also used to provide interventions with kindergarten classrooms. The extra reading time was noted as playing an integral role in improving struggling readers.

A third tier of literacy was provided by the special education teachers and special needs instructional assistants to the students who exhibited the most severe needs. Reading programs such as Read 180 (Hasselbring, Kinsella, & Feldman, 2009), Waterford Early Learning (Waterford Institute, n.d.), and Systems 44 (Adams & Hasselbring, 2008) programs were utilized with these children who demonstrated the most intensive needs. The fourth-grade teacher added,

Not all programs work for every student. If the student is not making progress with a particular program, we do not keep them in that program. We will use another program until we find what works. We ultimately believe it is the people that make a difference and not the programs.

Coded Response 2: Collaboration was vital to improving struggling readers.

Teachers in School B attributed the willingness of teachers to work together as a reason for success in improving struggling readers. Grade-level meetings were scheduled with the literacy coach and assistant principal. An agenda was made by the literacy coach. Conversations were shared to review the data. The principal provided support and created the master schedule to maximize instructional time and to provide common planning time. The master schedule dictated what subject was taught when and allotted the number of minutes to dedicate to a

certain subject. The schedule had been in place for five years.

The teachers collaborated as a team with the literacy coach and the assistant principal. Discussions were held to compare what was happening between classrooms with student data on standards and essential reading skills. Teachers openly shared what was working, and likewise, were willing to own up to the fact that they were struggling with a particular skill area. CFA data and benchmark data were analyzed to ask the critical questions about student progress. The literacy coach routinely modeled instructional strategies that were proven effective. The teachers then practiced and the literacy coach served as a coach to provide feedback to the teacher team.

Teachers were required to create a visual representation in the form of a graph to illustrate the student's data from CFA and benchmark test results. These graphs were posted publicly in the classroom and shared with school stakeholders. The scores were shared at the building level and also with the district level administrators. The third-grade teacher remarked, "Trust was a key factor between the teachers and the administration." Building leadership teams consisting of the principal, assistant principal, guidance counselor, and special education teachers met to review the student achievement data and planned professional development agendas based upon the outcome of the data. District leadership teams consisting of the school principals and central office administration met monthly to review the district wide data on the CFAs and benchmark assessments to monitor the pulse of the district.

The fourth-grade teacher explained the process that evolved with the teachers getting acclimated to this culture over the past five years. "It took a long time to get used to it . . . trust was a big factor and it was a struggle." The teachers worked together to carry out the motto repeated over and over at School B—"Know every name and Know every need." The teachers took ownership of the students and openly shared when they were struggling and needed

assistance or support from each other in areas of instructional practice. The third-grade teacher concluded with this statement, “We are the accelerators! We are 100% the accelerators. In a non-Title school it is us and only us. We have to work together to make a difference.”

School C Description

School C, located in a metropolitan school district in southwest Indiana is considered a rural community served 309 students in Grades K-5. Twenty-eight percent of the students received free or reduced lunch, and 6% of the students were minority. The school was housed in a one-story brick building that was kept in immaculate condition. The classrooms were arranged in wings of kindergarten through third grade in one section. The fourth and fifth grades were in a wing on the other side of the building. A teacher-student ratio of 19:1 was in place in the primary classrooms, and a 25:1 teacher-student ratio was maintained in the intermediate classrooms. At School C 13 teachers had over 20 years of teaching experience, or 76.5%.

School C was a non-Title I school. A full-time remediation instructional assistant and an administrative intern were employed at School C. The administrative intern teaches Grade 5 and spent his planning time after school hours working on administrative tasks to prepare him for a building level principal position. There was one principal in the building. Table 7 presents the English language arts achievement data for the Indiana state test (ISTEP+) and a summary of school demographics.

Table 7

School C Characteristics

Factor	Summary of Data
2013 ELA ISTEP Grades 3-5	93.9%
Percent growth	64.5% (median growth percentage)
Number of students	390
Grade configuration	K-5
Percent poverty	28.0%
Percent minority	6.0%
Locale	Rural
Recognition	Received A letter grade from IDOE; Indiana Four Star School (top 25%)

School C Analysis of Coded Responses: Principal Interview

Principal C had been at School C for 12 years. His background was in elementary education, and he had been a principal in another elementary school for four years and an assistant middle school principal for two years. His total years of experience as a principal were 18 years. Our interview lasted 29 minutes. Coded responses that emerged from the interview included:

- Coded Response 1: Improving struggling readers began with implementation of a tiered literacy system.
- Coded Response 2: Collaboration and people were vital to improving struggling readers.

Coded Response 1: In order to improve struggling readers, the principal began with implementation of a tiered literacy system with a focus on additional time and progress monitoring. Principal C believed that it was his responsibility to support the teachers and staff with appropriate resources and materials to improve student achievement. One of those materials was the *aimsweb* (NCS Pearson, n.d.) program utilized as a universal screening with all students in English language arts. Benchmarks were established with the screening three times per year in August, January, and April. The *aimsweb* assessment reports served as a diagnostic tool and indicated students who were at risk of being successful as well as identifying those students who may exhibit a high degree of giftedness. Principal C communicated that this initial screening in August provided a baseline to measure the progress occurring throughout the year. *Aimsweb* provided continuity by building in assessments into the program.

The *aimsweb* reports informed instruction in these three areas of the reading process: phonics, comprehension, and nonsense word fluency. Principal C stated, “This information gives us a good determination of the child’s weaknesses. We develop the program for instruction based on these deficits indicated on the *aimsweb* report.” School C utilized a retired teacher who actually was a volunteer as an instructional assistant. The instructional assistant offsets class size and taught the highest level of students in the classroom with novel units planned by the certified employee and provided enrichment opportunities to those higher performing students to maximize growth.

Principal C remarked, “The classroom teachers were 100% responsible for the students’ progress even though instructional assistants may have delivered the interventions to bolster students’ skills.” The classroom teachers worked with these struggling students during the 90-minute literacy block in small guided reading groups. School C had a licensed teacher employed as an instructional assistant. This individual worked with the most struggling readers in Tier 2

and Tier 3 for 30 minutes a day in addition to the Tier 1 core instruction provided by the classroom teacher. He served as the reading interventionist for the students who demonstrated deficits in reading. The groups were fluid and students were moved in and out of reading intervention groups based upon his/her level of performance and level of progress achieved.

The classroom teachers planned the intervention work for Tier 2 and Tier 3 which was utilized to strengthen the reading skill deficits. Student data was monitored regularly by the administration and classroom teachers. Students were moved out and replaced with new students to the group as they demonstrated appropriate gains. School C collected 18 different data points on students who were assigned to intervention groups before they made a recommendation for a formal psycho educational evaluation that may indicate a need for special education services.

The STAR reading test was utilized in Grades K-5 to monitor student progress to determine if the interventions that were conducted were successful in accelerating students' reading progress. Kindergarten students were assessed with the STAR Early Literacy test. The STAR test was conducted four times per year at School C. The STAR student reports were distributed with the report cards each quarter.

The Accelerated Reader was another assessment utilized to test reading comprehension levels at School C. The Accelerated Reader helped to determine if students were reading within expected levels that were required to be successful readers to reach grade level expectations. Accelerated Reader required students to read books and then students were tested on comprehension skills.

Coded Response 2: Collaboration and people were vital to improving struggling readers. Principal C elaborated on the high expectations that were in place at School C by both teachers and administration. The principal stated,

There are 312 students enrolled right now and this allows us to focus in and target individual students. Decisions are made based on individual needs through collaborative conversation with the teachers and the parents. This helps to pinpoint individual needs academically, socially and emotionally.

Principal C believed that an atmosphere of trust and respect was necessary to achieve success. He saw his role as the person who gets the materials and resources for the teachers. “If I cannot get the materials and personnel to assist as needed, we are fighting a fruitless battle.” Schedules were developed by Principal C to maximize time for collaboration with peers. The district curriculum director supported Principal C in his efforts to improve performance for his students and staff.

Collaboration was easy due to the level of trust and respect that existed in School C. Principal C stated, “Teachers make the difference.” Principal C explained that the teachers were the ones who made sure the students succeeded. Teachers had shared planning time and this was when the data was reviewed carefully to make decisions based upon needs. The data were transparent and teachers were not afraid to own the students and to admit if changes needed to be made. Collaboration was provided in a 45-minute session at the end of the school day.

An RTI team was assembled as a consultative group for the most struggling readers at School C. Principal C explained that a first-grade teacher at the school served as the literacy expert. The first-grade literacy expert served as the chairperson for this RtI team of teachers. He was paid an annual stipend to serve in this chairperson capacity. A co-chair was the assistant to the chairperson for the RtI team. This was strategically designed so that when the chairperson resigned, the co-chair would be ready to step up to the chairperson role. There was always a teacher with the necessary knowledge to serve in this chairperson role on the RtI team to support

struggling students. This process helped to build capacity in the RtI team at School C.

Principal C shared, “This team of five teachers was a support system to the other faculty members and they were the go to team for help.” The RtI team was a leadership team and worked after school with the school psychologist. Principal C went on to explain that the RtI team members were trained by the school psychologist in appropriate strategies and instructional practices to utilize with struggling readers. The RtI team had the knowledge and expertise to help drive decisions and to support other teachers to plan and implement effective strategies with struggling readers.

School C had also been focused on strengthening the core literacy program and building the intervention plans around non-fiction reading materials especially for Grades K-2. Principal C elaborated that the non-fiction titles led to a higher interest in reading which had led to better achievement. Through the leadership of the RtI team, School C had purchased more non-fiction titles to build classroom libraries which had grown a greater student interest in reading.

It was clear that the faculty at School C was supported by the principal and they strived to function as a team to provide a culture of achievement. Principal C concluded by adding the following statement, “The relationship we build with our parents is a key factor in the collaboration process.” Principal C then described how the parents were very willing to listen to the needs of their children from the teachers and how the parents embraced the feedback from the teachers to address those needs and work on the needs at home. Principal C concluded by saying, “We get the teachers involved and the parents involved by working one-to-one and really focusing on the one child to make a difference.”

School C Analysis of Coded Responses: Focus Group Interview

The teacher focus group included three staff members. Participants included general

education teachers from first grade, second grade, and third grade. The interviewees' years of experience ranged from three to 23 years. The interview lasted 69 minutes. The following coded responses emerged from the interview:

- Coded Response 1: Improving struggling readers began with implementation of a tiered literacy system.
- Coded Response 2: The principal was pivotal in providing resources and support and promoting a culture of high expectations and achievement to improve struggling readers.
- Coded Response 3: Collaboration and people were vital to improving struggling readers.

Coded Response 1: Improving struggling readers began with implementation of a tiered literacy system. The teachers at School C felt strongly that the tiered model of literacy instruction was a huge part of the success they had achieved. The core instruction was specifically focused around the five components of the reading process particularly, phonics, fluency, and comprehension. Teachers planned instruction with these essential skills as the top priority. One of the teachers shared, "We provide a great deal of time for the students to interact with the text by planning at least 15 minutes a day solely for reading that requires some type of accountability." Students were encouraged to set goals and to track the progress they made. Many resources were available to support independent reading with a comprehension component. Accelerated Reader (Renaissance Learning, 2014) and myON (myOn.com, 2013) programs were utilized to test students' comprehension levels after reading the stories.

Students were assessed three times per year with the *aimsweb* program as a formative and summative benchmark assessment. If students did not meet the benchmark then they were brought to the RTI team to devise a plan of instruction to be delivered by the remediation

assistant in Tier 2 and Tier 3 interventions. The *aimsweb* assessment data drove the plan for the students in need of additional support in literacy.

The RtI team was comprised of four teachers who worked as consultants for School C and were paid an annual stipend to serve in this capacity. The RtI team members were considered the experts and met once a week at the end of the school day. After students were brought to the RtI team for support, the teachers implemented the interventions for six weeks. One of the teachers explained, “After six weeks, if progress is not made, we intensify the interventions. The responsibility is shared between the remediation assistant and the classroom teacher.” Students’ progress was monitored weekly with the *aimsweb* progress monitoring tool. The data collected weekly was analyzed by the classroom teacher and the remediation assistant to set goals and to shift interventions as needed. One teacher clarified, “After 18 weeks, if the student does not make adequate progress, a special education referral may be made.”

The STAR test was administered quarterly as a progress monitoring tool for all students. The STAR test also assists in providing data for teachers on how to better meet the needs of high ability students. These STAR reports were sent home with report cards quarterly. Parents were contacted frequently throughout the RtI process. The teachers shared that goal setting was an integral part of this process. “All students have goals. They want to know immediately how they performed on the tests.”

The data drove the teachers’ instruction and served as a way to constantly check the progress being made toward reaching the students’ goals. A cyclical process was followed by teaching, assessing, and re-teaching as needed.

Coded Response 2: The principal was pivotal in providing resources and support and promoting a culture of high expectations and achievement to improve struggling readers. One of the teachers eagerly responded by saying, “I could not ask for a better principal!

The level of support with the students and the staff as well as families is incredible.” Another added, “He trusts us to make the best decisions for our students.” The teachers explained that he did not micromanage them but rather empowered them to take risks. There was never any judgment from the principal.

The teachers shared that the principal at School C not only knew each child and his or her needs but also knew the needs of the family. He worked to build relationships with all stakeholders. The third-grade teacher summarized, “He is truly all about the student and doing what is best for them. He sets high expectations for each child to attain.”

Coded Response 3: Collaboration and people were vital to improving struggling readers. The staff was all very supportive of each other. The teachers were encouraged to be risk-takers by the principal. A great deal of trust existed among the staff members and this trust bred a great sense of collaboration. The RtI team met with the principal to review the student data. The data was a catalyst for more collegial conversation regarding student’s performance. The focus of the conversations among teachers was about how they could make improvements in instruction. Formal training was limited and not regularly embedded within the daily schedule. Teacher leaders took it upon themselves to provide more opportunities for collaboration.

CHAPTER 5

SUMMARY, DISCUSSION, CONCLUSION

The purpose of this qualitative study was to explore the educational aspects of how high-achieving elementary schools improve struggling readers. The perceptions of the principal and key staff members were investigated in three areas through this qualitative study in high-achieving elementary schools: (a) effective instructional strategies in the area of reading, (b) early intervention, and (c) the dynamics of school leadership. To determine how these high-achieving schools improved reading skills in struggling elementary students, the five research questions were studied:

1. How do you improve struggling readers in your school?
2. How do you identify struggling readers?
3. Does administration play a role in accelerating student achievement in struggling readers? Why or why not?
4. Does staff play a role in accelerating student achievement in struggling readers? Why or why not?
5. Does training play a role in accelerating student achievement in struggling readers? Why or why not?

The qualitative study utilized a combination of grounded theory and phenomenological research. Phenomenological research was utilized in the study to capture human experiences

concerning phenomenon as described by the participants (Creswell, 2003). The theoretical lens through which this study was conducted was a combination of grounded theory layered with an interpretive lens. “Grounded theory research often builds theories based on the changes that occur over time with a certain phenomenon as well as other process-oriented topics” (Merriam, 2009, p. 2).

Three high-achieving elementary schools were selected through purposeful sampling that attained a high level of English language arts achievement by improving struggling readers. Semi-structured interviews were conducted at each site to gather data with groups of teachers and the principal from each school. Individual interviews were conducted at each school with the principal interviewed separately from the teacher group interviews. ISTEP+ scores, school improvement plan, and demographic data were studied for each site as well as conducting field observations. I searched for patterns or concepts to emerge through selective coding in the interviews. This process allowed me to develop key findings from the coding procedures.

I used a semi-structured interview format using consistent procedures for data coding and analysis to ensure validity while triangulating the data. Observations were conducted with consistency and public documents were utilized for background information about each school.

The researcher’s self-awareness and critical self-reflection of potential biases and predispositions is known as reflexivity that could influence the research study and the conclusions (Denzin & Lincoln, 2005). As mentioned in the personal statement, my background of experience in elementary education, reading, and early intervention may have biased perceptions. In order to interpret data in an unbiased manner this awareness must exist.

Effective Instructional Strategies in Literacy

Several concepts were revealed in the themes from this topic, which included data-

driven instruction, reflective practice, 90-minute literacy block with strong core instruction, planning and collaboration, and highly effective people.

1. Analyzing and interpreting data collected from various assessments, both formative and summative, was critical in making instructional decisions to accelerate student learning. The practice of utilizing data was perceived by all principals and teachers interviewed as a valuable practice and contributor to improving struggling readers. Sharing performance data with and among teachers and making a correlation between data and adjusting instructional practice was essential. Data were cited in the literature review: “an excellent data system is predicated upon an excellent assessment system” (Fielding et al., 2007, p. 29). Testing is irrelevant if you do not review the data, interpret the data, and change the instruction to better serve the student (Fielding et al., 2007).
2. All of the principals and teachers interviewed perceived data analysis as the catalyst for reflective practice and a vital element in improving struggling readers. Each school had a system of embedding continuous reflection as part of the professional practice at each high achieving elementary school. Grade-level teams used literacy data to guide reflection that was meaningful and a contributor to the school’s successes. The data provided confirmation of student performance levels and an awareness was developed from consistent data analysis and interpretation. The literature review cited reflective practice as instruction being monitored and adjusted to better support the needs of the students (Fullan, 2001; Marzano et al., 2005; Reeves, 2009; York-Barr et al., 2001).
3. All of the teachers and all principals except for one interviewed perceived a strong

- Tier 1 core instruction consisting of a 90-minute literacy block as instrumental to improve struggling readers. The 90-minute literacy block focused on the five components of literacy to build a strong foundation through phonemic awareness, phonics, vocabulary, fluency, and comprehension. Guided reading groups which targeted the instructional level were strategic and well planned to achieve the desired outcomes in performance. Previously cited in the literature review was the fact that teachers needed to have a solid understanding of scientific evidence and how it supports reading programs and methodologies they implement in the classroom (Armbruster et al., 2010; Lyon & Chhabra, 2004).
4. Collaboration was perceived by all the participants interviewed in all the schools as a contributing factor to improving struggling readers. Collaboration provided for ongoing conversation about what was working instructionally as well as exploring the best methods of evaluating student work consistently. Teachers were afforded a safe arena to share and question one another in regard to what is effective and what needs additional support and coaching. The collaboration assisted in making the necessary adjustments in the planning and implementation stages of instructional practices to improve struggling readers. Collaboration afforded teachers an opportunity to foster trusting relationships and the comfort of being critical friends while decreasing the level of isolation that once existed in educational environments. The literature review cited collaboration as a necessary element in high achieving schools and those experiencing change to improve student performance (DuFour & Marzano, 2009; Marzano et al., 2005; NCLE, 2013).
 5. All teachers and principals perceived highly effective people as an essential

component to improving struggling readers. These experts served in different capacities in each school and were the go-to people for modeling, coaching, and good old fashioned advice in terms of literacy. Each school had employees of various titles who served as the literacy experts. These titles ranged from Title I coordinator, intervention coordinator, literacy coach, assistant principal, and RtI committee chairperson. These highly-effective people who served as literacy experts were viewed by the administrators as a branch of the principal's own leadership. This was not an expected coded response and it was not cited in the research. All participants interviewed perceived the knowledge base of an expert as being a huge asset in the effort to improve struggling readers. Many studies in the area of scientifically based reading research exist and perhaps this supports the fact that all participants interviewed considered the knowledge base of a literacy expert required and essential to improving struggling readers.

The components listed above emerged as themes when discussing how high achieving elementary schools improve struggling readers. Notation was made that there was an overlap with the contributors mentioned above to early intervention and the role of the school principal. The components listed above were also embedded in early intervention as well as the responsibility of the principal to ensure that these contributors were established at the school. Table 8 illustrates the themes that arose during the research process.

Table 8

Contributing Elements of How High Achieving Elementary Schools Improve Struggling Readers

Element	Prin-A	Tch-A	Prin-B	Tch-B	Prin-C	Tch-C
Data driven	X	X	X	X	X	X
Reflective practice	X	X	X	X	X	X
90-Minute Block	X	X	X	X		X
Plan and collaborate	X	X	X	X	X	X
Literacy Expert	X	X	X	X	X	X

Early Intervention

Five elements emerged from the themes associated with early intervention. Elements that emerged in the themes from this concept of early intervention included establishing a literacy framework of tiered instruction beginning in kindergarten, conducting benchmark assessments, analyzing data to identify subskill deficits, developing and implementing an intervention plan, and monitoring student progress.

1. It was noted that each school conducted a 90-minute literacy block that provided grade-level instruction to all students. Additional layers of instruction, known as tiers, were provided to address specific skill deficits in the five components of reading.
2. Benchmark assessments were administered three times a year. These assessments

were administered in the fall, winter, and spring to measure the expectations.

3. Data collected and analyzed from these benchmark assessments determined the students' skill deficits. The data were reviewed in teams to make appropriate decisions to guide intervention. Identifying the student obstacles in the reading process early provided greater opportunities to prevent the gap in reading performance from widening.
4. The data were utilized to develop the intervention plan. The plans were developed and delivered with fidelity to increase student performance in reading. The plans were implemented for a designated period of time and progress was monitored weekly to track trends in the data. The second layer of instruction was referred to as Tier 2. If students did not respond positively to the Tier 2 plans, a more intensive intervention identified as Tier 3 was implemented. A student may have had as many as three sessions of instruction to target the literacy deficits in an effort to meet grade-level expectations.
5. The plans were implemented for a designated period of time and progress was monitored weekly to track trends in the data. The data were analyzed and interpreted to make decisions to guide the intervention plan. The timing of these assessments, plan implementation and progress monitoring varied by school but all of these pieces were in place at all schools participating in the study to provide early intervention and to narrow the literacy gap. Studies in the literature review pointed out the importance and benefits of early intervention (Ardoin & Christ, 2008; Fielding et al., 2007; Torgesen et al., 2001; Vellutino et al., 2006).

The teachers and principals respected this system of early intervention, which consisted

of a tiered literacy system, and viewed this as a necessary component to improve struggling readers. Table 9 illustrates the themes that arose during the research process.

Table 9

Early Intervention

Element	Prin-A	Tch-A	Prin-B	Tch-B	Prin-C	Tch-C
Tiered Instruction	X	X	X	X	X	X
Benchmark Assessments	X	X	X	X	X	X
Analyzing Data	X	X	X	X	X	X
Developing Plan	X	X	X	X	X	X
Monitoring Progress	X	X	X	X	X	X

The Role of School Leadership in Achieving Success

Several elements emerged from the themes surrounding the role of school leadership. Elements that appeared from the themes associated with the role of school leadership in achieving success included maintaining high expectations, trust, and respect; support for materials and resources; and strategic scheduling.

1. Principals and teachers in all three schools maintained a high level of student and teacher expectations. All three principals boasted on the quality of their staff members and praised the staff for the quality of work that is done in order to achieve high success. One principal stated, “If you always do the status quo, the

results you achieve from the practice will always be the same.” The expectations must come from the top down. All three principals referenced an overarching district and/or school-wide goal in reading achievement. Principals and teachers in all three schools portrayed a positive attitude and mutual respect for each other as well as the students. There was a sense of trust between the teachers and principal. This trust opened up lines of communication and increased the amount of risk taking that took place in the classroom in terms of instruction. Principals conducted classroom walkthroughs and observations and readily shared meaningful feedback with teachers to improve instruction and to be a catalyst for the change needed to improve struggling readers.

A leader who can thrive on change and be able to build capacity in an organization with high expectations and high levels of trust and respect was cited earlier in the literature review in this study (Bass & Avolio, 1994; Burns, 1978; Deal & Peterson, 1999; Fullan, 1993; Hall, 2008; Hoerr, 2005; Marzano et al., 2005; Reeves, 2009; Steil & Bommelje, 2004; Torgesen et al., 2007; Zemelman et al., 1998).

2. The three principals felt strongly that the teachers needed to know there was support in regard to providing the necessary materials and resources. One principal remarked, “If I cannot get the materials and personnel to assist as needed, we are fighting a fruitless battle.” The teachers spoke positively about the principals and vice versa. Another principal commented, “I feel like if I am not supportive of the efforts that are taken, they will not continue to make the effort to get better. We worked on this as a team.” The support provided by the principals empowered the

teachers to embrace the changes needed to improve struggling readers and motivated the teachers to persevere in their instructional practices.

3. A creative master schedule that provided for maximized instructional time was developed by the principal and was valued by all participants interviewed. This schedule included collaboration time during common planning time and/or time to converse and plan before and after school. The tiered literacy system was strategically embedded into this schedule to accommodate the additional time needed to deliver interventions.

All three schools' participants collaborated on a regular basis. This was made possible from strategic schedules that were created to provide for common planning time with grade-level teams, a tiered system of literacy, and to maximize efficient use of instructional time to improve struggling readers. Table 8 illustrates the themes that arose during the research process.

Table 10

The Role of School Leadership in Achieving Success

Element	Prin-A	Tch-A	Prin-B	Tch-B	Prin-C	Tch-C
High Expectations	X	X	X	X	X	X
Support & Trust	X	X	X	X	X	X
Strategic Schedules	X	X	X	X	X	X

Implications

This study of high-achieving elementary schools identifies several implications that have been instrumental in improving struggling readers. Struggling readers will not become accomplished readers without the vision and encouragement of the principal. The leadership of the principal is paramount to the success of this achievement. His or her entrepreneurship guides the endeavor from the ground up. He or she is the champion of the school to bring the outcomes to fruition.

Schools should examine the following aspects in their quest to improve struggling readers in an interrogatory manner:

1. Does the district and school have an expectation of high achievement in literacy with goals in place to inspire teachers to improve struggling readers?
2. Is there an atmosphere of respect and trust between administration and teachers? If not, what obstacles in leadership are preventing this from being present?
3. Is instruction driven by data with reflective practice?
4. Has a tiered system of literacy instruction been established to meet the needs of all students?
5. Is there a literacy expert available with a strong knowledge of the reading process and experience in teaching who has the ability to relate well to students, staff, and parents?
6. Is progress monitoring a regular practice to track the success of intervention plans?
7. Are collaboration and reflection routine practices that are championed and valued by the principal?
8. Has the principal developed a master schedule to maximize instructional time, to

provide for tiered levels of literacy instruction, and to honor time for collaboration and reflective practice?

9. Does the principal actively conduct walkthroughs and observations to reflect on instructional practices to provide meaningful feedback to accelerate student learning?
10. Is training provided to support teachers and instructional assistants in the area of core instruction as well as reading interventions?

Each school interviewed mentioned various programs that were utilized for assessment and intervention purposes but more focus was put on a solidified system that was similar in all schools. This would spark the inquiry of what takes precedence, the programs utilized or the framework? If the framework was in place with appropriate levels of data analysis and reflection and the students were not making the necessary gains, then perhaps, the changes needed would be automatically made, and it would not have to necessarily result in a mandate of certain programming. This would build capacity for better diagnosis and management of the interventions to lead to greater student success at a more expedited rate.

It was unanimous that the tiered system of literacy present in the schools interviewed was a huge asset in improving struggling readers across the board; however, there was also evidence to indicate that this tiered system was beneficial to the high-ability students as well. Growth was the goal and was occurring across all populations of students. A future study of how a tiered system of literacy impacts high-ability students and the ability the system has to accelerate performance in this demographic of student would be valued.

The literature revealed that many of the students who are not meeting grade-level expectations arrive at kindergarten already several years behind expected levels of language

acquisition. In Indiana, kindergarten funding has been made more readily available to open full-day programs, but kindergarten is still not a mandate. Other implications that might warrant research would be to study what states have mandated early childhood education programs and to investigate what effect the states with funded and/or mandated preschools have had on improving struggling readers.

Finally, the principals hired at each school were instrumental in establishing the systems necessary for success. The principals' backgrounds did not necessarily equate with the demographics of their students; however, there was longevity in their positions. Do all school systems value the importance of the principals' roles and how they impact student performance? Hiring practices of principals in high-achieving elementary schools might be another area of study to consider.

Conclusions

The principal is the mastermind to improving struggling readers in a high-achieving elementary school. Multiple layers of leadership build the foundation for success by fostering a culture of trust and respect. Perhaps the most important element being the existence of high expectations for all students and adults coupled with high literacy goals being established for the school. Collaboration and reflective practice are integral facets of the school culture. The principal must establish a structural framework of tiered instruction with an intentional schedule to allow for additional time and flexible grouping with a focus on integrating data, individual goal-setting, and progress monitoring. Student interventions are delivered with fidelity and progress is monitored relentlessly until success is achieved. The principal insists on buy-in from all stakeholders including the students through transparent tracking of student goals and individual progress.

The principal is responsible for providing support to the staff in the areas of time and resources, both material and people, for this system to be effective. A literacy expert is designated within the staff either as a team or individual person to provide guidance in the diagnosis and implementation of interventions and modeling instructional practices considered best practice. Principals act as change agents to empower teachers to take risks and try strategies that may be new with the support of the literacy expert or team of experts providing support along the way. Principals must constantly be aware of what is happening in the building through classroom observations and walkthroughs to monitor teacher effectiveness, be willing to hold critical conversations when necessary to hold teachers accountable, and finally, release teachers after protocols are followed for improvement with little or no success. Ultimately, principals in high-achieving elementary schools must value what is in the best interest of students above all else in order to improve struggling readers.

The degree of technology use or access a school has to technology was mentioned in two of the six interviews. With the rapid advancement and accessibility of new technological devices, applications, and tools, the implications of the specific impact technology and/or accessibility of devices and information may have in improving struggling readers might warrant further study. These technological tools may be a catalyst in the amount of time it takes to narrow the gap in students who are behind grade-level expectations in literacy skills.

Distributed leadership did not rise as an important theme in the interviews conducted as a major contributor to improving struggling readers. A literacy expert was noted as having an impact on student achievement. In the event of change in personnel, the existence of distributed or shared leadership would ensure that the capacity within the building is not threatened and no one person would leave a gap in the system if they left the school. The idea

of teacher leaders and distributed leadership would be another area of further study and the implications it has on the building culture in high achieving schools.

Professional development did not rise to any great degree as a contributing factor to improving struggling readers, which was unexpected. The amount of time spent in the schools on reflection, collaboration, data analysis, and planning was referenced in great depth in all interviews by the participants; however, this was not directly linked to the idea of professional development. The implications of a strong professional development infrastructure with specific goals and embedded work would support continued exploration on the effects it has to improve struggling readers.

Students who struggle with reading proficiently will struggle in school across all other content areas and will be challenged to realize his or her goals in life. It is imperative that students acquire the ability to read as an essential component of their academic achievement in the early elementary years. I agree with Mortimer Adler who stated, “Reading is a basic tool in the living of a good life” (as cited in Institute of Reading Development, 2014, para. 2).

REFERENCES

- Abbott, M., Walton, C., & Greenwood, C. R. (2002). Research to practice: Phonemic awareness in kindergarten and first grade. *Teaching Exceptional Children, 34*(4), 22-26. Retrieved from <http://www.sevenhillscharter.org/docs/phonemicawarenessarticles/paphonemicaawarenessinkindergartenandfirstgrade.pdf>
- Adams, M. J. (2001). Alphabetic anxiety and explicit, systematic phonics instruction: A cognitive science perspective. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 60-80). New York, NY: Guilford Press.
- Adams, M. J., & Hasselbring, T. (2008). A conversation with Dr. Marilyn Jager Adams and Dr. Ted Hasselbring, principal scientists for System 44. *Read 180 Community Newsletter*. Retrieved from <http://www.scholastic.com/teachers/article/conversation-dr-marilyn-jager-adams-and-dr-ted-hasselbring-principal-scientists-system-44>
- Allington, R. L., & Cunningham, P. M. (2002). *Schools that work: Where all children read and write* (2nd ed.). Boston, MA: Allyn & Bacon.
- Ardoin, S. P., & Christ, T. J. (2008). Evaluating curriculum-based measurement slope estimates using data from trinannual universal screenings. *School Psychology Review, 37*(1), 109-125. Retrieved from <http://www.nasponline.org/publications/spr/abstract.aspx?ID=1911>

- Armbruster, B., Lehr, F., & Osborn, J. (2010, March 9). *Put reading first: The research building blocks for teaching children to read (Teacher's guide), Kindergarten through Grade 3*. Retrieved June 17, 2013, from http://www.nichd.nih.gov/publications/pubs/prf_k-3/pages/prf-teachers-k-3.aspx
- Baker, S. K., Smolkowski, K., Katz, R., Fien, H., Seeley, J., & Kame'enui, E. J. (2008). Reading fluency as a predictor of reading proficiency in low-performing, high-poverty schools. *School Psychology Review, 37*(1), 18-37. Retrieved from <http://www.nasponline.org/publications/spr/index.aspx?vol=37&issue=1>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York, NY: Free Press.
- Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.
- Biemiller, A. (1999). *Language and reading success*. Cambridge, MA: Brookline Books.
- Blevins, W. (1998). *Phonics from A to Z: A practical guide*. New York, NY: Scholastic Professional Books.
- Bos, C. S., & Vaughn, S. (2002). *Strategies for teaching students with learning and behavior problems* (5th ed.). Boston, MA: Allyn & Bacon.
- Brian, S., & Welding, M. C. (2007). *Teach me to read: Getting started*. Unpublished manuscript.
- Brower, R., & Balch, B. (2005). *Transformational leadership & decision making in schools*. Thousand Oaks, CA: Corwin Press.
- Brown, E. (2011, May). *History of reading instruction*. Retrieved from <http://www.thephonicspage.org/On%20Phonics/historyofreading.html>

Brown-Chidsey, R. (2007). No more “waiting to fail.” *Educational Leadership*, 65(2), 40-46.

Retrieved from <http://www.ascd.org/publications/educational-leadership/oct07/vol65/num02/No-More-%E2%80%9CWaiting-to-Fail%E2%80%9D.aspx>

Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. New York, NY: Russell Sage.

Buffum, A., Mattos, M., & Weber, C., (2009). *Pyramid response to intervention*. Bloomington, IN: Solution Tree.

Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.

Camacho, C. (2012, September 20). *History of reading instruction timeline*. Retrieved from <http://prezi.com/prezi.com/7fe1wft5nhwh/history-of-reading-instruction-timeline/>

Chard, D. J., Stoolmiller, M., Harn, B. A., Wanzek, J., Vaughn, S., & Linan-Thompson, S. (2008). Predicting reading success in a multilevel, schoolwide reading model: A retrospective analysis. *Journal of Learning Disabilities*, 41, 174-188. doi: 10.1177/0022219407313588

Creswell, J. (2003). *Research design: Qualitative, quantitative, and mixed approaches*. Thousand Oaks, CA: Sage.

Creswell, J. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory Into Practice*, 39(3), 124-130. doi: 10.1207/s15430421tip3903_2

Cunningham, P. M. (1999). *Phonics they use: Words for reading and writing* (3rd ed.). Boston, MA: Addison-Wesley.

- Deal, T. E., & Peterson, K. D. (1999). *Shaping school culture: The heart of leadership*. San Francisco, CA: Jossey-Bass.
- Denzin, N. K., & Lincoln, Y. S. (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Diamond, L. (2005). Assessment-driven instruction: A systems approach. *Perspectives, The International Dyslexia Association*, 33-37. Retrieved from http://www.corelearn.com/files/PerspectivesFall202005_WEB.pdf
- DuFour, R., & Marzano R. (2009). High-leverage strategies for principal leadership. *Educational Leadership*, 66(5) 62-68. Retrieved from http://www.ascd.org/publications/educational_leadership?feb09/vol66/num05/High-Leverage_Strategies_for_Principal_Leadership.aspx
- Ehri, L. C., Nunes, S. R., & Willows, D. M. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly*, 36, 250-287. doi: 10.1598/RRQ.36.3.2
- Fielding, L., Kerr, N., & Rosier, P. (2007). *Annual growth for all students: Catch-up growth for those who are behind*. Kenewick, WA: The New Foundation Press.
- Fisch, K. (2007, June 22). *Did you know 2.0* [Web log post]. Retrieved February 15, 2014, from <http://thefischbowl.blogspot.com/2007/06/did-you-know-20.html>
- Fischer, D., & Frey, N. (2010). *Enhancing RTI: How to ensure success with effective classroom instruction & intervention*. Alexandria, VA: Association of Supervision and Curriculum Development.

- Fuchs, L. S., Fuchs, D., Hosp, M. K., & Jenkins, J. R. (2001). Oral reading fluency as an indicator of reading competence: A theoretical, empirical, and historical analysis. *Scientific Studies of Reading, 5*, 239-256. Retrieved from <http://specialistedpsy.com/fuchsetalreadfluency.pdf-link.pdf>
- Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London, England: Falmer Press.
- Fullan, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey-Bass.
- Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly, W. D. (2009) *Assisting students struggling with reading: Response to intervention (RtI) and multi-tier intervention in the primary grades* (NCEE 2009-4045). Washington, DC: Institute for Education Sciences, National Center for Educational Evaluation and Regional Assistance. Retrieved July 7, 2009, from <http://ies.ed.gov/ncee/wwc/publications/practiceguides>
- Good, R., & Kaminiski, R. (2002). *Dynamic indicators of basic early literacy skills* [assessment]. Published instrument. Retrieved from <http://dibels.uoregon.edu>
- Good, R. H., Wallin, J., Simmons, D. C., Kame'enui, E. J., & Kaminski, R. A. (2002). *System-wide Percentile Ranks for DIBELS Benchmark Assessment* (Technical Report 9). Retrieved from <http://dibels.uoregon.edu>
- Goodman, K. S. (Ed.). (2006). *The truth about DIBELS: What it is, what it does*. Portsmouth, NH: Heinemann.
- Hall, S. L. (2008). *Implementing response to intervention: A principal's guide*. Thousand Oaks, CA: Corwin Press.

- Hasselbring, T. S., Kinsella, K., & Feldman, K. (2009). *Read 180: America's premier reading intervention*. New York, NY: Scholastic.
- Hoerr, T. R. (2005). *The art of school leadership*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Hoffman, J. V. (1987). Rethinking the role of oral reading in basal instruction. *Elementary School Journal*, 87, 367-373. doi:10.1086/461501
- Hyatt, A. V. (1943). *The place of oral reading in the school program: Its history and development from 1880 - 1941*. New York, NY: Teacher's College, Columbia University.
- Ikeda, M., Neesen, E., & Witt, J. (2008). *Universal screening and progress monitoring* (Powerpoint slide presentation). Retrieved from www.media.doe.in.gov/rti/
- Indiana Department of Education. (2011). *ISTEP+ grades 3-8*. Retrieved from <http://www.doe.in.gov/assessment/istep-grades-3-8>
- Indiana Department of Education. (2012). *IREAD*. Retrieved from <http://www.doe.in.gov/assessment/iread>
- Institute of Reading Development. (2014). *Mortimer J. Adler*. Retrieved from <http://readingprograms.org/archive-of-quotes-about-reading/>
- Invernizzi, M. A., Landrum, T. J. Howell, J. L., & Warley, H. P. (2005). Toward the peaceful coexistence of test developers, policy makers, and teachers in an era of accountability. *The Reading Teacher*, 58, 610-618. doi: 10.1598/RT.58.7.2
- Kame'enui, E. J., & Simmons, D. C. (2001). Introduction to this special issue: The DNA of reading fluency. *Scientific Studies of Reading*, 5, 203-210. doi: 10.1207/S1532799XSSR0503_1

- Learning First Alliance. (2000). *Every child reading: A professional development guide*. Washington, DC: Author.
- Linan-Thompson, S., Roberts, G., & Harn, B. (2008, March 6). Intensive interventions boost at-risk first-graders' reading development. *Science Daily*. Retrieved from <http://www.sciencedaily.com/releases/2008/03/080306091133.htm>
- Lonigan, C. (2003). Development and promotion of emergent literacy skills in children at risk of reading difficulties. In B. Foorman (Ed.), *Preventing and remediating reading difficulties bringing science to scale* (pp. 23-50). Baltimore, MD: York Press.
- Lyon, R. G., & Chhabra, V. (2004). The science of reading research. *Educational Leadership*, 61(6), 12-17. Retrieved from <http://www.ascd.org/publications/educational-leadership/mar04/vol61/num06/The-Science-of-Reading-Research.aspx>
- Manzo, K. K. (2005, September 28). National clout of DIBELS test draws scrutiny: Critics say reading tool's scope fails to justify its broad use. *Education Week*, 25, 1, 12. Retrieved from <http://www.edweek.org/ew/articles/2005/09/28/05dibels.h25.html>
- Marzano, R. J., Waters, T., & McNulty, B. A. (2005) *School leadership that works from research to results*. Alexandria, VA: Association for Supervision and Curriculum and Development.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.
- Moats, L. (1999). *Teaching reading is rocket science*. Washington, DC: American Federation of Teachers.

myOn, A Division of Capstone. (2013). *A complete digital literacy program*. Atlanta, GA:

Author.

National Center for Education Statistics. (2003). *National assessment for educational progress:*

The nation's report card. Washington, DC: U.S. Department of Education.

National Center for Literacy Education. (2013). *Remodeling literacy learning: Making room for*

what works. Urbana, IL. Author.

National Center on Response to Intervention. (2010). *Essential components of RtI - a closer look*

at response to intervention. Retrieved from <http://www.rti4success.org>

National Center on Student Progress Monitoring. (n.d.). *Common questions for progress*

monitoring. Retrieved from <http://www.studentprogress.org/progressmon.asp#3>

National Institute of Child Health and Human Development. (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. Washington,

DC: U.S. Government Printing office.

National Institute of Health. (2012, November 30). *What is the best way to teach children to*

read? Washington, DC: Author. Retrieved from

<http://www.nichd.nih.gov/health/topics/reading/conditioninfo/pages/teach.aspx>

NCS Pearson. (n.d.). *aimsweb*. [Assessment]. San Antonio, TX: Author.

Pearson, P. D., & Gallagher, G. (1983). The gradual release of responsibility model of

instruction. *Contemporary Educational Psychology*, 8, 112-123.

Perfetti, C. A. (1977). Language comprehension and fast decoding: Some psycholinguistic prerequisites for skilled reading comprehension. In J. T. Guthrie (Ed.), *Cognition, curriculum, and comprehension* (pp. 20-41). Newark, DE: International Reading Association.

Perfetti, C. A. (1985). *Reading ability*. New York, NY: Oxford University Press.

Rasinski, T. (2003). *The fluent reader*. New York, NY: Scholastic.

Reeves, D. B. (2002). *The daily disciplines of leadership*. San Francisco, CA: Jossey-Bass.

Reeves, D. B. (2009). *Leading change in your school-how to conquer myths, build commitment and get results*. Alexandria, VA: Association of Supervision and Curriculum and Development.

Renaissance Learning. (2014). *Accelerated reader*. [Assessment]. Wisconsin Rapids, WI: Author. Available from <http://www.renaissance.com>

Riedel, B. W. (2007). The relation between DIBELS, reading comprehension, and vocabulary in urban first-grade students. *Reading Research Quarterly, 42*, 546-567. doi: 10.1598/RRQ.42.4.5

Robinson, R., & McKenna, M. (Eds.). (2008). *Issues and trends in literacy education* (4th ed.). Boston, MA: Pearson Education.

Samuels, C. A. (2010, July 23). Study: Effective principals embrace collective leadership. *Education Week*. Retrieved from <http://www.edweek.org/ew/articles/2010/07/23/37principal.h29.html>

- Scharer, P. L., Pinnell, G. S., Lyons, C., & Fountas, I. (2005, October). Becoming an engaged reader. *Educational Leadership*, 63(2), 24-29. Retrieved from <http://www.ascd.org/publications/educational-leadership/oct05/vol63/num02/Becoming-an-Engaged-Reader.aspx>
- Schleicher, A. [EdLeader21@EdLeader21]. (2013, April 3). Andreas Schleicher's great tag line "Without data, you're just another person with an opinion" #deeperlearning#edlearner21 [Tweet]. Retrieved from <https://twitter.com/EdLeader21>
- Schlechy, P. (1997). *Inventing better schools: An action plan for education reform*. San Francisco, CA: Jossey-Bass.
- Schmoker, M. J. (1999). *Results: The key to continuous school improvement* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Schmoker, M. J. (2004). Tipping point: From feckless reform to substantive instructional improvement. *Phi Delta Kappan*, 85, 424-432. Retrieved from <http://mikeschmoker.com/tipping-point.html>
- Scientific Learning Corporation. (n.d.). *Fast ForWord*. [Computer software]. Oakland, CA: Available from <http://www.scilearn.com>
- Shaywitz, S. E., & Shaywitz B. A. (1996) Unlocking learning disabilities: The neurological basis. In S. C. Cramer & W. Ellis (Eds.), *Learning disabilities: Lifelong issues* (pp. 255-260). Baltimore, MD: Paul H. Brookes.

- Simmons, D., Kame'enui, E., Good, R., Harn, B., Cole, C., & Braun, D. (2002). Building, implementing, and sustaining a beginning reading improvement model: Lessons learned school by school. In M. Shinn, G. Stoner, & H. M. Walker (Eds.), *Interventions for academic and behavior problems* (pp. 537-570). Bethesda, MD: National Association of School Psychologists.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Stahl, S. A. & Kapinus, B. (2001). *Word power: What every educator needs to know about teaching vocabulary*. Washington, DC: National Education Association.
- Stanovich, K. E. (2000). *Progress in understanding reading: Scientific foundations and new frontiers*. New York, NY: Guilford.
- Steil, L. K., & Bommelje, R. K. (2004). *Listening leaders ten golden rules to listen, lead & succeed*. Edina, MD: Beaver's Pond Press.
- Torgesen, J. (2004). Lessons learned from research on interventions for students who have difficulty learning to read. *Learning and Teaching Reading*, 89-103.
- Torgesen, J., Alexander, A., Wagner, R., Rashotte, C., Voeller, K., & Conway, T. (2001). Intensive remedial instruction for children with severe reading difficulties. *Journal of Learning Disabilities*, 34(1), 33-58, 78. doi: 10.1177/002221940103400104
- Torgeson, J., Houston, D., Rissman, L., & Kosanovich, K. (2007). *Teaching all students to read in elementary school: A guide for principals*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.

- Torgesen, J., Wagner, R., & Rashotte, C. (1994). Longitudinal studies of phonological processing and reading. *Journal of Learning Disabilities, 27*, 276-286. doi: 10.1177/002221949402700503
- Tyack, D. B., & Cuban, L. (1995). *Tinkering toward Utopia: A century of public school reform*. Cambridge, MA: Harvard University Press.
- Vaughn, S., & Linan-Thompson, S. (2004). *Research-based methods of reading instruction grades k-3*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Vaughn, S., Linan-Thompson, S., & Hickman, P. (2003). Response to instruction as a means of identifying students with reading/learning disabilities. *Exceptional Children, 69*, 391-409. Retrieved from <http://cec.metapress.com/content/q742w7261667m47g/>
- Vellutino, F., Scanlon, D., Small, S., & Fanuele, D. (2006). Response to intervention as a vehicle for distinguishing between children with and without reading disabilities. *Journal of Learning Disabilities, 39*(2), 157-169. Retrieved from <http://dx.doi.org/10.1177/00222194060390020401>
- Waterford Institute. (n.d.). *Waterford early learning*. [Computer software]. Sandy, UT: Author.
- York-Barr, J., Sommers, W., Ghere, G., & Montie, J. (2001). *Reflective practice to improve schools: An action guide for educators*. Thousand Oaks, CA: Corwin Press.
- Zemelman, S., Daniels, H., & Hyde, A. (1998). *Best practices: New standards for teaching and learning in America's schools* (2nd ed.). Portsmouth, NH: Heinemann.
- Zhao, Y. (2009). *Catching up or leading the way*. Alexandria, VA: Association of Supervision and Curriculum Development.

APPENDIX A: STANDARD PROTOCOL QUESTIONS

Time of interview:

Date:

Place:

Interviewer:

Coded name:

Questions:

1. How do you improve struggling readers in your school?
2. How do you identify struggling readers in your school?
 - a. Why or why not?
3. Does administration play a role in accelerating student achievement for struggling readers?
 - a. Why or why not?
4. Does staff play a role in accelerating student achievement in struggling readers?
 - a. Why or why not?
5. Does training play a role in accelerating student achievement in struggling readers?
 - a. Why or Why not?

APPENDIX B: OBSERVATION AND REFLECTIVE NOTES

Location:

Length of Activity:

Descriptive Notes	Reflective Notes

APPENDIX C: INVITATION TO PARTICIPATE IN RESEARCH

(Date)

Dear School Leader:

RE: Qualitative Research Interview

My name is Kimberly Hartlage. I am a doctoral candidate in the Department of Educational Leadership, Administration, and Foundations at Indiana State University. I am contacting you in hopes that you will agree to participate in a qualitative study looking at how high achieving schools improve struggling readers.

If you volunteer to participate in this study, you will be asked to participate in an interview wherein you will be asked to answer questions to explore your perception regarding aspects of how to improve struggling readers in your school. This interview will occur in person and will be audio-taped to aid in transcription. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. I also ask that I be able to observe the school environment on the day of your interview, and conduct a focus group interview with select staff members, including interventionists and general education teachers in grades K-5.

Your participation is entirely voluntary. If you volunteer, you may withdraw at any time without consequence of any kind or loss of benefits to which you are otherwise entitled. You may also feel free to refuse to answer any questions you do not wish to answer. Please contact me, Kim Hartlage, at (502) 262-8608 or (812) 283-0701 ext. 308 or khartlage@gcs.k12.in.us in the next week if you are interested in participating.

If you have any questions about your rights as a research participant, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Erickson Hall, Terre Haute, IN 47809, by phone at (812) 237-8217, or email the IRB at irb@indstate.edu. You will be given the opportunity to discuss any questions about your rights as a research participant with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed and approved this study.

I know that you lead a busy life as an educator, but I would be greatly appreciative of your assistance as I work toward completing this study. I look forward to hearing from you.

Sincerely,

Kimberly Hartlage
Doctoral Student at
Indiana State University

Terry McDaniel, Ph.D.
Professor, College of Education
Indiana State University

APPENDIX D: LOCATION OF STUDY

*Indiana State University, Terre Haute, Indiana
Department of Educational Leadership*

Date:

To:

From: Kimberly Hartlage, Principal Investigator

Re: Agreement for location of study

Thank you for considering my research entitled “How High Achieving School Improve Struggling readers.” I am conducting research to explore educational aspects, including perceptions of selected staff members, which help explain high achieving elementary schools improve struggling readers.

If you volunteer to participate in this study, you will be asked to participate in an interview wherein you will be asked to answer questions to explore your perception regarding aspects of how to improve struggling readers in your school. This interview will occur in person and will be audio taped to aid in transcription. Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. I also ask that I be able to observe the school environment on the day of your interview, and conduct a focus group interview with select staff members, including intervention teachers and general education teachers in grades K-5.

I will mail initial interpretations, data, and analysis from each interview to the direct person that was interviewed. Each teacher and the principal will have an opportunity to individually review the documents and evaluate them for accuracy of their intent and communication during the interview. Each interviewee will have an opportunity to respond to the content of the document and suggest additions that are needed for clarity. Dr. Terry McDaniel, my faculty advisor, and I will be the only ones who have access to notes or tapes. They will be kept in a locked cabinet destroyed three years after my study is complete. All names of schools and people will be kept confidential.

Please complete the signature page of this letter and return to me electronically.

If you have any questions about the right of participants as a research subject, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-8217 or email the IRB at irb@indstate.edu. The IRB is an independent committee composed of

members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed and approved this study.

I grant permission for _____ to be used in Kimberly Hartlage's study on "How High Achieving Elementary Schools Improve Struggling Readers."

Signature of Administrator

Printed name of Administrator

District Name

School Name

Date

APPENDIX E: CONSENT TO PARTICIPATE IN RESEARCH – PRINCIPAL

How High Achieving Elementary Schools Improve Struggling Readers

You are asked to participate in a research study conducted by Kimberly Hartlage, a doctoral candidate, and Dr. Terry McDaniel, Associate Professor of Educational Leadership, in the Department of Educational Leadership, Administration, and Foundations at Indiana State University. Your participation in this study is entirely voluntary. Please read the information below and ask questions about anything you do not understand, before deciding whether or not to participate.

Purpose of the Study

The purpose of this qualitative study is to determine how schools improve struggling readers. This study will examine three high performing elementary schools that have done an outstanding job accelerating early reading achievement by implementing effective instructional strategies in literacy around the five components of reading, early intervention, and the role of the school leadership in achieving success. This study will be researched through the lenses of administrators and teachers who are contracted by Indiana public school districts to provide the leadership and reading instruction.

Procedures

If you volunteer to participate in this study, you will be asked to do the following:

1. Participate in an interview wherein you will be asked to answer questions designed to explore aspects of your role in this particular school which have led to a high level of literacy achievement. This interview will be audio-taped to aid in transcription and will last approximately one hour. Participants will be provided the opportunity to review the transcripts and make changes within 14 calendar days.
2. The interview will take place individually.
3. A document analysis will be conducted to review artifacts pertaining to strategies utilized to improve struggling readers, data pertinent to reading intervention, and professional development.
4. An observation will be conducted to observe strategies implemented to improve struggling readers.

Risk of Participation

As with most research, and especially research involving specific groups of participants where the research is tape recorded, there is a potential risk of breach of confidentiality. Every measure will be taken to avoid this potential risk. Since many of the questions to be asked will revolve around personal views, you should be reminded that confidentiality will be maintained. Interviews will occur in a secure room within the school building at your convenience. Since the

interviews will occur in the school building, others in the building could likely know that you are participating in this research.

Benefits of Participation

While there are no direct benefits provided for participation, the information gathered from this study will help further the understanding of how high achieving schools improve struggling readers.

Confidentiality

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.

Confidentiality will be maintained in the following ways:

- You are asked not to identify yourself by name or school district on the audio-taped interview. Information will be reported in aggregated form. Data will not be linked with individuals or individual school districts at any time.
- A code will be assigned to each participant. A hard copy master list of participants and codes will be stored in a secure filing cabinet in the home office of the researcher, Kimberly Hartlage.
- During transcription and analysis by the Principal Investigator, Kimberly Hartlage, data will be identified by code.
- Tapes will be stored in a secure filing cabinet in the home office of Kimberly Hartlage. These tapes will be kept for three years following completion of the research and then destroyed.
- The only people having access to the data will be Kimberly Hartlage and her dissertation committee chairperson, Dr. Terry McDaniel.

Participation and Withdrawal

Your participation is entirely voluntary. If you volunteer, you may withdraw at any time by contacting Kimberly Hartlage by phone (502) 262-8608 or email khartlage@gcs.k12.in.us without consequence of any kind or loss of benefits to which you are otherwise entitled. You may also feel free to refuse to answer any questions you do not wish to answer.

Identification of Investigators

If you have any questions or concerns about this research, please contact the principal investigator:

Kimberly Hartlage
Co-Principal Investigator
(502) 262-8608
khartlage@gcs.k12.in.us

Terry McDaniel, Ph.D.
Co-Principal Investigator
(812) 237-3862
Terry.McDaniel@indstate.edu

Rights of Research Participants

If you have any questions about your rights as a research participant, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Erickson Hall, Terre Haute, IN 47809, by phone at (812) 237-8217, or email the IRB at irb@indstate.edu. You will be given the opportunity to discuss any questions about your rights as a research participant with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed and approved this study.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Printed Name of Participant

Signature of Participant

Date

Date of IRB Approval: 6/20/14

IRB Number: 589215

Project Expiration Date: 6/19/15

APPENDIX F: CONSENT TO PARTICIPATE IN RESEARCH – TEACHER PARTICIPANTS

You are asked to participate in a research study conducted by Kimberly Hartlage, a doctoral candidate, and Dr. Terry McDaniel, Associate Professor of Educational Leadership, in the Department of Educational Leadership, Administration, and Foundations at Indiana State University. Your participation in this study is entirely voluntary. Please read the information below and ask questions about anything you do not understand, before deciding whether or not to participate.

Purpose of the Study

This is a qualitative study to determine how schools improve struggling readers. This study will examine three high performing elementary schools that have done an outstanding job accelerating early reading achievement by implementing effective instructional strategies in literacy around the five components of reading, early intervention, and the role of the school leadership in achieving success. This study will be researched through the lenses of administrators and teachers who are contracted by Indiana public school districts to provide the leadership and reading instruction.

Procedures

If you volunteer to participate in this study, you will be asked to do the following:

1. Participate in an interview wherein you will be asked to answer questions designed to explore aspects of your role in this particular school which have led to a high level of literacy achievement. This interview will be audio-taped to aid in transcription and will last approximately one hour. Participants will be provided the opportunity to review the transcripts and make changes within 14 calendar days.
2. The interview will take place in a focus group in your school.
3. A document analysis will be conducted to review artifacts pertaining to strategies utilized to improve struggling readers, data pertinent to reading intervention, and professional development.
4. An observation will be conducted to observe strategies implemented to improve struggling readers.
5. The interview will take place individually in your school.

Risk of Participation

As with most research, and especially research involving specific groups of participants where the research is tape recorded, there is a potential risk of breach of confidentiality. Every measure will be taken to avoid this potential risk. Since many of the questions to be asked will revolve around personal views, you should be reminded that confidentiality will be maintained.

Interviews will occur in a secure room within the school building at your convenience. Since the interviews will occur in the school building, others in the building could likely know that you are participating in this research.

Benefits of Participation

While there are no direct benefits provided for participation, the information gathered from this study will help further the understanding of how high achieving schools improve struggling readers.

Confidentiality

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law.

Confidentiality will be maintained in the following ways:

- You are asked not to identify yourself by name or school district on the audio-taped interview. Information will be reported in aggregated form. Data will not be linked with individuals or individual school districts at any time.
- A code will be assigned to each participant. A hard copy master list of participants and codes will be stored in a secure filing cabinet in the home office of the researcher, Kimberly Hartlage
- During transcription and analysis by the Principal Investigator, Kimberly Hartlage, data will be identified by code.
- Tapes will be stored in a secure filing cabinet in the home office of Kimberly Hartlage. These tapes will be kept for three years following completion of the research and then destroyed.
- The only people having access to the data will be Kimberly Hartlage and her dissertation committee chairperson, Dr. Terry McDaniel.

Participation and Withdrawal

Your participation is entirely voluntary. If you volunteer, you may withdraw at any time without consequence of any kind or loss of benefits to which you are otherwise entitled. You may also feel free to refuse to answer any questions you do not wish to answer.

Identification of Investigators

If you have any questions or concerns about this research, please contact the principal investigator:

Kimberly Hartlage
Co-Principal Investigator
(502) 262-8608
kheartlage@gcs.k12.in.us

Terry McDaniel, Ph.D.
Co-Principal Investigator
(812) 237-3862
Terry.McDaniel@indstate.edu

Rights of Research Participants

If you have any questions about your rights as a research participant, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Erickson Hall, Terre Haute, IN 47809, by phone at (812) 237-8217, or email the IRB at irb@indstate.edu. You will be given the opportunity to discuss any questions about your rights as a research participant with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with ISU. The IRB has reviewed and approved this study.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Printed Name of Participant	Signature of Participant	Date
<i>Date of IRB Approval: 6/20/14</i>		
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