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## A Study of Correlation Between Student Achievement and Reading Instructional Methods

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Running head: A CORRELATION OF STUDENT ACHIEVEMENT

A Study of Correlation Between Student Achievement  
and Reading Instructional Methods

Kelly G. Lowe

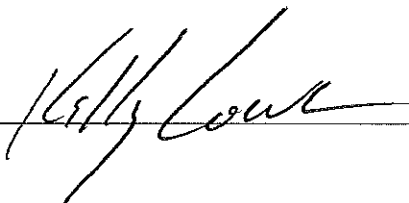
May 15, 2009

A dissertation submitted to the Education Faculty of Lindenwood University  
in partial fulfillment of the requirements for the degree of  
Doctor of Education  
School of Education

DECLARATION OF ORIGINALITY

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

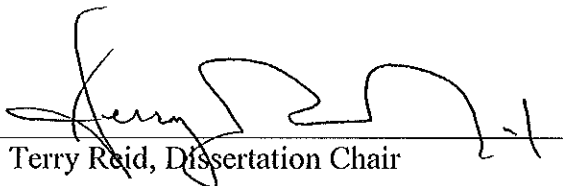
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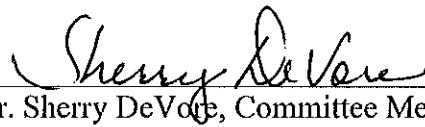
A STUDY OF CORRELATION BETWEEN STUDENT ACHIEVEMENT  
SCORES ON THE MAP TEST AND INSTRUCTIONAL METHODS

Kelly G. Lowe

This dissertation has been approved as partial fulfillment of the requirements for the  
degree of  
Doctor of Education  
at Lindenwood University by the School of Education

  
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ABSTRACT

The No Child Left Behind (NCLB) Act of 2001 forced school districts to become more accountable by requiring all students to read on grade level by the year 2014. In southwest Missouri, school districts are currently using different reading models, instructional time, and staff development in an attempt to reach the goal of NCLB. This study examined different instructional strategies implemented and compared student achievement on the third grade 2007-2008 Missouri Assessment Program communication arts test. Data were collected from 70 participating public, elementary school buildings to determine whether a correlation existed between reading models and instructional strategies implemented and student achievement.

Data collected from building surveys and MAP scores were retrieved from the Missouri education website. Student achievement and instructional practices were studied to analyze the correlation. This study found no significant correlation existed between achievement and instructional practices.

### ACKNOWLEDGEMENTS

I dedicate this paper to my mom and dad. They are the guiding forces in my life. Without their encouragement, support, and belief in me it would never have been possible. I would also like to thank fellow colleagues who assisted me with my paper and my committee who made it possible to survive this project. This study was time consuming and I appreciate the patience displayed by the loved ones in my house while I spent countless hours working on the computer to complete this study.

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CHAPTER ONE - INTRODUCTION

*Background*

By the year 2014 every student in the state of Missouri will be required to read on grade level to meet the No Child Left Behind (NCLB) law of 2001. The law was enacted by the federal government to hold school districts accountable for student academic growth. As a result of the NCLB mandate, the Missouri Department of Secondary Education (MDESE) developed an annual test to measure student academic growth and track public education progress (MDESE, 2007). Every year the percentage of students scoring in the proficient and advanced categorical areas of the Missouri Assessment Program (MAP) must increase by percentage points to meet mandates. The state of Missouri holds school districts accountable by measuring the percentage of students reading on grade level yearly. School districts refer to the accountability tool as the MAP test while the state uses the Adequate Yearly Progress (AYP) report to demonstrate their progress toward meeting NCLB. The MAP test was designed to measure the academic progress in core subjects such as communication arts, math, and science for students in grades 3 through 8. Each year students in those grades take the MAP assessment test in communication arts, math, social studies, and science to determine their academic growth over a period of one year (MDESE, 2007).

This is a change from past testing schedules when third grade tested in communication arts while fourth grade tested in math. Now all students test yearly in communication arts and math in grades 3 through 8. The validity of the MAP scores is based on the assumption that students are capable of reading on their appropriate grade level. Each year the state examines individual buildings, as well as district scores, to

check for the student growth. Teachers and administrators are not allowed to offer any assistance to students taking the test. Students who have been struggling in reading and have been receiving help are suddenly required to read and record answers on their own. Tests scores, however, will show little measure of a student's academic achievement if he or she cannot read on grade level. Reading is a learned skill that neither comes easily or nor quickly for most students. Wren (2002) identified learning to read as one of the most difficult tasks a child will ever learn. Wren (2002) also noted that most people assume children will learn if they are simply immersed in a literacy-rich environment. Though that may indeed assist them, Wren (2002) dismissed that idea by comparing learning to read with learning to juggle while blindfolded and riding a unicycle backwards.

The format for the MAP test requires students to read the question correctly and respond with an appropriate answer either by multiple choice or written response. Some administrators would say the MAP test does not give an accurate measurement of student achievement in third grade. It would be difficult to prepare them for their first experience in high stakes testing. Students taking the communication arts test in third grade, while only capable of reading on the first or second grade level, could struggle to meet the desired outcomes on the test. Student written responses are graded by trained, independent scorers who use a subjective rubric to determine the level of student achievement. They read through each response looking for key words and phrases (MDESE, 2007). Student scores are recorded and used to measure against the previous test as proof of academic growth. If the had no previous test the state recognizes their third grade test to be the baseline for measurement. Each year a larger percentage of students are required to be reading on grade level to meet state mandates (MDESE, 2007). NCLB

law allows little relief for school districts who have poverty stricken families and low levels of education within households (Wren, 2002). All districts in Missouri are held to the same accountability measures mandated by the state department of education (MDESE, 2007). The NCLB law (2001) states that all students must be reading on their individual grade level by the year 2014 with no exceptions. In 2009 59.2 percent of all students must score at the proficient or advanced level on the MAP test to be considered as a district meeting AYP.

Strong literacy skills are not the only determining factor in student success. However, students who have limited literacy skills have little chance of scoring in the proficient target range on the MAP test. Strong literacy skills begin in the lower elementary grades where students eventually learn to read such things as signs, daily papers, or even restroom walls (Armbruster & Osborn, 2001). Reading is a skill learned in primary school and that continues to serve through adulthood. Reading is a difficult task to accomplish. Although reading and literacy often begin before students enter Kindergarten, this study will examine the building blocks of literacy in grades one, two, and three. Once a strong reading foundation is established in students' primary years, future growth will become much easier (Arbruster & Osborn, 2001).

Reading is a skill that has often been taken for granted by many different stakeholders (Armbruster & Osborn, 2001). Now, the federal government has passed a law to hold school districts accountable for student reading levels. The MAP test requires students to read their test and respond in complete sentences. As the year 2014 appears on the horizon, schools are feeling the pain of the NCLB law. Effective reading ability provides students with weapons to combat the ever increasing demands of the world and

to perform well on any test (Reading First, 2007). This study examined professional development, instructional strategies, and programs used by school districts to develop reading skills in their students. The measuring stick for achievement will be determined by examining Communication Arts scores for 70 buildings in southwest Missouri for the 2009 school year.

### *Statement of the Problem*

In 2006, Missouri required 34.7 percent of students to score at the proficient or advanced levels as assessed by the communication arts MAP score. In 2007, the mandate for students scoring proficient or advanced on the MAP test rose to 42.9 percent. This administrator's district set their student achievement at 5 percent improvement yearly as part of a central school improvement plan. At that rate the school district will not meet the AYP goal for the 2009 school year. Many districts across the state are falling further behind the state goals, and being targeted as a district under improvement or unaccredited (MDESE, 2007).

Students in grades 3 through 8 are required to take the MAP test yearly in communication arts as a means of measuring their academic growth. School districts use the assessment data to redirect or adjust their curricular framework for the following year. School districts use the MAP test to assess weak areas of instruction or at least poor performance areas by the previous standards. Students who score in the proficient and advanced statistical areas on the MAP are considered by the state to be reading on grade level. Each year the percentage of students required to be reading on grade level rises until the year 2014 where all students will be proficient or advanced (NCLB, 2001). Data recorded from MDESE indicated student achievement levels for each building

participating in this study. Data from buildings will be categorized based on instructional practices.

The state of Missouri mandated that 59.4 percent of students should be earning proficient or advanced designation on the MAP test taken in the 2008-2009 school year (MDESE, 2007). Teachers are not allowed to assist students while they are taking the test. Students with special provisions are allowed to take the test by way of a trained proctor. All other students read and record answers independently (MDESE, 2007). An integral part of student success on the MAP test relies on student ability to read the test correctly and record an answer. If a child does not possess the ability to read on grade level, it would be difficult to achieve proficient or advanced scores. Therefore, school districts are searching for more effective ways to ensure student achievement.

Many communities, especially smaller ones, are built around their school system, and the success of the district's MAP scores may determine the way the community views the school. The economics of a town may rely on the success of the school district to attract industry and growth. Families might not consider moving into a school district that has been labeled as needed improvement or unaccredited. The problem can be observed in either of two ways: the government has set unrealistic goals for all school districts, or the district needs to implement effective instructional strategies to promote a better education for students. Since school districts cannot change the law, they need to turn their attention toward proven strategies of achievement. As indicated by MAP scores, some school districts across Missouri are flourishing with their communication arts scores. More districts need to understand why they are struggling to keep pace with the successful school districts. Competition could serve as fuel for the fire in school improvement.



After speaking with several colleagues, reading specialists and grade level teachers, a set of core questions were designed to drive research. Each building uses separate instructional methods and practices in reading. This study examined each building separately to determine if a correlation existed between instructional practices and student achievement.

The following questions guided this study:

1. What correlation exists between student achievement and daily reading instructional time in first through third grade?
2. What correlation exists between the amount of daily small group reading instruction and student achievement?
3. What correlation exists between student achievement and the type of reading program used by school districts?
4. What correlation exists between student achievement and the amount of professional development provided to staffs?
5. What correlation exists between student achievement and the amount of writing instruction time spent daily in school districts?

#### *Purpose of the Study*

The purpose of this study was to determine if any correlation existed between student achievement and the following factors: reading instructional time spent daily, daily small group instruction time, daily writing time, professional development and types of reading programs implemented by southwest Missouri school buildings. Many buildings are experiencing difficulty in maintaining reading standards set forth by the NCLB law (MDESE, 2007). If a correlation is found to exist between student

achievement and instructional practices in individual buildings the data could be used to drive school improvement. This study could assist administrators in determining the most effective instructional strategies implemented by school districts in the near geographical area of southwest Missouri with similar students and economic problems. The information may determine the direction of professional development, classroom instruction, and program evaluation of districts failing to meet AYP.

Each year school many school districts spend thousands of dollars for staff development focusing on strategies to increase student achievement on the MAP test. Professionals provide week long instructional sessions for the staff. The results are disheartening when student scores only minimally improve or in some cases remain stagnant in some cases. Therefore, there was a need to examine if school funds could be better spent on a different reading program or to provide staff development in different instructional methods.

It is not enough to show minimal gains in student progress. The state has clearly set the guidelines for student achievement (MDESE, 2007). A district cannot afford to keep spending money for professional development without signs of significant improvement in such targeted areas. Both inexperienced and veteran teachers benefit from professional development, however the professional development must be beneficial for the teacher to meet student needs (Birman, Desimone, Garet, & Porter, 2000). This study focused on different professional development opportunities and instructional strategies implemented within school districts across southwest Missouri in an attempt to identify the most effective instructional practices to increase student achievement.

The amount of instructional reading time spent daily within the area of communication arts was explored in seventy different southwest Missouri school buildings to determine if additional instructional time correlated with increased MAP scores for third grade students in communication arts. Building principals set the daily schedule and monitor teaching practices. They were asked to respond to questions on a survey with details on the amount of daily instructional time implemented in each building. Building principals were used to get accurate information back in a rapid manner.

The amount of small group reading instructional time within the area of communication arts was explored to determine if additional time led to increased communication arts scores on the third grade MAP test. Small group instruction assists the instructor in focusing on individual and similar weaknesses displayed by students while the rest of the class works in work stations to increase necessary skills (Reading First, 2007). Small group instructional time allows the teacher time to address individual student needs and weaknesses.

The amount of daily writing instructional time within the area of communication arts was explored to determine if additional time led to increased communication arts scores on the third grade MAP test. Writing is an important part of literacy. Students learn to pronounce letters first, begin placing letters together to make sounds, words, and then they begin learning sentence structure. At the beginning stages of writing students often misspell words and at times are the only ones who can read fluently what they have written (Fountas & Pinnell, 2001). Most teachers overlook the sentence structure of beginning readers to focus on detail and understanding by the student of writing

components (Rasinski, 2004). First, second, and third grade students learn to write sentences beginning at the infant stages of literacy. This research through principal surveys identified school districts with required writing time in their master schedule and examined their achievement scores. School districts across the state do not implement the same amount of writing time daily due to lack of state mandates. This research examined school districts with different blocks of writing time within the daily frameworks to determine whether different lengths of writing time contribute to increased student achievement.

The type of reading program implemented by individual buildings was explored to determine if different programs led to increased communication arts scores on the third grade MAP test. For the purpose of this study reading programs were limited to the most commonly used formats in the geographical area. School districts in southwest Missouri commonly pattern their reading programs with popular models such as the Missouri Reading Initiative (MRI), Reading First, Four Block, and the Arkansas Literacy Model as their guide to building literacy. For the purpose of this study all buildings choosing not to implement one of the popular programs mentioned above were categorized into the other models category.

The number of professional development days provided to staffs within the area of reading improvement was explored to determine if additional days led to increased communication arts scores on the third grade MAP test. The state does not mandate the amount of professional development days to be implemented in each school year. Schools choose the number of days based on need and choice by the administration.

*Null Hypotheses*

Null Hypothesis 1. There is no correlation between student achievement and daily reading instructional time.

Null Hypothesis 2. There is no correlation between student achievement and length of small group reading instructional time spent each day.

Null Hypothesis 3. There is no correlation between student achievement and the type of reading program implemented in a district.

Null Hypothesis 4. There is no correlation between student achievement and the amount of professional development provided to staffs.

Null Hypothesis 5. There is no correlation between student achievement and the amount of time spent writing in class each day.

*Design of Study*

Anyone is allowed to view data for each district and even each building taking the MAP test. All one has to do is pull the data from the DESE website. Statistical data were collected for each building for third grade communication arts scores from the Missouri education website for the 2007- 2008 school year. Data for instructional methods were collected and compiled by analyzing first through third grade building level surveys dispersed throughout 165 school districts in southwest Missouri. The surveys were broken down into statistical categories. Building principals were asked to mark which area of instruction or staff development their building fell within. Seventy surveys were returned with information detailing the amount of daily instructional time implemented in each building to improve student achievement scores. Third grade MAP scores were used because that is the first year for students to take the MAP test. Building administrators

were asked to fill out the survey and return it by e-mail or mail. The survey asked building principals to clarify the number of professional development days provided by the school district yearly to improve reading achievement. Principals were used as survey reporters due to their handling of building schedules and for a timely and accurate response.

The purpose of this study was to determine whether reading programs, amount of instructional time, writing time, small group instruction or professional development correlated with third grade communication arts achievement scores in individual buildings. This correlation study was designed to examine which factors had an impact on student achievement. This study examined buildings in southwest Missouri with similar geographical areas, instructional philosophies, and their third grade student achievement scores in communication arts for the 2007-2008 school year. This study was chosen as a tool to assist school districts seeking information on current instructional strategies applied by other buildings. This study was considered appropriate since all student achievement data were collected from the Missouri Department and Secondary Education (MDESE). All instructional practices data were collected by survey information with all building identities confidentially kept by assigning numbers instead of names to their districts.

#### *Limitations of the Study*

The scope of this study was limited due to the constraints:

1. This study was conducted using data from school districts in southwest Missouri for the academic year of 2007-2008.

2. Surveys were conducted, and it is assumed responses were given in good faith and without prejudice and were accurate and representative of classroom practices.
3. This study was limited by examining 4 different reading programs modeled in school districts across southwest Missouri. Programs were in use for more than one year prior to the study.
4. Scores were not obtained for the same class over an extended period, so it is assumed that scores may vary according to class abilities over longer time frames.
5. In this study, 165 school districts in southwest Missouri were selected with 70 buildings participating.
6. This study was limited to instructional practices implemented in grades 1 through 3 and scores on the third grade MAP test.
7. This study focused only on school districts located in southwest Missouri; therefore, findings may not be generalized to other geographical areas.
8. The study was conducted over a one year period with time being a limited factor.
9. The study looked at a correlation and possible cause and effect of different practices.
10. There was no demographic information studied for participating schools.
11. Schools could be implementing multiple programs which could skew data.

#### *Operational Definitions*

1. *Adequate Yearly Progress (AYP)*- Annual percentage of students who have to score in the proficient or advanced levels on the Missouri Assessment Program test (MDESE, 2007).

2. *Advanced*- Status given to students who excel beyond grade level on the Missouri Assessment Program test (MDESE, 2007).
3. *Communication Arts (CA)*- All aspects of literacy, including reading and writing, in elementary education (Fountas & Pinnell, 2001).
4. *Department of Elementary and Secondary Education (DESE)*- The governing body of education in the state of Missouri which oversees school districts and measures improvement (MDESE, 2007).
5. *Instructional Time* – Amount of time built into the master schedule that assumes students are on task and the teacher is providing instruction.
6. *Missouri Assessment Program (MAP)*- An assessment program given by the state of Missouri once a year to students in grades 3-12 to determine the academic progress of the students and the school district (MDESE, 2007).
7. *Missouri School Improvement Plan (MSIP)* - Cyclical reviews of the State of Missouri to ensure accountability in school improvement (MDESE, 2007).
8. *National Reading Panel*- Group commissioned by the President of the United States to examine and make suggestions for improving reading practices in school districts (NICD, 2000).
9. *No Child Left Behind (NCLB)*- A law signed in 2001 by President Bush that requires all students to be reading on grade level by the year 2014 (NCLB, 2001).
10. *Proficient*- Status given to students who perform at designated levels on the Missouri Assessment Program test (MDESE, 2007).



11. *Program Reading Models*- Different reading models used throughout southwest Missouri to provide a blueprint for reading instruction in the classroom and for professional development of staff.
12. *Research Based Instruction* – A collection of instructional practices that has a record of success if repeated with a similar group of students in a different location (Marzano, 2001).
13. *Small Group/Guided Reading*- Method of reading instruction within an elementary classroom where the teacher works with small groups of students reading on or near the same level (Reading First, 2007).
14. *Staff Development*- Additional support or instructional models provided to teachers to improve instructional methods and student achievement (DuFour & Eaker, 1998).
15. *Student Achievement*- Increased reading scores assessed yearly on the Missouri Assessment Program test in individual school districts (MDESE, 2007).

### *Summary*

As each year passes, the demand of NCLB has placed greater emphasis on school districts to meet each student's needs while also maintaining pace with the requirements of the law. School districts spend thousands of dollars and dedicate many hours yearly to educate their staffs on cutting edge instructional strategies to meet student needs. The NCLB law (2001) requires every student to be reading on grade level by the year 2014. As the year 2014 approaches, school districts are searching for better instructional practices to get their students reading on grade level. Students who test into the proficient or advanced levels on the MAP test yearly are considered to be reading on grade.

Students are required to participate in MAP testing for the first time during the spring of their third grade year. Little or no help can be provided by the instructor for students while taking the assessment. They are required to read their own test and provide responses in a variety of different formats. If students are not reading on grade level they may struggle to complete the test and fail to give an accurate measurement of their growth and abilities.

The NCLB law (2001) signed by President Bush was designed to improve the American educational system and ensure that every child would have success in school. Some might say the law failed to take into consideration that every child learns on a different level and in a different way. Most administrators might also argue that the test does not measure individual student growth; instead it pushes everyone into the same statistical category and measures the whole group's achievement. When students fail to make the passing grade, districts are labeled by the state as needs improvement or non-accredited for lack of yearly progress (MDESE, 2007). Yet, the rules are in place and it is each school district's responsibility to meet the individual needs of the students while maintaining yearly progress with the state. Individual buildings and districts continue to search for new ways to meet the mandates. School districts could use the data and information from this study to begin implementing change within their district. This study will serve as proof that instructional practices implemented in different buildings have a direct correlation with student achievement therefore; other districts could use the same strategies for student achievement.

## CHAPTER TWO - RELATED LITERATURE

*Historical Background*

The last one hundred years has brought many changes to the educational field in the world of reading and literacy. Pearson (2000) wrote a paper which was published in the Center for the Improvement of Early Reading Achievement (CIERA) on reading in the twentieth century. Pearson (2000) broke down the past century of reading education into thirds and discussed the growth and change in the United States which follows:

Pearson (2007) concluded that the second or middle period from 1935-1970 could be best described as the fine tuning process in reading education or the “words-to-reading” period. Of the many programs developed in the first third of the twentieth century, “words-to-reading” continued to gain momentum. By the end of the 1969, over 90 percent of all students were using the model in one form or another to learn how to read (Pearson, 2007). The National Institute of Child Health and Human Development (2007) educational research program initiated in 1965 and began to focus on reading difficulties as it became clear how extensive the reading problem was in the general population.

From 1970-2000 educators began to use different approaches to reading in the United States with researched based strategies and teacher development. Along the way they confronted fundamental shifts in our views of reading and writing. They started to create a variety of serious curricular alternatives to the conventional wisdom of the 1970’s. America began to see things such as whole language instruction and the introduction of phonics into reading education (Pearson, 2007).

In the last third of century, scholars from different fields began to study children's literacy. Linguists, philosophers, literary critics, and critical theorists began to weigh in on the development of reading.

### *Assessing the Problem*

In a study by the English Update (2003) it was concluded that despite efforts by educators and policy makers over the past several decades, achievement gaps between different groups of students continues to stubbornly exist. Since 1970, the National Assessment of Educational Progress (NAEP) has periodically surveyed student achievement across the country (English Update, 2003). From the early 1970s to the late 1990s, reading performance in 13-year-olds showed signs of narrowing the gap between white and black students; the gap between Hispanics and Whites narrowed, and then widened again from the early 1980s to 1990s (English Update, 2003). The study indicated the need for public education to have demands placed on them for continual school improvement.

Many models and reforms have been implemented but, no one model appears to have an ongoing positive affect universally for all school districts. Allington & Cunningham (2002) research on the implementation of various educational reform models suggested that nothing works everywhere but most ideas can be adapted to work somewhere. A report by the National Center for Educational Statistics (2003) concluded that 35 percent of fourth grade students in the United States read for fun every day. The report also concluded that 32 percent of students surveyed reported no reading at all outside of school. In the United States, fourth-graders who read for fun every day have higher scores on the combined literacy scale compared to those who hardly ever read or

never read for fun. The report concluded that the pattern of reading for fun and outside of school holds true on the international level as well (National Center for Educational Statistics, 2003).

Seastrom, Gruber, Hanke, McGrath & Cohen (2002) reviewed the reading problem in the United States and assessed possible causes for student failure in reading. They examined reading teachers, their qualifications and assignments within their buildings. What they discovered was somewhat staggering for reading instruction. Their study brought attention to those teachers whose school districts trust them with their most severe at-risk students. Reading specialists take additional college hours in reading instruction beyond their degree and then are placed in buildings to work one-to-one or in small group with students who are behind in reading. The study determined that most school districts are placing reading specialist in positions for which they are not qualified (Seastrom et al, 2002). Only 74 percent of elementary reading specialists in schools were actually classroom teachers before working in their current reading position. In fact, they found that most of the elementary reading specialists had more experience working in a high school classroom or were pull-out teachers before earning their degree as an elementary reading specialist. Those teachers actually entered the profession just to fulfill district needs. The authors concluded that one major problem with reading was that school districts were not placing highly qualified teachers in their buildings to work with struggling students at an early age (Seastrom et al., 2002).

Struggling readers often lack motivation or confidence to succeed. Early struggles lead to low self esteem and usually poor effort. Teachers have to implement creative schemes to overcome the lack of confidence in struggling students. Various approaches

by different individuals have led to student success. One teacher took the initiative to change the attitudes and abilities of her elementary students. Moorefield (2004), a reading specialist, classified elementary students in her class in three different categories of reluctant readers: 1) those who can not read, 2) those who do not read, and 3) those who will not read. In all three cases the teacher made it her responsibility to overcome the obstacles and develop a program to get students involved in reading.

Moorefield (2004) began a mentor reading program where high school students entered the classroom to read with her students while she worked individually with struggling students to improve their reading. Within a short time the atmosphere of the class was reversed and suddenly reading was a normal part of the day for each student instead of something that her students dreaded. Once students began to read, academics improved and the class atmosphere changed into one of learning and achievement rather than disdain and reluctance. The key to the program was to separate the students into one of the three categories of readers and work with the group to improve reading skills (Moorefield, 2004).

This administrator has fielded many questions from parents wondering why their child was not reading on level, often blaming the school for the failure. Reading actually begins at home with parents reading to their children or modeling the behavior and then, evolves in the early stages of school. The National Research Council (1999) indicated that children begin to communicate in the earliest of infancy stages. Children are learning to communicate when they scribble with a crayon or point out street signs as the first sign of literacy. The elementary classroom is a laboratory in which students learn a variety of things about themselves and the outside world. Elementary children develop attitudes

about literacy and learning that will carry them throughout their lives (Fountas & Pinnell, 2001). Literature and reading is the most underestimated subject of study taught in the school system. It plays a critical role in lives by helping people reflect on their world and their surroundings (Bangert-Drowns, et al., 2004).

School districts implement a variety of reading models in an attempt to assist their students in reading achievement. In reality, there is no perfect model to follow when teaching students to learn to read (Allington & Cunningham, 2002). In every grade level there is great diversity among students. The range of reading levels tends to become much wider as the students progress to each grade level. As their reading levels expand, so will their skills to express themselves, both orally and in writing (Fountas & Pinnell, 2001).

The National Research Council (1999) noted that most at-risk students begin primary grades with the lack of verbal skills, phonemic awareness, and necessary skills to understand the fundamentals of reading. However, Allington & Cunningham (2002) found in the last 25 years a tremendous amount has been learned about the reading and writing process. It is now more clearly understood of the mental processes that underlie both, and the new knowledge undercuts much of the conventional wisdom about how students learn to read and write (Allington & Cunningham, 2002).

The classroom has to be a place of learning, an environment conducive to learning and a place where the teacher and student are working together (Marzano, 2001).

Marzano (2001) studied The Coleman Report of 1966 which looked at classroom instruction and student achievement. The report studied over 600,000 students and 60,000 teachers and came to the conclusion that only 10 percent of student achievement can be

affected positively by any such school district. Marzano (2001) also stated The Coleman Report suggested that schools are a failure although research has proven two things about students who attend a “good” school today: 1) The ten percent achievement rule may be as many as twenty-three percentile points better than a student who attends a bad school; and 2) A teacher can have a powerful affect on her students even if the school is not high achieving. In interpreting Marzano’s (2001) thoughts, two fundamentals affect the outcome of student learning and those are both the quality of the school and the instructor in each classroom. In order to increase student achievement, districts must determine whether they provide a positive learning environment.

Even in a perfect situation, teachers will always find students struggling with one or more aspects of reading. Armbruster & Osborn (2001) noted that in today’s world, too many children struggle with reading. As many teachers, parents, and researchers will attest, reading failure has exacted tremendous long-term consequences for children developing self-confidence and a motivation to learn. It affects later success or failures in school performance (Armbruster & Osborn, 2001). Reading has been referred to as the cornerstone of success. Contrary to popular theory learning to read is not natural and easy; learning to read is a complex linguistic achievement (Reading Rockets, 2007). The online site, Reading Rockets, (2007) also noted the tragedy is that most reading failure is avoidable. Educators now know that classroom teaching by itself, when coupled with a range of researched-based components and practices, can help prevent reading difficulty.

While there are no easy or quick solutions to optimizing reading achievement, an extensive knowledge base of skills that students must learn in order to read well now exists (Armbruster & Osborn, 2001). In 2001, the National Reading Panel (NRP) issued a



report in response to a Congressional mandate to help parents, teachers, administrators, and policy makers identify key skills and methods conducive to positive reading achievement. The panel was charged with reviewing research in reading instruction (focusing on the beginning years of kindergarten through third grade) and identifying methods that related to sound reading practices. After conducting their study, of more than 100,000 students, the National Reading Panel found five areas of reading instruction conducive to students reading development: phonemic awareness, phonics, fluency, vocabulary, and text comprehension. Since the report has been issued, several articles have presented similar evidence while also disputing the findings as precise (National Institute of Child Health and Human Development, 2000).

#### *Phonemic Awareness*

The International Reading Association (1998) noted that the term phonemic awareness had gained much popularity in the 1990s. It is typically described as an insight to oral language and the segmentation of sounds that are used in speech communication. Armbruster & Osborn (2001) defined phonemic awareness as the ability to notice, think about, and work with individual sounds in spoken words. Research indicates that phonemic awareness instruction helps students learn. The International Reading Association (1998) stated that recent longitudinal studies have demonstrated that phonemic awareness is highly predictive of success in learning to read and the best indicator of success may be on the kindergarten level.

The National Reading Panel concluded in their research that phonemic awareness is important for students when learning to read, but often teachers become overly obsessed with teaching it (NICD, 2000). Armbruster & Osborn (2001) recommended that

teachers spend no more than 20 hours in a school year teaching phonemic awareness. They also suggested teachers use small group instruction for teaching phonemic awareness because students often benefit from listening to their classmates' responses to receive feedback from the instructor.

By the third grade more than 80 percent of students should develop phonemic awareness by the middle of first grade (IRA, 2007). The IRA (2007) noted the exception to this rule are those students who enter the school from poverty stricken families who come into school lagging behind tend to struggle with phonemic awareness. Students who fail to recognize phonemic awareness at an early age are likely to fall behind in smaller, rural school districts due to lack of resources (International Reading Association, 2001). As the research indicates, several different philosophies relate to the importance of phonemic awareness in reading.

### *Phonics Instruction*

The second aspect of reading instruction recommended by the National Reading Panel is the presence of phonics instruction. Phonics instruction teaches students the relationships between letters of written language and the individual sounds of the spoken language (Armbruster & Osborn, 2001). Phonological awareness involves different sounds and meanings of spoken words. Recent research indicates that children who enter school with a greater phonological awareness are better equipped to learn (National Research Council, 1999). The National Reading Panel concluded in their research that systematic phonics instruction provided a solid foundation for future growth in reading. They found a significant difference in achievement levels of those students receiving phonics instruction compared to groups who received instruction from alternative

programs (NICD, 2000). The Missouri School Improvement Plan (MSIP), fourth cycle, requires examiners to check classrooms for phonics instruction as one of the criteria to meet state approval (MDESE, 2007). All elementary curriculums are reviewed to ensure that phonics are being taught at the beginning stages of education.

### *Fluency*

The third aspect of teaching students to read was fluency. Reading First (2007) defined fluency as the skill of reading texts accurately and quickly, which allows readers to recognize and comprehend words at the same time. Fluent reading is reading in which words are recognized automatically without hesitation in decoding (Rasinski, 2003). With automatic word recognition, reading becomes faster, smoother, and more expressive, and students can begin to read silently, which is roughly twice as fast as oral reading. But beginning readers usually do not read fluently; reading is often a word-by-word struggle (Rasinski, 2003).

There are three dimensions of fluency that build a bridge to comprehension: accuracy in word decoding, automatic processing which requires students to use as little mental effort as possible to understand meaning, and prosodic reading which requires readers to understand expressions in meaning (Rasinski, 2003). Armbruster & Osborn (2001) concluded that students become more efficient in fluency when teachers model fluent reading and when students repeatedly read passages as the teacher offers guidance. Students are considered to be fluent readers when they can read a passage while only missing 1 out of 20 words. The National Reading Panel examined several different studies on teaching fluency and concluded instruction that encourages repeated oral

reading with feedback and guidance leads to meaningful expertise for both troubled and good readers (NICD, 2000).

### *Vocabulary Instruction*

Reading First (2007) describes vocabulary as the ability to store information about the meaning and pronunciation of words and understanding, remembering, and communicating with others about what has been read. A common debate is whether or not students understand the “vocabulary” presented in text and whether or not they understand the definitions of words; however, even vocabulary is not a simple concept (Fountas & Pinnell, 2001). Research shows that most vocabulary is learned indirectly while some must be taught directly (Armbruster & Osborn, 2001). Vocabulary occupies an important aspect in learning to read. As learners begin to read, vocabulary encountered while reading in texts is mapped into the brain and onto the oral vocabulary learned, thus allowing the reader to comprehend what they are reading by reflecting on experience (NICD, 2000).

The National Reading Panel examined different studies to learn how 8-to-10 year olds retained vocabulary from listening to stories told by others. They concluded that high ability students benefited more from listening to stories while low-ability and average readers should do more independent reading with a dictionary. The National Reading Panel found a high correlation between vocabulary and reading comprehension (NICD, 2000).

### *Comprehension*

All readers comprehend text by recognizing particular words and thinking about them as they read. Students may read and understand the word but still do not

comprehend the word meanings (Lipson, 2007). Comprehension is complex and requires a flexible and adaptive approach by the teacher. The National Reading Panel found that reading one book was enough to significantly improve children's expressive vocabulary of ten words in stories (NICD, 2000).

Allington & Cunningham (2002) reported that for much of the twentieth century it was assumed that once children learned to decode words, they would be able to read. It was also believed that once they could pronounce words, they would be able to comprehend, which was found to be a misconception. Adams and Bordova (2007) indicated that one reason reading instruction in elementary grades falls short of preparing students for the challenges of grades ahead is the increased teaching of word-recognition and an insufficient focus on text comprehension. In other words, students recognize what they are reading but do not comprehend what they have read. The major problem today with teaching reading comprehension strategies is that of implementation in the classroom for different levels of readers (NICD, 2000).

### *Instructional Time*

Most building administrators would agree that protected instructional time may be one of the most important aspects to student learning. Teachers are often guilty of unintentionally wasting instructional time throughout the day. Duke & Pressley (2006) noted that research shows teachers are most effective at building students' literacy when more than 90% of the students are on task more than 90% of the time. Allington and Cunningham (2002) found that most schools in the United States are open for instruction 180 to 190 days a year. A majority of children spend between 5 and 6 hours a day in those schools. However, in many schools, one-third to one-half of the day is spent on

nonacademic activities. The six hour day has been cut to four hours of instruction time due to distractions such as roll taking, lunch count, physical education, etc.; meanwhile, precious learning time is being wasted (Allington & Cunningham, 2002).

On the other hand some feel that the American educational system has sacrificed learning time in other areas to justify the extended amount of classroom time spent teaching reading. In an online article the International Reading Association (2007) noted that efforts to improve reading achievement have traded off instructional time to significant areas in subject areas like social studies, science, and the arts in order to gain additional time for reading drills and test preparation.

The International Reading Association (2007) added that the improvement of reading does not need to be accomplished at the expense of a well-balanced curriculum. In an online article written for Research Points (2007) John Carroll designed model of learning known as the “Model of School Learning” was examined. The equation breaks down the amount of time spent learning for each student and the actual amount of time needed to learn. Research Points (2007) found the need for school districts to implement extra time for students to learn within the frameworks of the school day. Since this study was conducted by Carroll, more studies have confirmed that those students who spend more time engaged at their appropriate level of difficulty achieve more than the traditional students who tend to spend less time (Research Points, 2007).

Most school districts in Missouri follow the required 90 minutes of reading time mandated by the state in the 4<sup>th</sup> cycle of the Missouri School Improvement Plan (MDESE, 2007). The National Reading Panel recommended at least 90 minutes daily of protected time devoted to reading instruction within the classroom. Carnahan & Levesque

(2005) suggested that schools should provide 90 minutes of protected instruction time and student intervention with supplemental reading. However, the state department does not mandate schools to provide extra time for intervention; the requirement remains at 90 minutes of instruction. The required 90 minutes by the state declares nothing about additional instructional or intervention time (MDESE, 2007).

Since students all learn at different paces, some need additional time and resources to understand instruction. Clark, Pearson, Taylor & Walpole (2007) concluded from their studies of first through third grade students that more time spent on reading instruction was conducive to student learning. In fact, the most successful districts spent an average of twenty minutes longer in reading instruction daily. Such studies have convinced some school districts to implement additional time for reading instruction throughout the day. Research conducted by Clark et al. (2007) on seventy teachers of grades 1 through 3 in Virginia, Minnesota, Colorado, and California developed a theory of the best and most effective instructional practices for literacy. The authors drew conclusions that the most competent schools did three things to set them apart: 1) Students spent more time in small group reading (almost double) and spent 134 minutes a week in reading instruction compared to 113; 2) Students received coaching during reading time; 3) Students applied writing in response to learning as part of instructional time.

Clark & Linn (2003) discovered the effects of instructional time on 3,000 eighth graders to determine learning patterns of students. One science teacher gave students a pre and post test over lessons to be taught to determine their current knowledge. With a full 12 weeks of instruction, 70 percent of the students performed within the mastery

level on both multiple choice and written response. Clark & Linn (2003) also noted that when the same instruction was given to another set of students with only six weeks of instruction, they began to notice the students were capable of mastery on multiple choice questions but performed poorly when writing the information down. When the same information was presented to students for three week intervals, correct choice answers were still noticeable but correct written response answers plummeted even further. The research concluded that students learn more when given time to conceptualize the learning process (Clark & Linn, 2003) .

#### *Writing and student achievement*

Sometimes it can be difficult to understand what elementary students are writing in early stages of reading. Banger-Downs, Hurley, & Wilkinson (2004) found students are the only ones capable of reading what they write down on paper but somehow they learn by writing. In the early grades students write letters backwards, spell words incorrectly, and tend to leave out vowels, yet they can read their own writing correctly back to the teacher. Banger-Downs et al. (2004) concluded that students should be encouraged to write words as soon as they learn them. They also noted that beginning writing with invented spelling does nothing short of encouraging students to write and then read their own writing. Eventually, the teacher can correct spelling errors with direct instruction and modeled writing (Bangert-Downs et al., 2004).

For struggling children, their own writing is sometimes the first thing they read (Allington & Cunningham, 2002). Three decades ago, a team of British educators championed the idea that writing would enhance academic learning. Bangert-Drowns, Hurley & Wilkinson (2004) conducted a study of school based writing to learn programs.



The study examined the frequency, nature and social context of the writing tasks to determine the effect on learning. The research examined studies that compared normal classroom instruction to writing-intensive instruction on the same content. In their findings, the researchers noted that writers outperformed conventional students but the typical improvement was a small one. The authors also noted that what appeared to make a difference was not the amount of time spent writing but the nature of the writing task, the thinking process implemented before writing. Banger-Downs et al. (2004) found that when students were asked to reflect on their learning processes, on the challenges they face, and on the strategies they employ, the effects of writing were substantially improved. However, this study showed writing was not an indicator of reading achievement. Researchers suggested that writing serves its purpose as a building block and scaffolding to the learning process in reading achievement (Bangert-Downs et. al, 2004). Effective writing will come from those who write about things they choose. Teachers are urged to allow students the opportunity to explore different ways of note taking to organize their thoughts and expression. No single technique for writing is perfect, so teachers should allow students to write about what interests them, and they will enjoy writing much more (Allington & Cunningham, 2002).

### *Small Group Instruction*

Several compelling reasons support bringing students together in small groups based on their individual needs. Guided reading is only a minima part of a student's reading instructional day, but with teaching that is efficient, effective, and socially supportive, it is an opportunity to accelerate their learning (Fountas & Pinnell, 2001). Small group instruction is effective because the teaching is focused on precisely what the

student needs to learn to move forward (Fountas & Pinnell, 2001). They also noted that by observing students reading for an extended amount of time, teachers could place them in appropriate groups where the instruction would be “just right” for their level. Opitz (1998) compared ability grouping of the past and flexible, small groups to concrete and sand. He noted that ability grouping was meant to withstand time while flexible groups were temporary walls that would change with time.

During small group instructional time, teachers are there to support students reading a difficult book or text. Fountas, Lyons, Pinnell & Scharer (2005) noted that during small group or guided reading, the teacher selects a text and introduces it; then each student reads the text softly or silently while the teacher observes them. After the story is finished, students discuss the story with the teacher. The teacher helps students practice processing strategies and engages the students in phonics/word study group. The effectiveness of small group and reading may relate back to the study conducted by Clark et al. (2007) found the most effective schools spending at least 60 minutes daily on small group instruction.

#### *Southwest Missouri Reading Models*

Good reading programs are grounded by the conviction that all students will learn how to read and be successful. Historically, there has been a plethora of different types of reading programs were used in elementary schools (Pearson, 2000). Most programs turn to an eclectic mix of literature-based, comprehensive basal, supplemental, and intervention programs to educate their students. Most school wide reading programs include a set of common instructional materials that guide instruction and assessment (Carnahan & Levesque, 2005).

As elementary schools have confronted the challenge of developing effective reading instruction, a flurry of reform proposals have been attempted to accomplish this goal along with funding opportunities for implementing school reform (Allington & Cunningham, 2002). A decade of research shows that there is no one best way to build students' literacy skills. A balanced approach to teaching reading combines a strong foundation in phonics with whole language methods. Only through more than one kind of instruction can students gain the skills to recognize and manipulate the sounds of letters and words and the skills to understand what they read.

Since all children learn differently, only a balanced approach to teaching reading can give all children the skills they need to read well (Coordinated Campaign for Learning Disabilities, 1999). Reading skills are like building blocks. To learn to read well, children need the blocks for knowledge of the sound of letters, blocks for the knowledge of knowing the meanings of words or vocabulary, word parts, grammatical markers, and groups of words (Coordinated Campaign for Learning Disabilities, 1999). The National Reading Panel determined that effective instruction includes teaching children phonemic awareness to break apart and manipulate the sounds in words, and phonics teaches that these sounds are represented by letters that can be blended. Effective instruction also includes having children read aloud while providing guidance, teaching word meanings, and providing comprehension strategies (NICD, 2000).

In 1990 the Arkansas Literacy Program was implemented into schools using Title One funding. The Arkansas Literacy School Reform Model is a school-wide design for ensuring that all children by the end of third grade will be achieving literacy proficiency (Arkansas Literacy Model, 2007). The program is designed to follow researched based

principles for initiating and sustaining literacy improvements throughout elementary schools. The model used a balanced literacy program with explicit instruction in phonemic awareness, phonics instruction, fluency, vocabulary, comprehension and writing processes (Arkansas Literacy Model, 2007).

The main components of the Arkansas Literacy Model (2007) included school based literacy coaches receiving specialized training and work in an apprenticeship. Upon completion of training, coaches return to their district to serve as the instructional professional and liaison between the district the model. Site-based professional development and literacy team meetings are scheduled regularly by coach where research-based strategies and techniques are modeled for the staff. This program provides assistance to states and districts to establish scientifically based reading programs for students enrolled in kindergarten through grade three. Funds support increased professional development to ensure that all teachers have the skills they need to teach these programs effectively. The program also supports the use of screening and diagnostic tools and classroom-based instructional reading assessments to measure how well students are reading and to monitor their progress (Arkansas Literacy Model, 2007). The online site provides evidence of the success of the program with data recorded from multiple school districts.

Reading First (2007) is the largest and most focused early reading initiative ever undertaken in this country. This program provides states, districts, and schools with funding to implement scientifically based reading instruction for students in grades kindergarten through third grade (Reading First, 2007). Authorized as part of the No Child Left Behind Act, Reading First's purpose is to ensure that every child reads at

grade level or above by the end of third grade (Reading First, 2007). To do this, the program focuses on what works, and it supports the implementation of proven methods of early reading instruction. This program places proven methods of early reading instruction in classrooms (Reading First, 2007).

Through Reading First (2007), states and districts receive support to apply scientifically based reading research—and the proven instructional and assessment tools consistent with this research—to ensure that all children learn to read well by the end of third grade. The program provides formula grants to states that submit an approved application. State education agencies fund those proposals that show the most promise for raising student achievement and for successful implementation of reading instruction, particularly at the classroom level (Reading First, 2007).

Only programs that are founded on scientifically based reading research are eligible for funding through Reading First. Funds are allocated to states according to the proportion of children age 5 to 17 who reside within the state and who are from families with incomes below the poverty line (Reading First, 2007). The need for such programs exists because of a high number of at-risk students throughout the nation who struggle with reading. Among students eligible for free or reduced price lunches, only 15 percent are proficient readers (National Center for Educational Statistics, 2003).

The program consists of five different areas of instruction based on research: phonemic awareness, phonics instruction, fluency, vocabulary, and comprehension. A site-based coach is chosen to be trained as the on site expert for the building staff (Reading First, 2007). The coaches are responsible for staff development and training throughout the year. After being trained, coaches return to the building to collaborate

with the staff about reading materials to be used and how they will structure their programs (Reading First, 2007).

Students are given reading test to determine their ability levels in the 5 areas of reading. All classrooms participate in a 90 minute uninterrupted reading block each day. Students will be given extra tutoring daily for as many as 90 minutes in areas of weakness. They will receive 90 minutes of reading instruction daily plus additional time outside the regular classroom for needs areas. Students are placed in flexible groups so their instruction outside the classroom changes as they progress their reading skills (Reading First, 2007).

The Missouri Reading Initiative is a comprehensive approach to professional development model in all aspects of literacy. It was first organized in 1998 under the auspices of the Missouri Learning First Alliance, consisting of fifteen major educational organizations. The initial mission of the Missouri Reading Initiative (2007) was dedicated to working with Missouri public schools' teachers and administrators to ensure every child would be able to read proficiently by the end of third grade. However, because of the successful results of the program it has been expanded to include literacy assistance at all grade levels. Individual elementary schools must apply to be selected into the program (Missouri Reading Initiative, 2007). Before applying, school administrators and their staff are required to discuss their commitment and need for improved reading achievement. Once the district has been accepted as a MRI school, it will be assigned a district trainer. The trainer works with the school for three years to provide instructional support and professional development (Missouri Reading Initiative, 2007).

The Missouri Reading Initiative (2007) requires professional development to begin before the school year with an intensive two days of researched based instructional strategies tailored to fit the individual districts needs. All teachers with a connection to literacy instruction are required to participate in all professional development. Once the school year begins, the trainer will work with teachers and principals in new instructional strategies and techniques. The trainer will observe teachers and model strategies throughout the year. Teachers are expected to participate in study groups when the trainer is not on site (Missouri Reading Initiative, 2007).

Study groups have proven to be effective change agents for individual schools (Missouri Reading Initiative, 2007). Missouri Reading Initiative (2007) requires that professional development time decrease throughout the three year period. In the first year, school districts are required to participate in 22 days of training. By the third year the amount of time spent in training decreases to 11 days with the assumption that programs will continue to grow and develop in the following years (Missouri Reading Initiative, 2007).

Another popular model used in southwest Missouri is Four-Blocks. Four-Blocks is a balanced literacy framework that was created by Dr. Patricia Cunningham and Dr. Dorothy Hall along with first grade teacher Margaret DeFee in Winston-Salem, North Carolina, in the late 1980s (Four Blocks, 2007). Four Blocks (2007) is a comprehensive language arts model that allows students to develop their reading, writing, speaking and listening skills to become effective, literate communicators. The main focus of the model is reading; however, the model allows for integration among all of the language arts areas and among all curricular content area. Four-Blocks is an instructional delivery system for

teachers: the *how* in teaching, not the *what*. Research is supporting that Four Blocks makes instruction more effective and more efficient, helping teachers to manage the precious time that they have to interact with students (Four-Blocks, 2007).

Four Blocks (2007) is based on the premise that there is not just one way educators can teach all children to read. The experts, according to the Four Blocks website, (2007) agree there are four ways children can learn to read. The failure in the past has been that educators have felt it necessary to pick and choose among the four to find the one that met the needs of most children. Four-Blocks provides a framework that allows teachers the opportunity to expose every student to all four approaches each day. This fail-free approach ensures that students will not fall through the cracks because their particular area of strength may not be included. This premise is what Four Blocks teachers refer to as multi-method (Four-Blocks, 2007). Second, Four Blocks is based on the theory that children can learn to read and write without being labeled and ability grouped.

Even though one of the four blocks is Guided Reading, which is often associated with ability grouping, the Four-Block approach to guided reading does not place children in small ability groups for instruction with the teacher (Sigmon, 2007). Four-Block teachers learn a different way to support students and to match them with text to aid their success in what is considered a more engaging manner than traditional instruction once offered. This premise is what Four Blocks teachers refer to as multi-approach.

The four programs provide similar; yet different approaches to teaching and learning. The reading programs all involve staff development, researched based instructional strategies, and guidelines for school districts to follow as a blueprint for



student achievement. If one program were more successful than others, test scores would consistently improve on MAP scores in that building.

*The History and Changing Role of Staff Development*

School districts can implement any program they desire as long as it has support from staff, administration and the community. All the programs mentioned above have similar backgrounds, beliefs and ideas toward student achievement. Is one program more effective at preparing teachers to be better reading instructors, thus causing more achievement by individuals? When a school district makes the decision to implement an instructional model, a determined amount of cost is involved with educating and developing the staff (Marzano, 2003). School districts use state and federal monies to provide professional development for their staff (MDESE, 2007).

Staff development evolved during the 20<sup>th</sup> century. In the early part of the century, a massive effort was launched to improve all schools through reform. During the late twenties and into the year 1930, there were approximately 247,000 public institutions of education (National Center for Educational Statistics, 2003). Also in the 1930s school districts began to consolidate smaller schools in a cost effective movement. The consolidation significantly reduced the number of school districts in the United States (National Center for Educational Statistics, 2003). The shift brought about a new face to education. Middle school was introduced into the public school system. As a result, high school students were no longer housed in the same building as the elementary students. The split was designed to improve early childhood education (National Center for Educational Statistics, 2003).

In the 1950s and into the early sixties education often took harsh and unfair criticism from the American people. Marzano (2003) reported that a man named Admiral Hyman Rickover scoffed at the quality of education in America and made direct links to education and the security of the nation. Even science jumped on board, by linking teachers to the failure of the Sputnik launching in 1957. Teachers were accused of failing to teach adequate skills in math and science while indirectly causing the United States to fail in their race against Russia in the race to space (DuFour & Eaker, 1998). In 1966 the *Equality of Educational Opportunity* also known as *The Coleman Report* expressed concerns about the quality of education young people were receiving in the United States (Marzano, 2003).

Marzano (2003) also noted that public school enrollment continued a downward spiral from the late 1960s into the 1980s. The solution to the academic problem was to decrease the ratio of students to teachers. Classroom sizes fell from an average of 22.3 students per teacher in 1970 to 17.9 in 1985 (National Center for Educational Statistics, 2000). The National Assessment of Educational Progress was introduced in the 1970s. The goal of the program was to monitor student achievement through long-term assessment while reporting the data to the public (National Center for Educational Statistics, 2003).

The second half of the century proved to be no better than the first (Marzano, 2003). The disappointment of school reform continued with major concerns in the 1970s and 1980s. The National Commission on Excellence in Education published *A Nation At Risk: The Imperative for Educational Reform* which led most Americans to believe that education had entered a state of disrepair (Marzano, 2003). Then Secretary of Education

Terrell Bell and a prestigious committee prepared the report for President Ronald Reagan who later endorsed the report in a public speech. The report had a rippling affect through education, proving to be a turning point for the role of teachers in education (Marzano, 2003).

The results of earlier reports on education forced educators to focus their attention on researched based efforts to begin the process of change. *The Coleman Report* as well as follow-up studies indicated that effective schools generally have a substantial impact on student success and achievement (Marzano, 2003). In 1989 President Bush called for the nations' governors to attend an educational summit to focus on school improvement. The result was a two-pronged approach to school reform. One of the first elements of the new strategy called for the development and implementation of national goals and standards. The outcome was the identification of Goals 2000: Educate America Act of 1994, which set specific goals for American schools' and students (DuFour & Eaker, 1998). Congress later added an additional two components to the Goals 2000, parental partnerships with the school and professional development for all educators. An optimistic outlook grew as Congress established the National Education Standards and Improvement Council in 1994 to monitor and review both state and national standards of education (DuFour & Eaker, 1998). During the same time a movement began to allow individual schools more freedom to research and develop the best methods to achieve the standards and goals. The new emphasis on researched based methods and staff development came to be known as the Restructuring Movement (DuFour, DuFour, Eaker, & Kaharnac, 2004). Although the Restructuring Movement had some critics, others saw value in its significant components such as site-based management, shared-decision

making, staff teams with similar or shared planning time, shared responsibility for student instruction, additional assessments, and more learning days were added to the school year (National Center for Educational Statistics, 2000).

In the 1990s, goals and standards continued to expand for both students and teachers. Professional teacher organizations, educational state departments, and academic organizations began the process of setting clear goals for students by defining new curriculum frameworks, implementing different instructional methods, and devising new methods for student assessments over a broader area of emphasis (National Center for Educational Statistics, 2001). From 1971 to 1999, the National Assessment of Educational Progress (NAEP) reported an overall increase in reading and math scores with a slight decline in science (National Center for Educational Statistics, 2000). The NAEP assessments were reconstructed in 2002 to report more authentic and representative state-level results and to redefine their representative student samples for the state (Digest of Educational Statistics, 2000).

In 2001, Congress passed the landmark No Child Left Behind Act to raise student achievement while closing the achievement gap. With the Act, Congress gave permission to reauthorize the Elementary and Secondary Education Act of 1965, the federal law for kindergarten through high school students (NCLB, 2001). The new law represented major changes in federal efforts for elementary and secondary education. It is based on four components: accountability for results, an emphasis on best practices based on proven research, expanded options for parents, and additional flexibility for local control of implementation (NCLB, 2001).

NCLB (2001) encouraged school districts to promote teacher development by consulting with teachers and administrators to determine the needs of the staff. The staff is asked to complete needs assessment questionnaires which allocate how professional development dollars are to be spent toward relevant, useful, and focused information to assist improvement in student achievement (NCLB, 2001).

From the early 1950s through the mid-1980s, studies of effective schooling had a tendency to perceive schools as having a unitary and consistent impact on student achievement (Marzano, 2003). A growing body of evidence now points to the teacher as the most important factor affecting student learning and achievement. Marzano (2003) found that current research indicated that by improving the effectiveness of the teacher, a positive impact would be transferred to student learning and achievement.

#### *Changes in Staff Development*

For many years staff development consisted of seminars held in half-day or full-day workshops on site at the schools (Marzano, 2003). Districts offered little participation in professional development conferences that were held anywhere other than on campus. Hoerr (2005) noted the major factor in a teacher's success and survival is his or her ability to do as much as possible in a small amount of time. Unfortunately, that skill only comes with time and experience. To speed up the process, professional development has been introduced into school districts (DuFour & Eaker, 1998). The extent of individual staff development depended on local resources or professional development funds provided by the state and at times, the willingness of the teachers to pay for the seminar out of their own pocket (National Center for Educational Statistics, 2000). In the 1990s and early 2000s, new initiatives for staff development began to evolve. Teachers, for the

first time, became more forthcoming about their individual needs as educators (Murphy, 2002). The new approaches began to center on how to best meet the needs of the learner and to assist teachers in recognizing those needs when they saw them (DuFour, DuFour, Eaker, & Karnahek, 2004).

Murphy (2002) identified two approaches to professional development into study groups and grade-level teaming to enhance professional development in the 1990s. Both caused teachers to use research and student data to analyze content and then to develop strategies to help students learn. Study groups consisted of teachers who met in school organized teams by grade level, department, or topic of interest to discuss instruction. Discussions and meetings were structured around an identified topic of sharing knowledge, effects of classroom practice, and the analysis of student performance. Teachers no longer felt like they were on an island by themselves. Murphy (2002) also noted that grade level teaming occurs when teachers determine how to learn about strategies and then, learn about strategies for assessments. Teaming generally involves individuals planning together, yet some teachers were reluctant to meet during their plan time each day to work with other teachers (Murphy, 2002).

Another approach common to school districts is Professional Learning Communities. Rick DuFour and Robert Eaker are considered to be two leaders in this approach for improving schools by engaging entire staffs in professional learning communities. DuFour and Eaker (1998) stated that the development of school personnel into a collaborative unit was a promising strategy toward developing a Professional Learning Community. Professional Learning Communities (PLCs) focus on many factors at the same time, such as educational research, best practices, standards, organizational

development, change processes, leadership and successful practices being employed outside the school district (DuFour, et al., 2004).

In a PLC, an environment is created by educators to support mutual cooperation, emotional support, instructional practices, and personal growth by working together as a team to accomplish goals that cannot be reached alone (DuFour & Eaker, 1998). Schools that operate as PLCs recognize the importance of team, ongoing study, and constant revision to meet student needs as they change (DuFour, DuFour, Eaker, & Karnahek, 2004)).

McTighe & Wiggin (2006) stated, “School leaders need to create job requirements that make learning about *learning* mandatory. Moreover, we need the equivalent of a Learning Bill of Rights-standards and structures the help us research and decide, as a staff, whether a given teaching practice is truly professional and consistent with our mission and state standards” (p. 26).

A third approach focuses on continuous improvement using six steps that are centered on school improvement. This approach purposely brings the teacher into the planning and implementation phase of staff development in a structured and disciplined manner (Kline, Kuklis & Zmuda, 2004).

Kline et al. (2004) identified six steps to be defined and followed in progression. Identify and clarify the core beliefs that define the desired effect on the school’s culture. Create a shared vision by explicitly defining what those core beliefs should look like when practiced in person. Collect accurate, detailed data and use analysis of the data to define where the school is currently and to determine the gaps between reality and the

set vision. Identify the necessary steps or procedures that will most likely close the gaps between the current reality and the shared vision. Develop and implement an action plan which will support the staff through the change process and integrates the desired outcome within each classroom and throughout the school. Embrace collective autonomy as the only way to close the gaps between the current reality and the shared vision, and embrace collective accountability in establishing responsibility for closing the gaps” (p 63).

The 4<sup>th</sup> and 5<sup>th</sup> steps in the continuous improvement provide a direct focus on staff development. Kline et al.(2004) suggested that staffs must be afforded the opportunity to learn about the change, and the impact it will have, both individually and collectively. Teachers need to see what change looks like when practiced in order to grasp the idea. For teachers, this approach requires training, coaching and support from other staff members, and administration during the staff development process so change can be integrated into the classroom and system (Kline et al., 2004).

Teaching reading is a difficult task that most teachers are unprepared to do when entering the teaching field. Most teachers are taught traditional reading methods in college (Wadsworth, 2001). Traditional approaches are less common in today’s culture of staff development. Changes in approaches to staff development are a results oriented with high expectations placed on education and are driven by the No Child Left Behind Act of 2001 which places more accountability on both the teacher and the district, leaving both to feel the intensity of change in education (Wadsworth, 2001). School districts are no longer relying on teachers’ experience; instead they depend on research-based standards,



best practices, student performance data, and teacher-driven needs to make improvements in student achievement (Birman, Desimone, Garet & Porter, 2000).

### *Staff Development*

Staff development for teachers must begin at the district level where induction programs serve as the foundation (Johnson & Kardos, 2002). A new teacher's contract often stipulates he or she attend district level training sessions before the regular school year begins. Some educators enter the profession with little exposure to induction programs while others leave college with no other exposure to the teaching profession other than what was experienced during their student teaching (Johnson & Kardos, 2002). Johnson & Kardos (2002) concluded that teachers enter the profession with more uncertainty than ever before.

Johnson & Kardos (2002) also noted that new teachers crave experienced reading teachers who will take their daily dilemmas seriously while providing feedback on teaching strategies and share insights about students' achievements, behavior, and assessments. New teachers need sustained, school-based staff development that carries throughout their first years as a teacher and expert colleagues who can observe their teaching and respond with instructional strategies (Johnson & Kardos, 2002).

### *Summary*

From the beginning of early education until current times there have been systematic changes, reforms, and educational values have changed. The one common denominator in all cases was the ever present facet of educational improvement. From the days of the one room school house to the current high stakes testing for accountability has brought one thing to the fore front and that is the importance of education. The

NCLB law of 2001 introduced school districts to high stakes testing. History has seen cultural shifts in education such as reading programs, instructional time spent on reading improvement and staff development. The one thing that has not changed since the early part of the century is the desire to provide the best education possible so students will be successful.

## CHAPTER THREE - METHODS

*Introduction*

School districts are held accountable by the NCLB (2001) law to provide evidence of student achievement. The state of Missouri developed the annual MAP test to assess yearly student progress. The progress is recorded and used by the state for an annual report card of individual districts and buildings. The report cards are used as an accountability tool by the state toward the NCLB mandates. Each year the percentage of students required to meet proficient or advanced status on the MAP test increases (MDESE, 2006). As school districts continue to search for new ways to meet the increasing demands, administrators are looking for effective reading models and methods of reading instruction to increase student achievement.

This research examined reading instruction methods and programs implemented by individual buildings across Missouri to improve student achievement. Teachers in every school building have different methods and approaches when teaching reading. Methods and procedures differ in each building; however, all districts are required to implement 90 minutes of reading instruction daily (MDESE, 2006). School districts may implement more than the mandated time. Districts may also employ different instructional models, professional development, and daily writing time to increase reading achievement.

This quantitative study was conducted to determine the correlation between student achievement and instruction methods in 70 southwest Missouri school districts. The 2005 version of SPSS statistical analysis was used for the purpose of computing statistics for this study. Statistics were compiled in spreadsheets located in the program.

After careful consideration of different statistical tests and advice from professors, it was determined to use the One-Way ANOVA to determine the significance of instructional methods applied, professional development, and student achievement in communication arts on the MAP test for third grade students. It was recommended by my advising professor to compare data for one year on the MAP test to narrow the scope of study. The data were examined for reading instructional time, professional development provided, and reading models implemented by individual buildings. Building scores were examined on the annual MAP test for the 2007-2008 school year in communication arts.

### *Research Questions*

School districts throughout southwest Missouri consistently experience high levels of proficient and advanced student scores on the MAP test (MDESE, 2007). Each year buildings are required by the NCLB law to provide evidence of student progress in communication arts. In 2014 every student is required to be reading on grade level. To gain a better understanding of current instructional methods being used by different districts, this study will be driven by the following questions:

1. What correlation exists between student achievement and daily reading instructional time in first through third grade?
2. What correlation exists between the amount of daily small group reading instruction and student achievement?
3. What correlation exists between student achievement and the type of reading program used by school districts?
4. What correlation exists between student achievement and the amount of professional development provided to staffs?

5. What correlation exists between student achievement and the amount of writing instruction time spent daily in school districts?

#### *Description of Population*

Schools participating in this study were individual public school buildings with student populations ranging from kindergarten through fifth grades. Seventy school buildings chose to participate for the purpose of this study. Over 2,400 students were enrolled in the school buildings that were surveyed for this research. No individual student names were recorded or reported. A second survey was sent by mail to building principals not reporting via e-mail in the first release. Each building participated voluntarily and all information gained was considered to be accurate.

Most of the school buildings in the geographical area where the study occurred are considered neighborhood buildings ranging from kindergarten through fifth or sixth grade. Southwest Missouri has similar school districts with students receiving free or reduced lunch rates ranging from 35 to 70 percent of students. Student scores were restricted to third grade communication arts for the 2007-2008 school year.

#### *Instrumentation*

To determine the correlation of instructional time and reading models used by buildings on student achievement, a survey was developed by this researcher. The survey was developed by after seeking input from 25 reading teachers in different buildings to answer research questions about the correlation existing between student achievement and instructional practices. The survey was field tested on 30 principals and teachers to check for clarity and purpose. After field testing the questionnaire, revisions were made

to the questions to clarify their intent. A likert scale was originally used but had to be replaced by a more specific questionnaire.

Building principals were asked to give data for reading models used, reading instruction time implemented, and professional development given to their staff. The surveys were emailed to building principals the first time by using the Missouri Association of Elementary Principals (MAESP) e-mail directory. A second survey was sent to building building participating in the study. Building scores were recorded for third grade students achieving proficient and advanced scores on the MAP test.

#### *Administration Procedures*

All buildings in the southwest portion of the state were asked to participate in this research. Individual buildings were determined by using the Southwest Regional Professional Development (SWPDC) list of participating school districts. To determine if a correlation existed between student achievement principals failing to respond by mail. A total of 70 responses were returned out of a possible 165 possible participants for a return rate of 42 percent. Surveys returned were assigned a random number to identify different buildings. Confidentiality was maintained by storing all information in a locked file cabinet throughout the study. The second instrument used for this study was communication arts scores retrieved from the MDESE website for the 2007-2008 school year for each and instructional practices employed, surveys were e-mailed to building principals. Twenty-two buildings responded the first time. A second survey yielded 48 more participants for this study. Student populations were examined to determine an even breaking point for classification of buildings into sizes. For the purpose of this study, buildings which had 1 to 38 students per grade were classified as small districts while

buildings with 39 to 74 students were classified as medium sized buildings. Buildings which had 75 or more students per grade level were labeled as large buildings. Large buildings had a range of 75 to 325 students per grade level. One hundred and sixty individual buildings were requisitioned for instructional practices implemented in their buildings. Data were recorded for individual buildings by assigning a random numbers. No school districts, individual buildings, or student names were recorded for this research.

The second form of data used for the study was third grade communication arts scores for individual buildings. Scores were recorded from the MDESE website for the 2007-2008 school year. Individual buildings were given a letter or number to protect their confidentiality. All third grade communication arts scores are posted on the MDESE website for each school district. Assessment scores are available for anyone to observe and there were no confidentiality risks due to the composite scores being given without student names.

### *Summary*

All data were compiled into the statistical program SPSS. The program allows researchers to record information into subcategories for examination against one another. The program assists researchers by applying different statistical tests to the data to determine significance of one versus another. The One-Way ANOVA was chosen to analyze the data because it compares one or more statistical categories against a constant variable. Student achievement could be compared for the different instructional times applied by buildings, different professional development days applied by buildings and

NCLB (2001) legislation dictated that every student would be reading on or above grade level in communication arts by the year 2014. Students will need to acquire reading skills in primary grades to be successful on the MAP test, which they take for the first time in third grade. School districts are mandated by the state of Missouri to require ninety minutes of daily reading instruction in the area of communication arts (MDESE, 2007). However, some school districts extend reading instruction, on a voluntary basis, beyond the time frame while employing different instructional and teaching methods. This study examined the correlation between student achievement and various reading instructional practices. Instructional methods data were collected in this study by surveys while third grade communication arts scores on the 2007-2008 MAP test were recorded the MDESE website. Instructional methods data gathered from the surveys were compared with third grade student achievement scores on the 2007-2008 MAP test for individual buildings.

In chapter 4 data will be compiled and analyzed to determine if any correlation existed between student achievement and instructional methods applied. Data will be displayed for different instructional practices and methods applied to individual buildings to improve student achievement. In chapter 5 findings, implications, recommendations and conclusions of the study will be discussed.



## CHAPTER FOUR - ANALYSIS OF DATA

*Introduction*

The purpose of this study was to determine if a correlation existed between instructional practices applied by school districts and student achievement on the third grade communication arts test administered by the state. The study examined different instructional practices throughout southwest Missouri elementary buildings and the achievement levels of their students. The results gained from this research could be used by geographical districts in determining future implementation of reading instructional methods. Findings from this could be used to determine the amount professional development, instructional time, and reading programs implemented by school districts in an effort to meet the requirements set forth by the NCLB law. Research was conducted on the four primary reading models implemented in southwest Missouri and different instructional strategies used by school districts to improve student achievement scores in communication arts.

Previous research has shown that there will always be a need for evaluation of programs. Duke & Pressley (2006) concluded that research shows teachers are most effective at building students' literacy when more than 90 percent of the students are on task all the time. This study examined communication arts scores from small, medium, and large classified districts to determine the different amounts of time spent teaching students in different aspects of literacy and student achievement. Wiggins (2006) suggested that a great weakness of the educational craft is that faculty members are not required to justify their teaching methods, approaches, and assessments against a set of established learning principles.

Data for this research was collected by administering a survey to 165 different school buildings throughout southwest Missouri. Some school districts had multiple buildings participating in the study. A total of 70 responses were returned after two e-mailings to building principals. This study had 70 participating buildings with some participating from the same district. The study was limited to 100 school districts in southwest Missouri for the 2007-2008 school year. Individual buildings were assigned a random number or letter to protect their confidentiality. The second instrument used in this study was data recorded from MDESE for third grade communication arts scores, for each building, in the 2007-2008 school year. Scores were recorded from the DESE website using proficient and advanced scores from each building. For the purpose of the study both scores were combined to get the average of students reading on grade level. Individual building scores were paired with their survey to examine if a correlation existed between reading instructional practices and student achievement. Confidentiality was maintained and protected throughout the study by omitting any building names or individual student scores. The foregoing data was used to determine the answers to the following questions:

1. What correlation exists between student achievement and daily reading instructional time in first through third grade?
2. What correlation exists between the amount of daily small group reading instruction and student achievement?
3. What correlation exists between student achievement and different programs used by school districts?

4. What correlation exists between student achievement and staff professional development?
5. What correlation exists between student achievement and time spent writing daily in school districts?

*Data Analysis*

*Research question 1.* Is there a correlation between daily reading instructional time and student achievement?

The data indicated 94% of school districts chose daily instructional time between 60-120 minutes (as shown in table 1). The highest recorded proficient and advanced mean scores recorded were in the buildings which implemented more than 120 minutes of daily instructional reading time. The mean of all reading scores was 42.30 out of a possible 100 percent. Two subgroups represented 94% of all the buildings, yet they were below the mean average by more than 2 percentage points. Buildings implementing more than 120 minutes of instruction daily had the highest mean scores of 49.70 percent but only ranked second in number. However, buildings implementing more than 120 minutes of daily reading instruction may not reveal accurate, long range predictions due to limited numbers.

Table 1

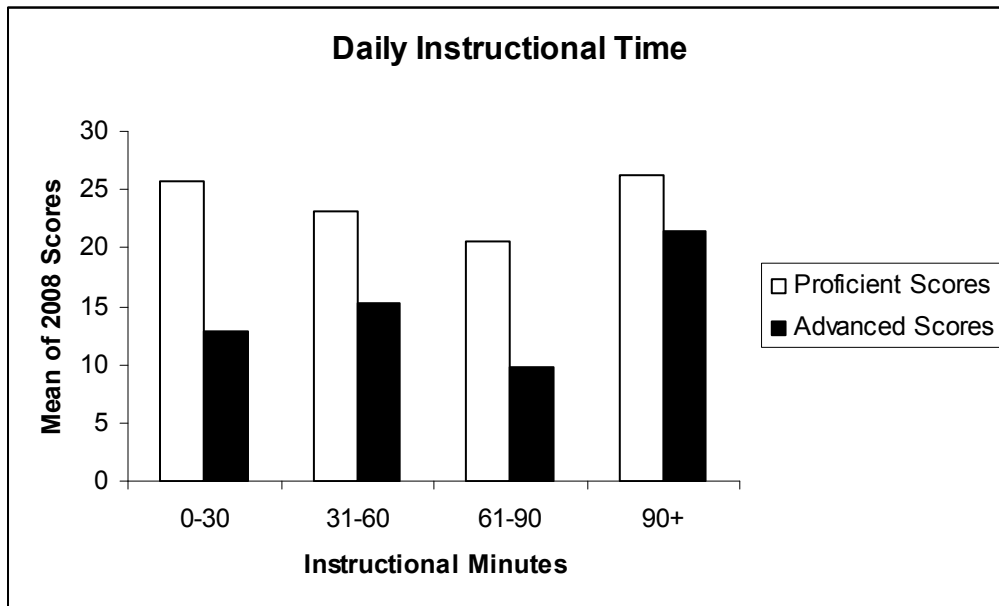
Daily Instructional Time

Minutes	Number of buildings	Proficient	Advanced	Total
0-60	2	24.40	18.65	43.65
61-90	31	25.08	13.46	38.54
91-120	35	23.89	14.05	37.94
120+	2	27.15	22.55	49.70

*Note.* Daily instructional time and student achievement scores showed no significant correlation with a value of .070 for  $p < .05$ .

The figure demonstrates the average mean of advanced and proficient scores recorded for the amount of instructional time spent daily in buildings (as shown in figure 1). Data indicated an increase in achievement scores of those districts which implement more than 120 minutes of daily instruction (as shown in figure 1).

Figure 1



*Research question 2.* Is there a correlation between daily small group reading time and student achievement?

The data revealed a mean score of 38.73 out of 100 percent for all buildings. The subgroup of buildings implementing 31-60 minutes daily of small group time were -1.08 below the mean scores. The lowest mean scores of -2.16 below the mean were recorded for buildings implementing 61-90 minutes of daily small group instruction (as shown in table 2). Of the 70 participating buildings, 60% of them chose to implement daily small group instructional time of 31-60 minutes daily. The mean score of all buildings was 39.7 percent of students scoring proficient or advanced on the 2007-2008 MAP test. Data indicates a bell curve for all districts participating in the research with the largest percentage of districts remaining in mediate two categories.

Table 2

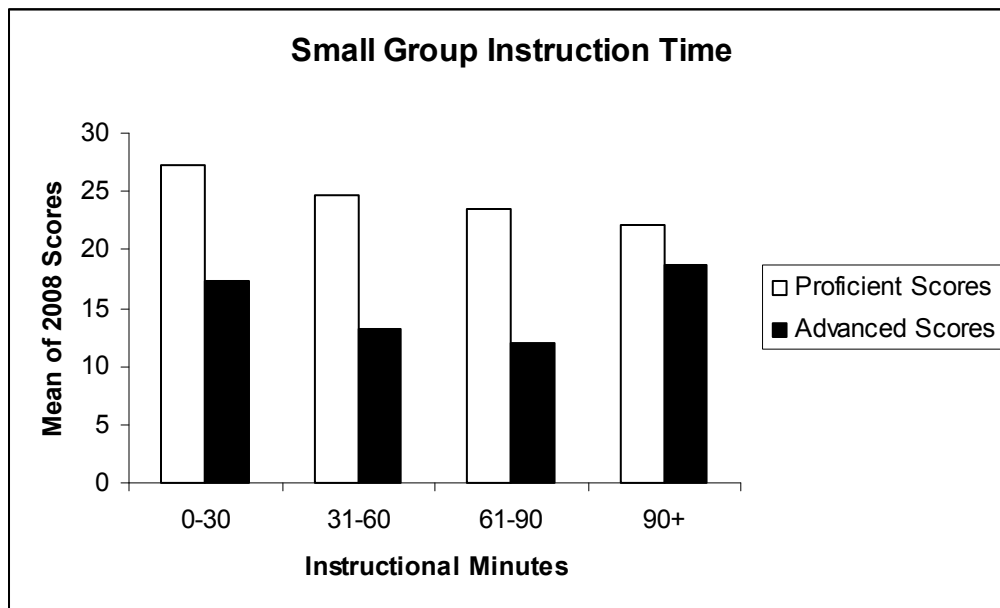
Small Group Instruction				
Minutes	Number	Proficient	Advanced	Total
0-30	9	27.18	17.38	44.56
31-60	39	24.63	13.13	37.76
61-90	14	23.52	12.05	35.57
90+	8	22.18	18.73	40.91

*Note.* Daily small group instruction time and student achievement scores did not show a significant difference. The One-Way ANOVA test revealed a significance of .317 for  $p < .05$  value.

Guided reading is only a smart part of a student's instructional day but with teaching that is efficient, effective, and socially supportive, it is an opportunity to accelerate their learning (Fountas & Pinnell, 2001). The figure indicates the difference in student achievement and the amount of daily small group instruction implemented in a

building. Buildings implementing 30 minutes or less experienced the highest advanced student scores while buildings implementing more than 90 minutes a day experienced the highest proficient scores. Data indicated that student achievement did not increase beyond 0-30 minutes of daily small group instruction (as shown in figure 2). The data indicated a decrease in student achievement with the exception of advanced students scoring better in buildings implementing more than 90 minutes daily of small group reading instruction.

Figure 2



*Research question 3:* Is there a correlation between student achievement and the reading program implemented in the district?

The table represents the different programs used in Southwest Missouri school districts. The mean score of 38.83 was more than districts implementing the Arkansas Literacy model, Missouri Reading Initiative, and other programs implemented (see table 3). Districts which used the Four Block reading model experienced the highest mean

scores of all models implemented. The table indicates that school districts do not rely on 1 program more than all others. More than 25.6 percent of the buildings chose to implement a different reading program than the 4 basic models in the area (as shown in table 3). A One-Way ANOVA test was applied revealing no statistical significance.

Table 3

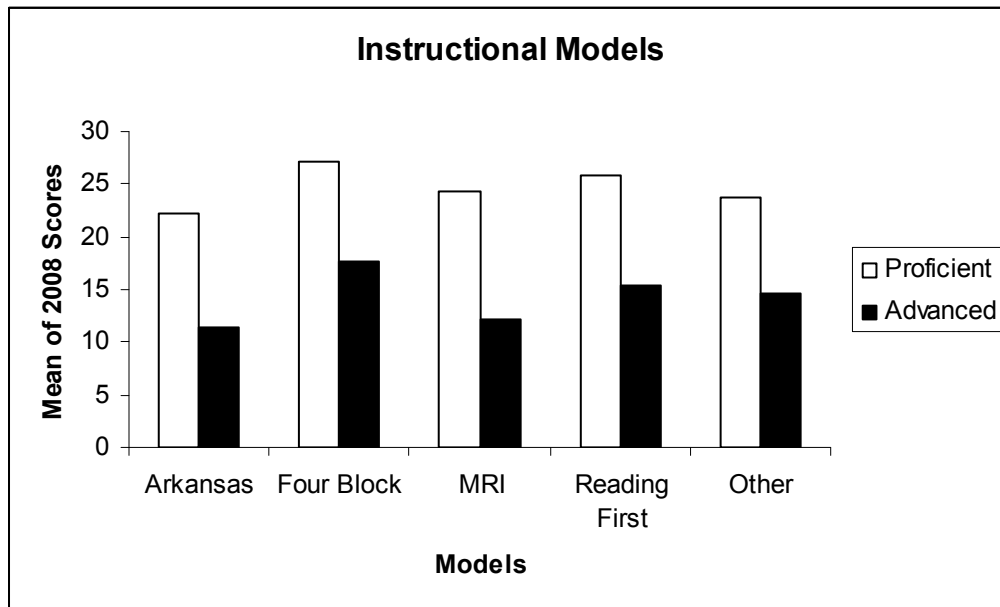
## Instructional Models

Model	Number	Proficient	Advanced	Total
Arkansas	13	22.15	11.31	33.46
Four Block	11	27.24	17.57	44.81
MRI	15	24.26	12.14	36.40
Reading First	13	25.86	15.37	41.23
Other	18	23.65	14.61	38.26

*Note.* Instructional models and student achievement showed no significance using  $p < .05$ .

As elementary schools confront the challenge of developing effective reading instruction, there has been a flurry of reform proposals in an attempt to accomplish this goal along with funding opportunities for implementing school reform (Allington & Cunningham, 2002). There are four popular models which are implemented in southwest Missouri. Some buildings indicated in the survey other models being implemented in their buildings. Data indicated a symmetrical relationship between advanced and proficient scores (as shown in figure 3). Buildings using the Four Block reading model experienced the highest proficient and advanced achievement scores. Buildings implementing the Arkansas Literacy Model experienced a decline in both advanced and proficient mean scores.

Figure 3



*Research question 4:* Is there a correlation between student achievement and the number of professional development days offered to staffs each year?

Seventy buildings responded to the survey questionnaire. The mean score of all buildings was 38.82 out of 100 percent. Buildings implementing 3-4 days and those implementing more than 7 days experienced lower scores than the mean. Buildings implementing 5-7 professional development days yearly had the highest mean scores. There was an even distribution of professional development days implemented yearly in school districts. More school districts chose to implement 7 or more days than any other model, yet student achievement was comparable across the board. The data indicated that professional development did not show a correlation between days spent improving reading instruction and student achievement. A One-Way ANOVA statistical test was applied and the results showed  $p < .220$  significance (see table 4).



Table 4

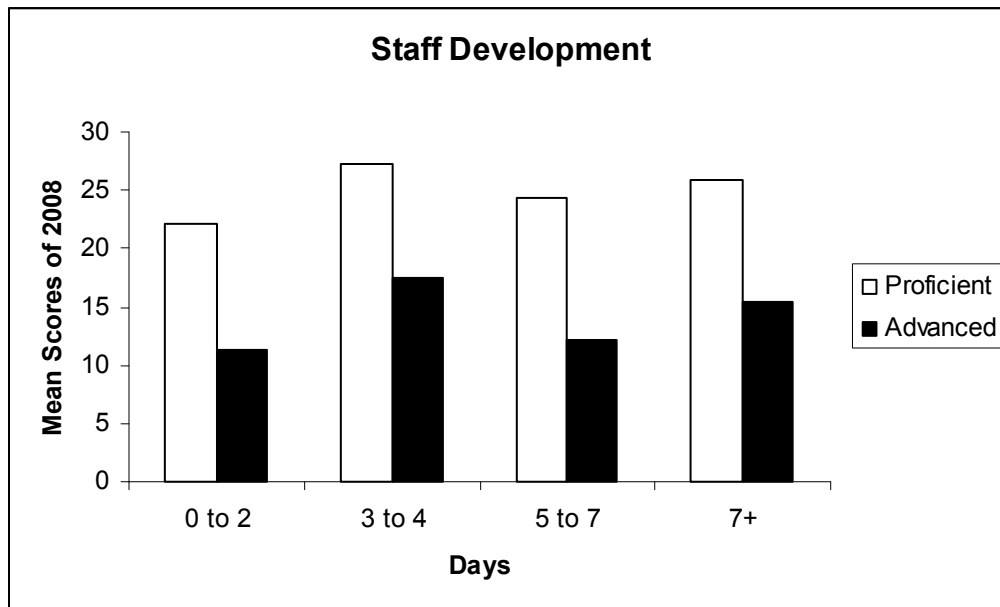
## Professional Development

Days	Number	Proficient	Advanced	Total
0-2	12	25.70	13.41	39.11
3-4	20	24.43	12.50	36.93
5-7	16	24.90	15.63	40.53
7+	22	23.70	15.03	38.73

Note. The number of professional development days and student achievement showed no significance using  $p < .05$ .

Kline, Kurkulis & Zmuda (2004) suggested that staffs must be afforded the opportunity to learn about the change, and the impact it will have, both individually and collectively. Teachers need to see what it looks like when practiced in order to grasp the idea. For teachers, this approach requires training, coaching and support from other staff members, and administration during the staff development process so change can be integrated into the classroom and system (Kline et al., 2004). The data represents the number of professional development days implemented in a school year to improve reading and student achievement. The data indicated that extended professional development for staffs does not guarantee increased student achievement scores. Data also indicated little difference in students obtaining proficient scores and the number of staff development days for reading instruction (see figure 4).

Figure 4



*Research question 5:* Is there a correlation between student achievement and the amount of time spent writing daily?

The table indicates the different achievement levels of students in buildings which require daily writing time. The data indicates that 90% of the school districts require 60 minutes or less of daily writing time. The mean score for all buildings was 38.78 percent proficient and advanced students. Ninety percent of all buildings were implementing between 0-60 minutes daily writing yet, both had mean scores below the average. No subgroup had a mean score which would meet the AYP mandated score of 51.4% (see table 5). A One-Way ANOVA test was performed with a statistical significance of .703 value. Buildings requiring more daily writing time experienced higher scores than buildings which required less time but had a smaller representative of participating buildings.

Table 5

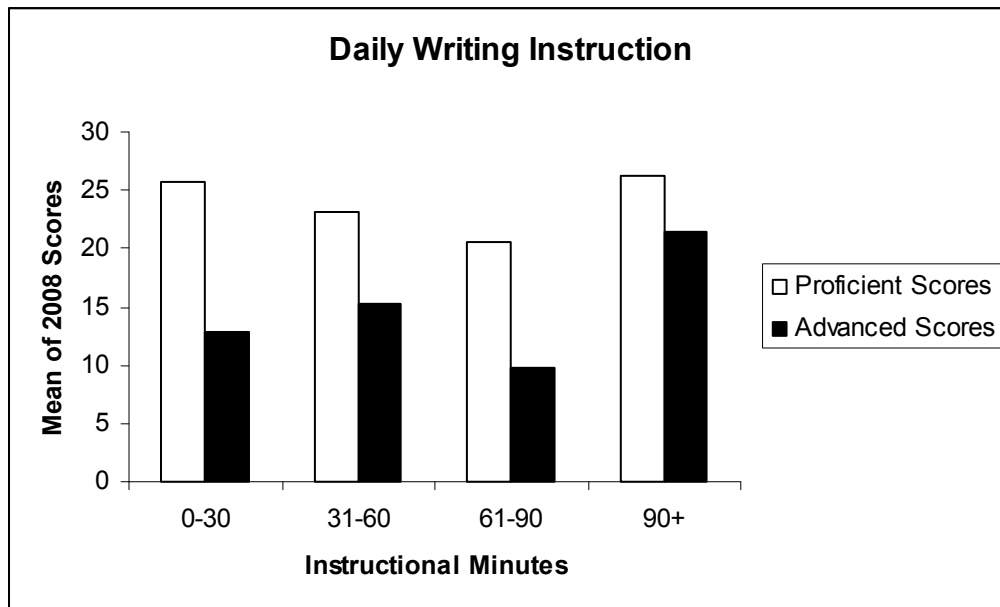
## Daily Writing Instruction

Minutes	Number	Proficient	Advanced	Total
0-30	21	25.74	12.93	38.67
31-60	42	23.10	15.23	38.33
61-90	6	20.50	9.83	30.53
90+	1	26.20	21.40	47.60

*Note.* Daily writing instruction and student achievement showed no significance using the  $p < .05$  value.

Marzano (2003) noted that writing activities benefit beginning readers tremendously and should be integrated into the reading period. Students can write about anything they read or learned in the lesson just taught as long as they're using writing skills to enhance reading skills. Proficient and advanced scores run asymmetrically across as districts implement more writing daily. As one drops the other will rise. Districts implementing 61-90 minutes of daily writing experienced the highest proficient scores while experiencing the lowest advanced scores (see figure 5).

Figure 5



School buildings across southwest Missouri vary in class size across the state due mainly to population in geographical areas. The small, rural school districts may have as little as 9 students per grade level while the larger schools around in southwest Missouri may have more than 300 students per grade. This research took the data recorded from the 70 participating school districts and broke those down into three class sizes ; small, medium, and large. The data indicated little difference between all categorical areas represented by small school districts. Nearly half the buildings chose to implement 31-60 minutes of daily small group instruction yet, those districts had the lowest mean scores on the Missouri Assessment Program (MAP) test. The Reading First model was implemented more than any other model in small school districts. Achievement scores were the highest for those buildings providing 5 to 7 days of professional development to increase reading achievement (see table 6). The AYP goal for 2007-2008 was 54.1% of students scoring proficient and advanced on the MAP test. No subgroup met the state

mandate of 54.1% of students scoring proficient and advanced on the 2007-2008 communication arts MAP test.

Table 6

Small Buildings				
Instructional methods	Number	Mean proficient scores	Mean advanced scores	Total proficient and advanced scores
Small group minutes				
0-30	2	22.50	18.45	40.95
31-60	10	22.02	11.22	33.24
61-90	8	26.33	04.30	40.63
90+	3	13.10	27.65	40.76
Daily instruction minutes				
0-60	1	26.10	21.10	47.20
61-90	7	22.30	13.40	35.70
91-120	15	23.04	13.04	36.08
120+	0			
Models used				
Arkansas	6	23.61	07.55	31.16
MRI	2	24.90	18.90	43.80
Reading First	7	25.25	15.71	40.96
Four Block	2	22.70	07.80	30.50
Other	6	19.03	16.66	35.69
Daily writing minutes				
0-30	6	25.83	17.83	46.66
31-60	14	19.51	14.10	33.61
61-90	3	33.23	01.43	34.66
90+	0	0	0	0
Professional development days				
0-2	4	25.03	12.06	37.09
3-4	5	16.06	08.02	24.08
5-7	7	28.20	17.95	46.15
7+	7	21.70	14.37	36.07

Buildings which had student enrollment between 39 and 74 students per grade level were classified as medium sized buildings. Over 50 percent of the medium sized buildings chose to implement 31 to 60 minutes of small group instruction daily (as shown in table 7). However, those buildings experienced the third highest mean scores on the 2007-2008 MAP test. No subgroup met the mandated 54.1% of students scoring proficient and advanced on the 2007-2008 communication arts MAP test.

Table 7

## Medium Buildings

Instructional method	Number	Proficient mean scores	Advanced mean scores	Total proficient and advanced
Small group minutes				
0-30	3	27.20	17.85	36.05
31-60	14	22.33	11.16	33.49
61-90	3	19.63	10.53	30.16
90+	5	23.98	15.68	39.66
Daily instruction minutes				
0-60	0	0	0	0
61-90	11	22.08	9.89	31.97
91-120	13	23.51	14.31	37.82
120+	1	26.20	21.40	47.60
Models used				
Arkansas	3	18.80	14.80	33.60
MRI	8	21.78	10.67	32.45
Reading First	4	25.65	13.92	39.54
Four Block	3	27.30	15.56	42.86
Other	7	30.54	15.80	46.34
Daily writing minutes				
0-30	8	22.95	9.26	32.21
31-60	15	22.92	13.44	36.36
61-90	1	20.50	19.20	39.70
90+	1	26.20	21.30	47.50
Professional development days				
0-2	5	24.02	13.48	37.50
3-4	9	25.05	13.36	38.41
5-7	4	21.50	12.75	34.25
7+	7	20.35	11.35	31.70

Buildings with more than 39 students per grade level were classified as large school buildings. Those buildings had a range from 39 to 328 students in each grade level. There were 22 districts classified as large districts. The table represents mean scores (as shown in table 8).

Table 8

## Large Buildings

Instructional methods	Number	Proficient mean scores	Advanced mean scores	Total proficient and advanced scores
Small group minutes				
0-30	3	30.13	17.40	47.53
31-60	15	28.62	16.24	44.86
61-90	2	16.70	16.40	33.10
90+	2	31.40	16.20	47.60
Daily instruction minutes				
0-60	0	22.70	16.20	38.90
61-90	13	29.16	16.66	45.82
91-120	8	25.41	13.58	38.99
120+	1	28.10	23.70	51.80
Models used				
Arkansas	4	22.47	14.32	36.79
MRI	3	31.93	18.96	50.89
Reading First	4	25.37	12.42	37.79
Four Block	6	28.00	18.13	46.13
Other	5	30.54	15.80	46.34
Daily writing minutes				
0-30	7	28.85	12.94	41.79
31-60	13	26.63	17.35	43.98
61-90	2	29.80	17.75	47.55
90+	0	0	0	0
Professional development days				
0-2	2	30.90	16.65	47.55
3-4	6	29.30	12.40	41.70
5-7	6	23.88	15.56	39.44
7+	8	28.37	18.82	47.19

All building classifications were compared to determine if any correlation existed in student achievement between small, medium and large buildings. The data indicated that larger buildings have the highest mean scores in every statistical category. Buildings classified as small and medium had similar mean scores in every statistical category examined. However, there was no significant difference between small and medium buildings (see table 10). Neither of the small, medium, or large buildings had a mean score to meet the mandated 54.1% of students scoring proficient and advanced on the 2007-2008 communication arts MAP test.

Table 9

Score Comparison			
Instructional Methods	Small building median scores	Medium building median scores	Large building median scores
Small group	38.89	34.48	43.27
Daily instructional time	39.66	39.13	43.87
Daily writing time	38.31	38.94	44.44
Professional development days	35.84	35.46	43.97
Different reading models	36.42	36.80	43.58

### *Summary*

Data was gathered from 70 school districts across southwest Missouri. Those building principals returned surveys with information on instructional methods used and different reading programs implemented in those districts to improve student achievement on the 2007-2008 MAP test. Data were gathered and input into the SPSS



statistical program where tables and figures were created to represent mean proficient and advanced scores for student achievement on the MAP test. Significance was determined by using the One-Way ANOVA statistical test. No correlation was found to exist between instructional methods and student achievement. Information was presented by using tables and figures to represent mean scores on the MAP test and instructional methods applied by the buildings. The information could be used by other school districts to determine future professional development for staff and pursuit of effective instructional methods used by successful school buildings in meeting the annual AYP goals. In chapter 5 findings, implications, recommendations, and conclusions will be made based upon the analysis of the data.

## CHAPTER FIVE - FINDINGS, IMPLICATIONS, AND CONCLUSIONS

The purpose of this study was to determine if any correlation existed between student achievement and the following factors; instructional time spent daily, daily small group instruction time, professional development and types of reading programs implemented by southwest Missouri school buildings. Many rural school districts are beginning to fall behind the mandates set forth by the NCLB law (MDESE, 2007). This research could be used to assist school districts in determining their implementation of instructional practices, reading models and professional development for staffs.

This study examined multiple buildings, with different populations, and reading instructional practices to determine what practices had a positive correlation to student achievement. Surveys were sent by e-mail and personal mailings to 165 elementary building principals in southwest Missouri. Seventy surveys were returned with the information recorded and used for this study. MAP data in third grade communication arts for the 2007-2008 year were collected for each participating district in the study. Proficient and advanced scores were recorded for all buildings participating in the study. This study examined the mean MAP scores of all buildings as they applied to different instructional strategies to examine if a correlation existed between student achievement and instructional strategies implemented. This study was guided by questions designed to improve reading instruction in the immediate area while searching for ways to meet AYP.

This study sought to answer 5 questions about whether a correlation existed between reading instructional practices and third grade student achievement scores on the MAP test. The review of related literature identified characteristics of quality reading

programs, necessary professional development, and different reading models used in southwest Missouri school districts. This study answered the following questions concerning reading instructional strategies implemented and student achievement:

1. What correlation exists between student achievement and instructional time spent teaching reading daily in first through third grade?
2. What correlation exists between the amount of small group reading instruction each day and student achievement?
3. What correlation exists between student achievement and the type of reading program used by school districts?
4. What correlation exists between student achievement and the amount of professional development provided to teachers for reading instruction?
5. What correlation exists between student achievement and the amount of writing instruction time spent daily in school districts?

### *Findings*

*Research Question 1:* Is there a correlation between student achievement and instructional time spent teaching reading daily in first through third grade?

Building principals were asked to identify the amount of time dedicated daily to reading instruction. The state mandates that each building implement the minimum of 90 minutes daily toward reading instruction. Data collected from surveys (See table 1) revealed that 66 out of 70 buildings implemented between 90-120 minutes daily. A One-Way ANOVA test was applied to the four statistical categories of instruction to determine if there was significance; the test revealed no significance between the amount of time dedicated daily to reading instruction and student achievement in communication

arts on the MAP test. Scores from each instructional area were placed together to achieve a mean score. The mean score was not representative of individual building which might give some idea as to why the scores did not meet state standards.

There could be several reasons why the data did not indicate any significance in student achievement. Third grade students take the communication arts test for the first time in third and nerves could have played a large part in their scores. Buildings have scheduled their instructional time but have no guarantee that each teacher works diligently within the frameworks to meet student needs. Time spent teaching may not have been a key factor in the data as much as what was actually being taught in the classroom. Socio-economic status and boy versus girl statistics were not recorded for this study. Their may have been a stronger indicator of achievement scores had this research broken the buildings down into further statistical categories. Achievement scores may not have been reflective due to the small time frame in which the study was conducted. It should be noted that all buildings participating in the study had scores below the state mandated 51.4% of students scoring in the proficient and advanced statistical areas on the MAP test.

*Research Question 2:* Is there a correlation between the amount of small group reading instruction each day and student achievement?

Building principals were asked to identify the amount of time dedicated daily to small group instruction for reading purposes. The mean score for all buildings participating was 38.73 percent of all students achieving proficient and advanced scores on the MAP test (See table 2). Seventy-five percent of all buildings surveyed reported that they implemented between 30-90 minutes daily of small group instruction.

Coincidentally, those groups recorded the two lowest mean scores of students scoring proficient and advanced on the 2008 MAP score. This study showed no correlation in the amount of daily instructional time dedicated to small group reading instruction and student achievement.

Student achievement appeared to increase on opposite ends of the spectrum for instruction. Buildings experiencing the best scores spent the smallest and largest amount of time dedicated to small group instruction. It should also be noted that the nearest subgroup to the mandated 54.1 percent proficient and advanced was those buildings implementing 0-30 minute's daily instruction yet; they only recorded mean scores of 44.56 percent of students on mandated reading levels. The data indicated little significance of implementing different levels of small group reading instruction daily.

The amount of small group instruction provided to students daily had no apparent significance on student achievement. Some building principals may have misunderstood what small group instruction meant while others may have mistaken small group instruction as that of teachers working with students in a matter not related to reading achievement. The communication arts test may not accurately reflect a students' reading ability on the third grade MAP test. Teachers may not understand the true meaning of small group instruction. Teachers may have too many students in the group, the students may not be participating in flexible groups, or the instruction they received may not have been high quality instruction. Achievement scores were not recorded for boys and girls separately. Small group instruction could have a greater impact on one gender versus the other. Building principals were not asked to detail how they conduct their daily small

group instruction. It could be possible that buildings are not actually conducting small group instruction rather confusing that as part of the whole reading block.

*Research Question 3:* Is there a correlation between student achievement and the type of reading program used by school districts?

Building principals were asked to identify the reading instructional model used in their building daily. Four basic models are used in southwest Missouri to model reading programs around. Most districts use some part of the four programs as their principle guidelines in reading instruction. This research revealed a wide variety of buildings implementing the 4 basic programs as well as “others” implicated in the questionnaire. The data indicated a mean score of 38.33 percent of students achieving a proficient or advanced score on the 2008 MAP test. The two programs experiencing the most success from the mean were Four Block and Reading First buildings but, it should be noted that their mean scores were well below the state mandated 54.1 percent of all students reading on grade level. Of note in the data was that 26 percent of the buildings reported using their own combination of all reading programs to instruct students.

All four reading programs had some similarities. Buildings may have been implementing a program and while using components of another model. The MAP test may not be a true indicator of reading achievement. Socio-economic status was not considered for different models, In fact, one model may be more productive for one gender versus another.

*Research Question 4:* Is there a correlation between student achievement and the amount of professional development provided to teachers for reading instruction?

Building principals were asked to indicate the number of professional development days used to improve reading instruction in their building. The development of teachers to provide quality instruction is very important. This research looked at the number of days each building attributed to the development of their teachers to improve student achievement. The data did not indicate a preference of districts toward implementing a certain number of professional development days. The mean score for all professional development days was 38.82. The data indicated no significant difference in the amount of professional development days implemented yearly to increase reading instruction.

Building principals may not have reported the proper number of days attributed to reading improvement. Principals could have assumed that all professional development was part of reading improvement when in fact it may not have been. In this study it would not prove to be wise to give staffs more than two reading professional development days to increase student achievement. The type of professional development may have been a limiting factor in student achievement. It would have been wiser to ask if the staff development was provided by an outside source or in-house by another colleague.

*Research Question 5:* Is there a correlation between student achievement and the amount of writing instruction time spent daily in school districts?

Building principals were asked to indicate the amount of daily writing instruction provided to students to increase reading achievement. The data indicated a mean score of 38.78 for all buildings. The only buildings which showed a large gap between the mean scores were the one's implementing 61-90 minutes of daily writing. Ninety percent of all

buildings surveyed implemented writing instruction between 0-60 minutes daily. Sixty percent of all buildings chose to implement writing daily for 30-60 minutes. It should be noted that the mean score of buildings implementing more than 90 minutes of daily instruction was 47.60 proficient and advanced students. It should also be noted that only one building chose to participate for that amount of time. That building was the closest to state mandated 54.1 percent of students reading on grade level.

Building principals may have mistaken writing instruction for writing across the curriculum. Every building will have some writing across the curriculum daily whether working with letters, numbers, or sentence structure. Those buildings indicating different times may have skewed the data from those actually taking time in their daily schedule to teach writing components.

The research examined five different areas of reading instruction implemented by buildings across southwest Missouri to determine if a correlation existed between student achievement on the MAP test for third grade students. Mean scores were figured for buildings using each instructional method or reading program. This research has concluded that school districts should look for programs that will fit the needs of their students rather than implementing programs by similar districts. There is an old saying that administrators say to each other often, “The teacher makes the difference, not the program.” That saying may have some truth to it. All five null hypotheses were accepted in this research. No instructional method or reading program proved to be significant for student achievement. The One-Way ANOVA statistical test was applied to each variable, and all had a significance greater than  $p < .05$ .



*Implications*

While some buildings experience high success meeting state mandated scores, others continue to struggle meeting AYP. This study was conducted to determine whether successful buildings across southwest Missouri were implementing methods that could be duplicated by neighboring buildings for similar success. Most administrators would agree that student achievement is the main goal of any district. If just one building were doing something which made a difference in student achievement, other building principals should want to know how to help their own students and faculty be successful.

After examining the data this research did little to disprove the old saying about teachers making the difference, not programs. This study showed implications that school districts should implement more time developing strong instructional leaders rather than spending valuable money on instructional programs to increase student achievement. Time spent instructing students varied throughout buildings in the study yet, there was no significant correlation in student achievement. No correlation existed between student achievement and reading programs implemented in buildings.

Most school districts in southwest Missouri have a free and reduced lunch rates of better than half the students. Further research should be done in this area to determine whether lower socio-economic buildings should implement certain reading programs which have more direct coaching and teaching or whether it would be beneficial to implement certain instructional methods. Further research could be done on fewer schools over an extended period of time to determine the significance in instructional changes on student achievement. Building administrators could document all instructional changes over an extended time while tracking student achievement to

ascertain which strategies are most effective for student achievement. Further research could be done comparing school districts which meet AYP and those which consistently fail to meet the standards to determine whether instructional methods are different. This research showed little significance in all southwest Missouri buildings when compared against one another. Comparing districts across the state of Missouri could identify different methods and trends in student achievement.

Often administrators complain about the state comparing apples to oranges when determining student achievement in different buildings. As an administrator who has worked in both large suburban districts and one who has worked in a small, rural district, there is stark contrast in available resources. Further research could be done on rural versus urban school districts to better understand differences in student achievement across the board. Also, further studies could be done on multiple grade levels over a 3 to 4 year period. Research could look at teacher turnover rate, program sustainability, and instructional leadership changes over a period of time to ascertain the significance in stability and achievement.

Often, administrator's get caught up in the latest success story from districts across the state or even perhaps nationally recognized programs implemented in buildings with high student achievement scores. However, it would be wise to invest in administrator to teacher relationships before looking beyond the district to improve achievement scores. Teachers make the difference, not instructional methods or programs. If teachers are not comfortable working with one another or the building administrator, some will more than likely never be as productive. Trust is something that can not be measured by an instrument yet, remains an important asset to any building

wishing to improve. When teachers trust one another they might openly share instructional plans, activities, and research with one another which ultimately improves learning for students.

Buildings and districts should consider some of the characteristics of Professional Learning Communities (PLC). Districts implementing PLC characteristics do not look at teaching methods, instead focusing on how they react to student achievement. PLC is built around three corollary questions: 1) What do we want our students to learn? 2) How will we know they have learned it?, and 3) What will we do if they have not learned it? (DuFour and Eaker, 1998). This study has proven that implementing time bound instruction or different reading programs does not necessarily guarantee student achievement so, it makes sense to look at how the building conducts learning standards within the walls. Staffs examine their practices to establish norms of teaching and learning with available data to redirect instructional approaches. No one system for learning is better than the rest or all school districts would be implementing it. This research has proven the need for buildings to develop instructional strategies to address the needs of their students and community.

This study was conducted in southwest Missouri for a one year academic period. Implications from the study may not apply to other school districts due to different programs, building configurations, student populations, and instructional methods applied to obtain reading achievement. It was assumed that all building principals gave good faith answers about instructional practices. This study was limited to four popular reading models used in southwest with all other buildings classified together. Those buildings indicating a different model were not asked to detail their reading program. Student

achievement scores were obtained for a one year period from the DESE website. Building principals were not asked for socio-economic status nor were scores reported separately for different genders. Limitations of this study made it practical for observation by southwest Missouri school districts.

### *Conclusions*

This study examined buildings in southwest Missouri to determine if a correlation existed between student achievement and reading instructional strategies and programs implemented in individual buildings. Five corollary questions drove this research in reading instruction and student achievement. Buildings across the state implement different reading programs while varying instructional time and methods in an effort to maximize student achievement on the MAP test.

Building principals were asked to complete a survey detailing the amount of instructional time spent daily in reading instruction and the reading program implemented. The data were compiled and examined to note whether a correlation existed between student achievement and instructional methods applied. After compiling the data and examining student achievement, this study accepted all null hypotheses which stated that no correlation existed between student achievement on the third grade communication arts MAP test and instructional methods applied by southwest Missouri elementary school buildings.

Implications of this study could be used by southwest Missouri school districts in determining future professional development and instructional improvement. The study had limitations due to one geographical area therefore, may not apply to other areas.

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APPENDIX A

Superintendent Information Letter

Dear (Superintendent):

I am in the process of completing my doctoral dissertation for Lindenwood University. I am ready to complete my field study research project which examines reading instructional practices and the correlation of student achievement on the Missouri Assessment Program test for third grade students. As part of the research study I would like to survey your principal(s) about individual building practices implemented to improve reading achievement.

I am writing to seek your permission to collect reading instructional information from your elementary building principal. Would you please take a moment to review and sign the attached permission form so that I may obtain information from your building principals? I truly appreciate your support. All information gained will be made available to any district or building participating in this study.

Confidentiality of your district, buildings and students will be protected throughout the study. No building or student names will be identified in reporting the results. Your signature on the attached form will indicate your informed consent for participation in the study.

If you have any questions regarding this project, please feel free to contact me at home (417) 877-0386, my office (417) 935-2287, or [klowe@seymourschool.net](mailto:klowe@seymourschool.net). Thank you in advance for your assistance in this project.

Sincerely,

Kelly Lowe  
Graduate Student  
Lindenwood University

APPENDIX A Continued

I, (Name: \_\_\_\_\_), superintendent of (District: \_\_\_\_\_), give my consent for our district to participate in this research project and understand the following:

**Project Background:** This research gathers information from building principals about instructional strategies implemented in different buildings to improve reading achievement. Data will be collected by survey of building principals and retrieval of third grade communication arts scores from the Department of Elementary and Secondary Education (DESE) website for the 2007/2008 school year.

**Purpose:** The purpose of this study is to determine if a correlation exists between reading instructional practices implemented and student achievement on the MAP test.

**Benefits:** Your participation in this research will enrich the research base. Your participation will assist this researcher, as well as Southwest Missouri districts, in understanding the affects of different instructional practices on reading achievement. Additional potential benefits could include foresight into future staff development opportunities.

**Risks:** This research does not involve any greater risks than those encountered in every day life.

**Confidentiality:** Your confidentiality will be maintained in that no building names or individual names will appear anywhere on or in the study itself. The data will be reported in aggregate form for the study.

**Injury:** No participants will be required to perform any physical act in this study. There will be no chance of injury outside of daily occurrences in life.

Thank you in advance for your participation in this project.

Sincerely,

Kelly Lowe  
Graduate Student, Lindenwood University  
(417) 935-2287  
[klowe@seymourschool.net](mailto:klowe@seymourschool.net)

APPENDIX B

Dear Principal:

I am in the process of completing my doctoral dissertation for Lindenwood University. I am ready to complete my field study research project which examines reading instructional practices and the correlation of student achievement on the Missouri Assessment Program (MAP) test. As part of the research study I would like to survey you about individual building practices implemented to improve reading achievement. I have received permission from your superintendent to conduct this survey in your district.

The following page has six questions to be answered. Would you please take a moment to fill out the survey and return it to me by email or by the stamped envelope sent to you in this packet? I truly appreciate your support. All information gained will be made available to any district or building participating in this study.

Confidentiality of your district, buildings and students will be protected throughout the study. No building or student names will be identified in reporting the results. The results will be made available upon your request at the completion of the study.

If you have any questions regarding this project, please feel free to contact me at home (417) 877-0386, my office (417) 935-2287, or [klowe@seymourschool.net](mailto:klowe@seymourschool.net). Thank you in advance for your assistance in this project.

Sincerely,

Kelly Lowe  
Graduate Student  
Lindenwood University

APPENDIX C

Please check the appropriate box after each question. Thank you for your help and information and rest assured that everything will be kept confidential. If you would like a copy of the results of the study please indicate so when returning the questionnaire.

**District Name:**

**Building Name:**

1. How much time is built into the master schedule daily for reading instruction?

0–60 Minutes \_\_\_\_ 61–90 Minutes \_\_\_\_ 91-120 Minutes \_\_\_\_ 120 + Minutes \_\_\_\_

2. How much time is built into the master schedule daily for writing instruction only?

0–30 Minutes \_\_\_\_ 31–60 Minutes \_\_\_\_ 61-90 Minutes \_\_\_\_ 90 + Minutes \_\_\_\_

3. How much reading time is spent daily in small group instruction?

0–30 Minutes \_\_\_\_ 31–60 Minutes \_\_\_\_ 61-90 Minutes \_\_\_\_ 90 + Minutes \_\_\_\_

4. How much time is spent in daily where writing across the curriculum is the only method of writing for your students?

0–30 Minutes \_\_\_\_ 31–60 Minutes \_\_\_\_ 61-90 Minutes \_\_\_\_ 90 + Minutes \_\_\_\_

5. Circle which reading model your building used to develop your reading instruction?

MRI    Reading First    Four-Block    Arkansas Literacy Model    Other

6. How much time is spent yearly in professional development to improve reading instruction? Early release days will count as one day of professional development.

0–2 days \_\_\_\_ 3-4 days \_\_\_\_ 5-7 days \_\_\_\_ More than 7 days \_\_\_\_

Kelly Lowe – Republic Elementary 1 - [klowe@seymourschool.net](mailto:klowe@seymourschool.net)

## VITA

Kelly Lowe was born in Willow Springs, Missouri in December of 1971. He attended the Willow Springs R-IV school district until graduation in 1990. Upon receiving his high school diploma, he entered undergraduate school at Missouri State University in Springfield, Missouri. Kelly received his undergraduate degree in 1996 with an emphasis in physical education. While working at Willow Springs he attended graduate college, again at Missouri State University, to obtain a Master's degree in educational administration. He finished his Specialist degree in with a Superintendent certification in the spring of 2007. His Educational Doctorate degree was earned in the spring of 2009 from Lindenwood University in St. Charles, Missouri.

Kelly began his teaching career in his hometown of Willow Springs, Missouri. He taught physical education while coaching 7<sup>th</sup> and 8<sup>th</sup> grade football and basketball. In the spring of 2001 he accepted an elementary physical education position at Mountain Grove, Missouri. While at Mountain Grove he was an assistant high school coach in basketball and football. His administrative career began at Republic R-III school district as an elementary assistant principal in 2005. He now serves as the elementary principal in Seymour, Missouri. Kelly has aspirations of becoming a superintendent of schools in the very near future.