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Running head: READING FIRST AND SPECIAL EDUCATION

Reading First Program Effects On

Students with Disabilities

Brenda K. Lakin

May, 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 here at Lindenwood University and that I have not submitted it for any other college or degree here or elsewhere.

Full legal name: Brenda K. Lakin

Signature: _____ Brende L. Lakin Date: July 27, 2009

READING FIRST PROGRAM EFFECTS ON

STUDENTS WITH DISABILITIES

Brenda K. Lakin

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

Dissertation Chair Dr. Terp Reild DeVoré, Dr. She Dissertation Advisor Dr. Dale Slagle, Committee Member

2009 Date ate

ACKNOWLEDGEMENTS

Thank you to the professors in Southwest Missouri who have taught through Lindenwood University. They have challenged me as I have developed leadership skills while beginning my administrative career. Thank you to my parents, Ralph and Melodye Snider, for always telling me I could do anything I set my mind to and encouraging me through the difficult times. Also, thank you to my husband, Scott, for being patient during the past two years as I have attended classes and spent multiple hours completing research and writing for this dissertation.

Abstract

The passage of the NCLB Act in 2002 and the Individuals with Disability Education and Improvement Act of 2004, mandated more accountability for student achievement. Students with disabilities were expected to progress through the curriculum and show gains in academic achievement at the same rate as other students. Therefore, schools were forced to look at their special education programs and make changes in instructional methods. One of the programs funded under NCLB was Reading First which was to ensure that all students would be able to read by the end of third grade. Reading First focused on helping those students who were struggling and provided intervention periods for students who were not performing at expected levels. This study focused on whether Reading First affected the achievement of students with disabilities on the communication arts portion of the Missouri Assessment Program test. The study analyzed data from twelve separate schools, six Reading First districts and six non-Reading First districts. The students with disabilities did not achieve at higher levels than those not participating in the Reading First instruction and the number of years involved in the program did not make a significant difference in their levels on the MAP test either.

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KEY TO ABBREVIATIONS

| DIBELS | Dynamic Indicators of Basic Early Literacy Skills |
|--------|--|
| USDOE | Department of Education |
| ESEA | Elementary and Secondary Education Act |
| IDEA | Individuals with Disabilities Education Improvement Act |
| LRE | Least Restrictive Environment |
| MAP | Missouri Assessment Program |
| MAP-A | Missouri Assessment Program-Alternate |
| MDESE | Missouri Department of Elementary and Secondary Education |

NCLB No Child Left Behind Act

CHAPTER ONE-INTRODUCTION

Reading First Program Effects On Students with Disabilities

Background

Recent legislation required increased accountability for public school districts because students were expected to show academic gains each year. As legislation was proposed each year for more charter schools and vouchers were given for students to attend the school of their choice, whether public or private, parents were beginning to scrutinize the results of their local school district on state mandated assessments.

School districts assessed their students in grades three through eight in reading and math, and also were required to administer a science test during two years students were in grades three through eight. Missouri chose to assess science at grades five and eight. (Missouri Department of Elementary and Secondary Education [MDESE], 2007a) The No Child Left Behind (NCLB) Act has created some positive results for students as the expectations for learning have increased but also have put more of a burden on the public school system. Districts must look for ways to help students achieve academically and be prepared for the state mandated assessments. Local money is used for after-school tutoring and intervention programs to help struggling students learn the concepts taught in the classroom. NCLB raised the academic expectations for all students. (Cortiella, 2006)

Reading is a fundamental skill. However, many students graduate from high school and can not read on a third grade level. (USDOE, 2007a) With the passage of the NCLB Act, all students are expected to read by the end of their third grade year. Additional monies were provided by the government for Reading First, a research-based program. Districts applied for grants through their state educational department. If districts were awarded the funding then teachers could receive additional professional development, progress monitoring assessment tools purchased through the grant, and extra support for the students who were struggling.

Students with disabilities who have various educational diagnoses (e.g. learning disabilities in reading or a language disorder) have additional hurdles to overcome as they are learning to read. If additional assistance is needed, students in special education could participate in the interventions with their peers in the

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regular classroom (Gamse, Bloom, Kemple, & Jacob, 2008) or could be provided the interventions in the special education classroom. In addition, the student in special education could receive specialized instruction by the special education teacher in the regular classroom where modifications and accommodations could be provided (Friend, 2006) or receive specialized instruction in the special education classroom where the curriculum may be taught at a slower pace and repetition could occur on needed concepts.

Conceptual Underpinnings of the Study

This study is based on the conceptual underpinnings of the Individuals with Disabilities Act (IDEA) and the No Child Left Behind (NCLB) Act. These laws have increased the expectations of academic success for students with disabilities. Schools are being held accountable for the achievement results of students in special education.

In 2004, the IDEA was reauthorized and was entitled the Individuals with Disabilities Education Improvement Act (IDEIA); however, it is still often referred to as IDEA. The reauthorization placed much more emphasis on educating students in the regular classroom using scientifically research-based instructional methods. Today, many of the special education teachers go into the regular classroom to work with the special education student to give them greater access to the general curriculum with their grade level peers. There is a higher level of expectation today for the student with disabilities and consequently, America is seeing these students begin to progress academically at a higher rate than in the past.

Much has changed over the years for students with disabilities. Students with special needs went from having no right to an education to receiving a right to be educated with their peers as much as possible. According to information on the National Collaborative on Workforce & Disability website, an informational brief entitled "Special Education Law Enacted" says IDEA reauthorization in 2004 included alignment with the then recently authorized Elementary and Secondary Education Act (now known as NCLB). Due to the alignment of these two laws, school districts working with special needs students were required to show progress of the students by using state mandated tests. Because of the realignment, increased accountability measures for special education programs were put into place for school districts. Hence, it was time for districts to begin focusing on the amount of progress their students with disabilities were making. Instruction changed in the special education classroom to include more scientifically, research-based methods.

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Not only did instruction change but also all students were required to participate in state testing. Districts were held accountable for what their students had learned. "Previously, students with disabilities could be exempted from statewide standardized testing at the discretion of each state" (National collaborative on workforce & disability, 2004, ¶ 13). However, today these students are required to participate in state and district assessments in order for schools to measure the progress the students are making. "Renewal of IDEA now requires that a significant portion of the population of students with special needs be subject to statewide assessments" (National collaborative on workforce & disability, 2004, ¶ 9).

"NCLB reauthorization would hold students with special needs to the same standards when it comes to accountability" (Sun, 2007, p. 91). According to the NCLB Act, "all eighth grade students will be proficient in the core subjects by the year 2014" (Williams, 2005, p. 155). President George Bush signed this law in 2002, in an effort to improve the educational system of America. These new mandates have benefited many students who may not have been challenged as they should have in the classroom. However, it did not take into account the needs of some students

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because NCLB said that "all" students would be proficient in the core areas of instruction-math, reading, science, and social studies. This was not easy for students coping with a reading or language disability. Severely disabled students must still show academic gains each year, but not on a level equal to their non-disabled peers.

According to the Guidelines for Special Education Instruction in the SWRPDC First Initiative, one such program approved by the United States Department of Education was Reading First. Reading First was a researchbased reading program with many prospective benefits for students with special needs. The Reading First program uses "the five essential components of effective reading instruction. The five components include: phonemic awareness, phonics, vocabulary, fluency, and reading comprehension" (Reading first support, 2003, ¶ 5).

Statement of Problem

While there has been research on the effects of the Reading First program with students in grades kindergarten through three, there has been limited research on how the Reading First program impacts students in special education. While districts continued to struggle to meet the expectations of NCLB and provide adequate special education services in compliance with IDEA, school personnel had to consider whether the programs implemented in their districts were producing the results required to show students with special needs making progress academically. There was an achievement gap between the students with disabilities and the students who did not have a disability which must, according to NCLB, be closed by the year 2014. Therefore, it was imperative to know whether the Reading First was truly making a difference in the communication arts portion of the Missouri Assessment Program (MAP) test when results were analyzed at the third grade level.

Purpose of the Study

Students with disabilities are required to participate in the same state mandated assessments as their peers, with very few exceptions. This study asks if the methodology of reading instruction makes a difference for a student with a disability.

Research Questions

The following overarching questions guided this study:

 What difference, if any, exists between the performance of students with disabilities who participated in the Reading First Program and those who did not participate in the Reading First Program,

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as indicated by the third grade communication arts MAP test?

2. What difference, if any, did the number of years the student with disabilities participated in Reading First instruction become a factor in how they scored on the communication arts MAP test in third grade?

Independent Variable

The independent variable in this study was the Reading First program that third grade students with disabilities participated in for their reading instruction.

Dependent Variable

The results of the third grade communication arts scores on the MAP test were the dependent variable.

Hypotheses

Null hypothesis #1. There is no significant difference between the communication arts MAP scores of third grade students with disabilities who received Reading First instruction and third grade students with disabilities who did not receive Reading First instruction.

Null hypothesis #2. There is no significant difference in the scores on the MAP test in regards to how many years a student with disabilities has participated in the Reading First Initiative.

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Assumptions of the Study

- 1. It was assumed all Reading First schools were following the Reading First grant guidelines.
- 2. It was assumed teachers adhere closely to the script provided in the teacher's guide of the reading series used for the instruction.
- 3. It was assumed students with disabilities participate in the Reading First instruction if they attended a school involved in the Reading First program.
- 4. It was assumed special education teachers supported the Reading First instruction.
- 5. It was assumed students with disabilities who qualified for Tier 2 and Tier 3 services participated in the extra instruction each day either in the special education classroom or by staff who provided these small group services.
- 6. It was assumed schools who did not participate in the Reading First grant were teaching traditional reading instruction and were not participating in the principles set forth by the Reading First grant.
- 7. It was assumed each district administered the MAP test according to the directions in the manual and followed correct procedures in the classroom.

Limitations of the Study

- Reading First instruction was only in its fifth year in Missouri.
- The data used were from the third grade communication arts portion of the MAP test during the 2006, 2007, and 2008 years.
- 3. The MAP test was self-administered in each district.
- 4. The schools compared would be Reading First schools with non-Reading First schools comparable in demographics (student size, ethnicity, and poverty level).
- 5. Only single grade level scores on the MAP test were used in this study, which provided only one type of test to compare.
- 6. Special education scores were obtained from schools that had a reportable population of students large enough to be a subgroup on the MAP data provided on the DESE website.
- 7. Only Missouri schools were used in this study.

Definition of Key Terms

The following terms were used throughout the study and have been defined for the reader in order to provide for easier comprehension of the study. Accommodation. "Changes in the design or administration of tests in response to the special needs of students with disabilities" (Ravitch, 2007, p. 8).

Adequate yearly progress (AYP). An individual state's measure of yearly progress toward achieving state academic standards, as described in the NCLB legislation. AYP is the minimum level of improvement that states, school districts, and school buildings must achieve each year. (MDESE, 2008)

Advanced and proficient. An achievement score which is calculated by a percent of the raw score on a criterionreferenced test determined by the state as necessary to meet AYP. These are the top two standards of performance for each assessed content area. (MDESE MAP, 2008)

Assessment. Any test or measure to determine if the students have learned the material that is expected to be learned in the class or grade level. (Ravitch, 2007)

Collaboration. A group of teachers working together in order to provide better services for all of the students. This can be all of the teachers at a particular grade or department discussing instruction they have in common. (Ravitch, 2007)

Co-Teaching. Two teachers working together in a classroom to meet the needs of all of the students. It often includes a general educator and a special educator

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working together in a classroom. "Co-teaching enables teachers or other licensed professionals to form instructional partnerships for the purpose of delivering high quality instruction to diverse classroom groups" (National Association, 2008, ¶ 5).

DIBELS. (Dynamic Indicators of Basic Early Literacy Skills). An assessment measure used as a part of the Reading First program to determine if the student is learning the components of reading. "DIBELS is a test designed by University of Oregon researchers to measure student reading development. It evaluates student performance in phonological awareness, alphabetic understanding, and fluency with connected text" (Brownstein & Hicks, 2006, The dibelization of America, ¶ 4)).

Differentiated instruction. Instruction focusing on the needs of each student in the classroom. It provides remediation for some students and challenges others who may already know the material. "A form of instruction that seeks to maximize each student's growth by recognizing that students have different ways of learning, different interests, and different ways of responding to instruction" (Ravitch, 2007, p. 75).

Disabled child. A child who has been identified

through special education as having an educational disability and is receiving specialized instruction in the public schools.

Free/Reduced lunch students. "The percentage of resident pupils who are reported by the district as eligible for free or reduced-price meals" (MDESE,2008). By this means, districts determine the poverty level of the students in the school.

Grade level expectations. "An objective that states a goal or benchmark that students are expected to meet at a particular grade level in a particular subject" (Ravitch, 2007, p. 105). These are developed through the DESE and are used throughout the state of Missouri.

Inclusion. "The practice of placing students with disabilities in regular classrooms in accordance with federal law" (Ravitch, 2007, p. 119).

Individualized education program. "A highly detailed education plan created for students with learning disabilities by their teachers, parents or guardians, school administrators, school counselors, education psychologists, and other appropriate parties. The plan is tailored to the student's specific needs and abilities and outlines goals for the student to reach" (Ravitch, 2007, p. 120). Individuals with Disabilities Education Act (IDEA). "A law that guarantees children with exceptional needs a free appropriate public education and requires that each student's education be determined on an individual basis and designed to meet his or her unique needs in the least restrictive environment possible" (Ravitch, 2007, p. 120).

Interventions. Programs or extra supports put in place to help students who are not showing knowledge of a concept or skill being taught. This can be for a short period of time (e.g., 4-6 weeks) to a longer period (e.g., a semester). It is a "program that does something different from what was done before in an attempt to improve a situation" (Ravitch, 2007, p. 124).

Least Restrictive Environment (LRE). "Refers to a setting where students with disabilities can be educated alongside their peers without disabilities to the maximum extent possible" (Ravitch, 2007, p. 133).

Missouri Assessment Program (MAP). Achievement test given in Missouri in grades 3 - 8 that includes some or all of the following core subjects: math, communication arts, and science. (MDESE, 2008)

Modification. Any change that would alter or change the general education curriculum.

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No Child Left Behind Act (NCLB). A federal law signed by President Bush in 2002 mandating schools to provide quality instruction to all students and help those who are struggling meet required levels of proficiency in the core subjects. NCLB established accountability for the nation's public schools through a measurement of Adequate Yearly Progress. Schools and districts are to achieve a goal of 100 percent proficiency in reading, mathematics, and science for every subgroup by the 2013-2014 school year. (USDOE, 2008)

Professional development. Instruction provided to teachers and staff on various educational topics to strengthen the lessons and teaching in the classroom. It also focuses on the level of student engagement in the classroom and how to increase academic achievement. (Ravitch, 2007)

Progress monitoring. Periodical assessments of a student to see if he is gaining mastery of a skill that he was previously struggling to learn. The data is used to determine if the student needs to continue with the same intervention, switch to a different intervention, or return to the general instruction with all other students.

Reading First. A program used by general education teachers focusing on the five essential components of

reading: phonemic awareness, phonics, vocabulary, fluency, and comprehension. This program is supported by the United States Department of Education and is scientifically and research-based.

Regular child. A child who does not receive special education services in the public school.

Special services. Any specialized services provided by special education staff or therapists in the school system such as the following: occupational therapy; physical therapy; speech therapy; language therapy; counseling; or additional help with academic work including subjects such as writing, math, reading. "Programs to identify and meet the education needs of students with emotional, learning, or physical disabilities" (Ravitch, 2007, p. 200).

Summary

The IDEA of 2004 underscores what the NCLB Act (NCLB) and IDEA 1997 mandated. "Instruction in special education must be tied as closely as possible to the general education curriculum" (Rice, Drame, Owens, & Frattura, 2007, p. 14). Under NCLB, students with disabilities were required to take content area exams. Student success increasingly depended upon how much the student was involved in the general curriculum. Therefore, many students received services in the regular classroom with extra support. Many special education teachers were coteaching in general education classrooms. Lawrence Gloeckler, Executive Director for the Special Education Institute in Rexford, New York, said "special ed should be a service rather than a place where children are sent" (National center for learning disabilities, 2007, p. 2). Students with disabilities were more included with the general population.

Because of limited research in this area, the purpose of this study was to determine if the Reading First method of reading instruction was more effective than traditional reading instruction when working with students with disabilities in Missouri. The study also analyzed data from DESE on school districts where students with disabilities were involved in Reading First for multiple years to determine if the number of years the students participated in the instruction made an impact on student scores on the state assessments in third grade.

Chapter two reviews related literature which included special education history and legislation, part of the requirements of NCLB as they related to students with disabilities, instructional components such as inclusion, co-teaching, and differentiated instruction in the regular classroom, the basic foundational components of Reading First along with pros and cons of the Reading First program and the Missouri Assessment Program. Chapter three explored the data used in this study and how it was selected. Chapter four provided results of the data analyzed for the study. Chapter five offered conclusions and recommendations for further study.

CHAPTER TWO-REVIEW OF LITERATURE

Introduction

Reading was an integral part of a child's education. (Williams, 2005) Over the past years, there appeared to be more and more students graduating who were unable to read. Students with disabilities were at even more of a disadvantage when learning to read due to their disabilities. Current legislation required more emphasis to be placed on school districts and teachers were held more accountable. Each state tests assessed students in reading and because of the legislation, testing was mandated at more grade levels. (MDESE, 2007d) Schools were expected to show that students were making progress. It was the goal of Reading First that all students were able to read by the end of their third grade year. (Southwest Missouri Regional Professional Development Center [SWRPDC], 2006, ¶ 3)

Special education teachers were feeling more pressure to teach grade level curriculum and ensure that their students were making academic progress. This was a change for many of the teachers and students as more was expected in the core academic subjects. Thus, special education teachers were providing instruction in the regular classrooms and were looking at the services the students needed to make sufficient progress. Students with disabilities were no longer always segregated in separate classrooms just because they had an educational diagnosis. (Gloeckler, 2007) They were provided the services they needed so they could progress through the general curriculum in the regular education classroom as much as they possibly could during the day. (Friend, 2006)

With the legislation, schools showed improvements in the number of students who were making progress. This chapter discussed the legislation, the Reading First program, special education services versus placements, required testing to determine whether students were making gains in the reading instruction, and how interventions were built into the Reading First program based on the results of the assessments.

Current Legislation/Overview

"The NCLB Act is the latest version of the Elementary and Secondary Education Act (ESEA), the nation's major federal law related to education in grades pre-kindergarten through high school. Congress first passed the ESEA in 1965 as part of the nation's war on poverty. The centerpiece of the ESEA, Title I, was designed to improve achievement among the nation's poor and disadvantaged students" (Cortiella, 2006, p. 6). These students were often overlooked in the past and emphasis was placed on those students who were not struggling. Now, teachers and schools were looking at the needs of all students and provided extra support during the school day and even offered tutoring after school in order to help the struggling students learn the concepts taught.

Students with disabilities were provided more support academically. According to an article in the Journal of Special Education Leadership (Sun, 2007), research confirmed the fact that students being educated with their typical peers using scientifically research-based instruction showed improved success in school. "Effective and appropriate use of inclusion-based education for students with special needs improves the likelihood of independence" (Sun, 2007, p. 91). Inclusion gave the students with disabilities a way to remain in the classroom with their peers. However, the student with disabilities received the necessary modifications and supports to help "level the playing field" with the other students. (Lugenbill, personal communication, November 2, 2007)

"When President Bush and Congress set out to reauthorize the IDEA legislation in 2004, they made sure it called for states to establish goals for the performance of children with disabilities that were aligned with each state's definition of 'adequate yearly progress' under the NCLB Act of 2001" (USDOE, 2007b, ¶ 6). Now, all students had to show they were learning and gaining academic skills at an appropriate rate.

"When NCLB was signed into law in 2002, it ushered in some of the most sweeping changes the American educational system had seen in decades" (Cortiella, 2006, p. 6). Schools no longer segregated the students with disabilities and taught any level of curriculum having no accountability. "New requirements introduced in NCLB were intended to increase the quality and effectiveness not only of the Title I program, but of the entire elementary and secondary education system-raising the achievement of all students, particularly those with the lowest achievement levels" (Cortiella, 2006, p. 6). Poor and disadvantaged students, along with special education students, were expected to achieve academically as measured on the state mandated assessment. Schools were faced with providing extra support and time for these students.

For the first time ever, students with disabilities were expected to take the state assessments with their peers.

There are three basic reasons why including students with disabilities in State assessment and accountability systems is crucial. First, it is established law. The IDEA, section 504 of the Rehabilitation Act of 1973, and Title I of the ESEA each requires inclusion of all students with disabilities in the State assessment system. Second, students with disabilities, including those with the most significant cognitive disabilities, benefit instructionally from such participation. Third, to ensure that appropriate resources are dedicated to helping these students succeed, appropriate measurement of their achievement needs to be part of the accountability system. Further, when students with disabilities are part of the accountability system, educators' expectations for these students are more likely to increase (MDESE, 2005a, p. 8-9).

Educators have said for many years that all students could learn; however, now schools were held accountable and expected to show students were indeed making progress.

NCLB established a system in which schools set high expectations for all students, including those learning
English, poor, disabled, or in the minority. School districts were required to "provide access to grade-level content, measure academic achievement of all students, and count all students in school achievement" (Quenemoen, 2005, p. 1). Schools had to find a way to help each child reach his full potential, and possibly beyond, in order to ensure students scored at the proficient level of the state mandated assessment. It did not exclude students who had disabilities, came from very poor homes, or had difficulty reading, writing, or speaking English. This mandate created a challenge for schools across the nation.

In order for students with disabilities to achieve at this expected level, they had to be exposed to the same material as their regular-education peers. Thus, more special education instruction was provided in the general education classes where students were exposed to the same material as their peers. Special education teachers spent time modifying the curriculum and helped provide accommodations for the student so he could learn from the same texts as their peers. Teachers no longer spent time teaching curriculum below grade level where the students were not exposed to the same grade level expectations as the other students. "While IDEA focuses on the needs of individual students and NCLB focuses on school accountability, both laws share the goal of improving academic achievement through high expectations and highquality education programs" (USDOE, 2004, ¶ 7). IDEA mandated only scientifically research-based instruction and curriculum would be used in classrooms.

Furthermore, according to a document printed by the law office of Melinda Baird (Reading Failure: Guidance on FAPE, the IDEA and NCLB, 2004) NCLB required all public school districts to implement scientifically based, empirically validated instructional reading programs. The term "scientifically based research" means

> research that involves the application of rigorous systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs, and includes research that:

- Employs systematic, empirical methods that draw on observation or experiment,
- Involves rigorous data analysis that are adequate to test the stated hypotheses and justify the general conclusions drawn,
- Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple

measurements and observations, and across studies by the same or different investigators,

- Is evaluated using experimental or quasiexperimental designs,
- Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication, and
- Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review. (NCLB, 2006, 20 USC 7707 [b] [37])

Both IDEA and NCLB required districts to use scientifically and research-based materials for students with disabilities.

According to the Guidelines for Special Education Instruction in the SWRPDC [Southwest Regional Professional Development Center] First Initiative, one such program approved by the United States Department of Education was Reading First. Reading First was a research-based reading program with many prospective benefits for students with special needs. The Reading First program used "the five essential components of effective reading instruction. The five components include: phonemic awareness, phonics, vocabulary, fluency, and reading comprehension" (Reading first support, 2003, \P 5).

Based on information on the Department of Elementary and Secondary Education's (DESE) web site, Missouri's Reading First goals were as follow:

> (1) all children will read at or above grade level by the end of third grade, (2) the gap will be closed for diverse groups by the end of third grade, and (3) the number of children referred to special education in the primary grades will decrease. (MDESE, 2005c)

If the program was effective and working, school districts would see academic gains from their struggling students.

The National Center for Learning Disabilities interviewed Lawrence Gloekler, Executive Director of the Special Education Institute regarding NCLB. They asked him the following question, "With the passage of the NCLB act, what kinds of information will parents of students in special education now be receiving from their children's schools, that will help them track the academic progress their children are or are not making?" (National center for learning disabilities, 2007, p. 1).

Mr. Gloeckler stated that:

Under NCLB, test scores will be disaggregated, meaning that scores will be broken down from the overall average and reported separately for a number of different groups specified by the law. Children with disabilities are one of these specified, disaggregated groups, and the idea is to present a much clearer picture of how they are doing as a whole within a school district. Parents with children in special ed will be able to see very clearly if there's a discrepancy between their child and children in the other groups and between the overall general ed population (National center for learning disabilities, 2007, p. 1).

NCLB created a new level of accountability for special education teachers and programs throughout the nation. All students were expected to make progress and parent(s) would have a report of the amount of progress their child made over the year. The NCLB act "aims to improve the quality of education for all children-including children with special needs" (NCLB, 2006, ¶ 1).

"NCLB wants schools to move away from trying to deal with failure after-the-fact through special education. Instead, schools are asked to move toward a prevention model that emphasizes strong instruction in important prereading skills" (NCLB, 2006, ¶ 2). NCLB put emphasis on determining which educational programs and practices had been proven effective through rigorous scientific research. Federal funding was targeted to support the programs and teaching methods that worked to improve student learning and achievement. "In reading, for example, NCLB supports scientifically based instruction programs in the early grades under the Reading First program and in preschool under the Early Reading First Program" (USDOE, 2004, ¶ 4).

Reading First

Since the passage of the NCLB Act in 2001, schools were responsible for more accountability each year. NCLB stated "all eighth grade students will be proficient in the core subjects by the year 2014." (Williams, 2005, p. 155) There were significant changes made in many of the public school classrooms across the nation so districts could show improvement in the achievement scores of their students.

In order to help districts meet the new standards, the United States Department of Education kicked off the Reading First Initiative. Schools that participated in the Reading First program were selected by applying for grants. Monies were provided for the district to use on professional development, materials, and staff in order to support the teachers in the classroom. By the end of third grade, students were supposed to be successful readers if they had participated in the Reading First program. "To qualify for Reading First funding, state and district professional development plans must include training on reading instructional methods and materials that incorporate the five essential components of reading instruction, and on the use of assessments that effectively screen, diagnose, and monitor student progress in reading" (Gamse, Bloom, Kemple, & Jacob, 2008, p. 1).

> The Reading First legislation requires programs and instruction to be based on scientific research in reading, and aims to ensure that all children can read at or above grade level by the end of third grade, thereby significantly reducing the number of students who experience difficulties in later years.

The Reading First legislation outlines the general components and activities to be included in state and local plans, and the Reading First Guidance describes several strategies that states and local educational agencies should use to improve students' reading skills. First, the guidance specifies that curricula used in classrooms must reflect scientifically based reading research that includes the essential components of reading instruction, and further, that students should have sufficient opportunity to practice the development of their skills in these essential components.

Second, it addresses teacher professional development on how teachers should work with academically struggling students, as well as how teachers can implement research-based reading instruction.

Third, state and local plans must include procedures for diagnosis and prevention of early reading difficulties through (a) using valid, reliable measures to screen students; (b) using empirically validated intensive interventions to help struggling students; and (c) monitoring the progress of students experiencing difficulties to ensure that the early interventions are indeed effective (Gamse, Bloom, Kemple, & Jacob, 2008, p. 1-2).

Many elements were involved in the Reading First program. As districts implemented the various components of the program, the students benefited from the reading instruction and showed gains on the state mandated assessments.

Reading First components were based on scientifically based reading research. "The research relies on measurements and observations that provide valid data across evaluators and observers and across multiple measurements and observations" (Reading first professional development, 2004, p. 2-3).

There are five essential components used during the reading instruction. They are as follows: "phonemic awareness, phonics, fluency, vocabulary, and comprehension" (Reading first professional development, 2004, p. 3). There were also two additional requirements: "classroom-based assessments for screening, diagnostics, progress monitoring, and outcomes; and interventions for students who begin to fall behind their peers so that they will be reading at grade level or above by the end of third grade" (MDESE, 2005c, ¶ 5).

Phonemic awareness instruction was the ability to notice, think about and work with individual sounds. (Armbruster, Lehr, & Osborn, 2001) Children showed they had phonological awareness by "identifying and making oral rhymes, identifying and working with syllables in spoken words, identifying and working with onsets and rimes in spoken syllables or one-syllable words, and identifying and working with individual phonemes in spoken words" (p. 23). Phonemic awareness helped children learn to read and spell. (p. 22) It also improved their word reading and reading comprehension. (p. 22)

Phonemic awareness was often taught in conjunction with phonics. Phonics instruction was the relationship between letters of written language and individual sounds of spoken language. (Armbruster, Lehr, & Osborn, 2001) Phonics improved children's word recognition, spelling, and reading comprehension. (p. 26) It began in kindergarten and was taught early as students were beginning to learn to read.

As children developed their phonetic inventory, their fluency improved during reading. Fluency was the ability to read text accurately and quickly. (Armbruster, Lehr, & Osborn, 2001) "Fluency comprises several features, including rate of reading, prosody, and attention to punctuation, all of which intersect to bring words on a page to life" (O'Connor, White, & Swanson H.L, Fall 2007, p. 31). Having students read aloud and having them listen to the adult read aloud best taught fluency. There was no evidence that independent reading helped a student develop fluency. As students read with more fluency, the ability to comprehend the material would be easier because the reading would flow more naturally and evenly. (O'Connor et al.)

Although fluency was very important in reading, vocabulary development had to be a part of daily instruction. Vocabulary instruction consisted of words students needed to know to communicate effectively. (Armbruster, Lehr, & Osborn, 2001) The Learning Point Associates (2004) stated "There are four types of vocabulary that a student must have exposure to each day: listening, speaking, reading, and writing" (p. 23). They (Learning Point Associates, 2004) further defined these four types of vocabulary on their website. A student's listening vocabulary consisted of the "words they understand when others talk to them" (p. 23) and their speaking vocabulary was the "words they use when they talk to others" (p.23). Furthermore, their reading vocabulary was the "words they know when they see them in print (sight words and words they can decode)" (p. 23) and finally, their writing vocabulary entailed the "words they use when they write" (p. 23).

Vocabulary was important in word recognition and comprehension. Children began to learn the various parts of words (prefixes, base, suffixes, compound words, etc.) and attached meaning to words during their reading. (Armbruster, Lehr, & Osborn, 2001) Vocabulary was developed through direct and indirect instruction. Children learned vocabulary taught to them and also learned vocabulary as words were used by other adults, children, and as stories were read to them. Understanding vocabulary helped children make sense of the words they were reading and helped them understand what the passage meant. (Armbruster et al.)

"Comprehension involves constructing meaning that is reasonable and accurate by connecting what has been read to what the reader already knows and thinking about all of this information until it is understood" (Learning point associates, 2004, p. 31). There were several strategies for teaching comprehension. Students applied previous knowledge as well as current knowledge to gain understanding (p. 32) and could also be taught to ask questions about the material that was read. (p. 32) This helped them to predict what would happen next in the passage.

The above five components, phonemic awareness, phonics, fluency, vocabulary, and comprehension, were taught together and not as individual items so the reading instruction was effective. "Teachers and students should be continuously engaged in activities related to the five essential components of reading instruction" (Gamse, Bloom, Kemple, & Jacob, 2008, p. 5). Each of the components were used as a part of everyday reading instruction in the regular classroom during Tier I in order for students to be proficient readers by the end of third grade. "Reading First has set a course for reading instruction that all teachers will be urged to follow. It is essential to keep in mind, however, that none of the areas above constitutes a complete reading program" (Instructor, 2002, ¶ 7).

According to an article in the Instructor magazine entitled Making Sense of "Reading First"-Education News & Trends, (2002) "Reading First requires educators to be much more intentional and strategic in their approach to reading instruction. Teachers are being asked to measure more specific outcomes than they were in the past" $(\P 4)$. Teachers "must now base decisions on scientificallydesigned, empirical research, rather than on qualitative case studies. It's no longer enough to teach or assess reading in a general way" (¶ 5). Teachers were asked to target the "particular aspects of reading that need to be addressed in classrooms and to identify research-based methods that will make a difference in those areas" (\P 5). "Teachers should be using effective classroom management strategies to maximize time on reading-based tasks and activities" (Gamse, Bloom, Kemple, & Jacob, 2008, p. 5).

Therefore, teachers were using their assessments to guide the interventions for struggling students. Effective use of the reading time with few transitions and no interruptions helped keep the students engaged during reading instruction.

Interventions/Progress Monitoring

Tier 1

Reading First used a three-tier model for instruction. Tier I included all students and was the core classroom reading instruction. It was designed to meet the needs of most of the students in the classroom. Tier I was comprised of three elements:

> (a) a core reading program based on scientific reading research, (b) benchmark testing of students to determine instructional needs at least three times per year (fall, winter, and spring), and (c) ongoing professional development to provide teachers with the necessary tools to ensure every student receives quality reading

instruction (What is the three, 2004, p. 9). The classroom teacher provided Tier I instruction. Tier I was a ninety-minute block of reading instruction that focused on the five essential components.

"According to the Reading First guidelines, a wellimplemented, high quality reading program sets high expectations for reading achievement and includes explicit strategies for monitoring student progress" (Gamse, Bloom, Kemple, & Jacob, 2008, p. 5). During the benchmark testing in Tier I, the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) was often used which were a "set of standardized, individually administered measures of early literacy development" (DIBELS data system, n.d., DIBELS as indicators, ¶ 2). DIBELS was not a summative or comprehensive evaluation of reading achievement. "According to the DIBELS web site, the tests are 'designed to be short (one minute) fluency measures used to regularly monitor the development of pre-reading and early reading skills." The instrument is used to predict how well students will read by the end of third grade" (Brownstein & Hicks, 2006, The dibelization of America, ¶ 4). DIBELS benchmarks were used for screening and grouping children. DIBELS progressmonitoring was for tracking "at-risk" children's response to instruction. The purpose of DIBELS was to catch the atrisk students before failure set in and guide appropriate instruction for them. The results of the DIBELS could be used to group students for instruction tailored to meet their needs.

The DIBELS measures were specifically "designed to assess phonological awareness, alphabetic principle, and fluency with connected text" (Brownstein & Hicks, 2006, The dibelization of America, ¶ 4). The measures were "linked to one another, both psychometrically and theoretically, and have been found to be predictive of later reading proficiency" (DIBELS data system, n.d., Which skills do the DIBELS measures assess, ¶ 1).

The DIBELS assessed the five components of Reading First. Measures of phonological awareness included Initial Sounds Fluency (ISF) which assessed a child's skill to identify and produce the initial sound of a given word. It also included Phonemic Segmentation Fluency (PSF) which assessed a child's skill to produce the individual sounds within a given word. Measures of alphabetic principle included Nonsense Word Fluency (NWF) which assessed a child's knowledge of letter-sound correspondences as well their ability to blend letters together to form unfamiliar "nonsense" (e.g., fik, lig) words. Finally, the measure of fluency with connected text was called Oral Reading Fluency (ORF) which assessed a child's skill of reading connected text in grade-level material words. These measures linked together to form an assessment system of early literacy development. (DIBELS data system)

The assessments were used to determine the progress of the students and the need for supplemental instruction for children who were struggling.

Students were progress monitored two times per month while receiving Tier II and Tier III instruction in order to determine if they were gaining and how long they needed to stay in the intensive small-group instruction. Students moved through Tier II and Tier III as needed and only received this additional instruction as long as needed.

By progress-monitoring the students and providing the supplemental instruction, Tier II and/or Tier III, fewer students were expected to have reading difficulties and the additional instuction was to reduce the number of special education referrals. Students often made the progress needed during the supplemental instruction to keep pace with their peers by the end of third grade.

Benchmark testing, the various interventions provided through the three-tiered model, and teaching the five components of reading helped students read fluently by the end of the third grade. The progress monitoring assisted with the type of supplemental instruction the student needed to be able to learn the concept he was struggling with during Tier I. The five components of reading were used during each of the Tiers of instruction and were taught as a "whole" and not separately. Benchmark testing was an important and necessary requirement so students were grouped appropriately during instruction. Reading First was an initiative that involved a lot of research and study to be certain that it was an appropriate program for students.

"DIBELS' insistence on frequent testing was the subject of annoyance for many teachers, who charge that the need for ongoing assessment overwhelms time needed for instruction. In some circles, it earned the derisive nickname 'dribbles.' 'It's the dibelization of America. Everything is being dibbled'" (Brownstein & Hicks, 2006, The dibelization of America, ¶ 7). The extra time teachers were progress monitoring students could have been spent on reading instruction.

Benchmark assessments were used to identify those students struggling and at risk for reading problems. The benchmarks were conducted three times during the year and are completed on all students during Tier I instruction. For students not making adequate progress, teachers provided supplemental instruction in Tier II and began progress monitoring the students more frequently to ensure appropriate instruction for each student. Tier 2

Some students needed additional instruction in order to gain the concepts being taught during Tier I. "Effective classroom reading instruction should also include differentiated small group instruction with flexible placement and movement based on ongoing assessment" (Gamse, Bloom, Kemple, & Jacob, 2008, p. 5). Reading First "recognizes the importance of early identification of children who are at risk of failing so that they can get extra attention in time to help keep them on level with their peers" (NCLB, 2006, ¶ 2). Struggling students participated in Tier II which was supplemental instruction. Tier II was "designed to meet the needs of these students by giving them an additional thirty minutes of intensive small-group reading instruction daily" (What is the three, 2004, p. 10). The goal was to reinforce and support the skills taught during Tier I. Tier II could be taught by reading specialists, special education teachers, or a classroom teacher. The thirty minutes provided an intervention period each day for students who were at-risk in their reading DIBELS or their benchmark scores. Tier 3

Still a few students continued to struggle with the material presented during Tier I and Tier II instruction.

These students required instruction that was "more explicit, more intensive, and specifically designed to meet their individual needs" (What is the three, 2004, p. 10). Tier III consisted of "two additional thirty-minute sessions of specialized, small-group reading instruction" (What is the three, 2004, p. 10). These students were experiencing extreme reading difficulties. Tier III required specialized training for the teacher on the intervention used for instruction. It could be taught by reading specialists, special education teachers, or classroom teachers. The extra sixty minutes provided time for intensive differentiated instruction that provided purposeful teaching in areas where the student was lagging behind his peers.

Differentiated Instruction

Struggling students and those with disabilities could be served in the regular education classroom better as teachers learned more about differentiated instruction. Carol Ann Tomlinson defined differentiated instruction "as a teacher really trying to address students' particular readiness needs, their particular interests, and their preferred ways of learning" (Rebora, 2008, ¶ 1). Tomlinson did a lot of training in the area of differentiated instruction and was well-known for it in the educational field. In an interview completed with Cara Bafile (2004) as a part of the Education World Wire Side Chats, it was reported that "Tomlinson has more than 20 years of experience as a public school teacher and more than 12 as a program administrator of special services for struggling and advanced learners" (¶ 1).

The interview explained what differentiation was in the classroom. Tomlinson stated that "differentiation is just a teacher acknowledging that kids learn in different ways, and responding by doing something about that through curriculum and instruction" (Bafile, 2004, How do you define differentiated instruction, \P 1).

Tomlinson said there were "three ways to deal with students' differences. One is to ignore them. The second way is to separate kids out- trying to figure out who's smart and who's not. The third, less common choice, is keeping kids together in the context of high-quality curriculum but attend to their readiness needs, their interests, and their preferred ways of learning" (Rebora, 2008, ¶ 3-5). Of course, the third way was how teachers were going to see their students achieve the most. All kids could learn and progress in this kind of environment. Differentiated instruction would benefit the regular child, the special education child, and the child who was struggling but had few extra supports in place for them.

As Tomlinson visited classrooms, there were three things she said she looks for in a differentiated classroom. Tomlinson wanted to see a teacher-student connection, a sense of community in the classroom, and the quality of the curriculum being used. (Rebora, 2008) If these three things were in place in the classroom, then Tomlinson believed the students would achieve. This did not mean students would not struggle and or take longer to learn the material; however, the student would progress academically and try his very hardest to learn the skills presented. The teacher was often the only person who took a genuine interest in whether the student learned the material or not. Therefore, if the teacher didn't develop the relationship that was necessary for the student and the student didn't feel he belonged, then the student would not try and would fail academically; thus, relationships were important for students.

Tomlinson also discussed the student who showed some negative behaviors in the traditional classroom setting. When Bafile (2004) asked Tomlinson "What often surprises teachers who practice differentiated instruction?" (¶ 1), Tomlinson replied, "a common surprise for teachers is that many students who are restless, uninvolved, or misbehave in one-size-fits-all settings become `less problematic' in effectively differentiated classrooms" (¶ 1). Not all students were working at the same level of ability. "There are generally several students in any classroom who are working below or above grade level and these levels of readiness will vary between different subjects in school" (Differentiating instruction, 2004, ¶ 5). The differentiated classroom was built around the needs of the students, which decreased the frustration and level of anxiety the students would normally experience if they were in another classroom.

"It is important to offer students learning tasks that are appropriate to their learning needs rather than just to the grade and subject being taught" (Differentiating instruction, 2004, ¶ 5). Teachers took the students at various levels of learning and helped them learn the concept. "This means providing 3 or 4 different options for students in any given class (not 35 different options). Readiness (ability), learning styles and interest vary among students and even within an individual over time. In a differentiated classroom all students have equally engaging learning tasks" (¶ 5). For a teacher to truly differentiate instruction meant they were "creating multiple paths so that students of different abilities, interests or learning needs experience equally appropriate ways to absorb, use, develop and present concepts as a part of the daily learning process" (Differentiating instruction, 2004, ¶ 3). Everyone learned differently. Differentiated instruction "allows students to take greater responsibility and ownership for their own learning, and provides opportunities for peer teaching and cooperative learning" (¶ 3). Therefore, students worked in small groups learning concepts together.

Reporting on an interview with Rick Wormeli, an author and educator who wrote the book <u>Fair Isn't Always Equal</u>, Brenda Dyck (2008, What is differentiation) quoted Wormeli as saying differentiation was "putting [students] into groups based on something you know about them. Just putting them into groups is not differentiation. But differentiation is putting them into groups that are purposeful, based on their individual needs" (¶ 5). The teacher strategically put students into appropriate groups based on what they already knew; thus, spending more time teaching the concept to some students while allowing other students to delve further into the knowledge they already had on the concept or subject. "The teacher becomes a facilitator, assessor of students and planner of activities rather than an instructor" (Strategies for, 2004, Anchoring Activities, ¶ 3). The classroom was "less structured, more busy and often less quiet than traditional teaching methods. However, differentiation engages students more deeply in their learning, provides for constant growth and development, and provides for a stimulating and exciting classroom" (¶ 3). Students were not watching instruction but were actively participating in it.

Wormeli said "The first thing that comes to mind when defining differentiated instruction is understanding that it is maximizing the learning that can happen over what traditionally happens with 'one size fits all' lessons" (Dyck, 2008, What is differentiation, ¶ 1). Wormeli continued the interview by saying "at any point when you're choosing to maximize what students learn, as opposed to settling for what they can learn, that is indicative of a differentiated class" (¶ 1). Teachers were able to challenge students at a level where learning occurred and the students were still stretched academically.

Tier II and Tier III interventions in the Reading First program used elements of differentiated instruction. The students were grouped according to the results of their DIBELS benchmarks. Progress monitoring occurred every two weeks to see if the student made progress or if the intervention needed to change. Once they reached benchmark, the student was released from the intervention and other students were moved in so they could receive the extra instruction.

Pros and Cons of Reading First

While research showed many children benefited from the Reading First program, there were still many opponents to the Reading First program. An article that appeared in the Washington Post (June 9, 2008) discussed a report released by the Education Department's research arm. The report (Glod, 2008), stated "students in schools that use Reading First score no better on comprehension tests than children in schools that don't participate" (¶ 2). The report further stated the "program (Reading First) places too much emphasis on explicit phonics instruction and does not do enough to foster understanding" (¶ 3). Data was collected for two years, 2004 to 2006, and "included tens of thousands of first-through-third graders in 248 schools in 13 states" (\P 5). In this study, "the children were tested, and researchers observed teachers in 1400 classrooms" (\P 5).

However, another study, the Reading First Impact Study, (Manzo, 2008) released in April 2008 by the Institute of Education Sciences "suggests that students in Reading First schools are not getting as much exposure to a variety of reading materials as they may need" (Manzo, Content neglected, ¶ 2). It further stated that Reading First had "reduced the percentage of students engaged in print" (Manzo, Content neglected, ¶ 2). According to Alan E. Farstrup, the executive director of the International Reading Association, based in Neward, Delaware, "there's been a very strong focus on the decoding side of things, and not nearly enough focus on critical thinking and understanding" (Manzo, Content Neglected, ¶ 4).

The following results were obtained from the Reading First Impact Study: Interim Report (Gamse, Bloom, Kemple, & Jacob, 2008) which revealed that Reading First did not improve students' reading comprehension. In each of the three grades, fewer than half of the students in Reading First schools were reading at or above grade level. (p. 38) Reading First increased total class time spent on the five essential components of reading instruction promoted by the program. There was a weekly increase of three quarters of an hour for grade one and one hour for grade two. (p. 41) Reading First increased highly explicit instruction in grades one and two and increased high quality student practice in grade two. (p. 43) Reading First had mixed effects on student engagement with print. (p. 46)

The study (Gamse, Bloom, Kemple, & Jacob, 2008) also found that "after up to three years of funding, Reading First's impact on student reading achievement was not statistically detectable" (p. 63). "The Reading First Impact Study indicates that schools receiving Reading First grants are still well short of the program's ultimate goal of ensuring that all students are reading at grade level by the end of third grade. Half or more of the third grade students in the study sample's Reading First schools were performing below grade level three years into the initiative" (p. 64). This was according to "SAT 10 grade level norms (which may differ from states' definitions of on or above grade level)" (p. 64).

There were many opposed to the Reading First program and the results were not always where school districts wanted them to be after the amount of time and money invested in the program. Reading First made positive changes for students in classrooms. This program "has resulted in schools' devotion of increased time to reading instruction" according to the impact study. Students "receive as much as an additional hour of instruction each week over non-Reading First schools". Previous studies also supported the fact there was "more professional development and coaching" (Manzo, 2008, Extra time, \P 1) to help teachers in the classroom.

While students developed basic skills to become proficient readers, these skills were meaningless unless they wanted to read. In that respect, "a teacher's job remains what it has always been-to instill in children a genuine love of reading, and to help each child develop the skills he or she needs to nurture that love" (Instructor, 2002, ¶ 7).

The Reading First program was intended to provide instruction for all students. Struggling students received extra supports through Tiers II and III. Students with disabilities were expected to make academic progress like their peers due to the interventions provided and the extra specialized instruction provided by the special education staff.

Special Education

Historically, individuals with disabilities were not valued members of the community. (USDOE, 2002) Sometimes, special asylums were built for people who were disabled and often, conditions in these institutions were dehumanizing, filthy, and crowded. (USDOE) There is little evidence that people in these institutions were given skills or education

that would enable them to cope with the world and become members of the greater community. (USDOE) "On November 29, 1975, the Education for All Handicapped Children Act (Public Law 94-142) was enacted by Congress" (USDOE, 2007b, ¶ 2). This opened opportunities for students with disabilities to be educated in the public school systems in that, "the law was intended to support states and localities in protecting the right of, meeting the individual needs of, and improving the results for infants, toddlers, children and youths with disabilities and their families" (USDOE, 2007b, ¶ 2). Prior to this law, one did not see students with significant developmental delays in the public school system. Many students were denied the privilege of an education and the opportunity to attend school and learn with their peers. (USDOE, 2007b) They were kept at home or put in institutions.

Therefore, "before the enactment of Public Law 94-142, the fate of many individuals with disabilities was likely to be dim. Many of these restrictive settings provided only minimal food, clothing, and shelter" (USDOE, 2002, ¶ 9). Much of the lack of education occurred because it was believed that these individuals were not able to learn like other people and that it would be a waste of money to help them learn. (USDOE) "In 1970, U.S. schools educated only one in five children with disabilities, and many states had laws excluding certain students, including children who were deaf, blind, emotionally disturbed, or mentally retarded" (USDOE, 2002, ¶ 5). They were not given the same chance to be educated as their peers.

In recent times, as early as the 1970's, prior to Public law 94-142 (Education of All Handicapped Children Act), children with special needs often continued to be excluded from the public education system or if included, they were often segregated from their peers in separate classrooms or schools. Parents often had to fight to have their child receive an education or for the child to be allowed to attend the public school. Several parents and advocacy groups demanded an education for the children with disabilities in America. These groups and parents eventually took the issue to court. Some of the decisions made by courts showed the following:

> increased educational opportunities for children with disabilities. For example, the Pennsylvania Association for Retarded Citizens v. Commonwealth (1971) and Mills v. Board of Education of the District of Columbia (1972) established the responsibility of states and localities to

educate children with disabilities (USDOE, 2002, Key milestones, ¶ 1).

Not allowing students with disabilities in schools was no longer acceptable because education was for all children, whether disabled or non-disabled, teaching students skills needed for use later in life. This fact was "grounded in the equal protection clause of the 14th Amendment to the United States Constitution" (USDOE, 2002, Key milestones, ¶ 2).

However, the existing mandate to serve students with disabilities did not mean that districts provided a quality education to this population. "As the special education system developed, students were being educated in special education programs that were usually administered in the local district separately from the general education program" (Gloeckler, 2007, p. 3). These students with disabilities were typically separated from their peers and did not experience the general curriculum as a part of instruction. Instead, they were educated in the special education classroom for the majority of their school day. "As a result of this separation, the quality of education of these children went unmeasured- and because it wasn't measured, opportunities associated with educational performance and accountability went untapped" (Gloeckler, 2007, p. 3). Schools were not able to look at data to see if the students were gaining knowledge and therefore, accountability for school districts was virtually nonexistent for the special education population. Unfortunately, many of the students with disabilities did not receive appropriate academic instruction. Instead, the students with the most significant disabilities were in rooms where they were merely kept busy during the day.

In 2004, the IDEA was reauthorized and was entitled the Individuals with Disabilities Education Improvement Act (IDEIA); however, it is still often referred to as IDEA. With the reauthorization there was much more emphasis placed on educating students in the regular classroom using scientifically research-based instructional methods. Today, many of the special education teachers go into the regular classroom to work with the special education student to give greater access to the general curriculum with grade level peers. There is a higher level of expectation today for the student with disabilities and, consequently, America is seeing these students begin to progress academically at a higher rate than in the past.

According to information on the National Collaborative on Workforce & Disability website, an informational brief entitled "Special Education Law Enacted" said IDEA reauthorization in 2004 included alignment with the then recently authorized Elementary and Secondary Education Act (now known as NCLB). Due to the two laws aligning, more was expected of school districts working with students with disabilities. Because of the realignment, increased accountability measures for special education programs were put into place for school districts. It was time for districts to begin focusing on the progress or lack of progress of their students with disabilities. Instruction changed in the special education classroom to include more scientifically, research-based methods.

With the reauthorization of P.L. 94-142, students with disabilities were an integral part of the regular school environment. This legislation emphasized the inclusion of children with disabilities into the regular classroom and community environments. When that was not possible, children were to be educated in the "least restrictive environment" appropriate for the child. (MDESE, 2007b) This would be a placement where the student was in the regular classroom with typical peers as much of the day as possible. Students with disabilities were only restricted to the special education classroom when adequate learning could not be achieved in the general education classroom with supports and modifications. Some students with disabilities needed to be removed from the typical classroom for some of their instruction during the school day in order to receive instruction at a slower pace or in a smaller group setting.

Federal laws, as well as State-mandated practices, established procedures to assure that to the maximum extent appropriate, students with disabilities were educated with non-disabled students. (MDESE, 2007b) Special classes, separate schools, or other methods of removal of students with disabilities from the regular educational environment occurred only when the nature or severity of the disability was such that education in regular classes, with the use of supplementary aids and services, could not be achieved satisfactorily. (MDESE, 2007b) One of the purposes of IDEA was to ensure that children with disabilities had a free appropriate public education (FAPE) available to meet their unique needs and prepare them for future employment, further education, and living independently. (The reauthorized IDEA, 2005) However, "with the increased accountability of special education programs, the costs and benefits of the services and needs of students with disabilities must be considered" (Sun, 2007, p. 91). Schools struggled to meet all of the demands of the severely disabled students. There were students who

required additional staff and services and schools were obligated to provide the extra support with little monetary support from the government. Hence, there were districts unable to provide the necessary supports required because of limited staff availability. The law required the necessary services be provided so districts were forced to contract and spend limited revenue because of the lack of certified and appropriate staff available.

IDEA required that students with disabilities be served in a setting appropriate for them and remain with their peers in the regular classroom as much as possible. Children with disabilities benefited from inclusive instruction with their peers in the regular education classroom. (Friend, 2006) Even for children with moderate to severe handicaps, inclusion increased social interaction between the student with a disability and their peers. (Sun, 2007) Inclusion could "increase social acceptance by peers and provide disabled students with appropriate behavior models" (The reauthorized IDEA, 2005, ¶ 7). It was important to note however, that the "mere physical placement of children with disabilities in regular classrooms does not necessarily result in positive results" (Sun, 2007, p. 90). Often children with disabilities
required direct intervention and support in order to be successful.

Along with the sweeping changes that occurred with the passage of P.L. 94-142, schools were challenged by the mandate that each child in special education would have an Individual Education Plan (IEP). (MDESE, 2007b) The law required that the plan be written and be developed in a meeting that included the parents, staff identified by the school, and by age 16, the student. (MDESE, 2007c) The IEP was a yearly-written plan developed through a team process designed to meet the needs of the child with disabilities. (MDESE, 2007c) The IEP outlined the goals for the student and was more focused on academic success and progress than in years past.

"In developing the IEP for a child with disabilities, the IDEA requires the IEP team to consider placement in the regular education classroom as the starting point in determining the appropriate placement for the child" (Special education inclusion, 2007, ¶ 9). The IEP also documented where the services required were provided, whether in the regular classroom, special education classroom, or separate school. (MDESE, 2007c) To the extent appropriate, the student was required to be educated with non-disabled peers. (MDESE, 2007b) The intent of the IEP was to ensure that each child with a disability was able to take part in an educational program that would help them later as an adult. (Sun, 2007) The IEP assisted and supported the child to learn to live, work, play, and make friends in the community. (Sun, 2007) Each student needed to be prepared to live independently or in an assisted living environment.

An essential part of the educational plan was to prepare the child to participate in the same settings as other children of the same age. This meant learning would occur in the "least restrictive environment" (LRE) which is generally considered the community setting or regular classroom in which children of the same age are placed. (MDESE, 2007b) If the IEP team determined the LRE appropriate for a particular child was not the regular education classroom for all or part of the IEP, the IEP team included an explanation in the IEP as to why the regular education classroom was not appropriate. (MDESE, 2007b) Students with disabilities spent as much time with their peers as they could in order to learn and socially interact with them. The typical students provided great models for the students with disabilities who struggled with social, behavior, and academic skills.

Inclusion

Lawrence Gloeckler stated that at the Special Education Institute they "never debated that there shouldn't be special schools, but those should be for kids with unique situations, kids who really need a different curriculum" (National center for learning disabilities, 2007, p. 2). Gloeckler believed students unable to achieve in the regular classroom with typical peers needed to be served in the special education classroom. (p. 2) There were other students who could not succeed in their regular school and they were provided services in a separate building or school. (p. 2) However, Gloeckler continued by saying "it is almost impossible for a special school to recreate the general ed curriculum, and the further a child is separated away from the general education environment, the less likely he or she is to be getting the full general ed curriculum" (National center for learning disabilities, 2007, p. 2). Schools were faced with a new challenge, and districts had to figure out how to keep the students with disabilities in school learning with their typical peers in the general curriculum and regular education classroom while meeting the individual educational needs associated with their disability.

Hence, special education services began to look different. Special education was no longer a classroom where students went each day but now many of the students remained in the regular classroom and the special education teacher went into the classroom to provide support and strategies. (Friend, 2006) This was called co-teaching. "Co-teaching is used to refer to arrangements in which licensed professionals are actually sharing in instructional delivery" (Friend, 2006, p. 16). Effective special education co-teachers shared certain characteristics: "professionalism, the ability to articulate and model instruction to meet student needs, the ability to accurately assess student progress, the ability to analyze teaching/teaching styles, the ability to work with a wide range of students and a vested interest in course content" (Rice et al, 2007, p. 16).

Professionalism involved both the general education teacher and the special education teacher planning with one another and depending on one another to be in class each day. General education teachers relied on the "special educators' ability to be proactive in introducing new ideas regarding curriculum, instruction, interdisciplinary connections, assistive technology, and strategies to address the needs of individual learners" (Rice et al, 2007, p. 17). There had to be a professional relationship between both teachers in order for inclusion to be successful.

Furthermore, general education teachers wanted the special education teacher to be able to explain how the student's disability was going to affect the student in the classroom and how the teacher could reach the student during instruction. Regular education teachers did not have the expertise needed to teach students with more significant disabilities. They relied on the special education teachers to have the strategies necessary to help the student with disabilities be successful in the regular classroom. Special educators were able to modify and accommodate the curriculum to make it possible for the special needs student to learn with his peers in the general curriculum. With the regular education teacher and special education teacher working together, the classroom became a learning environment for everyone. The student with disabilities received the support needed and the regular students learned to accept and support the students who were struggling. "Inclusive classrooms can be wonderful places to establish norms and practices that are based on the belief that all people need help, that giving and getting help are good things, and that helping others

creates an atmosphere of mutual support and respect" (Sapon-Shevin, 2007, p. 51).

For inclusion to be truly effective, students with disabilities had to be represented in the school in "natural proportions" (Sapon-Shevin, 2007, p. 52). "If children with disabilities represent 10 percent of the overall student population, then no classroom or school should have more than 10 percent of its students be children with such challenges" (Sapon-Shevin, 2007, p. 52). Not all students with disabilities were put in a single regular room but were evenly disbursed across the grade level.

Access to the general curriculum was so important for all students to achieve academically with their peers. There was a performance gap for students with disabilities. With students in special education who were lagging behind, some of the lag could be explained due to the disability. But when one really looked closely at the population of students with disabilities, most of those students should not have been that far behind academically. (National center for learning disabilities, 2007) They simply had not had "good-quality instruction or a curriculum designed to get them up to standard. So, we have to concentrate on making sure that those kids get good instruction and get the right curriculum" (National center for learning disabilities, 2007, p. 3). Keeping the students with disabilities in the regular classroom participating in the general curriculum would definitely help them be more ready to take the state mandated assessments written based on the current grade level expectations. The grade level expectations were covered best through the general curriculum in the regular education classroom.

Missouri Assessment Program (MAP)

"In 1997, Missouri began implementing a performancebased assessment system for use by all public schools in the state, as required by the Outstanding Schools Act of 1993. MAP is designed to measure student progress in meeting the Show-Me Standards" (MDESE, 2007d, \P 1). "It is to identify the knowledge, skills, and competencies that Missouri students should acquire by the time they complete high school and to evaluate student progress toward those academic standards" (MDESE, 2007a, \P 2).

The MAP assessments "incorporate three types of test questions in order to evaluate student achievement: selected-response questions, requiring students to select the correct answer; constructed-response items, requiring students to generate an appropriate response; and performance events, requiring students to respond to, solve problems or address issues of a complex nature" (MDESE, 2007d, ¶ 3).

"The NCLB Act of 2001 required all states to annually assess student learning in reading/language arts and mathematics at grades 3-8 and at a high-school grade by the 2005-2006 school year. The act also required states to annually measure student learning in science using gradespan assessments by the 2007-2008 school year" (MDESE, 2007d, p. 4).

"Previously, students with disabilities could be exempted from statewide standardized testing at the discretion of each state" (National collaborative on workforce and disability, 2004, p. 2). However, the students with disabilities were now required to participate in state and district assessments in order for schools to measure the progress the students were making. "Renewal of IDEA now requires that a significant portion of the population of students with special needs be subject to statewide assessments" (National collaborative on workforce and disability, 2004, p. 3). Research (Langenfeld, Thurlow, & Scott, 1997) suggested that excluding students with disabilities from school accountability measures lead to dramatically increased rates of referral of students for special education. The school district had no accountability measures on students with disabilities.

"NCLB reauthorization would hold students with special needs to similar standards when it comes to accountability" (Sun, 2007, p. 91). According to the NCLB Act, "all eighth grade students will be proficient in the core subjects by the year 2014" (Williams, 2005, p. 155). President Bush signed the law in 2002, in an effort to improve the educational system of America. However, it did not take into account the needs of some students because it required that "all" students would be proficient. This was not easy for students coping with a significant educational disability. However, students with disabilities were required to show academic gains each year, though possibly not on a level equal to non-disabled peers.

While most students with disabilities participated in the MAP test with accommodations and modifications, there were a few who could not participate due to the severity of their disability. The IDEA, as revised by Congress in 1997, required Missouri to develop an alternate to the statewide assessment for students whose disabilities were so severe that they could not participate in the regular MAP testing. (MDESE, 2007d) "The Department of Elementary and Secondary Education developed the MAP-Alternate (MAP-A) to allow the participation of severely disabled students" (MDESE, 2007d, ¶ 5). The MAP-A was given to students who could not participate in the regular MAP testing.

The five criteria a student with a disability had to meet to be eligible for the MAP-A were:

(1) The student has a demonstrated significant cognitive disability and adaptive behavioral skills. Therefore, the student has difficulty acquiring new skills, and skills must be taught in very small steps. (2) The student does not keep pace with peers, even with the majority of students in special education, with respect to the total number of skills acquired. (3) The student's educational program centers on the application of essential skills to the Missouri Show-Me Standards. (4) The IEP team, as documented in the IEP, does not recommend participation in the MAP subject area assessments or taking the MAP with accommodations. (5) The student's inability in participate in the MAP subject area assessments is not primarily the result of excessive absences; visual or auditory disabilities; or social, cultural, language, or economic differences (MDESE, 2005d, p. 3).

The IEP team made decisions about how students with disabilities participated in assessment programs. (MDESE, 2007b) These decisions included whether a student would participate in the subject area assessments or the alternate assessments that comprise the MAP. When making the decision about participation in the MAP subject area assessments, the IEP team considered the student's need for accommodations. (MDESE, 2007b) If the team decided the MAP subject area assessments were not appropriate for an individual student, even with the use of accommodations, then the team could determine the student's eligibility for the MAP-A. (MDESE, 2007d) Only one percent of the students with disabilities in a district could be administered the MAP-A without it affecting the overall scores for the district. (MDESE, 2007b)

The MAP-A assessed information about a student's knowledge and skills in Communication Arts, Mathematics, and Science. Student performance was assessed on Alternate Performance Indicators (APIs) in each content area. Teachers observed and assessed a student's performance and collected evidence in each content area during two distinct collection periods. "The assessment will be scored on the following three criteria: level of accuracy, level of independence, and connection to the standards" (MDESE, 2006, ¶ 7). Because of the alternate test, all students could participate in the state mandated assessments. Districts were now held accountable for the results of all students.

Summary

While NCLB created some nightmares for public school districts, it also set a standard and expectation for all students to achieve and show progress each year. One of the goals was for every student to be able to read by the end of the third grade. Funding was granted through the United States government and allocated to the states so that districts could apply for Reading First grants. This enabled the school districts who were willing to commit to all of the requirements and who were willing to keep data to seek additional monies to implement the program. As a requirement of the Reading First program, districts used scientifically based researched textbooks, assessed their students to determine needs and provided the necessary interventions, and provided professional development to their teachers. The reading instruction was extensive and generally more time was spent on reading in these districts.

As a part of this study, two groups of students, those who participated in a Reading First school and those who did not, were analyzed to determine if Reading First was making an impact on students with disabilities in Missouri. Chapter three discussed how the two groups were determined and what kind of data was utilized in the study. Chapter four provided the results of the analyzed data and determined if students were indeed benefiting from the Reading First program. Finally, chapter five stated the conclusions of the study and gave recommendations for further study.

CHAPTER THREE-DESIGN AND METHODOLOGY

Introduction

With the passage of the NCLB and IDEIA legislation, students with disabilities were expected to progress through the general curriculum like their peers. Specialized instruction was provided as needed for the student with disabilities, and progress on state mandated assessments was expected from all students. Reading, math, and science were the three core areas assessed in Missouri. While math and science were not a part of this study, students with disabilities took exams in those areas also.

Since reading was an important skill for all students to learn, the government provided grants to many states for the Reading First program. Individual school districts could apply for the grants to enhance the reading instruction for students in grades kindergarten through three. Several schools took advantage of the funding which provided ongoing reading assessment, professional development, reading coaches, and reading interventionists. All of these supports helped the teachers and the students as the district was implementing the Reading First program. This study focused on the Reading First program for students with disabilities.

Research Questions

Due to the NCLB Act, Reading First was an initiative developed and school districts were required to use scientifically research-based instruction. Educators had to determine if the methodologies being used in their school district were truly effective with all students. Research demonstrated the importance of giving students quality instruction that produced effective results. Reading First focused on scripted reading instruction in the classroom with levels of interventions for students who were not doing well on their benchmark assessments and progress monitoring.

The following questions were investigated for this study:

- 1. What difference, if any, exists between the performance of students with disabilities who participated in the Reading First Program and those who did not participate in the Reading First Program, as indicated by the third grade communication arts MAP test?
- 2. What difference, if any, did the number of years the student with disabilities participated in Reading

First instruction become a factor in how they scored on the communication arts MAP test in third grade?

Subjects

The subjects were obtained by searching through the public-viewable data on DESE's website for a list of all the Reading First schools that had a population of students with disabilities large enough to have a reportable subgroup shown on the disaggregated MAP data. The percentage of students with disabilities scoring proficient or advanced on the communication arts portion of the third grade MAP test were used from the selected school districts for this study. There were two groups of districts used in this study, Reading First and non-Reading First schools. The percentages of students at the proficient or advanced levels of the MAP test were added together to obtain one number used to represent each of the districts in the study.

Sampling Procedure

Twelve separate districts were used for this study. There were six districts that were a part of the Reading First Grant in Missouri having a large enough special education population in third grade to have the MAP results disaggregated and the data viewable to the public. Therefore, the Department of Elementary and Secondary Education (DESE) website was utilized to obtain the results. First, a listing all of the school districts participating in the Reading First grant was obtained from the website. It also listed how many years each of the districts had been provided funding. Then, the list was used to obtain disaggregated MAP results for each of the school districts funded by the Reading First grant. If there was a row, in the disaggregated data, for the IEP students in the third grade communication arts portion of the test, the percentage of students scoring at the proficient or advanced levels were added together. This became the number used for the district data in this study.

In order to choose the other six districts, demographic and geographical regions criteria were used. The schools were paired by the following demographic data: percentage of Free and Reduced lunch students, percentage of white students, percentage of black students, and the overall number of students in the school district. While the demographic parameters were important so was the geographical region in which the district was located. Each additional school came from the same county or a nearby county as the Reading First school it was matched with for the study. The exception was Kansas City, which was paired with the St. Louis City school district. These two were selected as matched pairs because of the number of students in each of the districts. Results were shown for students represented in each of the demographical groups used for the study and were represented in the matched pair, one Reading First school with one non-Reading First school.

There were 695 students with disabilities in the third grade who had participated in the Reading First program; while there were 616 students with disabilities who did not participate in the Reading First program. These results were also provided by matched pairs in chapter four. All of the results were shown in tables or graphs so a visual representation of the data could be provided.

For the second part of the study, MAP scores were used for the 2006, 2007, and 2008 school years for each of the Reading First school districts. This information provided a way to determine if there was an increase in the percentage of students scoring at the proficient or advanced levels of the communication arts portion of the MAP test in third grade. However, it was not possible to use the same group of students for each of the three years. The data was from three separate classes of students; therefore, the data did not provide a comparison of one group of students and the progress the same students made due to the Reading First program instruction over a three-year period. The data provided information about how the district scored on the communication arts portion of the MAP using the Reading First program over a three-year period and should be viewed as district results only and not be looked at as a group of students over the three year period.

Research Setting

The 2008 MAP results were utilized for third grade students with disabilities in the area of communication arts. Some of the students were in districts that participated in the Reading First program through the grant and some of the students were in districts that used traditional reading instruction.

All school districts eligible and chosen to participate in the Reading First grant were analyzed as a part of this study. DESE's web site provided the information needed for this study. Each school district's data and statistics page was analyzed and the MAP disaggregated data was used to determine the number of third grade students with disabilities who participated in the communication arts portion of the MAP during the 2007-2008 school year. Only districts with enough students with disabilities to have data reported separately in the third grade were used. The percentage of students with disabilities scoring in the advanced or proficient range was then added together and this was the number used for the statistics portion of this study.

Research Design Procedure

This study examined the effects, if any, of Reading First instruction and the results of the communication arts portion of the MAP test on students with disabilities in the third grade. The researcher was determining whether the number of third grade students with disabilities who participated in the Reading First program and scored at the proficient or advanced level of the communication arts MAP test was at a significantly higher rate or percentage than other third grade students with disabilities who were taught reading using other methodologies. The number of years the students with disabilities participated in the Reading First instruction was also analyzed to determine if the amount of time in the program was a factor that increased the percentage of students who scored at the top two levels, proficient or advanced, on the MAP test.

This study was a comparative study. The measurement tool was the Missouri Assessment Program. The independent variable was the Reading First program. The dependent variable was the results of the third grade communication arts scores on the MAP test for students with disabilities.

Data Analysis

Information was obtained from two areas on the Department of Elementary and Secondary Education website: http://dese.mo.gov/schooldata/ftpdata.html and http://dese.mo.gov/divimprove/fedprog/discretionarygrants/R eadingFirst/07-084thyearrecommendations. The second website provided the names of all of the school districts participating in the Reading First grant. The researcher went to the first website to obtain the communication arts scores for students with disabilities (IEP students) in third grade. There were six districts with special education numbers large enough in third grade to have public viewable data. All six of the districts were used in the study and these six districts were considered the treatment group.

Another six districts were chosen as matched pairs with the first six schools. Each of the Reading First school's demographics was examined. The researcher attempted to find another school district in the same county, when possible, and matched the school district to another district not participating in the Reading First grant. Districts were matched using overall student population in the district, both white and black racial data, and the number of students participating in the free and reduced lunch program. The schools were put in matched pairs for the study, one Reading First district with other district chosen as the match.

The treatment group was comprised of the Reading First districts and the control group was determined by districts not participating in the grant. The combined number of students with disabilities scoring either proficient or advanced on the third grade communication arts MAP test was obtained for all twelve of the districts and was compared to determine if there was a difference in scores for the two groups. An Excel spreadsheet was used to create bar graphs and obtain statistical information for this study.

In addition, the Reading First districts were analyzed more closely to determine if the number of years the students with disabilities participated in the Reading First instruction made a significant impact on student scores in the top two levels, proficient or advanced, on the MAP test in third grade. Again, an Excel spreadsheet was used to create the line graphs.

Statistical Treatment of Data

Bar graphs were used to show the difference in the matched paired schools. The total school population and number of students with disabilities were also shown in tables to allow the reader to see the comparisons in school sizes. Bar graphs were provided for the demographic data showing comparisons of poverty level and ethnicity for each of the matched pairs.

The Pearson R correlation was applied to determine the correlation coefficient between the communication arts scores of the Reading First districts and the other districts. The Pearson R correlation gave the magnitude and direction of the association between the two variables. The assumption would be that the variables were normally distributed. The null hypothesis for this procedure was that there was no significant difference between students with disabilities who received Reading First instruction and those who did not receive Reading First instruction on the communication arts portion of the third grade MAP test. The magnitude of the correlation was the strength. If the magnitude was zero (0) or close to zero (0), then there was not a correlation. The closer the correlation was to +1 or -1 the stronger the correlation. There could be a positive correlation or a negative correlation found between the variables. In a positive correlation as one variable increased the other one would also increase. In a negative correlation, as one variable increased the other one would decrease. (Runyon, 2000) The information was provided in paragraph form for the reader.

Line graphs were utilized to show the percentage of students with disabilities scoring at the proficient or advanced levels on the MAP for the 2006, 2007, and 2008 school years. This information was analyzed to determine if the students with disabilities in the district were showing increased scores with additional years of Reading First instruction. Each of the year's data was a separate group of students so the graph did not show changes in a particular group of students. The reason only three years worth of MAP data was used was because the MAP changed significantly in 2006 so scores before 2006 could not be compared easily with scores after 2006 due to the change in the way scores were computed on the MAP at the state level.

Ethical and Political Considerations of the Study

Student's data was not identifiable in this study. Individual student scores were not obtained. Instead, each district's special education group was treated as an entity by itself and yielded a score for this study. Therefore, it was impossible to identify any specific score with a particular student. Students with disabilities were used as a group for each district. No breakdown was provided by disability groups so again, no student was identifiable through this research project.

Summary

All data for this study was obtained from the Department of Elementary and Secondary Education website, http://dese.mo.gov/schooldata/ftpdata.html. Although all of the data was viewable to the public, care was taken to remove individual school district names during the study. In order for the researcher to know the guidelines of Reading First had been agreed to by the district and had been adhered to by all of the teachers, only districts that received funding through the Reading First grants were used in the study. All other districts were considered non-Reading First schools for the purposes of this study.

In the next chapter, the data was analyzed to determine whether Reading First instruction made a difference for students with disabilities according to the results of the third grade MAP communication arts levels and whether the number of years the students with disabilities participated in Reading First instruction made an impact in the percentage of students scoring at the proficient or advanced level. Chapter five discussed the conclusions of the study, implications for education, and further recommendations for the study.

CHAPTER FOUR-RESULTS

Introduction

Reading is such an important skill for people to have throughout life. (MDESE, 2007a) Due to the NCLB legislation, schools are now faced with more accountability and are being more scrutinized by the public. Each year, school districts must administer state mandated assessments from grades three through eight in the area of reading. Students are also assessed once during their high school years. (MDESE, 2008)

Districts must show students with disabilities were making an adequate amount of progress in the subject. Otherwise districts were mandated to provide extra supports for the students. The parents were notified of the status the district was given and could request extra tutoring, a different school building for their child, etc. (USDOE, 2008) These options were quite expensive for the school district.

If the district did not show progress the following year, then state accreditation could eventually be affected; therefore, assessments were very important for the district. Students were provided opportunities all year long to learn the material. All students were mandated to participate in state assessments. Students with disabilities were allowed accommodations help due to their disabilities. The student with an educational disability also had to show academic progress on the state assessment.

Reading First provided uninterrupted reading time, professional development for the teachers, and intervention time during the day to help students learn the basics of reading. Students with disabilities were expected to participate in the Reading First program, as appropriate, showing gains in their reading ability. The students with special needs were also offered the interventions as needed.

This chapter compared the scores of students with disabilities who participated in reading first instruction and students with disabilities who did not participate in the program to see if there was a significant difference in their scores on the communication arts MAP test in third grade. It also provided information in regards to the number of years the students with disabilities participated in the Reading First instruction in each district receiving the Reading First grant for more than one year.

Results

The results of the study were documented on the following pages.

Table 1. Comparison of all students enrolled in each district.

| | Reading First | Non-Reading First |
|----------------|---------------|-------------------|
| | Schools | Schools |
| Matched Pair 1 | 3692 | 4271 |
| Matched Pair 2 | 6902 | 3903 |
| Matched Pair 3 | 4690 | 3629 |
| Matched Pair 4 | 4626 | 3286 |
| Matched Pair 5 | 27,574 | 22,479 |
| Matched Pair 6 | 12,186 | 19,160 |
| | | |
| Total Students | 59,670 | 56,728 |

Enrollment of Students

Table 1 showed the total population of students for each of the twelve districts used in this study. They were separated into two rows, one for Reading First schools and one for non-Reading First schools. There were 59,670 students enrolled in districts that participated in the Reading First program and 56,728 students enrolled in districts not participating in the Reading First program. Although not all of these students were used in the study, it was important to determine that the two groups were evenly matched using some key characteristics.







Figure 1 showed a comparison of the total student enrollment by the matched pairs used in this study. Each Reading First School was paired with a non-Reading First school with similar demographics and in the same region.







Figure 2 showed the percentage of students who qualified for Free/Reduced Lunch in each of the districts? The data was displayed in the matched pairs selected for the study. A Reading First school was shown with a non-Reading First school in the same region.



Percent of White Students by Matched Pairs of Reading First and Non-Reading First Schools



Figure 3 showed the percentage of white students at each of the schools selected in the study. The two largest racial groups (whites and blacks) were used when matching the schools together, a Reading First school with a non-Reading First school. There were a higher percentage of white students in one of the selected Reading First schools used in this study.



Percentage of Black Students by Matched Pairs of Reading First and Non-Reading First Schools



Figure 4 showed the percentage of black students in each of the twelve districts selected in the study. The six Reading First schools were matched with six non-Reading First schools in the same region and using certain demographic parameters. The percentage of black students was a factor used to match the two schools together. Four of the Reading First schools had a higher percentage of black students taking the Communication Arts portion of the MAP in the third grade. Table 2. Total number of students with disabilities reported for each school district.

| | | | Reading First | 1 | Non-Reading First |
|---------|------|---|---------------|---|-------------------|
| | | | Schools | | Schools |
| Matched | Pair | 1 | 42 | | 74 |
| Matched | Pair | 2 | 79 | | 46 |
| Matched | Pair | 3 | 85 | | 32 |
| Matched | Pair | 4 | 40 | | 32 |
| Matched | Pair | 5 | 330 | | 224 |
| Matched | Pair | 6 | 119 | | 208 |
| | | | | | |

Number of Special Education Students

Total special

Education students 695 616

Table 2 showed the actual number of students with disabilities who took the Communication Arts portion of the MAP test in 2008. The data was separated into two rows: Reading First districts and non-Reading First districts. There were a total of 695 students with disabilities involved in the Reading First schools and 616 students with disabilities in the non-Reading First schools. There was only a difference of 79 students in the two groups.



Number of Special Education Students taking the Communication Arts portion of the MAP Test in the Third Grade during 2008



Figure 5 showed the actual number of students with disabilities who took the Communication Arts portion of the MAP test during third grade in 2008. The data was shown by matched pairs used in the study of the Reading First district next to the non-Reading First district.



Matched Pairs Comparing Percent of Proficient/Advanced Scores of Reading First and Non-Reading First Schools on the MAP test

Figure 6. Percent of students with disabilities performing at the proficient or advanced level of the communication arts portion of the MAP test in third grade

Figure 6 showed the percentage of students at each school who scored proficient and advanced on the Communication Arts portion of the MAP test given in the third grade in 2008. The majority of the students with disabilities in the Reading First districts scored higher than the students with disabilities in the non-Reading First districts.


Year Two Reading First Districts



Figure 7 showed three years worth of MAP data for three separate school districts. Each of the districts participated in Reading First for two years. Therefore, the first year was baseline data showing where the students scored before Reading First instruction began in the district. Each of the "Series" represented an individual school district. Data point 1 indicated the 2006 MAP scores of students with disabilities in the third grade. Data point 2 showed the 2007 MAP scores of students with disabilities in the third grade the 2008 MAP scores of students with disabilities in the third grade.



Year Four Reading First Districts

Figure 8. Communication Arts MAP scores for students with disabilities in third grade for Reading First districts finishing year four of the Reading First grant.

Figure 8 showed three years worth of MAP data for two separate school districts. Each of the "Series" represented an individual school district that had participated in the Reading First grant for four years. Data point 1 indicated the 2006 MAP scores of third grade special education students. Data point 2 showed the 2007 MAP scores of third grade special education students. Data point 3 indicated the 2008 MAP scores of third grade special education students.



Year Five Reading First District



Figure 9 showed three years worth of MAP data for one school district. The district participated in Reading First for five years. The "Series" represented the individual school district. Data point 1 indicated the 2006 MAP scores of students with disabilities in third grade. Data point 2 revealed the 2007 MAP scores of students with disabilities in the third grade. Data point 3 showed the 2008 MAP scores of students with disabilities in the third grade.

Analysis of Data

A Pearson r was used to obtain a correlation of 0.54 when looking at the correlation between Reading First instruction and the scores obtained on the Communication Arts portion of the MAP test by the special education students. The confidence interval was 8.00, the Mean was 16.17, and the Standard Deviation was 10.03.

The non-Reading First schools had a confidence interval of 14.37, a Mean of 17.97, and a Standard Deviation of 6.67.

The confidence interval level was figured at .05 with the results showing above. There was a wider gap between the scores of the Reading First schools. The highest percentage of students scoring proficient or advanced was a Reading First school and the lowest percentage was also from a Reading First school. There was a correlation of .54 between the Reading First instruction and the scores of students with disabilities on the communication arts portion of the MAP test.

Research Question Number One

What difference, if any, exists between the performance of students with disabilities who participated in the Reading First Program and those who did not participate in the Reading First Program, as indicated by the third grade communication arts MAP test? After the data was analyzed and the Pearson r was utilized, it could not be determined that the Reading First program made a significant difference on the MAP scores of the third grade students with disabilities. However, the confidence interval showed the Reading First program may have slightly impacted the student's results.

Research Question Number Two

What difference, if any, did the number of years the student with disabilities participated in Reading First instruction become a factor in how they scored on the communication arts MAP test in third grade? The 2008 MAP scores showed an increase in three districts and a decrease in three districts when compared to the previous year. It also showed that three of the districts revealed increases since the first year of data shown; however, there were also three districts that did not increase. Therefore, Reading First instruction did not show a significant increase in MAP scores of third grade students in special education.

Deductive Conclusions

Based on the above results, the first null hypothesis, there is no significant difference between the communication arts MAP scores of third grade students with disabilities who received Reading First instruction and third grade students with disabilities who did not receive Reading First instruction, was accepted. The scores and data analysis did not support Reading First instruction as a factor used to improve the scores on the MAP test.

The second null hypothesis, there is no significant difference in the scores on the MAP test in regards to how many years a student with disabilities has participated in the Reading First Initiative, was also accepted. Fifty percent of the districts analyzed in this study showed an increase and fifty percent showed a decrease. There was no clear indication that the number of years made a difference in the MAP scores of the district for the extra years of instruction.

Summary

The results of this study did not show a correlation between Reading First instruction for students with disabilities and the results of the communication arts MAP test in third grade. It also did not show that the number of years a special education student participated in the Reading First program made an impact on the scores at the third grade level of the communication arts portion of the MAP test. Chapter five discussed the conclusions, implications for effective schools, and recommendations for future studies on this topic.

CHAPTER FIVE-DISCUSSION

Introduction

It was federal law that children who had a disability had the "right" to be educated by the public schools. School districts were ultimately held accountable for the amount of progress each student made each year. All students were expected to progress and show academic achievement for the year, and students with disabilities were progressing through the general curriculum and were included in the general population of students.

The ability to read was a vital part of any student's future; therefore, schools spent much time each year teaching the subject of reading. With the NCLB legislation and the reauthorization of the IDEA, schools were mandated to use scientifically-developed and research-based instructional methods. One such program that came out of the NCLB Act was Reading First. This program had a lot of government support and funding over the five years. Students spent at least ninety minutes a day in uninterrupted reading instruction which focused on the five essential components of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. The focus of this study was to determine if Reading First instruction was more effective than the traditional reading instruction for students with disabilities. Did the students with disabilities who were in districts that participated in the Reading First grant perform better on the Communication Arts portion of the MAP as the students with disabilities who did not participate in the program? Did the results improve for the students with disabilities who had spent multiple years receiving Reading First instruction?

Conclusion

With the passage of NCLB and IDEA much more accountability was directed to school districts. Each district must show that students with disabilities were progressing and meeting the grade level expectations. Only scientifically research-based instruction could be used; therefore, Reading First was a result of the NCLB legislation. The United States Department of Education provided monies to each state that could be used for Reading First Instruction. Individual districts applied for the grants which provided funding for the students in grades kindergarten through three for the Reading First program. This study looked at the effects of the Reading First program for students with disabilities. The results of the third grade communication arts portion of the MAP test were analyzed to determine if the students with disabilities made more academic gains through the Reading First program. While the research did not support significant gains, there may be some effects on the students. Looking further into the data, it could not be determined that the number of years the students with disabilities participated in the program made significant impacts on the MAP test.

Implications for Effective Schools

Since the Reading First program had only been in effect for five years, it was hard to determine if the data supported this methodology for students with disabilities. However, the NCLB act put priority on all students making academic gains and meeting grade level expectations. With IDEA also supporting more academic progress, the students with disabilities were spending more time in the general curriculum with an emphasis on learning to read.

Reading First was a phonics-based program that could be difficult for some students with disabilities to succeed in learning to read. The program needed to be re-visited along with other methodologies known to help students with disabilities. Special education teachers spent more time helping the students proceed through the curriculum with their peers. The various interventions and progress monitoring could be beneficial for the teachers to use as they worked with students with disabilities.

Recommendations

If further research was conducted on this topic, it would be interesting to determine how the Reading First instruction was provided to the special education students, whether co-teaching occurred in the regular classroom, if interventions and small groups were provided in the special education classroom, or whether all of the instruction occurred in the special education classroom.

Another factor might be to compare the MAP scores from schools using Reading First with scores from districts using some other specific reading programs (i.e., Four Block, Arkansas Literacy Model, Reading Recovery,) to determine if it is the Reading First program that is truly making the difference. This would provide data on several reading methodologies and could determine which one is most effective for students with disabilities.

Further research could be completed by breaking down the MAP scores by specific educational disabilities to determine if the Reading First program is less effective for any particular groups of students (e.g. Specific Learning Disabilities, Autism, Language). Possibly it is more effective for students who do not have disabilities in reading or language.

In order to determine if the number of years of Reading First instruction is truly benefitting students, one would need to utilize another district-wide assessment given in grades kindergarten through three. This would enable the researcher to follow a particular group of students for four years instead of waiting until the third grade when the MAP is administered and having a different group of students taking the MAP each year. Another assessment would provide the needed baseline information with follow-up data for the following years.

Summary

This study was unable to conclude whether the Reading First program impacted the scores of students with disabilities on the communication arts portion of the MAP test administered in third grade. There was a mild correlation showing the Reading First program may have provided some benefits to students with disabilities; however, with the IDEA and NCLB legislation occurring close to the same time as the Reading First program was launched it is difficult to know what made the impact with increased scores on the MAP test. The new legislation definitely increased accountability for districts and their students with disabilities. IDEA and NCLB mandated districts to work at grade level with the students with disabilities and required the students to participate in the mandated state assessments. Therefore, the students with disabilities were exposed to more of the general education curriculum and expectations were increased for the students with special needs.

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APPENDIX A- RAW DATA

Table A1. Reading First School District Data

| | | | | Number Percent A Number | | | | | | | | | | | |
|-----------------|---------------------------------|------|-------------|---------------------------------------|----------|------|------|--------|---------------|--------|--------|-------|-----|---------|--------------|
| Content Area | Grade | Туре | Year | Accountable | Reportat | ole | LND* | B E | elov Basic | Basic | Profic | cient | Ac | lvanced | MAP Index |
| | | | | | | | | | | | | | | | |
| Commu | nication A | Arts | 03 | IEP_student | 2006 | 57 | 56 | 1. | 8 | 48.2 | 26.8 | 17.9 |) | 7.1 | 683.9 |
| Commu | nication A | Arts | 03 | IEP_student | 2007 | 44 | 43 | 2. | 3 | 69.8 | 16.3 | 9.3 | | 4.7 | 648.8 |
| Commu | nication A | Arts | 03 | IEP_student | 2008 | 42 | 42 | 0. | 0 | 26.2 | 40.5 | 16.7 | 7 | 16.7 | 723.8 |
| | | | | | | | | | | | | | | | |
| Commu | inication A | Arts | 03 | IEP_student | 2006 | 90 | 0 89 | 1 | 1.1 | 38.2 | 52.8 | 4. | .5 | 4.5 | 675.3 |
| Commu | inication A | Arts | 03 | IEP_student | 2007 | 64 | 4 62 | 3 | 3.1 | 51.6 | 33.9 | 6. | .5 | 8.1 | 671.0 |
| Commu | inication A | Arts | 03 | IEP_student | 2008 | 79 | 9 79 | (| 0.0 | 44.3 | 41.8 | 11 | .4 | 2.5 | 672.2 |
| | | | | | | | | | | | | | | | |
| Commu | inication 4 | Arts | 03 | IEP_student | 2006 | 70 | 6 70 | 7 | 7.9 | 30.0 | 48.6 | 17 | .1 | 4.3 | 695.7 |
| Commu | nication 4 | Arts | 03 | IEP_student | 2007 | 84 | 4 83 | 1 | 1.2 | 43.4 | 50.6 | 4. | .8 | 1.2 | 663.9 |
| Commu | inication 4 | Arts | 03 | IEP_student | 2008 | 8 | 5 85 | (| 0.0 | 30.6 | 57.6 | 8. | .2 | 3.5 | 684.7 |
| | | | | | | | | | | | | | | | |
| Commu | inication A | Arts | 03 | IEP_student | 2006 | 6 | 1 60 | 1 | 1.6 | 40.0 | 53.3 | 3. | 3 | 3.3 | 670.0 |
| Commu | inication 4 | Arts | 03 | IEP_student | 2007 | 6 | 0 58 | 3 | 3.3 | 53.4 | 36.2 | 10 | .3 | 0.0 | 656.9 |
| Commu | inication A | Arts | 03 | IEP_student | 2008 | 4 | 0 40 |) (| 0.0 | 47.5 | 47.5 | 5. | .0 | 0.0 | 657.5 |
| | | | | | | | | | | | | | | | |
| Commu | nication A | Arts | 03 | IEP_student | 2006 | 42 | 7 4 | 06 | 4.9 | 48.8 | 39. | 7 | 9.4 | 2.2 | 665.0 |
| Commu | nication A | Arts | 03 | IEP_student | 2007 | 40 | 93 | 71 | 9.3 | 3 55.3 | 32. | 6 ′ | 7.8 | 4.3 | 661.2 |
| Commu | Communication Arts 03 | | 03 | IEP_student | 2008 | 33 | 0 3 | 30 | 0.0 |) 46.1 | 42. | 7 | 7.0 | 4.2 | 669.4 |
| | | | | | | | | | | | | | | | |
| Commu | nication A | Arts | 03 | IEP_student | 2006 | 138 | 3 12 | 9 | 6.5 | 34.1 | 45.0 | 1' | 7.1 | 3.9 | 690.7 |
| Commu | mmunication Arts 03 IEP_student | | IEP_student | 2007 | 145 | 5 14 | 1 | 2.8 | 26.2 | 52.5 | 1. | 3.5 | 7.8 | 702.8 | |
| Commu | nication A | Arts | 03 | IEP_student | 2008 | 118 | 3 11 | 8 | 0.0 | 31.4 | 46.6 | 1. | 3.6 | 8.5 | 699.2 |

| | | | Number | | | | | Perc | cent | | | | | | |
|-----------------|----------|------|--------|-------------|----------|------|------|------------|-----------|-------|--------|------|-----|--------|--------------|
| Content Area | Grade | Туре | Year | Accountable | Reportab | le L | ND* | Bel Bas | ow sic | Basic | Profic | ient | Ad | vanced | MAP Index |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 54 | 1 53 | 1. | .9 | 24.5 | 49.1 | 1 | 7.0 | 9.4 | 711.3 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 51 | 49 | 3. | .9 | 34.7 | 46.9 | 1 | 0.2 | 8.2 | 691.8 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 74 | 1 74 | 0. | .0 | 21.6 | 51.4 | 1 | 7.6 | 9.5 | 714.9 |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 54 | 54 | 0.0 |) | 33.3 | 46.3 | 14 | .8 | 5.6 | 692.6 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 47 | 44 | 6.4 | | 22.7 | 56.8 | 13 | .6 | 6.8 | 704.5 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 46 | 45 | 2.2 | 2 | 28.9 | 51.1 | 8 | .9 | 11.1 | 702.2 |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 39 | 39 | 0.0 |) | 28.2 | 51.3 | 12 | .8 | 7.7 | 700.0 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 30 | 30 | 0.0 |) | 16.7 | 60.0 | 13 | .3 | 10.0 | 716.7 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 32 | 32 | 0.0 |) | 34.4 | 56.3 | 6 | .3 | 3.1 | 678.1 |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 40 |) 39 | 2. | .5 | 38.5 | 43.6 | 1 | 2.8 | 5.1 | 684.6 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 44 | 42 | 4. | .5 | 33.3 | 45.2 | 1 | 1.9 | 9.5 | 697.6 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 32 | 2 32 | 0. | .0 | 25.0 | 53.1 | 1 | 5.6 | 6.3 | 703.1 |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 26 | 9 2 | 60 | 3.3 | 48. | 3 35 | .0 | 6.9 | 9.2 | 676.5 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 27 | 6 2 | 70 | 2.2 | 51. | 5 34 | .4 | 6.7 | 7.4 | 670.0 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 22 | 4 2 | 23 | 0.4 | 52.9 | 35 | .9 | 5.8 | 5.4 | 663.7 |
| | | | | | | | | | | | | | | | |
| Communicat | ion Arts | | 03 | IEP_student | 2006 | 236 | 5 23 | 1 2 | 2.1 | 26.4 | 56.3 | 3 1 | 2.6 | 4.8 | 695.7 |
| Communicat | ion Arts | | 03 | IEP_student | 2007 | 168 | 16 | 2 3 | 3.6 | 32.7 | 54.9 | • | 8.6 | 3.7 | 683.3 |
| Communicat | ion Arts | | 03 | IEP_student | 2008 | 208 | 3 20 | 8 (| 0.0 | 28.8 | 52.9 |) 1 | 1.5 | 6.7 | 696.2 |

Table A2. Non-Reading First School District Data

| | Demographic Data, 2004-2008 | | | | | | | | | | | |
|---------------------------|-----------------------------|----------|----------|----------|----------|---------|---------|---------|---------|---------|--|--|
| | | | | | | | | Missou | ri | | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 | | |
| Total Enrollment | 3,554 | 3,640 | 3,743 | 3,728 | 3,692 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 | | |
| Asian (Number Percent) | 19 | 20 | 42 | 68 | 77 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 | | |
| | 0.50 | 0.50 | 1.10 | 1.80 | 2.10 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | | |
| Black (Number Percent) | 3 | 3 | 7 | 11 | 10 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 | | |
| | 0.10 | 0.10 | 0.20 | 0.30 | 0.30 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 | | |
| Hispanic (Number Percent) | 567 | 601 | 622 | 621 | 626 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 | | |
| | 16.00 | 16.50 | 16.60 | 16.70 | 17.00 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 | | |
| Indian (Number Percent) | 63 | 62 | 72 | 66 | 75 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 | | |
| | 1.80 | 1.70 | 1.90 | 1.80 | 2.00 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| White (Number Percent) | 2,902 | 2,954 | 3,000 | 2,962 | 2,904 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 | | |
| | 81.70 | 81.20 | 80.10 | 79.50 | 78.70 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 | | |
| | | | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 1,997.00 | 2,217.00 | 2,319.00 | 2,209.00 | 2,286.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 | | |
| (Number Percent) | 56.90 | 61.10 | 62.60 | 60.70 | 63.40 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 | | |

Table A3. Reading First School District Number 1.

| | D | emog | raphi | c Data | a, 2004 | 4-200 | 8 | | | |
|---------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | | | | | | Missou | ıri | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 7,250 | 7,094 | 6,920 | 6,949 | 6,902 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 87 | 97 | 78 | 69 | 92 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 1.20 | 1.40 | 1.10 | 1.00 | 1.30 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 5,366 | 5,361 | 5,250 | 5,524 | 5,465 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 74.00 | 75.60 | 75.90 | 79.50 | 79.20 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 298 | 321 | 349 | 364 | 405 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 4.10 | 4.50 | 5.00 | 5.20 | 5.90 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 21 | 17 | 23 | 25 | 20 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.30 | 0.20 | 0.30 | 0.40 | 0.30 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 1,478 | 1,298 | 1,220 | 967 | 920 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 20.40 | 18.30 | 17.60 | 13.90 | 13.30 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 4,281.40 | 4,497.90 | 4,803.50 | 5,188.70 | 4,921.60 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 60.40 | 64.90 | 69.30 | 74.50 | 74.00 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A4. Reading First School District Number 2.

| | D | emog | raphi | c Data | 1, 200 4 | 4-2008 | 3 | | | |
|---------------------------|----------|----------|----------|----------|-----------------|---------|---------|---------|---------|---------|
| | | | | | | | | Missou | ri | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 4,479 | 4,556 | 4,596 | 4,616 | 4,690 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 27 | 39 | 37 | 39 | 35 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 0.60 | 0.90 | 0.80 | 0.80 | 0.70 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 477 | 491 | 512 | 526 | 557 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 10.60 | 10.80 | 11.10 | 11.40 | 11.90 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 33 | 44 | 50 | 49 | 65 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 0.70 | 1.00 | 1.10 | 1.10 | 1.40 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 21 | 22 | 23 | 22 | 24 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 3,921 | 3,960 | 3,974 | 3,980 | 4,009 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 87.50 | 86.90 | 86.50 | 86.20 | 85.50 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 2,461.30 | 2,451.00 | 2,535.00 | 2,654.20 | 2,760.70 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 56.10 | 56.00 | 56.50 | 58.70 | 58.60 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

| Table | A5. | Reading | First | School | District | Number | 3. |
|-------|-----|---------|-------|--------|----------|--------|----|
|-------|-----|---------|-------|--------|----------|--------|----|

| | D | emog | raphio | c Data | a, 2004 | 4-200 | 8 | | | | |
|---------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|--|
| | | | | | | | | Missou | ri | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 | |
| Total Enrollment | 5,257 | 5,289 | 5,233 | 5,037 | 4,626 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 | |
| Asian (Number Percent) | 9 | 7 | 4 | 3 | 3 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 | |
| | 0.20 | 0.10 | 0.10 | 0.10 | 0.10 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | |
| Black (Number Percent) | 5,178 | 5,180 | 5,175 | 4,996 | 4,570 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 | |
| | 98.50 | 97.90 | 98.90 | 99.20 | 98.80 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 | |
| Hispanic (Number Percent) | 8 | 15 | 17 | 14 | 14 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 | |
| | 0.20 | 0.30 | 0.30 | 0.30 | 0.30 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 | |
| Indian (Number Percent) | 1 | 3 | 1 | 1 | 0 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 | |
| | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | |
| White (Number Percent) | 61 | 84 | 36 | 23 | 39 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 | |
| | 1.20 | 1.60 | 0.70 | 0.50 | 0.80 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 | |
| | | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 4,208.00 | 4,393.00 | 4,257.00 | 3,797.00 | 3,861.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 | |
| (Number Percent) | 80.20 | 83.10 | 81.40 | 76.30 | 82.60 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 | |

Table A6. Reading First School District Number 4.

| | | Demo | graphi | ic Data | , 2004 | -2008 | | | | |
|-------------------------|-----------|-----------|-----------|-----------|---------------|---------|---------|---------|---------|---------|
| | | | | | | | | Missour | ri | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 38,374 | 36,045 | 35,361 | 32,135 | 27,574 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 576 | 612 | 608 | 619 | 598 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 1.50 | 1.70 | 1.70 | 1.90 | 2.20 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 31,049 | 29,154 | 28,930 | 26,265 | 22,444 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 80.90 | 80.90 | 81.80 | 81.70 | 81.40 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic | 578 | 746 | 796 | 818 | 713 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| (Number Percent) | 1.50 | 2.10 | 2.30 | 2.50 | 2.60 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 55 | 72 | 83 | 73 | 75 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.10 | 0.20 | 0.20 | 0.20 | 0.30 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 6,116 | 5,461 | 4,944 | 4,360 | 3,744 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 15.90 | 15.20 | 14.00 | 13.60 | 13.60 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch | 31,548.00 | 30,301.00 | 27,870.80 | 24,557.80 | 19,141.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (FTE)* (Number Percent) | 84.70 | 86.10 | 81.00 | 80.10 | 71.90 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A7. Reading First School District Number 5.

| | D | emog | raphio | c Data | 1, 200 4 | 4-200 | 8 | | | | | |
|---------------------------|----------|----------|----------|----------|-----------------|---------|---------|---------|---------|---------|--|--|
| | | | | | | | | Missou | ri | | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 | | |
| Total Enrollment | 12,081 | 12,220 | 12,319 | 12,231 | 12,186 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 | | |
| Asian (Number Percent) | 98 | 112 | 101 | 105 | 102 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 | | |
| | 0.80 | 0.90 | 0.80 | 0.90 | 0.80 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | | |
| Black (Number Percent) | 8,240 | 8,599 | 9,008 | 9,222 | 9,407 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 | | |
| | 68.20 | 70.40 | 73.10 | 75.40 | 77.20 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 | | |
| Hispanic (Number Percent) | 169 | 159 | 148 | 132 | 148 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 | | |
| | 1.40 | 1.30 | 1.20 | 1.10 | 1.20 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 | | |
| Indian (Number Percent) | 21 | 27 | 19 | 11 | 13 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 | | |
| | 0.20 | 0.20 | 0.20 | 0.10 | 0.10 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | |
| White (Number Percent) | 3,553 | 3,323 | 3,043 | 2,761 | 2,516 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 | | |
| | 29.40 | 27.20 | 24.70 | 22.60 | 20.60 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 | | |
| | | | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 6,531.00 | 6,795.50 | 7,025.90 | 7,240.90 | 7,371.60 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 | | |
| (Number Percent) | 54.30 | 57.00 | 58.50 | 60.30 | 62.70 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 | | |

Table A8. Reading First School District Number 6.

| | D | emog | raphi | c Data | a, 2004 | 4-200 | 8 | | | |
|---------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | | | | | | Missou | ri | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 4,220 | 4,266 | 4,349 | 4,345 | 4,271 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 94 | 140 | 163 | 195 | 201 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 2.20 | 3.30 | 3.70 | 4.50 | 4.70 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 75 | 64 | 68 | 75 | 78 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 1.80 | 1.50 | 1.60 | 1.70 | 1.80 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 290 | 276 | 307 | 307 | 318 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 6.90 | 6.50 | 7.10 | 7.10 | 7.40 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 68 | 71 | 73 | 77 | 113 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 1.60 | 1.70 | 1.70 | 1.80 | 2.60 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 3,693 | 3,715 | 3,738 | 3,691 | 3,561 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 87.50 | 87.10 | 86.00 | 84.90 | 83.40 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 2,082.00 | 2,341.00 | 2,223.00 | 2,293.00 | 2,230.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 49.90 | 55.30 | 52.60 | 53.70 | 52.90 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A9. Non-Reading First School District Number 1.

| | D | emog | raphi | c Data | a, 2004 | 4-200 | 8 | | | | |
|---------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|--|
| | | | | | | | | Missou | ri | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 | |
| Total Enrollment | 4,229 | 4,184 | 4,120 | 4,078 | 3,903 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 | |
| Asian (Number Percent) | 39 | 40 | 35 | 42 | 36 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 | |
| | 0.90 | 1.00 | 0.80 | 1.00 | 0.90 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | |
| Black (Number Percent) | 2,241 | 2,250 | 2,369 | 2,415 | 2,295 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 | |
| | 53.00 | 53.80 | 57.50 | 59.20 | 58.80 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 | |
| Hispanic (Number Percent) | 322 | 326 | 367 | 404 | 425 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 | |
| | 7.60 | 7.80 | 8.90 | 9.90 | 10.90 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 | |
| Indian (Number Percent) | 20 | 19 | 17 | 14 | 15 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 | |
| | 0.50 | 0.50 | 0.40 | 0.30 | 0.40 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | |
| White (Number Percent) | 1,607 | 1,549 | 1,332 | 1,203 | 1,132 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 | |
| | 38.00 | 37.00 | 32.30 | 29.50 | 29.00 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 | |
| | | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 1,941.00 | 2,323.00 | 2,314.90 | 2,341.00 | 2,390.10 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 | |
| (Number Percent) | 47.20 | 56.20 | 56.60 | 60.30 | 62.60 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 | |

Table A10. Non-Reading First School District Number 2.

| | D | emog | raphi | c Data | a, 2004 | 4-200 | 8 | | | |
|---------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | | | | | | Missou | ri | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 3,839 | 3,792 | 3,710 | 3,785 | 3,629 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 21 | 20 | 26 | 34 | 28 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 0.50 | 0.50 | 0.70 | 0.90 | 0.80 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 1,299 | 1,313 | 1,320 | 1,349 | 1,304 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 33.80 | 34.60 | 35.60 | 35.60 | 35.90 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 44 | 52 | 52 | 63 | 68 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 1.10 | 1.40 | 1.40 | 1.70 | 1.90 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 5 | 4 | 7 | 4 | 6 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.10 | 0.10 | 0.20 | 0.10 | 0.20 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 2,470 | 2,403 | 2,305 | 2,335 | 2,223 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 64.30 | 63.40 | 62.10 | 61.70 | 61.30 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 2,100.80 | 2,063.60 | 2,110.40 | 2,092.60 | 2,042.60 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 55.80 | 55.80 | 58.60 | 58.10 | 58.40 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A11. Non-Reading First School District Number 3.

| Demographic Data, 2004-2008 | | | | | | | | | | |
|-----------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | Missouri | | | | | | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 3,974 | 3,784 | 3,608 | 3,550 | 3,286 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 42 | 45 | 42 | 40 | 41 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 1.10 | 1.20 | 1.20 | 1.10 | 1.20 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 3,406 | 3,261 | 3,099 | 3,034 | 2,812 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 85.70 | 86.20 | 85.90 | 85.50 | 85.60 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 31 | 30 | 32 | 34 | 36 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 0.80 | 0.80 | 0.90 | 1.00 | 1.10 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 5 | 9 | 7 | 6 | 17 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.10 | 0.20 | 0.20 | 0.20 | 0.50 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 490 | 439 | 428 | 436 | 380 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 12.30 | 11.60 | 11.90 | 12.30 | 11.60 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 2,248.00 | 2,209.00 | 2,194.00 | 2,086.00 | 1,927.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 57.40 | 59.10 | 60.80 | 59.70 | 59.10 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A12. Non-Reading First School District Number 4.

| Demographic Data, 2004-2008 | | | | | | | | | | | | | |
|-----------------------------|-----------|-----------|-----------|-----------|-----------|---------|---------|----------|---------|---------|--|--|--|
| | | | | | | | | Missouri | | | | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 | | | |
| Total Enrollment | 28,319 | 27,190 | 25,766 | 24,449 | 22,479 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 | | | |
| Asian (Number Percent) | 558 | 492 | 476 | 456 | 428 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 | | | |
| | 2.00 | 1.80 | 1.80 | 1.90 | 1.90 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | | | |
| Black (Number Percent) | 19,287 | 18,208 | 16,861 | 15,743 | 13,959 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 | | | |
| | 68.10 | 67.00 | 65.40 | 64.40 | 62.10 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 | | | |
| Hispanic | 4,249 | 4,523 | 4,711 | 4,730 | 4,761 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 | | | |
| (Number Percent) | 15.00 | 16.60 | 18.30 | 19.30 | 21.20 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 | | | |
| Indian (Number Percent) | 70 | 75 | 58 | 62 | 67 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 | | | |
| | 0.20 | 0.30 | 0.20 | 0.30 | 0.30 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | | | |
| White (Number Percent) | 4,155 | 3,892 | 3,660 | 3,458 | 3,264 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 | | | |
| | 14.70 | 14.30 | 14.20 | 14.10 | 14.50 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 | | | |
| | | | | | | | | | | | | | |
| Free/Reduced Lunch | 22,443.70 | 21,548.00 | 19,988.00 | 18,916.30 | 17,728.80 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 | | | |
| (FTE)* (Number Percent) | 80.40 | 80.60 | 79.50 | 79.90 | 80.50 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 | | | |

Table A13. Non-Reading First School District Number 5.

| Demographic Data, 2004-2008 | | | | | | | | | | |
|-----------------------------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| | | | Missouri | | | | | | | |
| Year | 2004 | 2005 | 2006 | 2007 | 2008 | 2004 | 2005 | 2006 | 2007 | 2008 |
| Total Enrollment | 19,311 | 19,315 | 19,556 | 19,297 | 19,160 | 896,186 | 894,809 | 899,941 | 899,525 | 894,609 |
| Asian (Number Percent) | 179 | 147 | 172 | 178 | 187 | 12,108 | 13,059 | 14,169 | 15,008 | 15,787 |
| | 0.90 | 0.80 | 0.90 | 0.90 | 1.00 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| Black (Number Percent) | 11,028 | 11,526 | 12,187 | 12,908 | 12,811 | 160,532 | 160,618 | 162,895 | 162,659 | 160,785 |
| | 57.10 | 59.70 | 62.30 | 66.90 | 66.90 | 17.9 | 17.9 | 18.1 | 18.1 | 18.0 |
| Hispanic (Number Percent) | 221 | 242 | 248 | 254 | 276 | 22,749 | 25,166 | 27,935 | 30,449 | 32,489 |
| | 1.10 | 1.30 | 1.30 | 1.30 | 1.40 | 2.5 | 2.8 | 3.1 | 3.4 | 3.6 |
| Indian (Number Percent) | 4 | 1 | 3 | 7 | 7 | 3,194 | 3,444 | 3,640 | 3,739 | 3,915 |
| | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| White (Number Percent) | 7,879 | 7,399 | 6,946 | 5,950 | 5,879 | 697,603 | 692,522 | 691,302 | 686,670 | 681,622 |
| | 40.80 | 38.30 | 35.50 | 30.80 | 30.70 | 77.8 | 77.4 | 76.8 | 76.4 | 76.2 |
| | | | | | | | | | | |
| Free/Reduced Lunch (FTE)* | 6,348.00 | 7,113.30 | 7,745.00 | 8,412.50 | 8,705.00 | 354,534 | 364,441 | 367,461 | 366,547 | 367,724 |
| (Number Percent) | 34.20 | 38.90 | 41.10 | 45.40 | 46.10 | 40.5 | 41.7 | 40.8 | 41.8 | 42.1 |

Table A14. Non-Reading First School District Number 6.
VITA

Brenda K. Lakin was born September 6, 1970, in Springfield, Missouri. She graduated from Willard High School in 1988. After this, she earned bachelor degrees in Early Childhood Education, Elementary Education, and Special Education from Evangel University (1993), a master's degree in Educational Administration from Missouri State University (1995), a specialist degree from Missouri State University (2005), and doctorate degree in Educational Administration from Lindenwood University (2009).

Brenda served as a kindergarten/early childhood special education teacher in Willard Public Schools, Willard, Missouri, for 5 years. She taught early childhood special education in Springfield Public Schools, Springfield, Missouri, for 4 years and then served as an autism consultant and early childhood special education process coordinator for 4 years in the same district. Since then she has served as the director of special education for the Aurora R-VIII School District in Aurora, Missouri.

Married to Scott Lakin, Brenda lives in Missouri.