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LEADERSHIP EFFECTIVENESS DURING IMPLEMENTATION OF READER  
INTERVENTION AT ELEMENTARY SCHOOLS IN OKLAHOMA

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By

LYNDA MCDANIEL

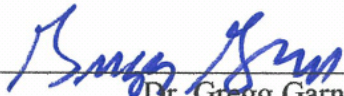
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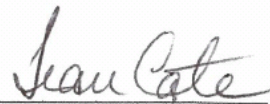
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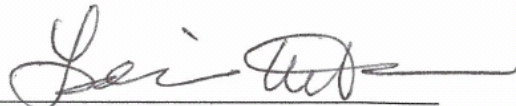
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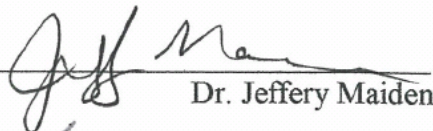
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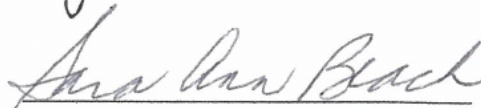
BY

  
\_\_\_\_\_  
Dr. Gregg Garn, Chair

  
\_\_\_\_\_  
Dr. Jean Cate

  
\_\_\_\_\_  
Dr. Leslie Williams

  
\_\_\_\_\_  
Dr. Jeffery Maiden

  
\_\_\_\_\_  
Dr. Sally Beach

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## **Dedication**

To my husband, Larry McDaniel, I owe time and money. This man for 44 years has proven his love and devotion over and over. He has always provided a leaning arm, offering smiles, concerns, and hours of “yes you can”. Because of his unconditional love, I am truly blessed. Beyond thanks to my daughter, Lindsay Rana, for her respect and proof reading abilities that never wavered. Lindsay has the ability to encourage even the worst of writers with continual hope by offering a “never give up” attitude and that spirit of passion for learning. I thank her for remaining a role model for me by finishing her degree as I finished mine. I am extremely proud she has decided to teach others. Children will be fortunate to have her as a teacher. Her love for reading instilled by my mother will surely live on. I express my gratitude to my son, David McDaniel, who continues to display respect and admiration toward his mother and her lofty ideas.

I owe a tremendous debt of gratitude to the teachers of the past, Gene and Pat Ross and Geneva Canada, for instilling moral values, a drive for success, and serving as role models. Lastly, I thank my mother, Dessa Davis, for her love and guidance. My mother saw nothing but good in everyone around her. I know her angel wings are dancing with delight to see her youngest daughter finish this tremendous accomplishment.

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## **Abstract**

The magnitude of students attending schools today that demonstrate reading difficulty in the earliest of years continues to grow throughout the United States. Compelling research indicates that children who get off to a poor start tend to remain behind in reading (Juel, 1998; Mead, 2010; CIREA, 2001). The reauthorization of the Individuals with Disabilities Education Act (IDEA, 2006) coupled with No Child Left Behind (NCLB, 2001) emphasizes necessary improvements in special education as well as general education requiring curricula and instructional tools that demonstrate proven effectiveness. Through these endeavors “Response to Intervention” (RtI) has been recommended as a model of instructional delivery to students who fail to meet the minimum requirements in reading achievement.

A quantitative approach (Creswell, 2009) was used to explore the effectiveness of leadership behaviors of school principals using the Principal Leadership Questionnaire ([PLQ], Leithwood & Jantzi, 1996; Valentine & Lucas, 2000) at 6 Oklahoma elementary schools and correlate results with the reading achievement of first-, second-, and third-grade at-risk students in each selected elementary school using the RtI model. The independent variables for this study included PLQ total scores and the three grade levels (first through third). Other related covariates’ were grade level and gender of students receiving reading intervention (RtI). The dependent variables were two aggregated DIBELS scores (beginning of the year and ending of the year).

Students defined as at-risk failed to meet designated benchmarks on either the beginning of the year and the end of the year Dynamic Indicators of Basic Early Literacy Skills (DIBELS, Institute for the Development of Educational Achievement [Institute],

2002) assessments. Student assessment data for 1,038 students was collected and analyzed to determine the success of the reading initiative and its relationship to the Principal Leadership Questionnaire. Student scores were correlated to the perceptions the teachers held of their principal's behavior questionnaire (PLQ). A significant negative correlation was found ( $r = -.09$ ,  $r^2 = .01$ ,  $p < .005$ ) when the student's reading achievement was correlated to the total principal leadership score. Achievement was positively related to student grade level ( $r = .10$ ,  $r^2 = .01$ ,  $p < .005$ ) but not related to the student's gender ( $r = -.02$ ,  $r^2 = .00$ ,  $p = .45$ ).

## **Chapter 1: Introduction**

### **Introduction**

Mandates such as the No Child left Behind Act (NCLB; United States Department of Education [USDE], 2001) and the 2009 Elementary and Secondary School Act (ESSA) require school principals and teachers to be accountable for academic success. The more information known about school leadership practices, the greater knowledge base available to educators seeking to improve literacy and math, two primary focuses of the NCLB requirements. The research study is a quantitative correlation investigation of the effect of leadership practices of school principals as perceived by teachers during implementation of a reading intervention program. It will explore the perceptions teachers have of principals in regard to effective leadership style and will compare the outcome with reading achievement of first, second, and third-grade students receiving reading intervention.

### **Statement of the Problem**

Although there have been many studies designed to explore leadership qualities of school professional staff and many more focused on reading achievement of students, the relationship between leadership practices and the level of reading achievement in Oklahoma's response to intervention programs is largely unexplored. School principals are challenged to direct staff through the complex changes imposed by complicated educational mandates in NCLB (USDE, 2001) and the ESSA Act (2009). Included in these challenges are the concerns for the reading success for all students. Through the implementation of the Individuals with Disabilities Education Act (IDEA;USDE, 2006) educators continue to sort methods to increase student reading achievement. Response to

Intervention (RtI) was identified as a model to use to reach more students who were considered at-risk of failure in the early years.

Increasing emphasis has been placed on reading assessment and intervention strategies at the K-3 level to identify students reading below grade level as early as possible and to investigate appropriate instructional interventions when necessary (Britto, Fuligni, & Brooks-Gunn, 2006). Therefore, certain principal leadership skills are essential to answer the challenges posed by curriculum standards (both local and state), high-stakes testing, accountability requirements, and the increasingly diverse student populations in Oklahoma schools. Successful student achievement requires school principals to respond to challenges and changes with appropriate leadership practices to ensure every student achieves at the highest level possible (Leithwood & Jantzi, 1990).

### **Purpose of the Study**

The purpose of the research study is to ascertain the effectiveness of leadership practices of school principals using the Principal Leadership Questionnaire (PLQ) at six Oklahoma elementary schools and correlate results with the reading achievement of first, second and third-grade students in each selected elementary school using the RtI model. The ultimate goal in a public school is to increase student achievement to the highest level possible. Student need to maintain *benchmark* as early as kindergarten. Through an awareness of the principal leadership practices that facilitate academic success, schools have an opportunity to improve student achievement by implementing effective leadership strategies at all levels.

School leaders are considered responsible for the academic achievement of students, an educational tenant based on the belief that success or failure of a student is

determined by the way leaders run a school (Fullan & Watson, 2000). Important discrepancies exist between successful schools and schools deemed unsuccessful because of failure to meet adequate yearly progress (AYP) standards under the requirements of the NCLB. Schools that fail to meet AYP standards are characterized by confusion and inefficiency in operation and frustration among staff (Sergiovanni, 2007). Low performing schools are usually characterized by discipline problems, violence, and an abundance of student absences. Staff and student conflicts are often present and professionalism is lacking. Excellent schools accomplish far more and teachers work harder, demonstrating high expectations of the entire professional learning community (DuFour, 2004). The research explored the relationship between leadership competencies of principals and the academic achievement of students in selected RtI schools.

### **Significance of the Study**

Through the identification of key leadership responsibilities, schools will have a better understanding of why the leadership role of the school principal is vital in creating a positive learning environment. Leal, Johanson, Huang, and Toth (2004) argued that principals' leadership practices require a heightened concern for direction and influence to mobilize a shared goal throughout the school community. The study was designed to add knowledge and insight into methods that can address such important academic issues as reading deficits when compared to the leadership practices of principals. The results may promote an understanding of achievement obtained in connection with students who fall into either strategic or intensive on the Dynamic Indicator of Basic Early Literacy Skills (DIBELS; Good & Kaminski, 2001) reading assessments at the beginning and end

of the school year while correlating those results to the leadership practices of the school leaders.

The importance of early identification and prevention of reading difficulties cannot be overemphasized. One indicator of the magnitude of problems in the United States is the finding that 50% of children will have some type of difficulty learning to read on grade level, and only half of those students will become proficient readers (Lyons, 1997). The National Reading Panel Progress Report (2000a) reported, "Overall, national longitudinal studies show that more than 17.5% of the nation's children, about 10 million children, will encounter reading problems in the crucial first 3 years of schooling" (p. 10). Beitchman et al. (1996) indicated children's language profiles at 5 years are predictors of significant group differences on scores of reading achievement 7 years later. Compelling research indicates that a child who gets off to a poor start in reading rarely catches up. Research also indicates that if a child starts off behind, the consequences become exponentially more difficult to manage over time. Torgesen and Burgess (1998) and Francis, Shaywitz, Stuebing, Shaywitz, and Fletcher (1996) both documented that the poor first-grade reader will almost invariably continue to be a poor reader.

### **Research Questions and Hypotheses**

Based on the background of the problem, the following research questions guided the design of the methodology:

1. What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?



2. After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?

The following hypotheses are proposed, based on the research questions:

H<sub>01</sub> There is no relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>A1</sub> There is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>02</sub> After controlling for student characteristics (gender and grade level) there is no relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>A2</sub> After controlling for student characteristics (gender and grade level), there is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

### **Nature of the Study**

In the original pilot project 21 Oklahoma elementary schools implemented the RtI program. Three of these schools use another tool rather than DIBELS to assess students' reading progress; therefore, they were not included in this study. After contacting the 18 remaining schools only nine agreed to participate in the study. Three of those schools failed to supply necessary data to include them in the research. Six schools using the DIBELS as their assessment tool participated in the research study. Ten teachers from each of the six schools were invited to participate and respond to the validated Principal Leadership Questionnaire (Jantzi & Leithwood, 1996), consisting of 24 questions with a 5-point Likert scale. The principal leadership constructs measured are designed to

determine if the principal (a) provides vision, (b) models appropriate behavior, (c) fosters commitment to goals, (d) provides individualized support, (e) provides intellectual stimulation, and (f) holds high expectations. Teachers rated the effectiveness of the principal through the questionnaire. Details of the instrumentation and procedure can be found in chapter 3.

### **Rationale**

The increasing challenges and complex issues impacting U.S. schools today, especially in early literacy and student achievement, cannot be ignored (Britto et al., 2006). Accountability, curriculum standards, achievement benchmarks, and emphasis on reading achievement currently have researchers actively seeking answers to questions about early identification (assessments and progress monitoring), prevention (pre-K programs), and intervention (tutoring) strategies to improve reading achievement for all students (Gormley, Phillips, & Dawson, 2005; Kamps et al., 2008).

Schools are challenged to promote continuous learning, to initiate change, and improve student achievement through the use of professional development (Hord, 2001; Mitchell & Sackney, 2001). Current reform efforts in school systems across the nation are basing school improvement plans on effective research, the results of which promote the importance of professional development of teachers for educational change (Fullan, 2001). The professional development model of choice for school boards to achieve this goal of improved teaching practice is the learning community (Hord, 2001; Mitchell & Sackney, 2001). Consequently, the rationale of this study is to use quantitative data to inform the process of adapting effective leadership by school principals and increasing student reading achievement using the RtI intervention model.

## **Definition of Terms**

The following terms are presented for clarification in succeeding sections. The general subject is leadership in relation to academic achievement. The specific subject is comparison of scores on a leadership questionnaire (given to Grades 1-3 teachers) with the academic achievement of first-, second-, and third-grade students in selected schools in Oklahoma.

*At-risk:* Students who fall below the established reading benchmark scores in one or more of the following categories: phonemic awareness, phonics or alphabetic principle, accuracy, and fluency when connected to text, vocabulary, and comprehension on the DIBELS assessments (beginning and ending assessment).

*Distributed leadership:* School leadership practice is comprised of the dynamic interaction of multiple leaders and followers and the stimulation around particular leadership tasks. Leadership practices are stretched over the social and situational contexts of the school (Spillane, Halverson, & Diamond, 1999).

*Dynamic Indicators of Basic Literacy Skills (DIBELS):* DIBELS is a set of procedures and measures for assessing the acquisition of early-literacy skills from kindergarten through sixth grade. The indicators are designed to be short (1-minute) fluency measures used to regularly monitor the development of early literacy and early-reading skills. DIBELS was developed to measure recognized and empirically validated skills related to reading outcomes (Good & Kaminski, 2001).

*Leadership:* Leadership is a process of persuasion and example through which an individual attempts to influence a group to take action that demonstrates a shared purpose toward a specific set of goals (DuFour, 1991).

*Leadership capacity:* Leadership capacity is the broad-based, skillful participation of the work of leadership within an institution (Lambert, 1998).

*Response to Intervention (RtI):* RtI is a systematic approach to instruction with two main goals: prevent academic problems and identify students with learning disabilities (Duhon and Hartzell, 2009).

*Transactional leadership:* A leadership style based on a transaction or exchange of something of value the leader possesses that the follower wants in return for services (Burns, 1978).

*Transformational leadership.* A style of leadership in which the leader identifies a needed change, creates a vision to guide the change through inspiration, and executes the change with the commitment of the members of a group (Bass, 1985; Burns, 1978).

### **Assumptions**

The following assumptions are inherent in the research design. Every reasonably possible measure was taken to ensure objectivity and representation of the field of study. It is assumed that participants in the research study respond as honestly and accurately as possible and that participants will agree to terms of the study without influence or coercion. It is assumed that all volunteers for the study were unbiased and truthful in all responses and can complete the survey from an Internet-based computer. It is assumed that the researcher is unbiased. It is assumed that data collected was measurable and will result in the intended purpose. It is assumed that participants have a common perspective about leadership and its effectiveness, resulting in responses that reveal a common area of knowledge.

## **Limitations**

Prospective participants will be working in school districts and may have a professional relationship with the researcher's employer. Although steps will be taken to ensure that participants remain anonymous, as detailed in chapter 3, work relationships may influence responses. Participants may feel obligated to participate in the study. The variability of the education environment or economic conditions may have some effect on attitude of the participants. The possibility of personality conflicts or problems with principals may be a factor that biases responses. The relatively small sample for research will be opportunistic and may yield a limited research result. Additionally, the results of the research could be subject to limitations associated with survey and data collection methods.

## **Scope and Delimitations**

The scope includes six elementary schools in districts across the state of Oklahoma. Respondents in the research study include teachers of first through third-grade students, and the results may not have generalized application to other populations, grade levels, or demographic locales. The validity of the study is limited by the reliability of the instrument being used. Generalizations will be limited to public elementary schools. The validated questionnaire is limited to gathering responses pertaining to an established set of variables.

## **The Effects of Leadership and Student Learning**

Leithwood is a Professor of Educational Leadership and Policy at the Ontario Institute for Studies in Education at the University of Toronto. He has extensively researched the topics of school leadership, educational policy and organizational change.

Leithwood has published over 70 journal articles and written or edited more than 30 books (“Kenneth Leithwood,” n.d). Leithwood (2005) found that most empirical evidence for leader effectiveness on student learning has evolved through research involving school-level leaders, especially school principals. Researchers argue that leadership has two functions, setting directions and exercising influence. Functions can be carried out with differences distinguishing the models of leadership (Leithwood & Riehl, 2003). Leadership, whether it pertains to choices a group makes, interpretation of events for followers, how the organization works through activities to accomplish goals, or the motivation found among the followers, requires maintenance of cooperative relationships in the community, as well as teamwork by all stakeholders (Yukl, 1994).

Marzano, Waters, and McNulty (2005) indicated through a meta-analysis of school leadership that educational leader’s influence learning primarily by initiating efforts connected to ambitious goals and by implementing conditions that support teachers. Student success or failure is determined by the way leaders run a school (Fullan & Watson, 2000). Leithwood, Louis, Anderson, and Wahlstrom (2004) offered further evidence that a leader affects student learning. Leaders of a school are required to operate in such a way as to provide strong guidance and support while demonstrating respect for all stakeholders. The instructional leader determines the direction a school must follow to develop into an academically successful unit (Covey, 1991; DuFour, 1997; Glickman, 2007; Sergiovanni, 1992). “School leaders are critical to helping improve student performance” (ISLLC, 2008). The instructional leader encourages success for every student by facilitating the development, articulation, implementation,

and acceptance of a shared vision of learning held by all community stakeholders (ISLLC).

Visionary leadership offers the necessary qualities to promote positive student achievement in reading. Schools where professional staff demonstrates unique qualities that can be identified as effective leadership practices produce a greater number of students who attain literacy success. Students attending a school where the principal is rated a highly effective administrator by faculty members will achieve higher levels of success in reaching benchmarks than students in a less effective principal's school (Leithwood & Riehl, 2003).

A review of the literature (see chapter 2) indicated that effective leadership, whether transformational or transactional, is vital in any organization (Southeast Educational Development Laboratory [SEDL], 2009). Leadership-fueled progress enables change to occur in an organization. In public schools, leadership can facilitate change where vision, collaboration, and action toward overall school improvement are concerned. Bennis (1990) implied that all leaders have the capacity to create a vision designed to encourage people to transform a vision into reality. These leaders are people who dream of a purposeful vision for an entire organization, including a complete picture of the desired outcome; thus, leadership is considered a complex enterprise and requires a visionary leader (SEDL, 2009).

One leadership challenge in post-NCLB Oklahoma is meeting the "Reading First" requirements designed to increase reading achievement for all students (Center for the Improvement of Early Reading Achievement, 2001). Implementing reading assessment and intervention strategies in K-3 classes has become a priority. Successful instructional

leaders set directions, encourage professional development, redesign the organization, and sponsor the building of a collaborative environment to facilitate implementation of required improvements in classroom practices (Leithwood et al., 2004), which is required by leaders in Oklahoma as schools across the state implement mandates of NCLB.

The requirements of NCLB cite literacy as an indicator of student academic achievement. President George W. Bush, during the discussion preceding passage of NCLB, stated, “We have a genuine crisis. More and more we are divided into two nations, one that reads, and one that does not” (U.S. Department of Education, 2001, p. 1). Yet the United States is still falling short of its literacy goals set in NCLB. President Bush expressed concern about the massive amounts of data documenting problems experienced by individuals who are unable to read competently. Identification of effective leadership during reading intervention implementation can provide schools with a better understanding of why school leaders are vital for creating positive academic achievement, especially in reading.

### **Literacy Development**

Literacy development starts early in life and is highly correlated with school achievement. Research on learning trajectories has found that children with low reading skills in first grade have a high probability of continuing to have such difficulties throughout school (Juel, 1988; Mead, 2010; CIREA, 2001), while becoming more discrepant from peers with each passing year (Stanovich, 1986). Ramey and Ramey (2006) argued that no matter how public schools improve kindergarten-Grade 12 (k-12) instruction and methods of instruction, an individual child’s entry-level skills and parental ability to support the child’s literacy development are the core factors in literacy



acquisition. Every domain of a child's development, including literacy, is interrelated and interdependent. The more limited a child's experiences with language and literacy, the more likely he or she will have difficulty learning to read (Ramey & Ramey, 2006). Minority and immigrant children from disadvantaged backgrounds are at risk for reading difficulties in school, especially Hispanic children who are less likely to enroll in preprimary education. Students who are considered Limited English Proficient (LEP) often read below grade level and tend to drop out of high school as a result (Britto et al., 2006).

The need to identify and remediate early-literacy problems is based on the lasting impact of the failure to read proficiently. Mead (2010) stated that the ability of children to read proficiently by the end of third grade is a powerful predictor of how likely they are to be successful in the future at school, at work, and as parents and citizens. Early reading problems have been framed as *developmental precursors* to a wide range of later social, educational and emotional problems, including the development of later reading disabilities, school behavior problems, incarceration, drug and alcohol use, and serious emotional disturbances (Satz, Taylor, Friel, & Fletcher, 1978; USDE, 1997). Other consequences facing those who cannot read well are poor parenting practices, teen pregnancy, social dependency, grade level retention, or special education placement. Students who cannot read, or cannot read well, tend to drop out of school (Satz, Taylor, Friel, & Fletcher, 1978). Children who are not independent readers by the end of third grade rarely catch up. These children struggle in the upper grades especially when reading tasks include other academic areas such as mathematics, science, and social studies (CIERA, 1998).

A long-awaited federal study finds that an estimated 32 million adults in the United States suffer through life with such low literacy skills that it would be tough for them to read anything more challenging than a children's picture book or the side effects listed on a standard pill bottle (USDE, 2009). The study also indicated that an estimated 32 million adults in the USA (averaging about 1 in 7) are burdened with such inadequate literate skills that it would be difficult for them to read anything more challenging than a children's picture book or to understand side effects of a medication noted on a pill bottle. Overall, the study finds, the nation has not advanced in its adult-literacy problem: From 1992 to 2003, the study indicated, the United States added about 23 million adults to its population; in that period, an estimated 3.6 million more joined the ranks of adults with minimal literacy skills (USDE, 2009).

In turn, the children of a school dropout may repeat an intergenerational pattern of behavior, resulting in a negative economic impact that U.S. leaders cannot ignore. According to Orr (1989), "In the U.S., the dropouts of the high school class of 1981 have potential lost lifetime earnings of \$228 billion; the lost tax revenues from those earnings are approximately \$68.4 billion" (p. 9). These figures have continued to grow to a staggering \$240 billion in 2009 in lost earnings, forgone tax revenues, and expenditures for social services. These facts and figures continue to be a national issue according to Tucker (2007) who stated that the United States has the highest dropout rate in the industrial world while maintaining the second most expensive primary and secondary education system in the world. The cost from school dropouts does not end with the loss of earnings and tax revenue. There is also a greater impact on our economy by the

increased need to provide health care, public assistance such as welfare or food stamps, and the public cost of the criminal justice system.

The ability to read is a prerequisite for being successful in the twenty-first century. Adults with low levels of literacy are likely to have significant difficulties on an economic level, a direct result of impaired ability to function in the majority of employment situations (USDE, 1997). As early as 1997 a study conducted by Lyon indicated, 75% of unemployed adults sampled were unable to read. That trend continues today with at least 70% of prisoners in U.S. prisons and 85% of juveniles who appeared in court were illiterate. Undoubtedly, individuals with poor literacy skills in the United States can be considered functionally *at risk* for a multitude of debilitating problems (USDE, 1997).

The NCLB goal that every child be able to read by the end of third grade by the 2013-2014 school year has remained elusive. Philosophical disparities between some school leaders and the teachers who implement reading instruction in the classroom have delayed full implementation of the goal. Research indicates that more and more children are coming to school lacking skills necessary to be successful in kindergarten and are in need of some type of immediate intervention (Britto et al., 2006). In response, standards-based reform is taking place throughout the country as states work to revise state standards to reflect the new NCLB literacy requirements.

### **Response to Intervention**

One tool that can be used to address students who demonstrate reading difficulties is the implementation of the RtI model noted in the final regulations for the reauthorized IDEA (USDE, 2006), which was published in the Federal Register on August 14, 2006,

and became effective on October 13, 2006. RtI is a systematic approach to instruction with two main goals: preventing academic problems and identifying students with specific learning disabilities (Hartzell, 2009). It is a method that identifies at-risk students, provides a structured guide for reading intervention, and contains guidelines to evaluate data. The method is also used to recommend an effective means for determining eligibility for learning disabilities special education (Duhon & Hartzell, 2009). As a result of extensive research in connection with revision of the IDEA, methods of early intervention and RtI have received a great deal of attention in the literature. Three goals associated with RtI include to ensure all students receive high quality core instruction, second, to identify at-risk students early and improve their performance and third, to accurately identify students who demonstrate some type of learning disability. Brown-Chidsey and Steege (2005) defined *RtI* as “a systematic and data-based method for identifying, defining, and resolving students’ academic and/or behavioral difficulties” (p. 2).

In 2007, the Oklahoma State Department of Education offered 21 school districts an opportunity to participate in a pilot RtI project. Participants in the project included general education teachers, special education teachers, counselors, speech pathologists, reading specialists, and primary school administrators. The role of the teacher and the administrator in RtI progress is related to scheduling options and components of appropriate instruction as well as behavior management. Leadership plays a significant part in the RtI model. However, little research has been done to determine the leadership practices of the school principal while implementing RtI as a reading intervention strategy or how RtI impacts student achievement.

## **Summary**

This chapter is a discussion of early-reading interventions, student achievement as a result of leadership, effective school leadership and leadership styles, the RtI project, and school principals recognized as instructional leaders. This chapter summarized the requirements of the NCLB (2001), currently referred to as the ESSA, as well as IDEA (2006). Each provides educational leaders with requirements for accountability, specifically in the area of reading. To ensure these mandates are successful, a shift must occur in responsibility from individual teachers, who are currently held responsible for the learning environment and the success of a student, to a school-wide ownership. School leaders are required to demonstrate the ability to articulate the pedagogy necessary to drive academic success for every student. This shift in responsibility toward providing school-wide ownership, displaying a problem-solving philosophy, and removal of barriers that prevent successful implementation of early intervention programs is necessary to meet AYP standards in schools. The new paradigm is intended to include a leader who can demonstrate a tolerance for uncertainty while leading a culture of change.

School personnel play a significant role in the success of a reading intervention model. The obligation of the school principal as leader is to develop successful strategies and model the practice of habits that can result in achieving the desired objective, the desired objective which ultimately is student success. The principal's job is to transform the school from an organization of technical function in search of objective outcomes to an institution focused on results (Sergiovanni, 2007).

## **Chapter 2: Literature Review**

### **Introduction**

This chapter explains the necessary characteristics of school leaders which include effectiveness, styles of leadership, practices, the importance of empowering those among the school, and the challenges school principals face in order to meet the necessary mandates in schools today. A discussion of early literacy in America today and the possibility of using models such as RtI to impact reading intervention programs with students identified as at-risk of reading failure. The research looks at reading engagement in the early years and discusses how later in life outside issues such as socioeconomic status reflects education attainment.

As school leaders and staff struggle to redefine and reform instructional programs, they are continuing to consider how intervention methods can affect overall student reading achievement. According to SEDL (2009), “The limited information on teacher leaders and correlations between values and leadership abilities of superintendents, principals, and teachers demonstrates the need to investigate the aspect of leadership” (p. 7). School leaders seek information on the work teachers and students’ perform, strive to focus the curriculum on worthy topics, and evaluate understanding of those topics by students (Weikart, 1981). The effective school day engages all students in purposeful learning. The responsibility of a leader is to create an organization that is exceptional in every dimension and does not focus on a single individual to bear the burden of exemplary performance in every area (Reeves, 2004). Ultimately, the school principal is an agent for change who empowers teachers to seek the highest possible level of success in teaching and encourages students to succeed in all core subjects. Successful

administrators' establish learning communities where all stakeholders can identify, analyze, and solve problems (Reeves; Weikart).

## **Leadership**

Leadership is defined as the relationship between an individual and a group that focuses on a common interest in which the group responds in a manner guided or determined by the leader. According to Fullan (2004) traditionally, school administrators have used a five-step method to solve problems such as staff conflicts, and lack of professionalism, as well as to develop consistency in academic instruction. This method included analyzing the problem, providing ideas for a solution, determining the best possible solution, then implementing and testing the solution.

In the past, a shift occurred in professional dialogue and cooperation. The educational effort in schools has become a collective rather than an individual enterprise (Freiberg & Knight, 1987). Fullan (2001) found that few improving schools do so without the leadership of a quality school leader. Fullan argued that to change U.S. elementary schools fundamentally and permanently, effective school leaders must challenge conventional wisdom that supports current school structure and instructional practices to regard the school principal as an instructional leader. The term *leadership* encompasses all aspects of identifying problems, seeking solutions, and implementing the best solution to achieve the desired result (Guskey, 1995). Gunn, Simmons, and Kame'enui (1998) posited that the school principal should reflect an instructional leader attitude and foster potential within the organization, as well as energize those who live and work within the school community.

The heart of leadership stems from what a person is committed to, believes, values, and imagines (Sergiovanni, 2007). The responsibilities of educational leaders include the promotion of initiatives and provision of quality professional development for staff (Good & Kaminski, 2001). In addition, the influence of a leader must blend professional expertise and moral obligation to the purpose of the school (Murphy, 1994). Within a school, principals are currently being challenged to professionalize teaching by allocating to teachers the responsibility for providing instructional leadership to peers (Jantzi & Leithwood, 1996). Leadership research beginning in the early 1900s has progressed from believing that great leaders are born, to searching for specific leadership traits, to focusing on the environment, and finally, to looking at the interaction between leader and follower (Gormley, Phillips, & Dawson, 2005).

Leaders can produce significant change that affects student achievement if they demonstrate an understanding of current issues and behaviors. Furthermore, they should demonstrate a commitment to continued professional development in order to develop habits of mind and practice to be a successful leader (Sparks, 2007). The school principal can network with colleagues to achieve more empowering and enabling points of view, and a principal can display skills and knowledge about the implementation of instructional practice (Good, 2001). For school leaders, accountability is a threefold construct. Leaders are obligated to direct staff in a search for instructional strategies that will meet the new standards and accountability required by NCLB and the 2009 ESSA. Accountability calls for achievements that transcend traditional academic skills, and accountability requires significant teacher learning, not just better implementation of traditional methods (Lashway, 2001). Current legislation encourages principals to offer



support for a standards-based instructional approach and provide adequate support that is received in a positive way, while maintaining the school's values and traditions.

Leadership is a necessary condition before positive reform can occur in a school (Marzano, 2003).

### **Effective Leadership**

Leithwood et al. (2004) argued that effective leaders provide vision, model behavior, foster commitment, serve as a source of support, provide intellectual stimulation, and have high expectations. Effective school leaders provide a careful analysis of collected data identifying problem areas and individual student needs, and implement classroom assessments that reflect state and national standards. Sergiovanni (2000) argued that deep change will occur only when leaders treat schools as communities that share core values, commitments, and passions. The primary leadership challenge in accountability is to keep a spotlight on improvement without neglecting the overall plan for improvement (Valentine & Lucas, 2000).

Marzano (2003) identified three principles necessary for effective leadership before change can occur. He noted that leadership is most successful when executed by a small group of educators, with the principal providing a cohesive influence that ensures success. The three principles include the principal functioning as a strong cohesive force, the second is to provide strong guidance while demonstrating respect, and third by demonstrating specific behaviors to boost interpersonal relationships. Effective leadership is best implemented by thoughtful leader behaviors that improve interpersonal relations. Successful leaders provide strong guidance while maintaining a respectful approach. Moreover, leadership is not a one-dimensional occupation and is not reserved

for administrators but is rather the job of all stakeholders (Glickman, 2007).

Leadership looks different depending on how an individual perceives it (Johnson, 1996). Most people perceive a leader as the person in charge. Leadership can be confused with position and power. Sparks (1991) characterized leadership as a behavior within which persuasion and example are combined by an individual to sway a group to act in a manner that is in accordance with the leader's intent, or the common purpose of all (Fullan, 2001). Schools need purposive leaders who can demonstrate organizational purpose, administrative competence, staff reliability, curriculum structure, and overall stability. The successful leader creates opportunities for faculty and staff so they can develop into productive leaders themselves (Strickland & Riley-Ayres, 2006). Reeves (2004) contended that effective envisioning helps individuals appreciate that they are part of a global environment and provides support for the idea that they are important contributors to the organization. Reeves added that leaders have an obligation to display an interest in establishing a learning organization. The leader can build trust and develop a stable organizational climate.

Improving literacy among young children depends upon such capabilities of the school principal. The principal is responsible for improving the school curriculum and developing a school climate that enhances the values and vision of the school and the success of all students. Effective principals demonstrate knowledge of assessment and make instructional decisions based upon data collected within the school. Principals need to be well-informed about the literacy curriculum and the best practices required to integrate that content into classrooms (Cummins, 2006).

## **Leadership Styles**

Leithwood (1992) identified leadership models in the field of education as transactional and transformational. Leithwood found that these leadership models, when applied to the educational field, were a promising concept of the type of leadership required to meet many educational reform objectives, including the development of a collaborative or shared technical culture. Leithwood created a survey instrument to measure the degree of each of leadership behavior in an educational setting. The survey was also designed to measure the faculty's views of their principal's behavior management (Reeves, 2004). The survey results identify each continuum of transformation for the transactions completed in the style of leadership. The results of the surveys can support the prediction of how transformational leaders move followers toward a higher level of commitment to a shared vision, which may ultimately influence student achievement (Fullan, 2004).

Cummins (2006) argued that the practice of leadership has changed during the past few years, moving away from a transactional to a transformational leadership style of leadership. Transformational leadership is a collaborative effort between school and staff working together to achieve an improving level of moral direction and motivation. In 1978, Burns used transformational leadership to explain how significant change can occur when awareness of expectations, values, and moral leadership is used to transform the way people understand the vision and goals of a group. Burns' leadership theory described transformational leadership as a give-and-take type of leadership aimed at motivating and inspiring workers to take dedication of a total vision to its highest level. It begins with a charismatic leader who values coworkers, and all become focused on an

end result. Riggio (2009), director of Kravis Leadership Institute at Claremont McKenna College, found the most common leadership style today is transformational. According to Riggio, this style of leadership encourages followers to focus on high levels of performance while offering assistance to others to reach the highest level of individual potential.

Transformational leadership includes four components: idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. Bass (1997), Bennis and Nanus (1985), Burns (1978), and Riggio (2009) indicated that these four components are necessary to develop transformational leadership in any organization. Idealized influence uses the leader as a role model to demonstrate great influence and respect for followers of an organization. Inspirational motivation comes when the leader inspires and motivates followers with a charismatic approach. Individual consideration by leaders is designed to show concern, identify the purpose of a task, and provide the opportunity to offer personal attention to followers' individual needs. Intellectual stimulation challenges followers to be creative while exploring new ways of doing things, including new ways of learning. Bass (as cited in Judge & Piccolo, 2004) explained that good leaders demonstrate characteristics of both transformational and transactional leadership.

Transactional leadership (Burns, 1978) is characterized by a leader who follows rules and is unremarkable, whereas the transformational leader is portrayed as extraordinary. Since the early 1970s, evaluation of the academic aspect of both leadership styles has involved an exploration of the effectiveness and nature of a school leader. Personal traits of a school leader include a manager who does things right

(Bennis & Nanus, 1985). Transactional leaders tend to maintain rigid control over behavior and enforce disciplinary rules, contingent reward, and management by exception (Bass & Avolio, 1994). Yukl (1998) indicated transformational leadership builds a strong commitment to organizational goals and vision while empowering followers to achieve specific objectives.

Research conducted by Leithwood et al. (2004), in conjunction with the Wallace Foundation, considered the concept of leadership as evidence that students are affected by both administration and distributed leadership in a positive way. Leithwood et al. found that several aspects of leadership, including school structures, school climate, instructional policies and practices, as well as the successful leadership practices of the school principal, were required for a successful school. The researchers examined the evidence and made several recommendations for educators, policymakers, and community persons interested in promoting successful schools. The results indicated that leadership not only matters, it is second only to teaching within school-related factors in its impact on student achievement.

Innovative, successful school reform depends heavily on the motivation and capacities of local leadership. The essential skills required for leadership to affect student achievement are evident throughout the report by Leithwood et al. (2004). They argued that leadership practices in which individuals begin setting directions, developing people skills, and making the organization work to support, rather than inhibit, teaching and learning affects student achievement in a positive way. School reform and the significant role of leadership in influencing the overall approach to teaching and learning directly relates to leadership practices. Leithwood et al. built a compelling knowledge base for

understanding a common set of basic leadership practices used by successful leaders. The researchers indicated that successful leadership plays a highly significant role in student learning. The report also emphasized the importance of how instruction plays a major role. In addition, the resulting conclusion “points to the value of changing, or adding to, the leadership capacities of underperforming schools as part of their improvement efforts or as part of school reconstruction” (p. 5).

### **Best Practices**

Rigorous content standards have been developed and adopted by virtually every state in the nation, together with accountability programs for monitoring student and school performances (Killion, 2002). Leadership advances in educational research and related programs, stricter accountability, higher academic standards for students, and constant assessment imply leadership that strives for excellence. If change is to impact student learning, teacher and school accountability, school leaders will have to increase the skills and knowledge of teachers and principals dramatically (Farrace, 2002). Advancement in student achievement is closely linked to improved teaching quality, which is in turn linked to the leadership role of the principal.

Leadership in organizations is characterized by various motivating, monitoring, and controlling functions by individuals in positions of authority. Along with transformational leadership, instructional leadership has also been a frequently researched model of school leadership. Instructional leadership centers on how leadership enhances educational results. Instructional leaders focus on overall school objectives, the curriculum, instruction and the school environment, while transformational leaders focus on reorganizing the school by improving school conditions (Stewart, 2006). According to

Leithwood (1992), instructional *leadership* was an idea that served many schools well in the 1980s and the early 1990s. However, regarding insight into current restructuring initiatives designed to take schools into the twenty-first century, instructional leadership no longer appears to capture the heart of what school administrators will have to become.

Research by Leithwood et al. (2004) provided a wealth of information on effective leadership and how it has its greatest effect on student learning. At the core of leadership are two functions: providing direction and exercising influence. School leadership comes from well-trained teachers, self-evaluations, and ongoing personal development of the school leader, namely, the school principal. As Leithwood et al. stated, “Certain leadership practices create an increasingly productive school climate where the student achievement increases and where school leadership initiatives provide a bridge between most educational reform initiatives and their consequences for students” (p. 70).

### **Principal’s Challenge**

In an effective school, the principal acts as the instructional leader, effectively and persistently communicating a mission to the staff, parents, and students. The principal is required to understand and apply the characteristics of instructional effectiveness in management of the instructional program. The role of the principal as school leader has been difficult to define since the existence of the principalship. Lashway (2007) contends that principals have little time for theoretical debates and have difficulty clearly defining their role on a daily basis. In 2000, the Institute for Leadership compiled a list of traditional managerial responsibilities. Principals are currently leaders for student learning and are required to be knowledgeable in academic content and pedagogical

methods. They work in conjunction with teachers to strengthen instructional skills (Murphy & Datnow, 2003). To stimulate excellence, they gather, examine, and employ data to improve the organization. The Institute for Educational Leadership stated that principals should unite students, parents, and faculty around the common goal of improved student performance. They also arrange for local health and family service agencies and coordinate with youth development groups, local businesses, and other community organizations to take part in working for the same goal of student improvement. Further, the Institute of Educational Leadership noted that it is essential that principals have leadership skills and the awareness to exercise independence and authority to practice these strategies for success (Fullan, 2001).

Principals should be prepared to tackle the challenge of establishing a vision of what a healthy school consists of and establishing that vision in the minds of faculty, parents, and the community (Gardner, 1988). As Levine and Lezotte (1990) found in a study of unusually effective schools, those who aim to *own* a vision should be participants in drafting it (Sparks, 2007). According to Sergiovanni (2007), currently too many principals are trying to do it alone. School improvement will not be successful or sustained without the broad-based empowerment of all stakeholders. In successful schools, generally there is a widespread sense of ownership of both the mission and strategies for change. Covey (1991) stated that leaders with skills such as good communication and careful team-building can be a powerful influence on overall organizational effectiveness. He posited that leaders need to be viewed as resources for support, rather than bosses or police. Fullan (2004) found that trust comes from building



a strong inside-out approach and that demonstrating qualities such as integrity, honesty, and trustworthiness offer stakeholders an opportunity to make commitments to change.

### **Empowering Others**

National and state standards continue to support the previous section's description of school leaders. A successful school principal encounters and solves a wide variety of challenges with enthusiasm and exceptional fortitude. They need to be able to express themselves fully, knowing what they want, why they want it, and how to communicate to others to gain cooperation and support (Bennis, 1998). Effective principals seeking to achieve their school visions and goals are resourceful (Foorman, Francis, Fletcher, & Lynn, 1996).

Murphy (1994) found that successful directors of comprehensive school reform build a tight management of organizations by enhancing their own skills, cooperation, developing teacher leadership, and offering resources to support growth. There are additional empirical studies and syntheses that conclude that the cooperation of communities plays an important role in improving schools. Fullan and Watson (2000) recommended continuation of research to search for important and useful dialogue to influence the future academic leadership initiatives that will ultimately impact student achievement.

The focus of the research study related to the relationship between leadership practices and academic achievement in first through third grade reading intervention programs. States and districts have established standards for early literacy that are articulated with k-12 programs and reflect consistency and continuity with overall program goals, but schools still fall short of NCLB standards. The emphasis on reading

assessment and intervention strategies at the kindergarten through Grade 3 level is at the forefront identifying at-risk students early and implementing appropriate instructional interventions in every state. School principals who respond to these challenges and are equipped with the essential leadership behaviors can guide student achievement toward achieving these complex issues.

Educators whose schools fail to meet NCLB standards may be required to make major changes in policy involving standards and accountability to help children meet NCLB goals. Gunn et al. (1998) found that early literacy policy is essential when developing structures and settings, as well as programs intended to meet literacy requirements. Gunn et al. commented that the educators who implement structures, settings, and programs create patterns of activity that can either advance or delay change. Well-conceived standards for educational outcomes, curriculum content, and teacher preparation have established clarity of purpose and a shared vision for early literacy education (Glickman, 2007). Glickman argued that early literacy curricula and teaching practices should be evidence-based and integrated with all domains of learning. The following chapter is a summary of literature pertinent to early-reading intervention and student achievement in reading, and their relationship to administrative leadership.

### **Response to Intervention**

Changes in United States' educational system continue to affect school administrators and educators. New regulations included in the IDEA of 2004 are making it imperative that changes occur involving all administrators, principals, and educators across the United States (Rinaldi & Herman, 2009). Implementing effective intervention strategies has become one of the most investigated aspects of the IDEA mandates. RtI is

such an intervention. RtI encompasses intensity of intervention and instruction, remedial and intensive instruction, accelerated and targeted supplemental instruction, and an effective strategy to prevent students from eventually becoming another statistic in the growing number of students identified as special education students. According to the National Association of State Directors of Special Education (2005), “RtI is the practice of providing scientific, research-based instruction and intervention matched to individual student’s needs, with important educational decisions based on the individual student’s level of performance and learning rate over time” (p. 3). In RtI, the emphasis is placed more on the centrality of general education and the importance of using interventions that are scientific and research-based. Scientific research-based interventions are contained in both the NCLB (Section 9101[37]) and IDEA regulations (Section 300.307 [a] [2]).

Oklahoma’s RtI advisory board consists of Oklahoma State Department of Education employees from a variety of sections. Currently, Duhon, a leading RtI expert, serves on the advisory board while promoting the RtI model throughout the state of Oklahoma. According to Hartzel (2009), of the Oklahoma State Department of Education, the RtI model addresses the structure for supplying effective instruction for all students. The RtI model is a culmination of assessing students’ current level of functionality, establishing appropriate learning goals, implementing research-based interventions specially formulated to meet each individual student’s precise needs, and using data as a tool to determine immediate intervention strategies and monitor the student’s response to the intervention (Hartzel, 2009). The school leader uses the RtI model to accentuate the positive when delivering teaching instruction and when asking classroom teachers to make a commitment to becoming a high-performing school.

The RtI leadership model for school change includes the school administrator playing a significant role in creating opportunities for change at both the district and school level. Leading the way, the successful leader demonstrates the ability to promote (a) strong core curriculum, (b) research-based effective teaching strategies, (c) a comprehensive common assessment plan, and (d) development of an information-rich school where data drives decision making. There is a collaborative effort toward building a partnership among all participants to make a connection between school culture and students' needs. The leadership incorporates achievable and feasible goals that go beyond a 1-year initiative working toward true school change. Prioritizing changes and potential outcomes, allowing the current experiences to drive future planning is vital. DuFour (2004) reported that guidelines should be established for a variety of levels and types of communication among all stakeholders. This includes leadership in the principal, teacher and student roles (as cited in Rinaldi & Herman, 2009). RtI promotes structures and conditions in which everyone is held accountable for results (DuFour, 2004).

Treatment intervention research has shown that appropriate early direct instruction tends to encourage reading remediation (Grossen, 1997). Grossen posited that “reading is not developmental, it is learned” (p. 4). Therefore, students who fall behind in kindergarten or first grade continue to fall farther and farther behind. Longitudinal studies have shown that 74% of children who are diagnosed as reading disabled in third grade are still disabled by ninth grade (Foorman et al., 1996; Grossen, 1997). RtI seeks to identify and intervene before third grade. Identifying students on an individual basis

where all stakeholders seek results creates ownership. Through quality leadership practices, one can expect these types of results from using the RTI model:

1. Enhanced academic outcomes for students.
2. Data-informed instruction.
3. Increased problem-solving capability of teachers.
4. Collaboration among all professional staff.
5. Reduction in inappropriate referrals to special education.
6. Increased levels of teacher engagement in professional development.
7. Evidence of a professional learning community through actions (Fuchs, 2003).

RtI utilizes a three-tiered approach. The First Tier includes all children from pre-school forward receiving standard reading instruction that is grounded in evidenced-based practices. Tier 2 allows for interventions to provide additional support in Grades k-3 students who demonstrate limited reading abilities. Tier 3 allows for in-depth assessments to determine if a student should be considered for Special Education. Assessments are done regularly to determine if the supplemental interventions are guiding specific strategies, targets, and techniques of the interventions. Students who failed to respond to effective interventions in Tier 2 may need specialized interventions to enable them to achieve the required standard of learning and offer a greater chance for success in school and in life (Fuchs, 2003).

For the purpose of this research students who are identified as needing Tier 2 intervention will be considered for study. Tier 2 is designed to enhance and stabilize Tier 1 efforts and prevent the need for Tier 3 interventions. It is estimated that from 15%-20% of students not meeting adequate progress and who required additional

modifications to core reading instruction qualify for Tier 2 interventions (Simmons, Kame'enui, & Good, 2002)

### **Support for Response to Intervention**

Fuchs and Fuchs (2006) suggested a standard management protocol, as opposed to a problem-solving protocol, for children demonstrating academic difficulties. They concluded, "With a standard treatment protocol, the nature of the preventive intervention is public, clear, and represents instruction that benefits most students" (p. 3). Targeting academic difficulties with a problem-solving model necessitates intervention teams to do the following: maintain prevalent records related to the outline of the intervention, convince staff that an individually personalized intervention is viable, and defend that a student's non-responsiveness to the particular intervention is not caused by poor instruction.

The Learning Disabilities Association in 2006 supported the RtI model involving research-based interventions, consistent progress monitoring of student performance during intervention process, using data to vary the method and intensity of intervention, and family involvement throughout the intervention process.

### **Opposition to Response to Intervention**

Opponents of RtI express concerns on the concept and implementation of the components of RtI. Mastopieri (2003) conveyed concerns that other characteristics of learning disabilities, such as those students who process information slowly may simply be overlooked. McEueaney, Lose, and Schwatz (2006) stated, "RtI approaches do not go far enough in recognizing chronic problems in our efforts to respond to severe reading difficulties" (p. 118). They contended that RtI could undermine student learning by not

putting enough emphasis on the individual character of responsive reading, and instead, continue to emphasize identifications of disabled readers. For the purpose of this study neither distinct position was taken.

### **Reading Skills**

For years American public schools citizens have expected that their children will gain the necessary skills, growth, and knowledge to become the citizens that guide the United States in the future (Gardner, 1988). Learning to read and write is vital for a child to ultimately succeed in school and later in life. Student success can be impacted by early-literacy achievement as well as socioeconomic environment. A study by the National Endowment for the Arts (2004), "Reading at Risk," provided some alarming results indicating the number of American's who engage in reading has dropped in all education and socio-economic levels. America's culture of reading is suffering. Americans should be worried about this trend. We are a nation at-risk where two cultures develop; one that reads and one that does not.

Early literacy is moving front and center in the field of early childhood education. For some time, early childhood educators have identified the significance language and literacy hold in preparing children for school success. More than ever before, early childhood literacy is considered the single most important investment for enabling children to develop skills that will benefit them for a lifetime (Dickinson & Neuman, 2006). Early literacy is an integral part in providing early learning experiences that research links with academic success, diminished grade retention, higher graduation levels and increased achievement as adults (Roskos & Vukelich, 2006). Roskos and

Vukelich confirms that literacy development begins in the early years of life and is closely related to academic achievement.

The early childhood years, birth through age 8, are the most important period for literacy development (National Association for the Education of Young Children [NAEYC], 2007). Preparing young readers to become successful readers is essential. Early literacy typically refers to specific basic skills that are the foundation for fluent reading. Currently, researchers are examining skills such as letter knowledge, phonological awareness, concepts of print, and naming of letters, colors, and objects to determine acquisition rates and prediction of later achievement. Early literacy should not be confused with emergent literacy, which refers to a broader concept of literacy that begins before formal instruction and leads to awareness and knowledge of print (Gunn et al., 1998). Failure to obtain early-literacy skills creates a domino effect that decreases the likelihood of achieving appropriate grade-level reading skills. Research shows that deficits in early-literacy skills persist meaning that they can be found in older children and adults who are poor readers, indicating that quality leadership should begin in the earliest of years to improve the effectiveness of instruction at such a vital time (Pratt & Brady, 1988).

According to Snow (as cited in Roskos & Vukelich, 2006), high-quality early-literacy instruction is a preventative measure that reduces the risk of long-term reading failure. Poor-quality programs can impede a child's progress. Strickland and Riley-Ayers (2006) state that early-literacy instruction should be research based, use multiple methods of assessment, and be integrated with all domains of learning. Effective programs should include clear and precise adaptations for children with exceptional



needs. In addition, support for English Language Learners should be specific and provided in both native language and English when possible.

A reoccurring idea in early-literacy policy is that higher teaching quality will create increasingly effective early-reading skills and improved overall school readiness for all children (Roskos & Vukelich, 2006). Effective teachers hold great influence in helping children reach their potential (Neuman, 2006). They provide content-rich contexts integrated across subject domains with high levels of teacher support and guidance, and provide opportunities for children to become successful.

Barnett (as cited in Strickland & Riley-Ayers, 2006) stated,

A growing body of evidence shows that early learning experiences are linked with later school achievement, emotional and social well-being, fewer grade retentions, and reduced incidences of juvenile delinquency and that these outcomes are all factors associated with later adult productivity (p. 2).

There is a large body of knowledge about the relationship between a child's first 5 years of life experiences and their emerging abilities in language and literacy (Ramey & Ramey, 2006).

According to Hart and Risley (2006), research implies that early experiences in oral language and reading readiness skills like phonological awareness put children at a greater advantage for later reading success. Oral language, alphabetic code, and print knowledge are important predictors of reading and academic success. A lack of experience and exposure with language and literacy greatly increases the difficulties a child will have becoming a successful reader.

One of the reasons children enter school with different oral language skills is the language experiences they are provided at home. According to Hart and Risley (as cited in Strickland & Riley-Ayers, 2006), children with families in which parents provide rich language and literacy exposure achieve higher in school than their counterparts. Children reared in language-poor families are less likely to have a developed vocabulary, and their language environment is oppressed and punitive. There is a correlation between vocabulary development and reading success. Senechal, Ouellette, and Rodney (2006) state that children who know more words have richer and stronger representations of the constituent parts of words, and these richly represented segments will facilitate growth in phonological awareness. One may assume that vocabulary development can affect future reading success through its role in phonological awareness. Children who acquire strong vocabularies increase their ability to make sense of what a word might be while using what they know about phonics (Strickland & Riley-Ayers, 2006).

### **Socioeconomic Status Reflects Educational Attainment**

When defining socioeconomic status (SES) in terms of income levels, the term is often associated with educational attainment or human capital (Britto et al., 2006). According to these researchers, it is a well-established fact that the literacy gap among schools today is directly related to SES. Snow, Burns, and Griffin (1998) contended that as some children enter school with certain disadvantaged backgrounds, they are already a couple of years behind. Three degrees of influence have been associated with early-literacy acquisition. They include cognitive ability, family-level factors, and school, student, neighborhood and community influences. These are interconnected and are unique contributions that influence a child's early-literacy success. American schools are

extremely diverse and are becoming more heavily populated by immigrants and non-English speakers (M. Levine, 2005). The growing number of students with minority backgrounds mandates how schools adapt to the accountability issues contained in the NCLB (Darling-Hammond, 2007).

The literature documenting the consequences of poverty for student development is extensive and continually changing (Britto et al., 2006). The results of the Britto et al. study, from an ecological perspective, explained how family-, school-, and community-level inputs or influences are significantly linked to a child's ability to be successful in school. The level of achievement obtained by students from minority backgrounds is far lower than that of students from nonminority backgrounds (Darling-Hammond, 2007). Therefore, students from diverse backgrounds may require *culturally responsive* instruction. Schools intervene by identifying norms, values, and practices often associated with certain cultures to gain knowledge and respect and to develop a foundation suitable for literacy acquisition (Leithwood, Day, Sammons, Harris, & Hopkins, 2006).

Research also shows the school leaders play a large role in influencing the school-learning environment (Hallinger & Heck, 1998). Devaney (2009) described the Response to Intervention Action Network as the savior for the lower SES students by promoting collaboration among all educators, especially special education teachers and families as it serves as a researched-based system to identify struggling readers early. It matches the intervention to the individual student needs (Duhon & Hartzell, 2009).

As schools, leaders, and staff struggle to redefine and reform instructional programs, they are continuing to consider how intervention methods can affect overall

student achievement. According to SEDL (2009), “The limited information on teacher leaders and correlations between values and leadership abilities of superintendents, principals, and teachers demonstrates the need to investigate the aspect of leadership” (p. 7). School leaders seek information on the work teachers and students perform, strive to focus the curriculum on worthy topics, and evaluate understanding of those topics by students (Weikart, 1981). The effective school day engages all students in purposeful learning. The responsibility of a leader is to create an organization that is exceptional in every dimension and does not focus on a single individual to bear the burden of exemplary performance in every area (Reeves, 2004). Ultimately, the school principal is an agent for change who empowers teachers to seek the highest possible level of success in teaching and encourages students to succeed in all core subjects. Successful administrators’ establish learning communities where all stakeholders can identify, analyze, and solve problems (Reeves; Weikart).

### **Chapter Summary**

This chapter includes a discussion of the responsibility and definition of a leader as it pertains to schools and the impact leadership can have on student achievement. The responsibility of a leader is to create organization, empower teachers, promote overall student achievement, and establish high expectations for student success. Leadership is the relationship between an individual and a group striving to connect professional expertise and moral obligation to purposeful learning in a school setting. This chapter defines leadership more in depth by explaining that effective leaders are committed to understanding current issues, continued professional growth, and focus on networking with colleagues using the most effective means of student improvement available.

Leaders can produce significant change in student achievement if they demonstrate an understanding of current issues and behaviors. Effective leaders provide vision, model behaviors, foster commitment, serve as a source of support, provide intellectual stimulation and maintain high expectations. The primary leadership challenge as a school principal in accountability is to be a strong cohesive force as well as provide guidance while demonstrating respect and showing specific behaviors to boost academic achievement. Most research indicates leadership behaviors do impact student achievement (Leithwood, 2004; Fullan & Watson, 2000).

Meeting the mandates of NCLB Act requires the school principal to look carefully at improving student literacy skills. Effective leadership begins with the school principal becoming knowledgeable about assessments and how to implement change through program models such as RtI. The responsibility for decisions in current issues dealing with literacy and interventions that improve overall student success is brought about through quality leadership behaviors. Principals face challenges that include empowering others to follow best practices and researched-based data to improve student literacy.

Reading is the gateway to all things possible; in short students must encounter reading as a way of life as early as possible. They must be exposed to related issues in their literacy development from birth to eight. Students who do not experience a quality literacy environment will no doubt find struggles as they continue their educational experience. Failure to meet the necessary early-literacy skills creates a domino effect that diminishes the likelihood the child will be a successful reading student in the appropriate grade-level. Those students who enter school as a struggling reading will more than

likely be a struggling reader throughout school unless schools implement interventions that decrease that risk.

This research adds to the literature by providing data based on a relatively large sample, will identify the relationship between principals and reading intervention programs, and allow for data to be generalized and duplicated to encourage intervention strategies that impact student reading achievement. The study primarily focused on principal leadership behaviors while a pilot program is implemented to improve reading of first through third-grade students. There is relatively no research connecting the principal leadership and implementation of RtI as a reading intervention strategy in Oklahoma.

## **Chapter 3: Methodology**

### **Introduction**

This chapter outlines the research design and procedures used to implement the study. The first portion provides an overview of the research design, continuing with a restatement of the research questions. Subsequent sections define the population and sample used in the study, instrumentation, data collections, ethical considerations, and the data analysis methodology. To satisfy the purpose of the study and answer the research questions outlined, a quantitative, descriptive study has been conducted. A questionnaire methodology provides the necessary data collection from 108 classroom teachers in six schools regarding leadership effectiveness, and archival data were collected from each school and correlated with the results of the survey. The results of the DIBELS assessments for first-, second- and third-grade classes for the six schools provides data to indicate the percentage of growth after the implementation of the RtI pilot project for the Oklahoma State Department of Education, and its correlation to the Principal's Leadership Questionnaire (PLQ). Ultimately, the purpose of the study is to ascertain the effectiveness of leadership practices of school principals as identified in a survey administered to teachers at six Oklahoma elementary schools and correlate results with the reading achievement of first, second, and third-grade students in each selected elementary school using the RtI model.

### **Appropriateness of the Research Design**

The research study involved a quantitative design to investigate the principal as leader of the school and that leader's effectiveness as it relates to student achievement. A correlational descriptive design was implemented. Questionnaires are the most common

process for collecting informal evidence and were used to collect data. Guskey (1995) indicated that questionnaires can be used to gather data on almost every aspect of organizational functioning therefore, a reliable questionnaire was selected as the appropriate method to use in this research.

Researchers make a methodological choice based upon assumptions about the nature of reality (Creswell, 2007). Those assumptions provide a basis for choosing between a quantitative or qualitative methodology. Both methodologies strive to attain the same goal, which is to derive meaning from data. The objective of quantitative research seeks to obtain precise measurement and analysis of targeted concepts using questionnaires. Quantitative experimentation involves a standard format with a few interdisciplinary variations, establishing a hypothesis that can be proved or disproved. A quantitative approach requires the researcher to be distant and objective (Creswell, 2007). Variables are extrapolated from the idea sets and used to design the research questions and hypotheses. The resulting research questions and hypotheses subsequently form the foundation of the study (Creswell, 2003).

The research used quantitative methods to analyze numerical data. The objective in quantitative research is to determine the relationship between one variable (the independent variable; principal leadership) and another (the dependent or outcome variable; student achievement) through hypothesis testing (Cooper & Schindler, 2006; Neuman, 2005). Quantitative design is used to implement statistical techniques and subjective inferences to facilitate decisions about the results of the data.

Quantitative researchers advance knowledge through verified hypotheses that involve valid, reliable, and precisely measured variables. Questionnaires are used as the



primary data collection approach because of versatility of the format. Questionnaires do not require visual observations from the researcher and can expand or contract the sample size and geographic coverage as needed (Cassel & Westlund, 1999). Questionnaires distance data collection from human influences, thereby reducing the potential for research bias. The study design focused on a questionnaire method of collecting data for analysis and the use of pre and post test comparisons requiring a quantitative analysis strategy.

### **Research Questions and Hypotheses**

Based on the background of the problem, the following research questions guided the design of the methodology:

1. What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?

2. After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?

The following hypotheses are proposed, based on the research questions:

H<sub>01</sub> There is no relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>A1</sub> There is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>02</sub> After controlling for student characteristics (gender and grade level), there is no relationship between the principal's total PLQ score and student's DIBELS gain score.

$H_{A2}$  After controlling for student characteristics (gender and grade level), there is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

### **Setting and Participants**

The State of Oklahoma is located in the South-central region of the United States. As of 2009, it had an estimated 3.7 million residents (U.S. Census Bureau, 2009). The state's name is a combination of two Choctaw words, *okla* and *humma*, which translates as *red people*. In 2009, the state's primary ethnic groups are African American (7.9%), Hispanic (5.2%), Asian (1.4%), and Native American (7.9%). There are approximately 25 different languages spoken, and the state contains 67 different tribes of Native Americans.

The Oklahoma school systems are comprised of public school districts and private schools. Oklahoma is 46th nationally in expenditures per students. Oklahoma teachers' rank 48th nationally in salaries (Oklahoma Department of Education, 2010). Oklahoma's high school dropout rate was 2.9% in 2009. The 2010 per capita income for Oklahoma families was ranked 34th in the nation at \$36,421, which is just above the national poverty rate for a family of four (Oklahoma Policy Institute, 2011).

The sample pool for the research contains six elementary schools in Oklahoma public school districts where the pilot RtI project has been implemented. The RtI project was designed to improve reading via intervention strategies. From the original list of 21 elementary schools involved in the state pilot project, 18 schools use the same progress monitoring techniques. Nine agreed to participate, but only six supplied data. The six school districts are located in various regions of the state. All first through third-grade

level teachers from each subject school are asked to participate in the study.

Demographics will be obtained from the Oklahoma State Department of Education profiles for the 2009-2010 school year from public records.

### **Description of the Study Sites**

The schools were determined by eliminating the schools using the BEAR test or respondents refusing to participate in the study. Two schools out of the 21 used the BEAR (BAS; Wilson & Sloan, 2000) assessment tools leaving nineteen schools. Each school was contacted to participate in the research and only nine responded positively and agreed to participate; although only six schools completed the data collection process. Each school offered results using the DIBELS in Grades 1 through 3. Each school's first through third-grade teachers were given the PLQ. Teachers had the opportunity to use or not use technology through Survey Monkey to complete the questionnaire, or fill out the questionnaire and return it by mail, or simply hand to the researcher. Questionnaires were returned by all three means. The completion rate resulted in 57% of the questionnaires returned to the researcher.

The highest level of free or reduced-price lunch was 85% and the lowest was 45%. The number of classes per grade level ranged from one first grade per school to as many as eleven classes per grade. Second-grade classes ranged from one to as many as 10 with third grade from 1 to 11 classes per grade level. The student population varied in the percentage of first through third graders receiving reading remediation.

### **School Demographics**

School A is an urban district located in central Oklahoma with a total Academic Performance Index (API) score of 1143 in reading achievement (state average being

1103). Oklahoma has implemented the API law to measure the performance and progress of a school based on factors such as primary state assessment scores, contributing to the overall educational success of students within the district. The potential score ranges from 0 to 1500. Items such as Oklahoma School testing Program, School completion together with attendance, dropout and graduation rate, academic excellence including ACT scores and participation, Advanced Placement Credit, and college remediation rates in reading and math are factors involved in the API. School A has a poverty rate was 19% and has a 30% single-parent rate. The average household income ranges near the state rate of 29%. The district consists of 132 certified staff and has 15 special education teachers. Five percent of the student population is considered gifted and talented with 12% of students identified as special education students. The percentage of Grades 1 through 3 receiving reading intervention is 66%. Students qualifying for free or reduced-price lunch total 49%. The ethnic makeup of the student population is 73% Caucasian, 4% Black, 1% Asian, 13% Hispanic, and 9% Native American. The total number of student participating in the research study totaled 250. The total number of PLQ's returned for School A was 14.

School B is a rural district located in south central Oklahoma with a total API score of 1108 in reading achievement. The poverty rate for School B is 12% and has 20% of its students living in a single-parent environment. The average household income is slightly below state average at \$41,283.00. This school district employs 71 certified teachers with four of those teaching special education. Twenty-three percent of students are considered gifted and talented with 14% of students receiving special education services. Grades 1 through 3 had 34% of students receiving reading intervention. Fifty-

two percent of the total student body qualifies for free or reduced-price lunch. The ethnic background includes 68% Caucasian, 1% Black, 2% Hispanic, and 29% Native American. The total number of students participating in the research study was 92. The total number of PLQ's returned for School B was 10.

School District C is a small rural district with a total API score of 1130 in reading achievement. The poverty rate stands at 17%. Twenty-two percent of the students reside in a single-parent home with the average household income well over \$10,000 below Oklahoma's average income scale. There are 25 certified teachers in the district with each elementary grade only having one class per grade. Nineteen percent of the student population is considered gifted and talented with 15% eligible for special education services. The total percent of students qualifying for reading intervention totaled 16%. A typical result of low income rural areas in Oklahoma, the number of students qualifying for free or reduced-price meals exceeded 79%. The diversity of the students includes 72% Caucasian, 1% Black, 3% Hispanic, and 24% Native American. This small district provided a total of 68 students to participate in the research. The total number of PLQ's returned for School C was 2.

School D is a rural district located in rural northwestern Oklahoma with a total API score of 1118 in reading achievement. The poverty rate of School D was 9% and has a 21% single-parent rate. The average household income is 8% below the state average. This school district employs 77 certified teachers and with eight special education teachers. Fifteen percent of students are considered gifted and talented with 18% identified as special education students. First through third graders receiving reading intervention totaled 45%. Students who are eligible for free or reduced-price lunch was

45%. The ethnic makeup of School D is 63% Caucasian, 1% Black, 1% Asian, 4% Hispanic, and 31% Native American. The total of students participating in the research study was 128. The total number of PLQ's returned for School D was 12.

School E is an urban district located in the northeastern portion of Oklahoma with a total API score of 943 in reading achievement (160 points below the state average). The poverty rate was 12% while 31% of students resided in a single-parent home setting. The average household income was \$4,000 lower than the state average. The district employs 162 certified staff with 17 special education teachers. Eighteen percent of students are identified as gifted and talented with 21% with Individual Education Plans or IEP's. Students receiving reading intervention totaled 63%. Eighty-five percent of the students qualify for free or reduced-price lunches. The student diversity totals 50% Caucasian, 9% Black, 1% Asian, 2% Hispanic, and 38% were Native America. Three hundred and fifteen students participated in the research study. The total number of PLQ's returned for School E was 16.

School F is an urban district located in the northwestern section of Oklahoma with a total API score of 1251 in reading achievement. The poverty rate was 19% and 23% of students live with only one parent. The average household income was \$4,000 below state average of \$41,716. The district employs 110 certified staff with nine special education teachers. Twenty-seven percent of students are considered gifted and talented while 13% are identified as special education students. Thirty percent of students require reading intervention while the state average is 38%. Fifty percent of the students qualify for free or reduced-price lunches. The ethnic makeup includes 79% Caucasian, 2% Black, 1% Asian, 8% Hispanic, and 10% Native American. A total of 316 students

participate in the research study. The total number of PLQ's returned for School F was seven.

### **Data Sources**

The researcher obtained permission to use the PLQ, based upon the work of Jantzi and Leithwood (1996; see Appendix D). The original survey developed by Leithwood (1996) contained 50 Likert-type items measuring four constructs of leadership: (a) purpose, (b) people, (c) strengthens school climate, and (d) builds collaborative structures. For the research purposes, the Valentine and Lucas (2000) instrument was chosen which measures six principal leadership behaviors that fall under the constructs of *purposes* and *people* from Leithwood and Jantzi's (1996) original survey. This set of leadership behaviors explains the majority of the variations in the handful of organizational outcomes included in Leithwood's studies and identified by Leithwood (Leithwood, 1994, Leithwood & Steinbach, 1995) from his empirical research intended at adapting, for schools, models of transformation leadership developed in non-school contexts. The original survey instrument, designed by Leithwood and Jantzi (1990), had a reliability rating of .95. The reliability for this research study was .98. The primary independent variable in this study is the teacher's response on this questionnaire in rating their principal, and those responses will be compared with the dependent variable of student reading achievement.

Leithwood (1994) argued that there are six dimensions of leadership practice wherein the principalship, including (a) provides vision by identifying opportunities to influence the school leadership team to adapt a vision, (b) models appropriate behavior and serves as the role model by setting an example for the school leadership team to

follow, (c) fosters a commitment to common goals that promote cooperation among the school’s leadership team, (d) promotes individualized support indicating respect for leadership team members and demonstrating concern for personal feelings and needs, (e) provides continued intellectual stimulation challenging school leader teams to constantly re-examine assumptions about work and how it is performed by all team members, and (f) demonstrates high expectations for excellence, quality, and high performance on the part of the school leadership team. PLQ Questions 1 through 5 relate to identifying and articulating vision and providing inspiration. Questions 6 through 8 are associated with providing an appropriate model. Questions 9 through 13 indicate individual support while 19 through 21 encourage intellectual stimulation. Questions 22 through 24 demonstrate high expectations for excellence. The 24 questions included in the PLQ are divided among the six distributed dimensions as noted in Table 1.

Table 1

*Principal Leadership Questionnaire Dimension Item Distribution*

PLQ dimension item distribution	
Dimension	Item number
Provides vision (PV)	1, 2, 3, 4, 5
Models behavior (MB)	6, 7, 8,
Fosters commitment (FC)	9, 10, 11, 12, 13,
Provides individual support (PS)	14, 15, 16, 17, 18
Provides intellectual stimulation (NS)	19, 20, 21
Holds high performance expectations (HE)	22, 23, 24

The PLQ was submitted to and reviewed by a committee of six educators to establish validity. The questionnaire has been used in previous studies including a study entitled “Towards an Explanation of Variation in Teacher’s Perceptions of



Transformational School Leadership” (Jantzi & Leithwood, 1996). Cronbach’s Alpha was used to test the reliability internal consistency for each question. All five factors were tested using the coefficient Alpha as indicated:

- Identifying and articulating a vision: behavior on the part of the principal aimed at identifying new opportunities for his or her school staff members and developing, articulating, and inspiring others with his or her vision of the future. This factor has a reported reliability coefficient Cronbach’s Alpha of .88 (University of Missouri, 2006).
- Providing an appropriate model: behavior on the part of the principal that sets an example for the school staff members to follow consistent with the values of the principal espouses. This factor has a reported coefficient Cronbach’s Alpha .80 (University of Missouri, 2006)
- Fostering the acceptance of group goals: Behavior on the part of the principal that indicates respect for school staff members and concern about their personal feelings and needs. This factor has a reported reliability coefficient Cronbach’s Alpha .82 (University of Missouri, 2006)
- Providing intellectual stimulation: Behavior on the part of the principal that challenges school staff members to reexamine some of the assumptions about their work and rethink how it can be performed. This factor has a reported reliability coefficient Cronbach’s Alpha of .77 (University of Missouri, 2006).
- Holding high performance expectations: Behavior that demonstrates the principal’s expectations for excellence, quality, and high performance on the

part of the school staff. This factor has a reported reliability coefficient Cronbach's Alpha of .73 (University of Missouri, 2006).

The leadership of any organization is complicated and constantly requires certain competencies. Leaders establish the direction and vision, are effective communicators, bring out the best in people therefore resulting in a group of people who can make decisions in a time of crisis (Fullan, 2001). Research consistently advocates that leadership impacts student achievement (Hallinger & Heck, 1998; Leithwood et al., 2004; Waters, Marzano, & McNulty, 2003). The questionnaire is designed to rate a principal's leadership behaviors.

Data sources include a discussion on DIBELS and student achievement found on page seventy-two. Field notes are added to provide a clear understanding of the research schools and their involvement in the RtI project as well as the use of DIBELS as their assessment tool used to determine reading improvement over the research period. The field notes are located on page 73.

## **Procedure**

Permission to use the PLQ (see Permission to use the PLQ in Appendix A) was sought via e-mail from Valentine, Leithwood, and Jantzi on July 16, 2008, obtaining permission to use the PLQ, which is composed of 24 Likert-type items (Valentine & Lucas, 2000, based on the work of Leithwood & Jantzi, 1996). Through the identification of key leadership responsibilities, schools will have a better understanding of why the leadership role of the school principal is vital in creating a positive learning environment. Permission to conduct the study was also obtained from the Oklahoma University Institutional Review Board. Permission was requested from the

superintendent of each district to administer the questionnaires and obtain DIBELS pretest and posttest results without student's identifying name or number, while collecting demographics from the Oklahoma State Department of Education's public schools profile. Finally, permission to conduct the study was obtained from each school superintendent (see Appendix B). E-mail addresses of all 1-3 grade level teachers as obtained at the school level. Teachers were contacted through the school website, and asked to complete questionnaires on-line using Survey Monkey, in person, and/or by e-mail. They could also return by U.S. mail if they preferred.

An invitation to participate in the study (see Appendix C) was distributed via SurveyMonkey to a total of 108 first through third-grade teachers in the target schools. The researcher used SurveyMonkey, an Internet software tool to distribute the letters of invitation and survey instruments. To keep respondent's e-mail addresses and names anonymous, the researcher selected an option not to have the e-mail address or Internet Protocol (IP) addresses saved on the actual responses. The SurveyMonkey privacy statement is viewable on their website. Demographic information such as free and reduced-price lunch percentages and number of students receiving reading remediation collected from the Oklahoma State Department of Education's website for each school site that responds positively to the invitation to participate was considered when developing the school's profile. In response to the Principal Leadership Questionnaire (PLQ), 108 teachers received the questionnaire. School A returned 14 surveys for a 23.0% return rate. School B returned 10 surveys at a 16.3% return rate. School C returned two survey (this school had one class per class) at a 3.3% return rate. School D returned 12 surveys at a 19.7% return rate. School E returned 16 surveys for a 26.2%

return rate. School F returned 7 surveys for an 11.5% return rate. The total return rate was 57%.

Statistical Package for Social Sciences (SPSS) was used to perform quantitative analysis. The alpha level for this study was set at  $p = .05$ . Data had been initially tabulated using standard summary statistics (means, standard deviations, frequencies, and percentages). The unit of measurement for this study was the aggregated grade level (first, second, and third) scores for each of the 6 schools. This resulted in 84 cases.

As a general data analysis approach, bivariate comparisons were performed to relate the independent variables and covariates with the dependent variables using Spearman rank-ordered correlations. The independent variables were PLQ total scores and the three grade levels (first through third). The related covariates were the grade level and gender of student receiving reading remediation. The dependent variables were two aggregated DIBELS scores: the beginning of the year (typically September) and ending (typically April) DIBELS scores. With that, the primary statistical approach that was used for this study was repeated measures. To calculate the total PLQ score for the school, all available volunteer teachers were surveyed. This ranged from 3 to 16 teachers with five of six schools having at least seven teachers and four of six having at least 10 teachers. The reason for having only 2 teacher results from one school (School C) was due to the fact that there was only one class per grade level in this small rural school.

### **Ethical Considerations**

Cozby (2007) argued that “ethical concerns are paramount when planning, conducting, and evaluating research” (p. 35). As such, care was taken to ensure that the participants understand the nature of the study and that participation is voluntary. All

participants were assured that confidentiality will be maintained indefinitely. Respondents were made aware of the benefits of the research in the letter of invitation (Creswell, 2007) and assured that the study contains no risk factors. All data were aggregated, and the participant's identity was not disclosed. The protection of the identity of the respondents is critically important to ensure the best possible environment for honest responses. Through the support of SurveyMonkey, a code is assigned to each respondent and no names were associated with responses in any manner.

Only the researcher had access to the data provided by the participants and used for data analysis. Procedures for the protection of human participants were followed as required. The study presented minimal risk to participants, as it contains neither experimental treatment of the participants nor exposure to physical or psychological harm. No sanctions were applied if participants decline or withdraw from the study. All data will be kept under physical lock and key, while electronic data will be password-protected and only known to the researcher. After 3 years, all collected data in any form will be destroyed.

### **Internal and External Validity**

Creswell (2007) stated, "Validity means that researchers can draw meaningful and justifiable inferences from scores about a sample population" (p. 183). Issues that could affect validity of a study include inadequate design, poor participant selection, or incomplete outcome data. Validity includes both internal and external validity (Hammersley, 1998). According to Creswell, internal validity involves aspects related to either the population of the study or the procedures. Threats to internal validity are "problems that threaten drawing correct inferences that arise because of the experimental

procedures or the experiences of participants” (p. 325). Neuman (2005) described the 10 common potential problems to internal validity as selection bias, history, maturation, testing, instrumentation, mortality, statistical regression, contamination, compensatory behavior, and experimenter expectancy. Internal validity of the research study will be achieved by ensuring that the Principal Leadership Questionnaire is accurately transmitted according to the prescription of its authors.

External validity is the correlation between the findings of the study and relevancy to the general population (Creswell, 2007). According to Creswell, threats to external validity include problems that threaten drawing correct inferences from the sample data to other persons, settings, and past and future situations. External validity is the concept that the outcome of the study can be comprehensive to a greater population, termed generalizability (Creswell, Kitzinger, 1995). External validity suggests that the conclusions drawn from a study may be generalized to other similar situations. The conclusions from the study may be generalized to other schools in Oklahoma that institute the RtI project. A shared understanding of the results of the study could assist educators statewide and nationwide with information pertinent to decisions about the RtI project (Herrin & Spears, 2007).

### **Mandated Reviews**

The identification of reading problems holds promise for literacy improvement only when it is linked to reading interventions that are effective. Effective early-reading instruction has been thoroughly researched and discussed in several widely cited sources (National Reading Panel, 2000). A congressional mandated National Reading Panel (2002) concluded that the most successful way to teach children to read is through

instruction that includes a combination of methods. The mandated review included a panel that selected research from the approximately 100,000 reading research studies that have been published since 1966 and another 15,000 that had been published before that time. The assessments focused on the following areas: phonemic awareness, phonics instruction, reading fluency, reading comprehension, teacher education, and computer technology. The No Child Left Behind Act (USDE, 2001) has been a driving force for the focus on early literacy, especially in kindergarten and first grade. Research in the field of beginning reading has given educators both the knowledge of the critical foundation skills that make up reading and the tools to assess such skills early to prevent the development of reading problems.

### **Assessment**

A standardized battery of curriculum-based measurement (CBM) will be utilized. CBM is used to monitor progress in academic areas of reading, written expression, and math (Hintz and Silbergitt, 2005). CBM is used by educators as a measurement evaluation system to monitor student growth and whether an instructional program is effective. CBM utilizes general education curriculum for the basis of developing tests rather than using traditional psychometric applications of standardized assessment to achieve the necessary validity and reliability.

The National Reading Panel has identified five essential components of reading (NRP, 2000). Those five are phonemic awareness, phonics, fluency, vocabulary, and comprehension. The DIBELS is a commercial assessment program designed by the University of Oregon. This set of measures was designed to evaluate the attainment of early-literacy skills from kindergarten to sixth grade. Phonemic awareness can be defined

as the ability to identify and manipulate sounds in spoken words. It can be measured through the Initial Sound Fluency (ISF) and Phoneme Segmentation Fluency (PSF) measures. Phonics or the alphabetic principle is the correlation between written and spoken letters and sounds. This component of reading can be measured with Nonsense Word Fluency (NWF) and Oral Reading Fluency (ORF). Fluency is the ability to read quickly and accurately with proper expression and phrasing. The ORF measure assesses fluency and when combined with Retell Fluency (RTF) can be used to measure comprehension or the ability to understand what is read. Vocabulary, the knowledge of words and their meaning, can be measured with Word Use Fluency (WUF).

Teachers have the ability to administer and progress monitor frequently to obtain repeated measurements and assess student growth over time. This capability for repeated measurement is important because it increases reliability in student observation, allowing educators to identify trends in student progress, and allows rapid response when students begin to exhibit difficulty (Tindal & Marston, 1996).

### **DIBELS Results**

Schools and teachers must be able to identify and provide intervention to students who are at risk for reading failure. The identification of at-risk students is exactly what the publishers of the DIBELS assessment state it is designed to do. The DIBELS assessment was designed to identify specific literacy abilities and skills instead of surveying how well a student reads overall. It is much more suited to working with students who are just beginning school and are therefore just learning the skills they need. Naturally, there are many more tests that are implemented to determine how well children read. However, DIBELS is one of the most popular and is utilized most often. Children



with poor reading skills are not only unable to do well in reading classes—this difficulty extends to all areas of classroom instruction. Students who cannot read well often do not score as highly in other subjects because they read much slower and often do not understand much of the material (Haager & Windmueller, 2001).

The research study offered a body of knowledge in reading assessment by specifically examining the use of the DIBELS benchmarks in providing sufficient knowledge to drive interventions for reading success. This information may allow teachers and administrators to evaluate the utility of the DIBELS assessments in meeting the goal of raising student achievement in reading. Key questions that were answered include how and whether DIBELS test results individually or sequentially correlate with student scores in reading comprehension as well as fluency, phonetic awareness, phonics instruction, and decoding as demonstrated toward meeting the benchmarks designated for the appropriate grade level through the RtI intervention program.

### **Chapter Summary**

Solving the student literacy crisis demands more than a new textbook, a stand-alone technology program, or a couple of teacher workshops. Rather, it requires a complete instructional system that can overcome years of failure in a short time, while providing professional assistance to regular classroom teachers who have never thought of themselves as experts in reading instruction. Research-based techniques that include best practices in reading acquisition while building schools' capacity to improve early-literacy should be included in all school improvement plans. Striving readers must accomplish more than simply passing the state assessments. From the perspective of social welfare, it is important to look at America's future today. When all individuals in

a society are educated to the fullest extent possible, the number of individuals creating a financial load on society lessens. This means that there are fewer individuals who society and therefore the taxpayers are required to support. Solutions must be sought and implemented to improve America's literacy problem today. If the United States wants to remain competitive and serve as the world leader, the nation must address this serious issue by attacking it with research-based intervention programs that can offer positive results.

Understanding how a principal's leadership practices relate to the quality of instruction when establishing an intervention program designed to raise student reading achievement remains an issue (DuFour, 1997; Leithwood & Jantzi, 1990). The question of what role the principal plays in influencing staff development or leading an initiative that hopefully brings about increased student achievement has not been empirically researched in the 21 Oklahoma schools where the RtI project was originally initiated. The NCLB (USDE, 2001) requires all educators to use interventions that have been demonstrated to be effective through empirically based research; consequently, the results of the research study may add to the body of literature on intervention projects and the relationship of leadership to them. In addition, the American School Counselors Association (2003) national model requires increased attention to the documentation of impact through *results data* that include standardized measures of achievement.

Student achievement in reading is simply on the forefront of most requirements at both the state and national level. Implementation of mandates such as those in IDEA require school districts to monitor students who are falling behind in reading and have suggested methods and models such as RtI as a way to progress monitor while at the

same time placing intervention as a necessary component of the requirements. DIBELS is used in Oklahoma as a method to determine who receives intervention and who does not. A discussion on whether RtI is a successful way to bring about change in student's reading achievement and if school leadership is a vital part of that change is likely to happen when investigations such as this are brought to the table.

This chapter included discussion of the basis for selection of a quantitative research method. This selection included consideration of the setting and participants, procedure, and the analysis of data for the research study. The findings of the study will be presented in chapter 4.

## **Chapter 4: Results**

### **Introduction**

This chapter includes the results of the Principal's Leadership Questionnaire (PLQ) in relationship to the results of the pre and post DIBELS assessments given at the beginning and end of the year in first through third grades in six elementary schools in Oklahoma after implementing the RtI model of reading intervention. This study is designed to examine teachers' perceptions of the roles of elementary school principals as instructional leaders who offer the leadership necessary for school improvement in implementating a reading intervention program to increase the number of first through third-grade students reaching benchmark levels on the DIBELS assessment.

Throughout chapter 4 the methods of data analysis used to determine the findings are presented and discussed. The data were analyzed using Statistical Package for the Social Sciences (SPSS) statistical procedures to generate descriptive statistics (Mean, Standard Deviation, Frequencies, and percentages), Pearson Product-Moment correlations, one-way ANOVA tests, as well as multiple regression models.

### **Research Questions and Related Hypotheses**

Based on the background of the problem, the following research questions will guide the design of the methodology:

1. What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?
2. After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?

The following hypotheses are proposed, based on the research questions:

H<sub>01</sub> There is no relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>A1</sub> There is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>02</sub> After controlling for student characteristics (gender and grade level) there is no relationship between the principal's total PLQ score and student's DIBELS gain score.

H<sub>A2</sub> After controlling for student characteristics (gender and grade level), there is a significant, positive relationship between the principal's total PLQ score and student's DIBELS gain score.

### **Data Analysis**

Research Question 1 examines the relationship between leadership practices and gains and/or losses in student reading achievement after implementing the RtI model designed to increase student achievement through the use of an intervention program. Student's reading achievement scores were correlated with the principal leadership questionnaire (PLQ) total score (Table 4). The related hypothesis predicted that, "There was a significant positive relationship between the total PLQ and student's DIBELS gain scores". To address this, the student's reading achievement score was correlated with the principal's PLQ total score. A significant negative correlation was found ( $r = -.09$ ,  $r^2 = .01$ ,  $p < .005$ ). However, since the hypothesis predicted a positive relationship, this finding provided no support for the alternative hypothesis. Also, in Table 5 reading achievement was correlated with the student's gender and grade level. Achievement was positively related to student grade level ( $r = .10$ ,  $r^2 = .01$ ,  $p < .005$ ) but not related to the student's gender ( $r = -.02$ ,  $r^2 = .00$ ,  $p = .45$ ).

Research Question 2 investigates the relationship between student characteristics, gender and grade level. Research Question 2 asked, “After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?” The related alternative hypothesis predicted that, “After controlling for student characteristics (gender and grade level), there is a significant, positive relationship between the principal’s total PLQ score and the student’s DIBELS gain score.” To test this hypothesis, Table 6 displays the results of the multiple regression model predicting the change in the student’s reading achievement based on student gender, grade level and the principal’s leadership. The overall model was significant ( $p = .001$ ) and accounted for 1.8% of the variance in reading achievement. Inspection of the beta weights found changes in reading achievement to be more favorable in the higher grade levels ( $\beta = .10, p = .002$ ) when the principal’s PLQ score was lower ( $\beta = -.09, p = .005$ ). When grade levels are dummy coded as in Table 9 the inspection of the beta weights found changes in reading achievement to be somewhat more favorable for second-grade students ( $\beta = .07, p = .07$ ), more favorable for third-grade students ( $\beta = .11, p = .002$ ) and when the principal’s PLQ score was lower ( $\beta = -.09, p = .005$ ). The results from both analysis result in the correlation coefficient remaining the same ( $R^2 = .018$ ). However, since the hypothesis predicted a positive relationship, this finding provided no support for the alternative hypothesis.

Table 2 the frequency counts for selected variables. For the number of students at the six schools, their enrollment ranged in size from 68 to 315 ( $M = 173.00, SD = 95.76$ ). Roughly equal numbers of students were from first, second, and third grades. However,

there are more males students (55.8%) than female students (44.2%). For changes in reading achievement from the beginning of the year (BOY) to the end of year (EOY) about half the students (48.7%) remained at the same reading level while 21.1% decreased in reading achievement while the other 30.2% of students demonstrated an increase in reading achievement. This indicated a statistical significance in reading achievement and student grade levels but no statistical significance in gender.

Table 2 displays the frequency (percentages) counts for selected variables. For the number of students at the six schools, their enrollment ranged in size from 68 to 315 ( $M = 173.00$ ,  $SD = 95.76$ ). Roughly equal numbers of students were from first, second, and third grades. However, there are more males students (55.8%) than female students (44.2%). For changes in reading achievement from the beginning of the BOY to the end of year EOY about half the students (48.7%) remained at the same reading level while 21.1% decreased in reading achievement and the other 30.2% of students demonstrated an increase in reading achievement.

Table 2

*Frequency Counts for Selected Variables (N = 1,038)*

Variable	Category	<i>n</i> Students	%
School	A	250	24.1
	B	92	8.9
	C	68	6.6
	D	128	12.3
	E	315	30.3
	F	185	17.8

Grade level	First	329	31.7
	Second	362	34.9
	Third	347	33.4
Gender	Male	579	55.8
	Female	459	44.2
Change in reading achievement	Decrease	219	21.1
	Same	506	48.7
	Increase	313	30.2

Table 3 displays the results (means, standard deviation, Cronbach's Alpha) for the sixty-one teachers at the six school sites who rated their principal using the Principal Leadership Questionnaire (PLQ). The 24-item measure showed excellent internal reliability ( $\alpha = .98$ ) (Creswell, 2007) with a mean score of 4.35 on a 5-point scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*). Descriptive statistics were utilized for Tables 2 and continues through 4 using Mean, Standard Deviation, Frequencies, and percentages.

Table 3 *Psychometric Characteristics of the Total PLQ Score Based on the Teacher's Ratings of Their Principal (N = 61)*

Score	Number of items	<i>M</i>	<i>SD</i>	Low	High	$\alpha$
Leadership	24	4.35	0.77	1.75	5.00	.98

*Note.* Ratings were made with a 5-point Likert scale: 1 = *Strongly Disagree* to 5 = *Strongly Agree*.



Table 4 displays the frequency (percentages) distribution for the total Principal Leadership Questionnaire (PLQ) scores for the 61 teachers. All but twelve of the teachers (80.3%) gave their principal a rating of at least 4.0 on the 5-point scale with seventeen teachers (27.9%) rating their principal a perfect 5.0 across the 24-items questionnaire. There was a significant positive relationship between the total PLQ and student's DIBELS gain scores. The student's reading achievement score was correlated with the principal's PLQ total score. A significant negative correlation was found ( $r = -.09$ ,  $r^2 = .01$ ,  $p < .005$ ). However, since the hypothesis predicted a positive relationship, this finding provided no support for the alternative hypothesis.

Table 4

*Frequency Distribution for Leadership Scores Based on Teacher Ratings (N = 61)*

Score <sup>a</sup>	<i>n</i>	%
1.75 to 2.99	5	8.2
3.00 to 3.99	7	11.5
4.00 to 4.49	16	26.2
4.50 to 4.99	16	26.2
5.00	17	27.9

*Note.* Ratings were made with a 5-point Likert scale: 1 = *Strongly Disagree* to 5 = *Strongly Agree*.

<sup>a</sup> Score:  $M = 4.35$ ,  $SD = 0.77$ .

Table 5 examines the Pearson Product-Moment Correlation coefficient (Pearson's  $r$ ) to determine the strength of the linear relationship between the Principal's Leadership score, gender, and student grade level to reading achievement. Significant correlations are flagged with asterisks. Significant correlations indicate a reliable relationship but not

necessarily a strong correlation. Achievement was positively related to student grade level ( $r = .10, r^2 = .01, p < .005$ ) but not related to the student's gender ( $r = -.02, r^2 = .00, p = .45$ ).

Table 5

*Pearson Product-Moment Correlations for Reading Achievement with Selected Variables (N = 1,038)*

<sup>a</sup> Variable	Reading achievement
Principal's leadership score	-.09 ***
Student gender <sup>b</sup>	-.02
Student grade level	.10 ***

<sup>a</sup> Change: 1 = *Decreased* 2 = *Same*, 3 = *Increased*.

<sup>b</sup> Gender: 1 = *Male* 2 = *Female*.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .005$ .

Table 6 indicates the one-way ANOVA model was significant ( $F(2, 1,035) = 5.05, p = .007, \eta = .10, \eta^2 = .01$ ). Scheffe post hoc tests found for students who “decreased achievement,” their principal had significantly higher total PLQ scores ( $M = 4.37$ ) than for either the “same” students ( $M = 4.32$ ) or the “increased” students ( $M = 4.30$ ). It should also be noted that the squared eta coefficient ( $\eta^2$ , the proportion of variable explained in the relationship between the change level and their principal's PLQ score) only accounted for 1% of the total variance.

Table 6

*Comparison of Principal's Leadership Score Based on the Change in the Student's Reading Achievement (N = 1,038)*

Change <sup>a</sup>	<i>n</i>	<i>M</i>	<i>SD</i>
Decreased	219	4.37	0.24
Same	506	4.32	0.27
Increased	313	4.30	0.26

$F(2, 1,035) = 5.05, p = .007, \eta = .10.$

<sup>a</sup> Scheffe post hoc tests: Decreased > Same ( $p = .04$ ); Decreased > Increased ( $p = .008$ );

Same  $\approx$  Increased ( $p = .64$ ).

Table 7 indicates the results of the multiple regression model predicting the change in the student's reading achievement based on student gender, grade level, and the principal's leadership. The results of the comparison of the principal's PLQ score are based on the change in the student's reading achievement.  $F(3, 1,034) = 6.27, p = .001, R^2 = .018.$

*Table 7 Prediction of Change in Reading Achievement Based on Selected Variables (N = 1,038)*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>p</i>
Intercept	2.99	0.37		.001
Student Gender <sup>a</sup>	-0.04	0.0□	-.02	.42
Grade Level	0.0	0.□3	.10	.002
Principal's Leadership Level	-0.23	0.08	-.09	.005

$F(3, 1,034) = 6.27, p = .001, R^2 = .018.$  <sup>a</sup> Gender: 1 = Male 2 = Female.

## Additional Findings

Table 8 displays the results of the chi-squared tests comparing the change in student's reading achievement with the student's school, grade level and gender. The student's change in reading achievement was significantly related to both the school that they attended ( $p = .001$ ,  $V = .21$ ) and their grade level ( $p = .001$ ,  $V = .11$ ). However, neither Cramer's  $V$  statistic (Pearson correlation between two nominal variables) accounted for more than 4.4% of the variance (see Table 8).

Table 8

*Association of Selected Variables with Changes in Reading Achievement (N = 1,038)*

Variable	Category	Decrease		Same		Increase	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
School <sup>a</sup>	A	43	17.2	128	51.2	79	31.6
	B	35	38.0	35	38.0	22	23.9
	C	3	4.4	54	79.4	11	16.2
	D	48	37.5	46	35.9	34	26.6
	E	38	12.1	171	54.3	106	33.7
	F	52	28.1	72	38.9	61	33.0
Grade <sup>b</sup>	First	97	29.5	136	41.3	96	29.2
	Second	71	19.6	184	50.8	107	29.6
	Third	51	14.7	186	53.6	110	31.7
Gender <sup>c</sup>	Male	116	20.0	286	49.4	177	30.6
	Female	103	22.4	220	47.9	136	29.6

<sup>a</sup>  $\chi^2 (10, N = 1,038) = 89.74, p = .001$ . Cramer's  $V = .21$ .

<sup>b</sup>  $\chi^2 (4, N = 1,038) = 24.21, p = .001$ . Cramer's  $V = .11$ .

<sup>c</sup>  $\chi^2 (2, N = 1,038) = 0.89, p = .64$ . Cramer's  $V = .03$ .

In Table 9 the student grade level was treated as a continuous variable. However, as an additional analysis grade level was dummy coded to determine if the relationship between change, reading achievement, and grade level was non-linear. In Table 9 inspection of the beta weights found changes in reading achievement to be somewhat more favorable for second-grade students ( $\beta = .07, p = .07$ ), more favorable for third-grade students ( $\beta = .11, p = .002$ ) and when the principal's PLQ score was lower ( $\beta = -.09, p = .005$ ). Note the coefficient of determination remained the same as Table 7 ( $R^2 = .018$ ).

Table 9  
*Prediction of Change in Reading Achievement Based on Selected Variables (N = 1,038)*

Variable	<i>B</i>	<i>SE</i>	$\beta$	<i>p</i>
Intercept	3.03	0.37		.001
Gender <sup>a</sup>	-0.04	0.04	-.03	.42
Second Grade <sup>b</sup>	0.10	0.05	.07	.07
Third Grade <sup>b</sup>	0.17	0.05	.11	.002
Principal's Leadership Level	-0.23	0.08	-.09	.006

$F(4, 1,033) = 4.73, p = .001. R^2 = .018.$

<sup>a</sup> Gender: 0 = *Male* 1 = *Female*.

<sup>b</sup> Dummy Coded Variable: 0 = *No* 1 = *Yes*.

### Field Notes

The researcher in this study visited individual schools included in the research to gather data on both DIBELS and principal leadership behaviors. When visiting 4 of the 6 research schools it became apparent the school leader was unable to ascertain what

information the DIBELS assessments provided nor could they provide the researcher with the requested data information. Staff members who were assigned to actually oversee and monitor the progress of the RtI model were unfamiliar with obtaining DIBELS results from their computer program. The researcher had to physically help school personnel print student data on individual students. In several cases the researcher provided a mini lesson on how to use the data collected through the testing process to determine individual student reading achievement. At one point, the school personnel expressed a true appreciation for the support from the researcher on how to disaggregate data as well as review documentation on students to determine where the weaknesses were for classroom teachers. One staff member explained they had been given the responsibility to oversee the RtI and had no concept as to how the program was to be implemented or how to use DIBELS. It again, was apparent there was a lack of an understanding of professional development on the DIBELS in regard to implementation and disaggregation of data to best benefit students in the RtI research schools.

While seeking the completion of the Principal Leadership Questionnaire (PLQ) the researcher offered three ways for the teachers to complete and return the survey. Teachers could use SurveyMonkey on line to complete the questionnaire at their leisure, they could complete it and personally give it to the researcher while the researcher was present, or they had the opportunity to send it to the researcher by mail. The researcher received questionnaires in all three modes of collection but ran into some resistance for various reasons. One such reason was the teachers were extremely afraid their principal might review he results, leaving the entire third grade at one particular research school uncooperative to the researcher's plea to complete their PLQ. These teachers were under

control of an upper primary principal while the teachers under the leadership of the lower primary principal completed their surveys without concern. In most cases the principal at the school designated someone to be in charge of handing out the surveys and returning them to the researcher by mail or allowing them to use SurveyMonkey. Most teachers were not familiar with SurveyMonkey.

School E asked the researcher to return after being notified and receiving an appointment to give the special education/curriculum director time to contact someone who could possibly run the DIBELS program. The special education/curriculum director was relying on a classroom teacher to help her gather the necessary data to determine if their school was demonstrating progress using RtI and DIBELS. Although the special education director/curriculum director understood confidentiality, she was unaware how to run the necessary reports, yet was considered the person in charge of the RtI program. The researcher returned to the school for the information where the superintendent assured her the results would be mailed directly to her. After receiving the data by mail and completing the statistical analysis the results indicated a very weak school as to their student reading achievement. When comparing the DIBELS data to the API the conclusion was confirmed, School E was the lowest performing school in the research study and fell below the state average for reading (1103) on their API (963). This type of results certainly indicated that Oklahoma needs to provide more training and professional development for schools such as School E before we can move ahead toward No Child Left Behind. Even though RtI has value, school leaders and teachers need to know how to intervene or determine if the intervention is working.

One school we will call School Zero failed to get the data to the researcher in time to be included in the research but did eventually respond to the request for data. At that time the researcher provided the necessary information and actually trained the teacher responsible for RtI and the use of DIBELS on how to acquire data, for current as well as previous years, and received a sincere appreciation on the part of the teacher. This teacher was excited to find she could actually look up individual student results and return to previous years to create an individual chart on every student in her school.

School D was the only school whose principal as instructional leader was able to immediately run the data on individual students, code them and supply them to the researcher. School F was also able to quickly provide the requested data information as they had a curriculum coordinator who collected and sent the results to the researcher. When only two out of six schools demonstrated that they used the DIBELS effectively, suggests that Oklahoma principals and instructional staff need professional development and training on how to implement and use RtI as well as DIBELS to gain valuable information on individual students to enhance student reading achievement.

In her own school the principal researcher uses data to drive instruction, to determine successful teaching strategies, to make changes when necessary, to provide parents with documentation on their student, and provides professional development for the staff. When student information is not monitored appropriately, some students may remain in the same level (strategic or intensity) throughout the year. When DIBELS indicates those lower proficiency levels and when students do not move levels, an intervention should occur. DIBELS requires students to be progress monitored every three weeks. There is no reason for students who are not improving to be evaluated to



determine the necessary steps to take to improve. If a student remains in the same level over a progress monitoring period, principals and teachers meet to create an intervention plan for that individual student. This process takes time, an understanding and knowledge of disaggregating the information and knowing how to interpret the results.

Oklahoma has quality leaders and staff but an increased emphasis on the use of data collection, interpreting those results, and how to implement interventions that work is needed. DIBELS is beneficial in determining students who fail behind in reading but this study indicates that the DIBELS is not used to prevent students from failing to meet benchmark status. RtI is a beginning in the process of change in providing lower students the opportunity for extra instruction. Is it the results of the intervention; failure to understand the data, or both? This study suggests there was not enough training for the RtI schools in implementing the intervention nor how to diagnosis assessment results. A recommendation from this study is that Oklahoma develop an opportunity for leaders and teachers to learn the steps in disaggregating data, using it as a change agent in individual schools to monitor students as individuals providing the necessary resources to change the end results where more and more students are reading to learn rather than learning to read.

### **Chapter Summary**

This chapter summarizes the purpose of the study and the methods used for data analysis. The purpose of the study is to examine the correlation between the quality of leadership behaviors of school principals and the success or lack thereof of reading intervention programs specifically in RtI schools.

In response to research question, “What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?” the researcher investigated student’s reading achievement scores by correlating the principal leadership questionnaire (PLQ) total score finding a significant negative correlation ( $r = -.09$ ,  $r^2 = .01$ ,  $p < .005$ ). However, since the hypothesis predicted a positive relationship, this finding provided no support for the alternative hypothesis. Investigating Research Question 2, reading achievement was correlated with the student’s gender and grade level. Achievement was positively related to student grade level ( $r = .10$ ,  $r^2 = .01$ ,  $p < .005$ ) but not related to the student’s gender ( $r = -.02$ ,  $r^2 = .00$ ,  $p = .45$ ).

A multiple regression model illustrated change in student’s reading achievement based on student gender, grade level, and the principal’s leadership. The overall model was significant ( $p = .001$ ) and accounted for 1.8% of variance in reading achievement. Inspection of the beta weights found changes in reading achievement to be somewhat more favorable for second-grade students ( $\beta = .07$ ,  $p = .07$ ), more favorable for third-grade students ( $\beta = -.09$ ,  $p = .005$ ). These results provided no support for the alternative hypothesis.

## **Chapter 5: Interpretations and Implications**

### **Introduction**

The purpose of this chapter is to present a summary of the research study and discussion of the findings. The summary includes a statement of the problem, a review of the methodology, and a summary of the results. There are indications for further research, which may offer recommendations for practitioners and suggestions for additional research. The discussion is based on the responses of the two research questions that explored the relationship between reading achievement using the RtI intervention method and the teacher's perceptions of their principals' leadership behaviors.

### **Research Questions**

1. What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?

2. After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?

A quantitative approach (Creswell, 2009) is used to explore the effectiveness of leadership behaviors of school principals using the PLQ (Leithwood & Jantzi, 1996; Valentine & Lucas, 2000) at six Oklahoma elementary schools and correlated results with the reading achievement of first-, second-, and third-grade at-risk students in each selected elementary school using the RtI model. The independent variable for this study includes PLQ total scores with the student's gender and grade level used as covariates. The dependent variable for this study is the change in the student's DIBELS score from

pretest (BOY) to posttest (EOY). The results of the data were analyzed using Statistical Package for the Social Sciences (SPSS).

### **Issues Addressed**

Throughout America increasing emphasis is placed on reading assessment and intervention strategies at the k-3 level to identify students reading below grade level as early as possible and to investigate appropriate instructional interventions where necessary (Britto et al., 2006). According to Leithwood and Jantzi (1990), successful student achievement requires school principals to respond to challenges with appropriate leadership practices to ensure every student achieves at the highest level possible. Therefore, certain principal leadership skills are essential to answer the challenges posed by curriculum standards (both state and local), high-stakes testing, accountability requirements, and the increasingly diverse student populations in Oklahoma schools.

Although there are many studies designed to explore leadership qualities of school professional staff and many more focused on reading achievement of students, the relationship between leadership practices and the level of reading achievement in Oklahoma RtI programs has been largely unexplored. School principals continue to be challenged to direct staff through the complex changes imposed by complicated educational mandates in the NCLB (2001) and the ESSA (2009). In addition to these challenges, leadership qualities of the site principal influence the success of reading achievement of first-, second-, and third-grade at-risk students.

### **Methodology Revisited**

The study utilizes a quantitative (Creswell, 2009) approach to study the effects of principal leadership behaviors reflected through the use of the RtI pilot programs in

elementary schools in Oklahoma. Proper consent to access school assessment information is assured and acquired through the superintendent and principal at each school district. Quantitative data are obtained using SurveyMonkey to collect and document principal leadership questionnaires sent to teachers ( $N=108$ ) with a return rate of approximately 57%. The questionnaires are collected and quantified by the survey service (Survey Monkey). The results are analyzed by a univariate correlational analysis using Statistical Package for the Social Sciences (SPSS). The leadership behavior questionnaire utilizes Jantzi and Leithwood's PLQ from the Center for Leadership and Development in Toronto, Ontario, Canada. The PLQ measures principal leadership behaviors in six constructs including vision, modeling behavior, fostering commitment, providing individual support, providing intellectual stimulation, and maintaining high expectations toward those within the school walls. Research conducted by Leithwood et al. (2004), in conjunction with the Wallace Foundation, considers the concept of leadership as evidence that students were affected by both administration and distributed leadership in a positive way.

This research study centers on six schools involved in the Oklahoma State Department of Education's RtI pilot program throughout the state to incorporate a reading initiative designed to increase student reading achievement. Twenty-one schools are contacted to participate; however, only nine agree to take part in the research study. Three of those nine schools fail to provide adequate data; therefore, they are eliminated from the study. Each school varies in size, area of the state where they were located, and how many students were considered at-risk of reading failure. Each school determines the students involved through the use of the DIBELS assessment at the beginning of the

school year. If the student failed to meet the criteria for satisfactory reading progress, the individual student are placed in the RtI program. Results are obtained after the student completed the school year (DIBELS end of the year assessment) determining the level of success through the use of the RtI model for individual students.

Previous research indicates the importance of early identification as a key responsibility of the school administrator. His or her leadership behaviors can create an effective school that tackles challenges by establishing a vision that drives instruction, eliminates chaos, and monitoring intervention strategies to focus on continued student achievement (Roskos & Vukelich, 2006). Included in the research are individual student achievement in reading over a 1-year period. A total of 1,038 students pretest and posttest assessments are analyzed to determine the success of the Oklahoma State Department of Education's pilot program using RtI, and whether the principal's leadership behaviors play a role in that process. Student assessments using results from the growth from the fall and spring DIBELS reading (BOY and EOY) are collected for analysis using SPSS.

### **Summary of Results**

Students from six school districts in Grades 1 through 3 ( $N = 1,038$ ) are selected to participate, being identified to attend the pilot project RtI program. RtI is designed to increase student reading achievement through intervention methods. The pretests and posttests are used at the BOY (early September), and EOY (late April). DIBELS assessments track the success rate of RtI in improving reading achievement. Students are individually scored and the results supplied to the researcher. Each school codes the

students by number to protect their identity and gives the researcher access to the necessary research data.

The total number of students for the six research schools ranges from 66 to 315 ( $M = 173.00$ ,  $SD = 95.76$ ). A total of 1,038 students' assessment results are collected. The number of students per grade level roughly equaled the same for first, second, and third grades. There are slightly more males than females (55.8% males to 44.2% females). The results indicates that there were more students who remained on the same reading achievement level (48.7%) than those who increased their reading level (30.2%). The total number of students who decreases in reading achievement was 21.1%. However, it appears more students increased their reading achievement in second grade over first and third grades (34.9% to 31.7% and 33.4%). School E appears to have a better success rate on increases in reading achievement with a 30.3% to a smaller sampling school C with a 6.6% rate using only 68 students. Gender does not seem to play a significant role in reading changes either increasing, decreasing, or remaining the same (male 55.8% to female 44.2%).

The results for the 61 teachers (57%) who participated in the PLQ at six school sites rates their principal an average mean score of 4.35 on a 5-point Likert scale. The questionnaire includes 24 questions related to the principal's leadership behaviors while the school district was implementing a reading intervention project. All but 12 teachers (80.3%) give their principal a rating of at least 4.0 on a 5-point Likert scale with 17 teachers (27.9%) giving their principal a perfect 5.0 on all 24 questions. The results indicate that better leadership did not increase student achievement. The post hoc tests find for students who decreased achievement their principal has significantly higher total

PLQ scores ( $M = 4.37$ ) than for either the “same” students ( $M = 4.32$ ) or the “increased” students ( $M = 4.30$ ). These results do not coincide with previous literature on the perceptions teachers have on their leader in connection to student school success (Leithwood & Jantzi, 1994; Leithwood, Jantzi, & Steinbach, 1999; Waters, Marzano, & McNulty, 2003). There are several explanations for these results one which may indicate teachers could have possibly held some type of concern or fear in rating their principal. However, it could also indicate poor instruction on the part of the instructor implementing the RtI model. The relationship between principal and instructor might imply respect for their leader but no vision for what they hope to accomplish using the RtI model. These results present a question to why the high leadership scores and low student achievement occurred throughout the six schools.

### **Discussion of Findings**

Research persistently implies that principal leadership impacts student achievement (Hallinger & Heck, 1996). Although research studies links school improvement to leadership (Leithwood, Jantzi, & Steinbach, 1999), the results of this research find no positive statistical findings linking the perceptions of teachers toward their principal to the improvement of students’ increased overall reading achievement using the RtI model of intervention. School leaders have both a moral and ethical obligation to improve student achievement. The emphasis on literacy through NCLB Act (2001) increases the accountability principals’ encounter; however, in this study the principal’s are rated prominently at the high end of the 1 to 5 Likert scale with 80% scoring four or above. Student scores suggest principals who scored four or higher failed to see an increase in their reading achievement. The majority of students remain the



same without making process toward the necessary benchmark required for their grade level.

Research Question 1 asks, “What is the relationship between leadership practices and gains in school reading achievement in an elementary school setting?” The frequency distribution for the 5-point scale ranges from 8.2% to 27.9%. The return of the PLQ results in 61 returned out of a total of 108. A portion of teachers share a concern their principals would somehow gain access to the results of the questionnaire. School E has just completed a survey requested by their superintendent. Therefore, several of those teachers indicate they do not want to participate in this research. Nonresponse is a serious problem in any survey research. “Researcher hope that everyone surveyed will return a complete questionnaire, but this seldom happens” according to Ary, Jacobs, & Razavieh (2002).

Research Question 2 asks, “After controlling for student characteristics (gender and grade level), what is the relationship between leadership practices and reading achievement in an elementary school setting?” This question investigates the variables grade level and gender, where second-grade students encountered higher level of proficiency than first or third (34.9%). Achievement scores are correlated with the principal’s PLQ total scores. Significant correlations indicate a reliable relationship but not necessarily a strong correlation. Achievement is positively related to student grade level ( $r = .10$ ,  $r^2 = .01$ ,  $p < .005$ ) but not related to the student’s gender ( $r = -.02$ ,  $r^2 = .00$ ,  $p = .45$ ). Frequencies counts indicate more male students than female students increased their reading scores (55.8% to 44.2). The results also indicate the largest number of students remained in the same reading category (strategic or same level; 48.7%) than did

those increasing to benchmark (30.2%). School E has the highest percentage of students with a frequency count of 30.3% out of a total of 362 students. School C demonstrates the lower rate of improvement at 6.6% with 68 students participating.

### **Effective Leadership**

Today, effective leadership comes in the form of accountability. As Leithwood (2003) suggested, “Local, state, and federal achievement standards for ambitious learning for all children have changed the landscape of educational accountability” (Leithwood, 2003). Effective school leaders provide a careful analysis of collected data identifying problem areas and individual student needs, and implement classroom assessments that reflect state and national standards. While tremendous amounts of research indicates effective school leaders use student data to identify success or failure through assessments and guide instruction based on those results, the results of this research suggest that this is not the case in Oklahoma schools. Nor do the findings in this study conclude that school leaders impact whether the RtI intervention program affects student progress in a positive way. As the researcher investigates individual RtI schools, it becomes apparent that principals (see field notes) could not identify parts of the RtI program or how the program worked in their district. This lack of leadership is further demonstrated when the researcher visits the school district to find the school leader unable to use the necessary technological tools to retrieve the results of the students in their district. Sergiovanni (2000) indicates that deep change occurs only when leaders treat schools as communities sharing core values, commitments and passions. Effective leaders focus on accountability and create road maps on improvement without neglecting the overall plan for improvement (Valentine & Lucas, 2000). Effective leadership

requires school leaders to maintain the necessary knowledge and influence in order to see change happen when their students are not progressing at a mandated rate. In recent effective leadership research, Marzano (2003) describes three principles included in the principal's routines that are necessary to boost school success. Those principles include the principal providing cohesive influence that ensures success, providing strong guidance while demonstrating respect, and finally by demonstrating specific behaviors to boost interpersonal relationships. Marzano continues to emphasize the best way to implement effective leadership was through interpersonal relations. In contrast, school principals in this research through the questionnaire (PLQ) are rated high in interpersonal relations yet the majority of their students failed to meet grade level benchmarks in reading.

A growing body of research documents "the impact of good leadership may be difficult to determine but the effects of poor leadership are easy to see" (Leithwood, 2003, p. 2). This research concluded that several of the schools involved in the results were ineffective but connecting those results directly to the principal was not accomplished (see field notes). According to some experts effective leadership has two functions, one to provide direction and the other to exercise influence (Leithwood & Riehl, 2003). Sparks (1991) argued that leadership persuades and sways a group to act in a certain manner in accordance with the leaders' intent, or the common purpose of the group. Improving literacy among young children depends upon such capabilities of the school principal as leader. This area is where the researcher felt a lack of communication between the classroom teachers implementing RTI to the principal failed to meet the

hypothesis. The researcher being familiar with Leithwood's studies on leadership expected to find a significant relationship between the RtI program and the principal.

The success or lack of success in the RtI program leaves the unanswered question as to why students in the RtI project did poorly in reaching the required benchmark level in reading. The leader must build trust and develop a stable organizational climate much like a business or organization. Effective principals can express a clear knowledge of assessment and make extremely important instructional decisions based on data collected within the school. The principal as the school leader is required to know what is happening in his/her school and implement instruction change when necessary to improve overall student achievement (Leithwood et al., 2004). The lack of knowledge and the importance of using data to drive instruction were lacking in all six schools although two of the leaders demonstrated more knowledgeable than others when it came to actually using the data to implement change.

Leadership styles vary as do schools. Marzano (2003) suggests that principals need to demonstrate specific behaviors in order to boost interpersonal relationships. Leithwood (1992) identifies leadership behaviors in the field of education as transactional and transformational. The transactional leader uses a method where the leader desires to exchange one thing for another. Transformational leaders "recognizes and exploits an existing need or demand of a potential follower and looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower" (Burns, 1978, p. 4). Leithwood finding show these leadership models when applied to education are a promising concept as to the leadership required to meet many educational reform objectives, including the development of a collaborative or common technical

culture. Leithwood's survey instrument is designed to measure the degree of certain leadership behaviors in an educational setting. This survey (PLQ) is also designed to measure the faculty's views of their principal's behavior management (Reeves, 2004). The survey identifies each continuum of transformation for transactions completed in the style of leadership.

This research indicates the school principal is considered well respected, as an asset to the district, and influences faculty in a positive way. The teachers rate their principal extremely high on the leadership behavior scale by giving them a majority PLQ total score of 4.00 or higher (80%) on a scale of 1.00 to 5.00. These results suggest that the principal's leadership behaviors would impact student achievement. Even after Leithwood et al. (2004) built a compelling knowledge base for understanding a common set of basic leadership practices used by successful leaders to influence student achievement the importance of how instruction plays into it may result in a different conclusion. This study concludes that a principal rated high on the PLQ does not necessarily produce improved reading achievement as based on the DIBELS assessments alone in first, second or third grade over a 1-year period, and the lack of reading achievement. These data suggest that factors other than the principal's leadership may impact the scores on the DIBELS.

Leadership advances in educational research have continued to focus on rigorous standards to develop best practices that lead to overall excellence in America's schools. If change is to impact student learning, teacher and school accountability, school leaders have to dramatically increase the skills and knowledge of teachers and principals (Farrace, 2002). This study suggests that in several schools in Oklahoma leadership and

effective implementing reading intervention programs that build reading achievement is lacking. In the schools in the study school leaders are leaving the process of RtI up to the classroom or reading teacher. Previous research indicates that the effective leader and the best practices used to influence reading achievement begin with the school becoming a professional learning community. Effective reading initiatives take teamwork and a working knowledge of the process required to change academic strategies that best fit their school. Leithwood et al. (2004) relates team work to building teacher capacity.

Although some of the schools in this study demonstrate a true concern and desire to increase reading achievement, the ultimate decision starts with the school leader. The school leader, generally the school principal, have to agree with the Oklahoma State Department of Education to implement RtI to improve their reading scores throughout their district. Best practices in organizations are characterized by various motivating, monitoring and controlling functions by individuals in positions of authority. The research makes one wonder if the teachers were included in making that commitment to the State Department of Education or if the school principal made the decision alone to implement the pilot study. Along with transformational leadership, instructional leadership has also been a frequently researched model of school leadership. Instructional leadership centers on how leadership enhances educational results. This research indicates these are significant pieces missing in the process of instructional leadership. Instructional leaders who use best practices or research-based methods focus on overall school objectives, the curriculum, instruction, and the school environment, while transformational leaders focus on reorganizing the school by improving school conditions (Stewart, 2006).

America's principals are challenged daily to act as instructional leaders. As Marzano (2003) suggests principals influence instruction to ensure success, must provide strong guidance while demonstrating respect, and exhibit the type of leadership behavior that increases interpersonal relationships. Thus, principals who challenge themselves to be current and continue to learn even though they may have years of experience in the field are more effective. Successful school principals are those who are persistently communicating a mission of success for all throughout the entire professional learning community. The RtI project is considered an accountability issue as the school leader needs to provide resources, training, as well as all the necessary tools for the classroom teachers to develop a unique and positive program for students who are struggling in reading. Principals are no longer simply building managers. In today's educational world, principals are required to manage schools as a business striving to deliver a group of persons ready to challenge the diverse world in which we live. Principals are responsible to maintain knowledge of academic content and pedagogical methods. Data-driven leadership seems to be a serious area of need as some school principals failed to readily access the student data when the researcher visited the schools to establish whether the RtI program was truly making a difference in students' reading ability.

The field notes suggest some principals do not feel responsible for the success or failure of programs like RtI. There seems to be more blame directed to the students themselves or the RtI instructor. According to Sergiovanni, currently there are too many principals trying to do it alone (2007). School leaders who empower those around them to meet the challenges found in national and state standards hold the power to implement change that influences student achievement. Fullan and Watson (2000) recommend

continuation of research searching for important and useful dialogue to influence the future academic leadership initiatives that will ultimately impact student achievement. This would certainly include RtI as one of those initiatives.

### **Improvement of Reading**

Research on learning trajectories shows that children with low reading skills in first grade have a high probability of continuing to have such difficulties throughout school (Juel, 1988; Mead, 2010; CIREA, 2001), while falling further behind peers with each passing year (Stanovich, 1986). Literacy development starts early in life and continues through adulthood. The ability to read is a prerequisite for becoming a successful adult. Adults with low levels of literacy are likely to have significant difficulties on an economic level, a direct result of impaired ability to function in a world requiring employment. As early as 1997, some suggest America functionally at-risk due to a staggering numbers of adults who could read and were considered illiterate (U. S. Department of Education).

In response to the enormous number considered at-risk in reading achievement NCLB (2001) was passed. This Act created challenges for schools to become accountable for meeting the requirements in core academic areas to make Annual Yearly Progress (AYP). Researcher and schools began to seek strategies to intervene in students who fail to make annual progress or do not meet the criteria necessary to achievement reading success. This research study showed there are staggering numbers of students who are not making yearly progress nor or they reading on grade level. This study supported the previous early-childhood research that has indicated more and more students exhibit reading difficulties in America today. Darlington et al. (1980) found that



disadvantaged students who received interventions at a young age were more likely to be in the appropriate grade and less likely to be in special education compared to peers who did not receive early intervention. Children who attended early education programs have been more successful in school compared to children who did not (Weikart, 1981). This type of research encouraged the implementation of reading intervention programs designed to increase student achievement.

### **Implementation of RtI**

New regulations included in the IDEA of 2004 are making it imperative that changes occur involving all administrators, principals, and educators across the United States (Rinaldi & Herman, 2009). Implementing effective intervention strategies is one of the most investigated aspects of the IDEA mandates. RtI is such an intervention. Devaney (2009) describes the Response to Intervention Action Network as the savior for the lower socioeconomic students by promoting collaboration among all administrators, teachers and families as it serves as a researched-based system to identify struggling readers early. RtI matches the intervention to the individual student needs (Duhon & Hartzell, 2009).

Oklahoma State Department of Education implemented an RtI pilot project in 2009 for the purpose of intervening early in students educational lives to impact their ability to read. The RtI model assesses the students' current level of functionality while establishing appropriate learning goals for the individual student. RtI is designed using research-based interventions specially formulated to meet individual student's precise needs. The process uses assessment data as a tool to determine immediate intervention strategies and monitoring the students' response to the intervention. In this process, the

school administrator (principal) is considered a major player in developing a successful RtI program. This research shows a serious need to implement reading interventions such as RtI to encompass the large number of students who are not becoming fluent readers. This study reveals the limited success rate of students, with 48.7% not advancing from one level to the next from the beginning of the year to the end of the year on the DIBELS assessments. These DIBELS results indicate a lack of success in meeting RtI goals.

The leadership aspect of the principal includes providing the necessary tools, training, and resources needed to directly impact student achievement. The implications are that principals are not providing the necessary leadership to accomplish success in implementing RtI. The first step in making changes happen with RtI in Oklahoma includes; determining why the largest number of students are not reaching benchmark. Further investigations into how the programs are developed and methods of instruction are handled may offer some explanations on the poor results.

Prioritizing changes and potential outcomes, allowing the current experiences to drive future planning is vital. DuFour (2004) reported that guidelines should be established for a variety of levels and types of communication among all stakeholders. This includes leadership in the principal, teacher and student roles (as cited in Rinaldi & Herman, 2009). For successful implementation of RtI structures and conditions similar to those suggested in which everyone is held accountable for results are required. In this pilot project, 21 schools agreed to participate in the state pilot program. These schools are located selected around the State of Oklahoma. The schools vary in size from extremely small to larger districts that had more than one building. The pilot schools are

required to collect data through the use of DIBELS or BEAR assessments to monitor achievement progress. This research utilizes only 6 schools using the DIBELS form of assessment. These assessments are done three times during the year, one at the beginning of the year, one midyear, and one at the end of the year. This study only uses the pretest and the posttest. Individual student assessments are recorded using a computer-based program. The program included in this research was the DIBELS assessments using M-Class to maintain individual records on students. Students in the research are each coded and names protected using a number system at each individual school. Each student has records depicting growth and non-growth throughout the school year 2009-2010. Each student's information on his/her particular results on all three assessments indicates whether the student made progress toward the necessary benchmark for successfully completed reading achievement required for their grade level. Students are either in the strategic or intensive category to be included in the research. The research study compares the beginning of the year results to the end of the results and whether there was sufficient growth in the individual student in his or her grade level. All students involved in the research are identified to receive reading intervention using the RtI method.

Some question the effectiveness of the DIBELS a Curriculum-Based Measurement (CBM) model to predict reading achievement in students in Grade 1 through 3. The DIBELS may serve as one limited measure of students reading success especially if used often to monitor student progress. One difficulty in the use of the DIBELS might be who is doing the individual students evaluations of the results and their expertise or training. DIBELS documents "the reliability and validity of the measures as

well as their sensitivity to student change” according to previous research done by the Kaminski and Good (1996).

### **DIBELS Discussion**

When examining the results of this research one would have to consider the use of the DIBELS as the only assessment tool used to determine student reading success. DIBELS is designed to test fluency and accuracy. However, fluency is not an end in itself but rather a critical entryway to comprehension. Tierney and Thome (2006) question the effect of DIBELS when responding to the professional judgment of well-trained classroom teachers as well as its link between testing, accountability, and student learning. DIBELS requires teachers to look at student achievement through a narrow lens. In a Michigan State University Position Paper, Pressley, Hilden, and Shankland (2005) present their findings leading to the conclusion that “DIBELS mispredicts reading performance on other assessments much of the time, and at best is a measure of who reads quickly without regard to whether the reader comprehends what is read” (p. 2). Researcher Douglas Reeves (2004) points out school principals should not get excited by high DIBELS scores. Students have to learn to summarize, and grasp the main idea, effectively comprehend while developing all five essential elements in learning to read. DIBELS does not do that and according to Reeves this does not necessarily mean DIBELS is worthless; it is simply a part or piece of the reading process determining student reading achievement.

The U. S. Department of Education has led many to believe DIBELS is the assessment of choice, by excluding other assessments during the development of the Literacy First initiative. Research points to numerous valid and reliable assessments of

early reading being used throughout many American classrooms before DIBELS. Very little was known about DIBELS before Reading First. Reading First legislation called for tests to be used for screening, diagnosis, and progress monitoring, to ensure that students receive the appropriate level of instruction and remediation necessary to become proficient readers. Kentucky and Illinois are two states that have documented complaints about the use of DIBELS (Orwell, 2006). Susan Seay (2006), a professor at the University of Alabama, in her contribution to the book, entitled "How DIBELS Failed Alabama," states:

Unfortunately, Alabama reading scores are stagnant. The expectations that state authorities had that DIBELS would improve reading achievement have not been fulfilled? Findings from this study suggest that testing students on how fast they can read is not leading students in this district to higher test scores, and is clearly not leading to meaningful reading. When speed becomes the goal of reading instruction, rather than meaning and purpose, students lose. (pp 62 and 63)

Ken Goodman (2006) in his book "*The Truth About DIBELS*" gives a summary of subtests and investigates the DIBELS purposes and if these purposes are consistent with the authors' theory of reading development. Goodman also examines the possibility that the test and subtests could misrepresent the success or failure of pupils based on the tester's philosophy of reading. Therefore, the results of this research could come under scrutiny from those who believe as Goodman as well as other educational professionals that DIBELS should not be used as a sole indicator of reading success. Susan Orwell (2006) indicates DIBELS was the "only assessment presented to states by reviewers of the state Reading First Leadership Academies and it was then pressed on states by

reviewers of the state Reading First applications” (p. 1). According to the Center on Education Policy (CEP) states are very consistent in using the DIBELS to progress monitor student reading achievement. In 2006 CEP indicates that 37 states required the use of DIBELS as part or all of schools assessments with five additional states using it simply as a choice. Oklahoma relies heavily on DIBELS although the B.E.A.R. is also available to schools as a choice to comply with the state required reading assessments. When the researcher investigated the Oklahoma pilot RtI project it revealed 18 schools out of the 21 schools used the DIBELS solely as their progress monitoring tool. Since this study is based on DIBELS three of the 21 schools used the B.E.A.R. and were eliminated from the study.

There is evidence through many educational realms that indicate DIBELS may or may not be a valuable tool when assessing reading readiness or benchmark status. The results of this research reflect some doubt on the use of the DIBELS as the only assessment used to determine if students are reaching reading proficiency or not, especially when connecting the school leader and his/her ability to impact reading achievement when the DIBELS is the only indicator of reading success. Further research on principal leadership impacting student achievement may result in different results if other types of assessments are used. If one looks at the third grade only API reading scores in Oklahoma one would see students in these same research schools scoring 70% advanced or proficient with an average of 30% scoring limited knowledge or unsatisfactory in reading, in comparison to a 48.7% scoring below benchmark on the DIBELS assessments for the same assessment period. Throughout this research DIBELS

appears to only be a small indicator of reading achievement and research results from these assessments could be questioned.

If previous research is any indicator of validity then one must look closely at the use of DIBELS as the only assessment used to determine if students are progressing in reading achievement in the research schools. To make an adequate determination if principal leadership behaviors impact student reading achievement one should consider using more than one type of assessment and pursue a reliable survey instrument that better indicates a correlation between the two. As long as the DIBELS is not used for monitoring to shape instruction the controversy remains the same. The results of DIBELS must be understood, used as a change agent, and drive instructional strategies by all stakeholders within the school district. If school districts do not use DIBELS data by school leaders and teachers to differentiate instruction through the data collected it will surely remain a questionable assessment.

All the research schools use Mclass (DIBELS website) direct as the method of documentation. Mclass is a literacy software program designed to provide step-by-step guidance to target interventions for students most in need. Very few persons involved in this research (including school leaders, teachers, and persons responsible for the actual implementation of RtI) supply the necessary data needed to determine student success using data that not only indicated where the student was low or how they were progressing. As a matter of fact several principals and teachers involved in the research study are unfamiliar on how to use DIBELS successfully such as finding results on individual students or past records. The overall result of this research shows that neither Oklahoma school leaders nor classroom teachers use data to drive instruction based on

the schools failure to move the most students to benchmark. Neither do they implement changes throughout the year if a program fails to increase academic achievement in the area of reading.

### **School Findings**

School A identified 249 students to participate in the RtI project. Seventy-eight first-grade students were assigned to RtI intervention. Forty-one of those student reached benchmark on the DIBELS assessment. Fourteen students remained on the same level, and 23 students decreased in achievement. When determining male and female, 4 females remained the same, 24 females increased, leaving 12 females decreasing in achievement. The male results indicated 10 males remaining the same, 17 males increasing, and 11 males decreasing in achievement. In second grade, 85 students were included in the study with 35 students reaching benchmark. Thirty-five of those students increased in achievement. Twenty-six students remained on the same level. Thirty-five students increased with 24 students decreasing in reading achievement. Ten females remained on the same level, 12 females increased and 13 females decreased in reading achievement. Sixteen males remained the same, 23 males increased, and 11 males decreased in reading achievement. In third grade, 86 students were included in the study with 20 students reaching benchmark. Fifty-four of those students remained on the same reading level with 20 students increasing achievement and 12 students decreasing. Twenty-five females remained on the same level while 11 females increased and 10 females decreased in reading achievement. Twenty-nine males remained on the same level, nine males increasing, and two males decreasing in reading achievement. The overall results indicated 23.7% of the students decreased in achievement, 37.8 % of the



students remained the same, and 38.6% reaching benchmark status. School A had a 1143 API score in reading with 58% of their third grade students scoring proficient in reading with a district total score of 1103.

School B identified 92 students to receive RtI interventions. The total number of first graders was 37 with 16 of those students reaching benchmark. Five students remained on the same level, 16 students increased in reading, and 16 students decreased in reading achievement. Two females remained on the same level, six females increased and five females decreased in reading achievement. Three males remained on the same level with 10 males increasing and 11 males decreasing in reading. Second grade had a total of 28 students participate in the research. Only three of those students increased in reading achievement. Nine students remained on the same level with 3 students increasing and 16 students decreasing achievement. Two females remained the same, no females increased and 6 females decreased in achievement. Seven males remained the same, three males increased, and 10 males decreased in overall reading achievement. Third grade had a total of 27 students participate with 13 students increasing to benchmark. Six students remained on the same reading level, 13 students increased, and 8 students decreased in reading achievement. Six males remained on the same level, six males increased and 3 males decreased in reading achievement. The overall results indicated 43.5% of the students decreased in achievement, 21.7 % of the students remained the same, and 34.8% reaching benchmark status. School B had a 1108 API score in reading with 79% of their third grade students scoring proficient in reading with a district total score of 1130.

School C identified 24 students in the RtI project. First grade identified seven students in first grade requiring intervention with five of those students increasing in reading achievement. Two decreased with none remaining on the same level. Four females increased and one female decreased in reading. One male increased and one male decreased after receiving intervention. In second grade, 13 students received intervention resulting in five students remaining on the same level, seven students increasing and one student decreasing in reading achievement. One female remained on the same level, two females increased and zero females decreased. Four males remained the same, five males increased and one male decreased in reading. Third grade had four students participate (two male and two female). Two students remained the same, one student increased and one student decreased in reading achievement. No females remained the same, one female increased and zero females decreased. Two males remained the same, zero males increased and one male decreased in reading achievement. The overall results indicated 16.7% of the students decreased in achievement, 29.2 % of the students remained the same, and 54.2% reaching benchmark status. School C had a 1130 API score in reading with 54% of their third grade students scoring proficient in reading with a district total score of 1068.

School D identified 129 total students involved in the RtI project. First grade included 46 students with 16 students reaching benchmark. Fifteen students remained on the same level, 16 students increased and 15 students decreased in reading achievement. Six females remained on the same level, eight females increased, and 10 females decreased in reading achievement. Nine males remained on the same level, eight males increased and five males decreased in reading achievement. Second grade recognized 47

students as RtI participants with 10 of those students reaching benchmark. Twelve females remained the same, four females increased, and seven females decreased in reading achievement. Nine males remained on the same level, six males increasing, and nine males decreasing in reading achievement. Third grade had a total of 36 students with 10 students meeting benchmark. Ten students remained the same, 10 students increased, and 16 students decreased in reading achievement. Three females remained the same, two females increased, and seven females decreased in reading achievement. Seven males remained the same, six males increased and nine males decreased in reading achievement. The overall results indicated 36.4% of the students decreased in achievement, 35.7 % of the students remained the same, and 27.9% reaching benchmark status. School D had a 1118 API score in reading with 73% of their third grade students scoring proficient in reading with a district total score of 1153.

School E identified 316 students to participate in the RtI project. First grade included 87 students with 41 students reaching benchmark status. Thirty-one students remained on the same level, 41 students increased, and 15 students decreased in reading achievement. Eight females remained on the same level, 10 females increased and 6 females decreased in reading achievement. Twenty-three males remained on the same level, 31 males increased, and nine males decreased in reading achievement. Second grade totaled 112 with 36 students reaching benchmark. Fifty students remained on the same level, 36 students increased, and 26 students decreased in reading achievement. Twenty females remain on the same level, 15 females increased and 10 females decreased in reading achievement. Thirty males remained on the same level, 21 males increased, and 16 males decreased in reading achievement. Third grade totaled 117

students with 56 reaching benchmark status. Forty-eight students remained on the same level, 56 students increased, and 13 students decreased in reading achievement. Nineteen females remained the same, 31 females increased, and four females decreased in reading achievement. Twenty-nine males remained the same, 25 males increased, and nine males decreased in reading achievement. The overall results indicate 17.1% of the students decreased in achievement, 40.8 % of the students remained the same, and 42.1% reaching benchmark status. School E had a 943 API score in reading with 70% of their third grade students scoring proficient in reading with a district total score of 1269.

School F identified 185 students to participate in the RtI project. First grade included 61 students. Nineteen students remained on the same level, 20 students increased, and 22 students decreased in reading achievement. Eight females remained the same, 11 females increased, and five females decreased in reading achievement. Eleven males remained the same, nine males increased, and 17 males decreased. Second grade totaled 64 students with 21 student reaching benchmark. Twenty-nine students remained the same, 21 students increased, and 14 students decreased in reading achievement. Sixteen females remained on the same level, 13 females increased, and nine females decreased in reading achievement. Thirteen males remained the same, eight males increased, and five males decreased in reading achievement. Third grade totaled 60 students with 26 students reaching benchmark status. Twenty-four student remained on the same level, 26 students increased, and 10 students decreased in reading achievement. Nine females remained on the same level, 11 females increased, and five females decreased in reading achievement. Fifteen males remained on the same level, 15 males increased, and five males decreased in reading achievement. School F had a 1251 API

score in reading with 80% of their third grade students scoring proficient in reading with a district total score of 1269.

The overall results (Chi Squares =42.5804 df=10 p=0.0000) indicated 25.1% of the students decreased in achievement, 37.0 % of the students remained the same, and 37.9% reaching benchmark status. First grades had 29.4% decreased in reading, 26.6% remain on the same level, and 44.0% decreasing in overall reading achievement. Second grade had 27.8% students decrease in reading, 40.1% remain on the same reading level, and 32.1% increase in reading achievement. Third grade had 18.2% decreased, 43.6% remain on the same level, and 38.2% increase in reading achievement. The total for all three grade levels (Chi Squares = 29.9746 df=4 p=0.0000) was 25.1% decreased, 37.0% remained the same, with 37.9% increased and meeting the required benchmark using the DIBELS assessment determined from the pretest (beginning of the year) to the posttest (end of the year). Totals for male and female (Chi Squares=2.1238 df=2 p=0.3458) included females results at 26.3% decreased, 34.5 % remained the same, and 39.3% increased their overall reading achievement. The totaling for males was 24.2% decreased, 39.0% remained the same, and 36.8 increased their reading achievement. The overall research project included 108 classes with 1,038 student assessment data analyzed from 6 school districts across Oklahoma and 61 Principal Leadership Questionnaires returned.

In response to the Principal Leadership Questionnaire (PLQ), 108 teachers received the questionnaire. School A returned 14 surveys for a 23.0% return rate. School B returned 10 surveys at a 16.3% return rate. School C returned two survey (this school had one class per class) at a 3.3% return rate. School D returned 12 surveys at a 19.7%

return rate. School E returned 16 surveys for a 26.2% return rate. School F returned 7 surveys for an 11.5% return rate. The total return rate was 57%.

Schools involved in the research all seemed to have principals who were considered positive role models and teachers who demonstrated they were concerned about so many students remaining on the same level throughout the year and ultimately not making benchmark. However, there seems to be little done to make changes especially as the district and schools implements what is considered a school improvement initiative such as RtI. This lack of preparation and implementation oversight indicates there should be concerns about Oklahoma schools and whether RtI was successful as a reading intervention model designated by IDEA as a strategy to eliminate illiteracy in America today.

### **Limitations**

The limitations' involved in this research study indicated one should look closely at the Principal Leadership Questionnaire and how to increase the likelihood more participants will complete the survey. The research results showed there could have been several factors that prevented participants from either answering the questionnaire or possibly positively skewing the scoring the survey. The researcher assumed the participants would be objective in their scoring and completion the questionnaire. Some participants expressed the concern their principal might get access to the information on the survey creating a fear of retaliation on their part. Additional limitations include the overall low response rate to the PLQ and the inability of school leaders to readily access and provide the DIBELS data which indicates the lack of use of these data.

## **Implications**

In previous research, numerous scholars agree school principals have an impact on student achievement (Hallinger & Heck, 1996; Leithwood, 2006; Waters, 2003). That research is not supported in the findings of the current study. Statistical analysis shows that when students' reading achievement scores as measured by the DIBELS assessment alone and correlated with the total PLQ, a significant negative correlation results. In contrast to the hypothesis, principal leadership scores are higher in the schools where students actually score lower in reading achievement. Statistics show that reading achievement is positively related to student grade level but does not relate to student's gender. In addition, the results of this study encourage one to consider further inquiries into the relationship between the principal as the instructional leader, the implementation of a reading intervention model such as RtI when only one measure such as the DIBELS is used to measure reading achievement.

The results of the research demonstrate many school leaders lacking the ability to acquire the necessary assessment data to drive instructional strategies and methods to implement change when students fail to meet the necessary reading requirements set forth by national and state standards. Findings suggest that a continued investigation be considered to explain how students qualify for intervention as well as how the intervention itself is presented. When analyzing results of this research, one should consider several factors that might influence reading intervention effectiveness such as schools using a pull-out type program, schools where students remain in the classroom with their regular teacher providing the intervention instruction, or schools using a specially trained teacher in charge of the reading intervention program. Further research

could possibly offer conclusive findings that to show the principal being a resource for the implementation or whether he or she plays no part in the program at all. Further research could determine if the students encounter the same type of intervention methods such as individual or group instruction. Future research might suggest a closer look at students who failed to meet the necessary criteria. This line of study might consider whether they will continue to struggle or whether they are recommended to remain in the same grade level. One might investigate the types of instructional materials used in the RtI model. Furthermore, investigations might include whether there is a relationship between the regular classroom teacher and the teachers assigned to instruct the RtI model or why the largest number of students continued to remain at-risk (48.7%).

RtI's vision is to recognize students quickly and hopefully eliminate the need for special education services. A question remains: How many of these students were considered "special education" students or how many was recommended the following year to receive special education testing? Research on learning trajectories finds students who demonstrate low reading skills in first grade have a high probability of continuing reading difficulties throughout their entire school experience (Juel, 1988). School leaders play a large role in influencing the school learning environment (Hallinger & Heck, 1998). This research study did not corroborate previous research findings on school leaders. Implications for professional development in the implementation of RtI as to the leadership being in place as schools move forward to increase student learning is advised. Leaders who currently are or plan to implement RtI are encouraged to provide training within the district to create a solid foundation of knowledge on the RtI model.



Policy makers should take into consideration the required steps necessary for staff (including school leaders) needed to implement models such as RtI. Training is essential.

### **Recommendations for Further Research**

Student reading achievement is considered one of the most essential academic areas where students struggle. It is vital that schools in America today attack this issue to create a nation of readers. Programs come and go that claim to solve those reading struggles and offer a solution that schools can quickly implement. However, without the proper training and commitment needed, these programs simply take up another portion of the school day. It is no longer satisfactory for principals to simply manage the daily chores of the school. Principals are required to be instructional leaders creating a clear path or road map for teachers to follow toward reading success (Fullan 2004). Both principal leaders and the classroom teachers must maintain the knowledge and skills to monitor, collect, evaluate, and instruct changes daily to challenge students to gain the necessary proficiency required to become readers. Principals play a pivotal role in serving as a change facilitator. Change cannot occur if leadership is unaware or lack the necessary knowledge and skills to facilitate the change process. This paradigm shift is needed to reform instructional leadership and the implementation of programs designed to improve every student's ability to read on grade level (Leithwood, 1994). Therefore, the researcher suggests the following recommendations for further research:

1. The researcher recommends conducting further research on the impact of the principal's leadership and improving reading in the early years due to the limited number of responses on the Principal Leadership Questionnaire.

2. The researcher recommends that a longitudinal research study be conducted to determine the long-term effects that principal leadership behaviors (including the six constructs) play in influencing student reading achievement in schools using RtI.

3. The researcher recommends conducting further research to investigate and compare leadership programs in Oklahoma and the skills of leaders as well as teachers to disaggregate data.

4. The researcher recommends principals complete a questionnaire to examine and compare their perceptions of teachers as instructors while implementing reading initiatives.

5. The researcher recommends conducting the results of the implementation of the RtI across the United States to determine the effectiveness of the model to increase student reading achievement in Grades 1 through 3.

6. The researcher recommends conducting a study comparing the use of the Dynamic Indicators of Basic Literacy Skills (DIBELS) scores to other types of assessment data used to predict reading proficiency used in RtI schools.

7. The researcher recommends additional research into schools using the RtI model to examine the relationship between the principal leadership, minority students, and students of various socioeconomic levels to determine whether the teacher's perceptions of principals' leadership behaviors match those included in this research study.

8. The researcher recommends utilizing a case study of a school in which students are progressing well to investigate what leaders and teachers are doing in that school.

9. The researcher recommends using free and reduced lunch results as a variable.

10. The researcher recommends an investigation on how RtI was implemented and how school staff was trained in the implementation of RtI.

In summary, this study indicates that principal leadership is not related to increases in student scores on the DIBELS as a measure of reading proficiency. Yet, it leaves unanswered questions as to the underlying causes of this, suggesting the need for further research.

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## **Appendices**

## Appendix A: Permission to Use the Principal Leadership Questionnaire

Re: Principal Leadership Questionnaire  
Sat, December 5, 2009 11:39:08 AM  
From: "doris.jantzi@utoronto.ca"  
<doris.jantzi@utoronto.ca>  
Add to Contacts  
To: Lynda McDaniel <lmcdaniel09@yahoo.com>  
Cc: kleithwood@oise.utoronto.ca

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Our items are not copyright, so feel free to use those that are beneficial for your research. We do request acknowledgment of the source, but are happy to have others work in this area. Good luck with your study.

Doris Jantzi

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You are welcome to use the questionnaire. Good luck with your research.

Ken Leithwood, Professor  
Ontario Institute for Studies in Education (OISE)  
University of Toronto  
252 Bloor St. West, Toronto, Ontario M5S 1V6  
Tel: 416-978-1171  
Fax: 416-926-4741

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This message has been scanned for viruses and dangerous content by [MailScanner](#), and is believed to be clean.



**Appendix B: Permission to Conduct Study**

Dear \_\_\_\_\_,

I am a student at the University of Oklahoma working on a doctorate in Educational Administration, Curriculum, and Supervision. I am conducting a research study entitled: *Leadership Effectiveness During Implementation of Reader Intervention at Elementary Schools in Oklahoma*. The purpose of the research study is to ascertain the school principal’s effectiveness of leadership practices to facilitate academic success through the implementation of the Response to Intervention program.

Your district participation in the study is voluntary. Should you choose to withdraw from participation at any time you may do so without demur. The results of the study will be published as a dissertation, but your name will not be associated with any results.

This research poses no foreseeable risk to any of the participants in the study. Although there may be no direct benefit to you, your participation may help by providing educators nationwide with the opportunity to reevaluate the processes of implementing reading intervention programs with supportive leadership practices.

Please find the enclosed stamped envelope to return your signed permission request.

If you have any questions concerning the research study, please call me at (580) 795-6934.

Sincerely,

Lynda McDaniel

By signing this form, I acknowledge that I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. My signature on this form also indicates that I am 18 years old or older, and that I give my permission to voluntarily serve as a participant in the study described.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Signature of researcher \_\_\_\_\_ Date \_\_\_\_\_

## Appendix C: Invitation to Participate and Consent Form

(for electronic distribution by SurveyMonkey)

Dear Teachers:

I am a student at University of Oklahoma working on a Doctoral in Educational Administration, Curriculum, and Supervision. I am conducting a research study entitled: *Leadership Effectiveness During Implementation of Reader Intervention at Elementary Schools in Oklahoma*. The purpose of the research study is to ascertain the effectiveness of leadership practices of the school principal to facilitate academic success through the implementation of the Response to Intervention program designed to increase reading performance.

Therefore, I am asking you to assist me by agreeing to participate in this study. Your participation in the study is voluntary. Should you choose to withdraw from participation at any time you may do so without demur. The results of the study will be published as a dissertation, but your name will not be associated with any results.

You will be administered the *Principal Leadership Questionnaire (PLQ)*. Responses to the PLQ will not be linked to any participant and should be based on teachers' perceptions of the principal regarding his/her role in implementing a reading intervention program such as RtI. The data collected will not be used to evaluate your performance nor will it be available to your principal. The questionnaire will be distributed through the website "surveymonkey" directly to your school e-mail address. The directions for the completion and return will accompany the questionnaire.

This research poses no foreseeable risk to any of the participants in the study. Although there may be no direct benefit to you, the possible benefit of your participation may help by providing educators nationwide with the opportunity to reevaluate the processes of implementing reading intervention programs through leadership practices.

If you have any questions concerning the research study, please call me at (580) 795-6934.

Sincerely,

Lynda McDaniel

By signing this form, I acknowledge that I understand the nature of the study, the potential risks to me as a participant, and the means by which my identity will be kept confidential. My signature on this form also indicates that I am 18 years old or older, and that I give my permission to voluntarily serve as a participant in the study described.

Signature of participant \_\_\_\_\_ Date \_\_\_\_\_

Signature of researcher \_\_\_\_\_ Date \_\_\_\_\_

## Appendix D: PLQ Survey Instrument

(for electronic distribution through SurveyMonkey)

Principal Leadership Questionnaire					
Please respond by considering how well each statement applies to your principal.					
Circle the number that corresponds to your response. Please use the following scale: 1=Strongly Disagree 2=Disagree 3=Undecided 4=Agree 5=Strongly Agree					
	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. My principal has both the capacity and the judgment to overcome most obstacles.	1	2	3	4	5
2. My principal commands respect from everyone on the faculty.	1	2	3	4	5
3. My principal excites faculty with visions of what we may be able to accomplish if we work together as a team.	1	2	3	4	5
4. My principal makes faculty members feel and act like leaders.	1	2	3	4	5
5. My principal gives the faculty a sense of overall purpose for its leadership role.	1	2	3	4	5
6. My principal leads by “doing” rather than simply “telling”.	1	2	3	4	5
7. My principal symbolizes success and accomplishment within the profession of education.	1	2	3	4	5
8. My principal provides good models for faculty members to follow.	1	2	3	4	5
9. My principal provides for our participation in the process of developing school goals.	1	2	3	4	5
10. My principal encourages faculty members to work toward the same goals.	1	2	3	4	5
11. My principal uses problem solving with the faculty to generate school goals.	1	2	3	4	5
12. My principal works toward whole faculty consensus in establishing priorities for school goals.	1	2	3	4	5
13. My principal regularly encourages faculty members to evaluate our progress toward achievement of school goals.	1	2	3	4	5
14. My principal provides for extended training to develop my knowledge and skills relevant to being a member of the school faculty.	1	2	3	4	5
15. My principal provides the necessary resources to support my implementation of the school’s program.	1	2	3	4	5
16. My principal treats me as an individual with unique needs and expertise.	1	2	3	4	5
17. My principal takes my opinion into consideration when initiating actions that affect my work.	1	2	3	4	5
18. My principal behaves in a manner thoughtful of my personal needs.	1	2	3	4	5
19. My principal challenges me to reexamine some basic assumptions I have about my work in the school.	1	2	3	4	5
20. My principal stimulates me to think about what I am doing for the school’s students.	1	2	3	4	5
21. My principal provides information that helps me think of ways to implement the school’s program.	1	2	3	4	5

22. My principal insists on only the best performance from the school's faculty.	1	2	3	4	5
23. My principal shows us that there are high expectations for the school's faculty as professionals.	1	2	3	4	5
24. My principal does not settle for second best in the performance of our work as the school's faculty.	1	2	3	4	5

Adapted from Jantzi & Leithwood, *Educational Administration Quarterly*, (October, 1996) pp. 533-534. Used by author's permission

**Appendix E: IRB Approval Letter**



*The University of Oklahoma*

OFFICE FOR HUMAN RESEARCH PARTICIPANT PROTECTION

**IRB Number: 12829**  
**Category: 2 & 4**  
**Approval Date: March 29, 2010**

March 30, 2010

Lynda McDaniel  
Education  
Route 4 Box 935  
Madill, OK 73446

Dear Ms. McDaniel:

**RE: Leadership Effectiveness During Implementation of Reader Intervention at Elementary Schools in Oklahoma**

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research project and determined that it meets the criteria in 45 CFR 46, as amended, for exemption from IRB review. You may proceed with the research as proposed. Please note that any changes in the protocol will need to be submitted to the IRB for review as changes could affect this determination of exempt status. Also note that you should notify the IRB office when this project is completed, so we can remove it from our files.

If you have any questions or need additional information, please do not hesitate to call the IRB office at (405) 325-8110 or send an email to [irb@ou.edu](mailto:irb@ou.edu).

Cordially,

A handwritten signature in black ink, appearing to read "Lynn Deyenport".

Lynn Deyenport, Ph.D.  
Chair, Institutional Review Board

Ltr\_Prot\_Fappv\_X

