READING IMPROVEMENT IN THE ERA OF NO CHILD LEFT BEHIND

A Dissertation

Presented to

The Faculty of the School of Education

Liberty University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

by

Meredith Park Furrow

March 2008

Reading Improvement in the Era of No Child Left Behind

by Meredith Park Furrow

APPROVED:

COMMITTEE CHAIR	Karen L. Parker, Ed.D.
COMMITTEE MEMBERS	Clarence Holland, Ed.D.
	Oneal C. Sandidge, Ph.D.
CHAIR, GRADUATE STUDIES	Scott B. Watson, Ph.D.

Abstract

Meredith Park Furrow. READING IMPROVEMENT IN THE ERA OF NO CHILD LEFT BEHIND. (Under the direction of Dr. Karen L. Parker) School of Education, March, 2008.

This mixed-methodology study described the reading curriculum and instructional changes that occurred in a small, rural, intermediate school in Virginia as a result of the No Child Left Behind legislation and Virginia's Standards of Learning requirements. A special focus was placed on the progression of reading scores of the 2003-2004 fifth grade students to their eighth grade school year of 2006-2007. Since the Standards of Learning reading scores given in the spring of 2004 initiated the school improvement process for this school, the focus of this research was based on documenting these scores along with the school improvement process that incurred as a result. The reading test scores documented included the Virginia Reading Standards of Learning tests, the *Gates Mac-Ginitie Reading Test*, the *Tests for Higher Standards*, and *STAR Reading*. The research also consisted of a document analysis of the school improvement changes in the school, especially in the area of reading curriculum and instruction, implemented from May 2004 to June 2007. A major emphasis was placed on the school's School Improvement Plan. As the school progressed through school improvement, the reading scores did increase including the scores of the focal group of students in this study. Curriculum alignment with the Virginia Standards of Learning, grade level pacing guides, and student data analysis were major approaches to improvement discussed in this study. However, the school has yet to meet AYP or Virginia accreditation standards

due to the subgroups not meeting the Annual Measurable Objectives and low scores in other subject areas. Further study is encouraged to determine the future impact of the No Child Left Behind legislation on reading and on school improvement.

CONTENTS

ACKNOWLEDGEMENTS

- To my Lord Jesus Christ: He initiated my journey toward obtaining a doctorate and supplied the necessary ways and means with which to complete this degree. His unconditional love, wisdom, and continuous presence during this process have carried me through.
- To my mother, Jeanne Wainwright Park: She has given constant life-long support for all of my educational endeavors as well as for all that I have sought to accomplish. Her love, wisdom, prayers, and "comfort" food have given me the strength to pursue an Ed.D. She is truly a Proverbs 31 woman.
- To my father, George Mack Park: Because of his Godly character, he has been the solid foundation of the Park family. His wisdom and strength have supported me throughout my life.
- To my loving husband, Randy Furrow: He has uplifted me by prayer and encouragement through this long, arduous process.
- To my children, Mandie and David Furrow: Their patience with Mom throughout this process has been amazing. They have endured eating questionable dinners, survived without Mom in the summers, and allowed her to spend extended amounts of time at her computer. I could have not asked for better children. I am so proud of all that they have accomplished and will accomplish in the future.
- To Dr. Karen Parker, Dean of the College of Education: She gave much wisdom at the initial stages of this project and has supported me to its completion. Her wisdom in the classroom and with the dissertation process has been invaluable.

Chapter 1

Introduction of the Study

In light of the increased government involvement in local education, this dissertation was undertaken as a mixed-methodology study of a small, rural, Title I school that has failed to meet both federal and state requirements. Since this school was *Accredited with Warning* for the 2004-2005 school year because of low reading scores, this study concentrated on the progression of reading scores of the 2003-2004 fifth grade students until their eighth grade year in 2006-2007. This study also documented the changes implemented to the reading curriculum and instruction brought about by federal and state mandates and sanctions.

The first chapter addresses the background of the study as well as the problem statement and research questions. The professional significance of this study is also addressed with an overview of the methodology and definitions of key terms.

Background of the Study

Heraclitus, an ancient Greek philosopher once stated, "Nothing endures but change" (Diogenes, L., circa 225/1895, Book IX, Sec. 8). The truth of this ancient proverb is evident in modern society, especially in the field of education. From the one room schoolhouse to expansive buildings, from chalk and slate to personal computers, from the *New England Primer* to modern texts, American education has evolved immensely since the days of Thomas Jefferson and Horace Mann.

Until 1958, the control of educating America's youth was predominately in the hands of the parents, and local communities. Eventually the states became more involved

in regulating education. The federal government stepped in when there was a need to help disseminate statistics and to offer solutions to school problems. The federal government was also indirectly involved in education by providing categorical aid, civil rights legislation, and educational research (Spring, 2000).

However, during the past 50 years, the federal government, through a series of legislation, has become increasingly involved in education. The passing of the No Child Left Behind Act of 2001 (NCLB) continued to support the government's goal of providing educational services for economically disadvantaged school districts. The major change in the current law was the expansion of the federal government's control of education into the state and local school systems. Thus, through the passing of NCLB, a single statewide accountability system that provided equal educational outcomes for all of America's students was established. Through mandated accountability, this far-reaching nature of NCLB directly affected educational practices, curriculum, and instruction in America's public schools (Sunderman, Kim, & Orfield, 2005).

This increased involvement of the federal government into the nation's educational system began when the Russian satellite, Sputnik, was launched in 1957. At that time, Americans began to fear that their educational system was in need of major reform. Thus, in 1958, Congress authorized 887 million dollars in loans and grants for the National Defense and Education Act to support the teaching of science and of foreign languages (Kennedy, Cohen, & Bailey, 2002). Since national policy objectives were linked to categorical funding, educational policy started to shift from local to federal control (Spring, 2000).

In 1965, as a part of Lyndon B. Johnson's Great Society program, the Elementary

and Secondary Education Act (ESEA) was passed in order to assist low-income children through a section of the legislation known as *Title I* (Kimmelman, 2006). The passing of this act solidified the federal government's position in controlling education as it sought to end poverty by providing categorical aid to the nation's schools (Spring, 2000).

In 1981, Congress passed the Education Consolidation and Improvement Act, and Title I of ESEA of 1965 was renamed Chapter I. This legislation simplified requirements as the states became increasingly responsible for administration of the federal grant money, and the local school districts were placed in charge of program design. This act also provided financial support for government-sponsored research. Title VI of the Civil Rights Act of 1964 allowed the federal government to regulate education in order to protect the civil rights of students. Schools were not allowed to discriminate based on race, religion, or ethnic background, with the penalty of withholding federal money. Title IX of the amendments to the Higher Education Act of 1972 allowed the withholding of federal money if students were discriminated based on their gender. Parents were given the right to review their child's school records with the passing of the Buckley Amendment in the Educational Amendments of 1974 (Spring, 2000).

A Nation at Risk, written in 1985 by the National Commission on Excellence in Education, reported a dismal assessment of America's educational system, especially in student achievement (Dufour & Eaker, 1992). President George H. W. Bush in his 1990 State of the Union address outlined six national performance goals for education. These goals became the basis of the Goals 2000 Act signed by President Bill Clinton. Goals 2000 focused on accountability of student achievement outcomes and required states to develop curriculum standards, instructional practices, and assessments (Irons & Harris,

2007).

In January 2002, as a reauthorization of the Elementary and Secondary Education Act, President George W. Bush signed the No Child Left Behind Act. To date, NCLB was the most comprehensive federal education law passed by Congress. This law required that states have an accountability plan; use proven programs; hire highly qualified teachers; and narrow the achievement gap between disadvantaged, disabled, minority, limited English proficient students, and their peers (Kimmelman, 2006).

Under NCLB, schools were required to meet state reading and mathematics benchmarks, or Annual Measurable Objectives (AMO), in order to make Adequate Yearly Progress (AYP). These benchmarks increase each year until 2014 when all schools must obtain a 100% passing rate in each category. Schools that do not meet these yearly goals will then be subject to sanctions that include school choice, supplemental services, reconstitution, and restructuring (Sunderman, Kim, & Orfield, 2005).

Before NCLB, the Commonwealth of Virginia was actively involved in establishing it own state standards. Prior to NCLB, Virginia required a Literacy Passport Test that was given in the sixth grade and the passing of this test was required for high school graduation. At that time, Virginia started to build a test-based accountability program based on the Standards of Learning (SOL). These learning standards were written for each subject area and for each grade level. The Standards of Learning tests were first administered in 1998 before NCLB became law (Sunderman, Kim, & Orfield, 2005).

In addition to the NCLB mandates, the Commonwealth of Virginia also issued its own accreditation ratings. Schools not meeting Virginia's accreditation requirements

were subject to many mandated sanctions connected with the accreditation ratings. The five accreditation ratings given to Virginia schools included, *Fully Accredited*, *Accreditation Withheld/Improving School Near Accreditation*, *Accredited with Warning*, *Conditionally Accredited*, and *Accreditation Denied* (Virginia Department of Education [VDOE], 2006).

According to the *Virginia School Report Card: School Accreditation Status for 2006-2007* (VDOE, 2006), of a total of 1,839 schools in Virginia, 1,670 of Virginia's schools were fully accredited, 138 schools were Accredited with Warning, 6 were Denied Accreditation, 17 were Conditionally Accredited, 2 were Accreditation Withheld, and 6 were To be Determined. Interestingly, of the 169 schools that were not fully accredited, 100 or 59% were middle or intermediate schools.

Of the middle or intermediate schools that did not receive full accreditation status, 1 was given the Accreditation Denied rating, 4 were rated Accreditation Withheld-Improving School, 94 were Accredited with Warning, while 1 was Conditionally Accredited. Those schools in Virginia that were not Fully Accredited experienced various levels of sanctions. Much pressure was placed on these schools to meet state and federal standards.

One such intermediate school in eastern Virginia is having difficulty complying with state standards and federal standards. This small, rural, Title I school serves grades five through eight with 485 students. The county where this school is found consists of 1,690 students with three schools: one elementary, one intermediate, and one high school. In 2006, the population of this intermediate school consisted of 41.9% Caucasian, 55.3% African-American, and 1.8% Hispanic. In this school, 48.3% of the students receive free

or reduced lunch. Thus, this school is qualified to receive Title I funds. The student population of this system also consists of 1.1% English language learners and of 15.8% students with disabilities (United States Department of Education [ED], 2006).

For the 2006-2007 school year, this intermediate school did not meet the AYP requirements according to NCLB. The school was also Accredited with Warning for its third year and is in Year Two for English improvement and in Year Two for mathematics improvement (VDOE, 2006). Consequently, this intermediate school has had to undergo many state and federal sanctions. The school has also had to make many changes and improvements in its curriculum and instruction in order to meet the necessary benchmarks. This dissertation concentrated on the changes made in the area of reading in order to focus on the first and most important subject area needing improvement at this intermediate school.

Research Questions

The purpose of this mixed-methodology study was to describe the reading curriculum and instructional changes that have occurred in a small, rural, intermediate school in Virginia as a result of the No Child Left Behind legislation and Virginia's Standards of Learning requirements. A special focus was placed on the progression of reading scores of the 2003-2004 reading scores for the fifth grade to the scores of the same group as they were tested in the eighth grade year of 2006-2007. The Standards of Learning reading scores given in the spring of 2004 initiated the school improvement process for this school. Thus, the focus of this research was based on documenting these scores and the school improvement process that incurred as a result.

The research explored the following questions:

1. What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?
2. What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?

Professional Significance of the Study

Since the passing of the National Defense in Education Act in 1958, the United States federal government has continued to increase its role in the education of American children. The No Child Left Behind Act of 2001 is the government's most comprehensive education legislation to date as it seeks to require states to increase accountability, employ proven scientifically-based programs, hire highly qualified teachers, and narrow the achievement gap between disadvantaged, disabled, minority, limited English proficient students, and their peers (Kimmelman, 2006).

As the years have progressed since the signing of No Child Left Behind into law, many schools have had difficulty meeting both state and federal requirements. The schools that fail to meet the basic benchmarks are required to undergo a series of increasing sanctions. Thus, the significance of this study to the educational community is to document the reading improvements made in the curriculum and instruction of a rural Title I school because of both NCLB and Virginia SOL requirements. As the required benchmarks increase in the following years, other districts may find themselves in need of implementing similar school improvement measures.

Furthermore, since 59% of the Virginia schools that were not fully accredited

were middle or intermediate schools, this study may help to provide much needed information on school improvement for middle and intermediate school teachers and administrators, specifically in the area of reading. The findings of this study may also be informative to other schools and districts in other states that do not meet NCLB benchmarks or their own state's requirements and are required to implement school improvement plans.

Overview of the Methodology

The research was based on a mixed-methodology design approach in order to answer the two research questions. Within the mixed-method design, components of case study, historical, and education evaluation research can be found along with the use of test data to support the findings. The research contained aspects of a case study in that it featured one group of students at a small, rural, intermediate school and the reading improvement measures that were implemented during a three-year period at this school. Aspects of historical research were utilized in that reading and school improvement historical documentation were collected from various sources located at the school in order to answer the first research question. These historical documents were used to determine the improvement practices that were implemented as mandated by federal and state law during the three-year focus of this study. This study also contained aspects of educational evaluation research in that the merit of the reading improvement process was presented. Finally, reading test data was used to answer the second research question and to support the results of the reading improvement practices at the school.

The focus of this research was on a small, rural, intermediate school in the Commonwealth of Virginia. This school was chosen for this study in that it has

continued not to meet AYP or Virginia accreditation standards since 2004. School improvement was first implemented in the area of reading at this school when the fifth and eighth grade students failed to meet state and NCLB reading requirements in on the spring 2004 SOL reading scores. Consequently, the intermediate school went from being Fully Accreditated to Accreditated with Warning and was placed into school improvement for the 2004-2005 school year. Thus, in order to document the reading improvement changes implemented, this study focused on the reading improvement changes implemented and the reading test scores of the 2003-2004 fifth grade class and the until they reached the eighth grade in 2006-2007.

To answer the first research question, documents were located at the school that pertained to school improvement, especially in the area of reading curriculum and instruction implemented from May 2004 to June 2007. A document analysis was performed on all available written and electronic artifacts that related to school and reading improvements found in the various files and bookshelves located in the school. This documentation included the school's yearly School Improvement Plan, in-service notes, meeting notes, copies of schedule changes, documented materials of parent involvement, resources used, textbooks adopted, curriculum maps, and various other related materials. The numerous local, district, and state mandated changes in the reading program at the school during the designated time were reviewed and included in the dissertation.

To answer the second research question, test data were categorized according to the various reading tests given and placed into tables for the school years that encompassed the May 2004 to June 2007 timetable. The reading scores were emphasized

of the students who were fifth graders during the 2003-2004 school year and were traced until their eighth grade year of 2006-2007. The scores for the focal group of students were highlighted.

The test data documentation started with the spring 2004 reading SOL test scores since school improvement started with these scores. All available reading scores were documented including Virginia's Reading Standards of Learning tests, *STAR Reading*, the *Gates MacGinitie Reading Test*, and the *Tests for Higher Standards,* which was used for local benchmark testing. The SOL scores were of public domain and were listed on the Virginia Department of Education website. The reading test scores from the other grade levels were also noted and compared. The researcher gained the permission from the county superintendent of schools in order to obtain the archived *Gates MacGinitie Reading Test* scores, the *STAR Reading* scores, and the *Tests for Higher Standards*. A copy of this permission letter can be noted in Appendix A.

All of the documents that pertained to this research were gathered and placed into a file. The documents were then coded according to three main categories and the information was reduced and placed into a notebook. The categories created were school improvement, reading improvement, and reading tests. Documents found at the school that related to the three categories were listed on a table. Another table was created to denote the school improvement, reading improvement, and tests given for each of the school years in this study. A special emphasis was placed on the focal group of students.

Additionally, a chronological narrative was written. Using the documents located in this research, the chronological narrative explained the reading improvement strategies with other related school improvement strategies implemented at this school from May

2004 to June 2007.

After the school improvement and test data were put into categories and refined and the major categories of school improvement, reading improvement, and reading testing were identified, relationships and patterns across the categories were considered. The data were confirmed through triangulation. The data were summarized and presented in both table and narrative forms. Then, an interpretation of the data was made to report the major findings of the study. Generalizations were made based on the common findings and connections among the categories (Ary, Jacobs, Razavieh, & Sorensen, 2006). Relationships between school improvement, reading improvement, and test scores were reported.

Definitions of Key Terms

Definitions for the terms used in this dissertation were provided by the Virginia Department of Education (2006) in the report entitled, *Virginia School Report Card: Accountability Terminology.*

Accreditation Denied – The accreditation rating given to a school when the adjusted pass rates of the students in any core area fall below the benchmark required to receive a Fully Accredited rating for the past three school years as well as for the current school year.

Accreditation Withheld/Improving School Near Accreditation – The rating given to a school that has never been rated Fully Accredited, but has increased student achievement according to specific requirements.

Accredited With Warning – This rating is given to a school when the adjusted pass rates of the students in any core area fall below the benchmark required to receive a Fully

Accredited rating. This rating can be given for no more than three consecutive years.

Achievement Gap – The differences among student groups and their performance on SOL tests constitute an achievement gap. Student groups can include minorities, disadvantaged, disabled, and limited English proficient children.

Adjusted Pass Rates – When accreditation ratings are calculated, adjustments in the scores can be made for certain transfer students, limited English proficient students, and for students who pass retakes of tests.

Adequate Yearly Progress (AYP) – Determined by NCLB, AYP is the minimum level of improvement that schools and school divisions must achieve each year.

Alignment – The correlation between what is taught in the classroom, Virginia's Standards of Learning, and the questions on the SOL tests.

Annual Measurable Objectives (AMO) – These objectives in each content area consist of the minimum required percentages of proficient students.

Corrective Action Plan – This is a plan that a school or division In Improvement uses to improve teaching, administration, or curriculum.

Conditionally Accredited – This rating is given to a new school or to a reconstituted school.

Disaggregated Data – The data from a given test that are sorted by specific groups of students.

Fully Accredited – This rating is earned when the students in a school successfully achieve the predetermined adjusted pass rate in each of the four core areas of mathematics, English, science, and social studies.

In Improvement – The designation that a Title I school or a school division is given if it

does not make AYP in the same subject area for two years in a row. NCLB requires that a school in improvement take specific actions to raise student achievement.

NCLB – No Child Left Behind Act of 2001

Scientifically Based Research – Research based on the application of objective, rigorous, and systemic procedures to obtain reliable knowledge to support effective educational programs.

Supplemental Educational Services (SES) – Outside tutoring services provided to students in Title I schools in improvement and paid for by the school district. Parents can choose the appropriate service for their child.

Virginia's Standards of Learning (SOL) - These are Virginia's objectives for learning are written for each subject area at each grade level.

Title I – A federally funded entitlement program designated to help low-income children who are falling academically behind in school. This program is based on the number of students in a school receiving free or reduced lunches.

Summary

This dissertation was a mixed-methodology study of a small, rural, Title I school that has failed to meet both federal and state requirements for the 2004-2005, 2005-2006, and 2006-2007 school years. This study documented the changes implemented to the reading curriculum and instruction because of federal and state sanctions. This chapter addressed the background of the study, the research questions, and the professional significance of the study. An overview of the methodology and a listing of the key terms with definitions used in the dissertation was also given.

A review of the literature that pertains to the No Child Left Behind legislation is

presented in chapter 2. Furthermore, chapter 2 addresses the impact of NCLB on school improvement, reading improvement, and rural education. The next chapter also explains the effect of NCLB on the Commonwealth of Virginia's educational system, and especially on the intermediate school of this study.

Chapter 2

Review of the Literature

Introduction

Senator Edward Kennedy stated, "'No child left behind' is more than just a slogan. It is a moral commitment and a solemn oath to children, parents, and communities that we will provide the opportunity for each child to receive a quality education" (Kennedy, 2005, ¶ 26). Congress' commitment to providing a quality education to America's children has continually increased since the launching of Sputnik in 1957, which created a national concern for education. This escalating governmental involvement in education can be noted with the passing of the No Child Left Behind Act in 2001. The availability of current literature about NCLB has grown as educators have become more familiar with the requirements and sanctions of this current reauthorization of the Elementary and Secondary Education Act of 1965.

Chapter 2 explains the legal foundations of NCLB and discusses how this law affects the states. The educational changes that have resulted because of the implementation of this law are also presented. The general provisions of this law of accountability, research based education, increased flexibility and local control, increased options for parents, and highly qualified teachers are discussed with the theoretical basis and accompanying empirical literature for these principles. Positive and negative aspects of these principles are also noted with accompanying theoretical and empirical evidence. The review of literature also contains theoretical and empirical literature pertaining to the implementation of No Child Left Behind and school improvement, reading improvement,

and the implementation of this law in rural communities and in the Commonwealth of Virginia. Next, this chapter focuses on school improvement in Virginia. The chapter concludes with a discussion of the involvement of a specific intermediate school in Virginia in the school improvement process as it attempts to meet both federal NCLB mandates and state accreditation requirements.

No Child Left Behind Act of 2001

As President Bush stated on January 8, 2002, "And now it's up to you, the local citizens of America, to stand up and demand higher standards, and to demand that no child – not one single child in America is left behind" (Yell & Drasgow, 2005, p.1). On this date, the Elementary and Secondary Education Act was reformed and signed into law by President George W. Bush as the No Child Left Behind Act of 2001. At its signing, NCLB was the most comprehensive federal education law passed by Congress. With strong bipartisan support, the law passed in the House with a 381 to 41 vote and with an 87 to 10 vote in the Senate (McGuinn, 2005). The major difference of NCLB from previous educational law was that the federal government's control of education was expanded into the state and local school systems with the requirement that each state implement a statewide accountability system that would provide equal educational outcomes (Sunderman, Kim, & Orfield, 2005).

The primary purpose of the NCLB legislation was to focus on the federal government's objective of closing the achievement gaps between minority, disabled, disadvantaged, limited English proficiency students, and their peers. In order to achieve this goal, NCLB targeted four specific components to improve America's schools. This law required that states have an accountability plan, and use proven educational methods.

The law also provided for increased flexibility and local control and providing more options for parents (United States Department of Education [ED], 2003). In addition to these four basic provisions, Kimmelman (2006) also added the NCLB requirement for states to hire highly qualified teachers. The historical, theoretical, and empirical bases for these four main provisions plus the mandate to hire highly qualified teachers are discussed in detail later in this chapter.

Legal Foundations of No Child Left Behind

The United States government is based on a federalist system in which the nation is comprised of a single, central government with a union of 50 autonomous states. Under the Constitution of the United States, the Tenth Amendment states that the national government is given specific powers, and powers not relegated to the national government are reserved for the states or the people. Since education was not specifically mentioned in the U.S. Constitution, it became a responsibility of the states. Thus, according to the Tenth amendment, the federal government cannot create a national educational system, nor can it mandate that the states adopt specific policies or use a certain curriculum (Yell & Drasgow, 2005).

However, throughout American history, the federal government has played an important, although indirect, role in education. Until NCLB, the U.S. government funded about 10% of the total money spent on education, with the states and local districts funding close to 90%. The indirect participation of the federal government in education included such measures as providing land grants for schools and colleges, and categorical grants to assist the states. If categorical grants were received by a state, then the state had to use the funds according to the federal guidelines (Yell & Drasgow, 2005).

The federal government's role in education started to increase soon after the Soviet Union launched Sputnik in 1958. As Americans became increasingly concerned about the condition of the education system, more states started to incorporate categorical grants. The National Defense in Education Act of 1958 is one example of many categorical grants implemented at this time. Accordingly, the Elementary and Secondary Education Act of 1965 (ESEA) was a categorical federal grant used to help improve the education of low-income students (Kimmelman, 2006; Yell & Drasgow, 2005).

Paige (2006), the former secretary of education, explained that the passing of ESEA was a major shift in educational philosophy. He stated that ESEA expanded the federal government's role in education, and most importantly, the law represented the first time federal funding was connected with national policy concerns.

With the passing of ESEA, the federal government's major goal was to use education to defeat poverty in America by providing educational opportunities for disadvantaged children. The largest part of this law was termed, *Title I*. The appropriated funding under this federal entitlement program was based on either the number of students in a district receiving free or reduced lunch or receiving public assistance (Yell & Drasgow, 2005). Thus, in order to receive these funds, a qualified school must abide by the guidelines set forth by the federal government.

Since ESEA was passed in 1965, the consecutive reauthorizations of this law focused on helping specific groups of students. For example, Title I of the 1965 authorization of ESEA was designed to help the mathematics and reading achievement of low-income children. In 1968, ESEA included help for bilingual students. Handicapped students were the focus of the 1970 reauthorization. Furthermore, as a part of the 1970

version of ESEA, the Safe and Drug-Free Schools program fought against illegal drug usage and school violence. Included in this 1970 version was the Title II Eisenhower Professional Development program, which was designed to help teachers gain new teaching methods for science and math (Sloan, 2007).

During the 1970s, Congress became concerned with the status of education for America's special needs children. In 1970, only one disabled student in five received an education. Furthermore, many states refused to educate children who were blind, deaf, mentally or emotionally handicapped. Thus, in 1975, in addition to ESEA, Congress passed the Individuals with Disabilities Education Act (IDEA) mandating states to educate the special needs student population (Paige, 2006).

The federal government's increased role in education can also be noted with the 1983 Commission on Excellence in Education's report entitled, *A Nation at Risk*. This report revealed that the nation's schools were not producing acceptable results and that the United States was falling behind other industrial countries in education. The report's main recommendation was for schools to establish higher academic standards (Paige, 2007; Yell & Drasgow, 2005). Hursh (2005) revealed that during the 1980's, educational deficiencies were blamed for the economic woes of the United States and thus, corporate and government began to push for the raising of educational standards. This thrust included implementing standardized tests and making teachers and students accountable for educational achievement.

In 1989, the governors of the United States met to discuss the nation's educational problems. This National Educational Summit addressed the need for a national educational strategy. Because of this summit, the governors developed six educational

goals, which were to be met by the year 2000. Hess and Petrilli (2006) and Paige (2007) reported that these goals included a 90% high school graduation rate, children starting school ready to learn, and students mastering the five core subject areas before leaving fourth, eighth, and twelfth grades. Furthermore, the goals also included America's students leading the world in math and science, schools that were drug-free and safe, and adults who were literate and prepared for the work force. These goals became a part of President George H. W. Bush's America 2000 legislation and were later included in President Bill Clinton's Goals 2000: Educate America Act. As a part of this act, an organization called the National Education Standards and Improvement Council was created in order to reject or approve each state's educational standards (Yell & Drasgow, 2005). Thus, these goals for education, as determined by Presidents Bush and Clinton, called for higher standards, accountability, measuring student achievement, and an increase of public school choice (Hess & Petrilli, 2006).

Hence, most of the current educational reforms originated with *A Nation at Risk*. This report initiated the national movement toward focusing on school standards and outcomes. It also added reform measures to increase parental choice and competition in education (Hess & Petrilli, 2006).

However, by the early 1990s, both Democratic and Republican leaders agreed that the goals set by *A Nation at Risk* were not going to be met by the year 2000. Rather than simply changing the curriculum, the nation's leaders decided that the schools themselves would need to be reshaped. Consequently, in 1994, the federal government increased its control in the American education system with the reauthorization of ESEA as the Improving America's Schools Act (Yell & Drasgow, 2005).

The main purpose of the Improving America's Schools Act was to establish and implement standards-based educational systems throughout the country. Therefore, not only was the federal government providing funding to educate disadvantaged students, it also provided for the developing, implementing, and assessing of educational standards at the state level and holding the states accountable for the results by the year 2000. In order to receive these federal funds, the states had to comply with the federal requirements (Yell & Drasgow, 2005). However, Hess and Petrilli (2006) reported that the federal government did not have the necessary means to enforce the performance-based accountability system that they had enacted. Consequently, most states did not comply. Furthermore, many Title I schools were not aware of this federal policy shift. By 2002, only 16 states had fully complied with ESEA 1994. Goertz (2005) further explained that the standards, assessments, reporting practices, and consequences were implemented in varying measures by the states. Thus, it was imperative that a uniform system be established to implement national educational policy changes.

In the presidential campaign of 2000, both candidates, George W. Bush and Al Gore, promised educational reform. George W. Bush sought to model the nation's educational system on Texas' strong standards-based accountability program. After winning the election, President Bush favored a more influential role of the federal government into educational reform. He promoted uniform measures in enforcing mandated tests and consequences, increasing parental choice, and giving states more freedom with the spending of federal educational funds. The document that he sent to Congress was built on the four principles of providing more parental choice, increasing flexibility while reducing bureaucracy, increasing student accountability, and using

proven programs (Hess & Petrilli, 2006).

After a year of hard work, negotiations, and compromises from both Republicans and Democrats, the final bill was written with a strong focus on testing and accountability. Added to this bill was the provision for hiring highly qualified teachers, and requiring scientifically based research as the basis for education policy and teaching practices. A major reading initiative was also included. President Bush's flexibility proposals were also included in the final bill, but on a much smaller scale. Still, the central and underlying problem of narrowing the achievement gap remained the central focus of the bill. The final product, a reauthorization of ESEA, became the No Child Left Behind Act of 2001. This law kept and revised many of the provisions of the Improving America's Schools Act (Hess & Petrilli, 2006).

Sunderman and Kim (2005) noted a fundamental difference in the underlying theory of educational change from the original ESEA to its reauthorization as NCLB. They explained that ESEA was a broad attack on unequal opportunity for minority and low-income students as it was enacted in the 1960's during the Civil Rights Movement and the War on Poverty. On the other hand, the focus of NCLB was on the individual schools and how they could specifically raise student academic achievement for all minority groups as well as for children with disabilities and for students with limited English proficiency. Furthermore, NCLB increased the government's role in education even more by requiring that all public schools bring all students up to specific standards over a period of time with reading and mathematics proficiency levels reaching 100% by 2014 (Borkowski & Sneed, 2006; Yell & Drasgow, 2005). Other goals specified by NCLB included that all students be educated in safe and drug free school environments,

that all limited English proficient students be proficient in English, and that all students would graduate from high school (Yell & Drasgow, 2005).

In addition to the major provisions outlined by NCLB, the law also required that each state and school district publish a school report card that detailed the status of each school according to NCLB standards. This report card, which is made available to parents, is required to publish the student achievement data by student subgroups. These subgroups include gender, race, ethnicity, limited English proficient, migrant, disabled, and disadvantaged students. The report card also reported the professional qualifications of the school's teachers (Resnick, 2005).

In order to meet its goals, NCLB is divided into seven title sections or programs. These programs range from helping the disadvantaged; preparing teachers; teaching limited English proficient students; educating Indian, Native Hawaiian, and Alaskan students; promoting parental choice; ensuring drug-free and alcohol-free schools to providing flexibility and accountability in educational programs (Hess & Petrilli, 2006).

Of the seven title programs funded by NCLB, Title I is the largest. The purpose of the funding provided by Title I is to improve the education of disadvantaged students. More than half of America's schools receive Title I funding. School districts in which at least 2% of the school population is in poverty may apply for these federal funds. Schools usually base the percentage of disadvantaged students on the number of students who receive free and reduced lunches. In 2005, 96% of high-poverty schools and 58% of all public schools received Title I funds. In 2005, funding for Title I was $12.7 billion and served 14.9 million students. For the 2005-2006 school year, out of $56 billion spent for NCLB, Title I received $23 billion (Hess & Petrilli, 2006).

Title I funds may be used in a variety of ways to help improve the education of disadvantaged students. The money may be used for teacher training, teacher salaries, tutors, teacher aids, curriculum, after school or summer school programs, parental involvement programs, and early childhood education. These Title I funds are directly connected to NCLB's accountability and assessment stipulations (Hess & Petrilli, 2006).

The States and No Child Left Behind

In light of the increasing role of the federal government in the United States education system, former Secretary of Education, Paige (2007) explained that under NCLB, the states actually have various degrees of autonomy. Each state determines its own standards, assessment instruments, grade-level proficiency, curriculum, textbooks, interventions, and pedagogy. The states also decide whether to implement consequences to students, or to impose sanctions and/or rewards to the school districts. Each state is also responsible for determining its own timeline for achieving the mandated 100% proficiency in 2014. Furthermore, NCLB does not affect local school boards and the local collective bargaining unit agreement.

Pond, the executive director for the *Task Force on No Child Left Behind Final Report* (National Conference of State Legislatures, 2005), stated that the state legislatures actually initiated the dramatic overhaul of America's schools thirty years ago. Experiments in education reform were started in one state and then modified by other states to fit their individual needs. Thus, in order to provide adequate and equal ways for funding the schools, the state legislatures shifted to standards-based reforms during the 1980s. These reforms received national attention by President George H. W. Bush when he called for a national education summit in 1988. Arkansas Governor Bill Clinton was

one of the chief supporters of standards-based education and supported this reform as governor and later as president.

The National Conference of State Legislatures (2005) also reported that standards-based education reform was a move from equality of opportunities to an equality of outcomes by all of America's students including minority and low-income children. Thus, the states were required to set standards of learning for all students, assess the outcomes, and implement solutions for deficiencies. Accordingly, curriculum and instruction had to be aligned to meet the standards. When NCLB deliberations were started in early 2001, 48 states had made much progress on implementing standards-based reform in their localities. In this reform movement, states created a variety of approaches in order to meet their specific needs. At this point, federal intervention was limited and money was tied to specific categorical programs. However, due to a few states not moving quickly enough to incorporate standards-based reform, the federal government expanded its role in education by passing the No Child Left Behind Act of 2001.

One of the many concerns presented in the *Task Force on No Child Left Behind Final Report* (National Conference of State Legislatures, 2005) was the great number of accommodations the states had to implement in order to comply with NCLB. The states had to adjust testing cycles and assessment systems, and NCLB overruled any state legislation for parental choice. Furthermore, many of the states' English-only statutes, state take-over legislation, and parental rights to withdraw students from standardized testing, counted negatively toward NCLB's attendance requirement of testing 95% of all the school's children including a 95% attendance requirement in each subgroup.

DeBray (2005) explained that just as the federal government expanded into educational issues that were traditionally controlled by the states, so did the state governments expand into what was traditionally local control. This can be noted during the 1980s and 1990s as standards-based reform controlled public policy. The states wrote the standards and the local school districts were responsible for achieving these goals. However, President Bill Clinton worked with Congress to make Title I consistent with reform efforts at the state levels.

Educational Changes Attributed to No Child Left Behind

Abernathy (2007) explained in his book, *No Child Left Behind and the Public Schools,* that because of the relative newness of NCLB, there is a lack of nonpartisan empirical research. Most of the writing has focused on the politics and legal issues of NCLB with less research performed on the achievement effects or the consequences of this law. Abernathy reported that according to a national survey of educational officials performed in March 2005, 72% of the school districts showed improvement on the achievement tests that are given by the states. The school district personnel in this survey also reported that 99% of the schools had aligned curriculum and were providing extra instruction to the lower achieving students. Abernathy also reported from a study entitled, *The Impact of the No Child Left Behind Act on Student Achievement and Growth: 2005 Edition,* that an analysis of mathematics and reading scores showed growth during the earlier years after the implementation of NCLB, with test scores declining in the more recent years including achievement in the ethnic groups.

Azzam, Perkins-Gough, and Thiers (2006) explained that based on the Center on Education Policy report of 2006, four broad conclusions could be made after four years

of NCLB. This study focused on 299 school districts and included all 50 states. First, the conclusion of this report found that many changes were taking place in teaching and learning. The study also found that teachers were aligning curriculum and instruction to meet standards and basing instruction on assessments. Furthermore, more academic coaches were being hired to help teachers, and teachers were meeting the highly qualified requirements in their states. However, 71% of the schools reported that the increased focus on reading and math reduced instruction time in other areas. Second, the states were reporting rising scores on achievement tests. According to the study, it was unclear if this rise is due to policy changes that affect the number of proficient students or not. Third, the effects of NCLB remained steady, as federal and state rules have changed the number of schools needing improvement. Fourth and last, the study showed that the greatest effect of NCLB was on urban schools. The researchers report the strength of NCLB to be a focus on subgroups, higher learning expectations, improved alignment, and a more accurate use of data. The negative aspects included a lack in funding, lack of staff, teacher stress, and low teacher morale.

Hess and Petrilli (2006) stated that even though NCLB is a complex law, it is held together by a "theory of action" (p.21), the belief that schools and school districts should be made accountable for student performance. Within this theory of action was the chief concern of narrowing the achievement gap. The nation's leaders deemed it unacceptable for African-American, Latino, and underprivileged students to be testing well below Caucasian and Asian American children. This achievement gap, they felt, could and would threaten American competitiveness worldwide.

Hess and Petrilli (2006) further report that the differences in student achievement

levels could be explained by three theories. The first theory stated that underperformance was caused by a lack of resources in schools in poverty areas. However, the Republicans declared that $200 billion was spent on education since the initial ESEA was enacted with few noticeable results. The Republicans supported specific initiatives such as Reading First, standardized testing, and accountability. They felt that more money was not needed, rather a change in the culture and politics of education. A second theory concentrated on the effects of poverty on the culture and the specific societal problems that cause poverty. Both the Republicans and Democrats rejected this explanation. They used examples of successful schools in both tough urban and rural situations. A third theory stated that the problems could be linked to a lack of governance in schools to make the necessary decisions for their needy student populations. NCLB was ultimately based on this third premise. They believed that "local education politics are fundamentally broken, and only strong, external pressure on school systems, focused on student achievement, will produce a political dynamic that leads to school improvement" (Hess & Petrilli, 2006, p. 23). Thus, the lawmakers believed that sanctions, federal leadership, and high standards would change schools. They also felt that this law would help give political cover to superintendents and school board members to make the necessary but controversial steps toward school improvement even when opposed by influential parents or teacher unions.

In his State of the Union address in 2006, President Bush spoke of new initiatives for NCLB. The two main initiatives included the American Competitiveness Initiative and the National Security Language Initiative. The American Competitiveness Initiative's goal was to "strengthen the nation's competitive position in the world

economy" (McReynolds, 2006, p. 35). The focus would be in the areas of engineering, technology, mathematics, and science. The goal of the National Security Language Initiative was to increase the number of students learning foreign languages in order to help advance national security and global competitiveness (McReynolds, 2006).

The Main Provisions of NCLB

In January 2002, with the reauthorization of ESEA as the No Child Left Behind Act, four main provisions of this law were to be implemented by the states. This law required that states have an accountability plan, and use proven educational methods. The law also provided for increased flexibility and local control, and giving parents more options (ED, 2003). An additional provision for hiring highly qualified teachers is also included in this review of NCLB provisions.

Accountability

One of the major provisions of NCLB demands accountability. Hess (2005) states, "Standards represent a public commitment that schools will teach all children a discrete body of knowledge and skills to a specified level of mastery" (p. 53). Thus, one of the central focuses of NCLB is on increasing the student's academic performance as well as improving low-performing schools (Yell & Drasgow, 2005). According to NCLB, it is the state's responsibility to set challenging content and achievement standards for the students and to test the students according to the standards. The content standards are based on learning expectations for each subject area at each grade level. Academic achievement standards rate a student's proficiency as basic, proficient, or advanced (Hess & Petrilli 2006).

Test-based accountability uses large-scale testing to show achievement of a pre-

selected group of students. NCLB requires the testing of students in reading and mathematics in grades three through eight and at least one time in high school. Science testing will be required and added for the 2007-2008 school year. The results of these tests are to be made known to the public in the form of yearly school report cards (ED, 2003; Goertz, 2005; Hess & Petrilli, 2006; Howell, 2006; Mickelson & Southworth, 2005; McGuinn, 2005). Under this process, policies and procedures are in place to set rewards or sanctions based on these scores. Most test-based accountability systems are composed of goals, targets, measures, and incentives (Sunderman & Kim, 2005). Hess and Petrilli (2006) report that NCLB places the pressure on schools and school districts to improve student performance, not on the students. Thus, NCLB does not promote linking school promotion or high school diplomas to the passing of the state tests. However, some states have adopted such measures.

In order to ensure that educational improvement is occurring, the law requires that all states, school divisions, and schools meet annual Adequate Yearly Progress benchmarks referred as Annual Measurable Objectives. The AYP benchmarks focus on students meeting basic standards on both reading and math tests. The testing data also has to be disaggregated into various subgroups in order to show how each group is progressing toward the required benchmarks. The benchmarks will increase each year until the 2013-2014 school year in which NCLB will require that 100% of America's students be proficient in both reading and mathematics (Borkowski & Sneed, 2006; Mickelson & Southworth, 2005; Virginia Department of Education [VDOE], 2005). These objectives also apply to the four major subgroups of students including those who are disabled, disadvantaged, minority, and/or limited in English proficiency (ED, 2004).

Thus, disabled and limited English proficient students are also tested according to the standards of the other students in their grade level. Testing accommodations for special needs students may be made under the individual student's individualized educational plan or 504 plan of the Rehabilitation Act. Some students may require an alternate assessment. Limited English proficient students will be tested after three consecutive years in a United States school. They may also receive accommodations (Yell & Drasgow, 2005). Furthermore, the schools must have 95% participation in each subgroup for testing (Borkowski & Sneed, 2006; Hess & Petrilli, 2006).

Weaver (2007) explained that a school must meet all of the AYP requirements in order to pass for the year. This author stated that an average school in America must pass 37 criteria in order to meet AYP. Failing just one requirement will result in the school receiving the In Need of Improvement rating and the accompanying sanctions.

If a school does not meet the required AYP benchmarks, then it must provide supplemental services and take other corrective actions. If a school does not meet AYP, the school could receive assistance, or be required to develop research-based instructional strategies. If the school continues to fail, a new curriculum could be implemented, supplemental educational services provided, or public school choice offered. Other sanctions could include internal restructuring, decreasing management authority in the school, extending time in school, or replacing the administrative and teaching staff (Hess & Petrilli, 2006; Hursh, 2005; McGuinn, 2000; Mickelson & Southworth, 2005; Smith, 2005; Welner, 2005; Yell & Drasgow, 2005).

If Adequate Yearly Progress is not made after five years, then major restructuring is implemented in the management of the failing school. The restructuring could include

reopening the school as a charter school, allowing the state or a private organization to operate the school, replacing school staff, restructuring school governance, taking over the school by the state, or other major restructuring plans that would produce fundamental reform of the school's governance (Hess & Petrilli, 2006; ED, 2004; Hursh, 2005). However, NCLB also includes a *safe harbor* provision to allow schools to make AYP if the low performing students make at least a 10% gain in a year. Furthermore, the school's corrective action plan must be made available for parental review (Hess & Petrilli, 2006).

If the entire school district does not meet AYP, the district must also undergo consequences similar to those that the schools have experienced. If AYP is not met for two years in a row, the district must develop an improvement plan. This plan must set the improvement goals of the state's education department with the district. It also must state goals for each subgroup, give plans for outside programs to be provided after school or in the summer, extend the school day, increase parental involvement, or use 10% or more of the Title I funding for teacher development. If the district's improvement plan does not improve the AYP in the district after two more years, then the state must choose one of the following options: implement a new curriculum, replace faculty and staff, remove certain schools from the district, abolish the district, transfer students to another district, restructure the district, or replace the superintendent and school board. Because of the newness of NCLB, the necessity for implementation of corrective action against the districts is in the beginning stages (Hess & Petrilli, 2006).

Historical and theoretical basis for standards-based education.

Sloan (2007) noted that the origin of educational accountability could be traced

back to the 1960s to a report entitled, *Equality of Educational Opportunity*, by the U.S. Department of Health, Education, and Welfare. This report is also known as the *Coleman Report* for its principal author. The provisions in this report were mandated by the Civil Rights Act of 1964 in response to racial inequality in America's public schools. Thus, pressure was put on the federal government to increase its role in education and in educational funding in order to solve this social issue. Flinders (2005) explained that this *back-to-the-basics* movement shifted the American thinking of education to focus on raising standards in order to raise test scores.

Initially, the researchers involved in the *Coleman Report* believed that increased federal funding was the answer to the achievement gap between Caucasian and African-American students. However, the data from over 600,000 students and teachers showed other results. The report found that funding differences were smaller than anticipated between white and black schools. Coleman also found that test scores were not related to funding. His conclusion was that the achievement gap was based on a student's economic status. Thus, the amount of money used by a school had little to do with school achievement. As a result, politicians stopped the consideration of increased funding for low-income schools and realized integration by bussing would not positively affect student achievement. As a result, the quality of schools was no longer based on money spent; rather states turned to the standardized test as the most widely used and cheapest form of measuring academic achievement. However, six years later, Coleman reanalyzed the original data and found that the effect of funding was underestimated and the effects of economic background were overestimated. This updated report was never brought to the forefront (Sloan, 2007).

During the fifteen years after the Coleman Report was published, many states and school districts mandated the use of standardized tests to assess student achievement. Teachers did not pay much attention to these scores and thus, instruction was not affected (Sloan, 2007).

In the 1980s, because of two federal policies, lawmakers started to focus on academic outputs. These policies were President's Reagan's plan to link funding of schools and universities to standardized test outcomes, which resulted from the A *Nation at Risk* report in 1983. Many states were able to implement some of the recommendations of *A Nation at Risk*. However, President Regan was not able to implement them at the federal level. The other policy was President George H. W. Bush's *America 2000* proposal that was based on accountability. While the standardized tests of the 1970s and 1980s were based on minimum competency levels, America 2000 promoted a push beyond the basics (Sloan, 2007).

Thus, in the 1980s and1990s, states started efforts to create standards that were more rigorous and to develop accompanying tests. The states also looked for help in developing standards to the many professional organizations that had published their own set of standards for their particular discipline. By 1997, 31 states had published standards, with an increase to 38 states in 1998, and 49 states in 2005 (Sloan, 2007). The first basic assumption underlying accountability was to make schools, administrators, and teachers more accountable for student achievement by making the test scores public. The next assumption was that fear would motivate schools to change. This included job security and financial support. A third assumption was that standardized tests were valid measures of academic achievement in a school.

Empirical research.

Hursh (2005) explained that political and corporate leaders promoted high-stakes testing, school choice, and accountability to promote success by all of America's students. Political as well as corporate leaders believed in the importance of increasing the global economy by decreasing inequality in education. Furthermore, the implementation of objective standardized tests and procedures provided a reliable measure of student achievement since teacher made tests were perceived as unreliable. However, Hursh stated that many standardized tests were poorly constructed with faulty questions or an inaccurate grading scale. He cited the tests given in New York State as an example.

Harris (2007) stated that out of over 60,000 schools reviewed, low-poverty schools as compared to high-poverty schools were 22 times more likely to obtain higher achievement standards. Hunter and Bartee's (2003) research also supported this finding. Schools that are both low-minority and low-poverty were 89 times more likely to achieve high academic standards as compared to high-minority, high-poverty schools. Thus, Harris explained that in spite of recent gains of low-income and minority students, the differences in achievement were still large. Through his research, Harris found that a student's economic and social disadvantage is the main cause of inequity in education, not the school itself. Harris stated that these inequities were the most significant problems in education today. He suggests that accountability under NCLB should focus on student learning gains and not on learning levels.

With the achievement-based measure, Haretos (2005) explained in her research that the AYP requirement might have negative consequences. For instance, in

elementary schools in Tennessee, 66% of the schools were under penalties even though they were closing the racial achievement gap. She suggested that NCLB should also consider growth-based measures as well.

In order to raise student achievement and close achievement gaps, Weiner and Hall (2004), the policy director and policy analyst respectively for Educational Trust, report five influential factors. First, effective teaching will raise student achievement. Districts should invest in professional development to help teachers continue to improve their skills. Next, students need a rigorous curriculum with challenging standards. These authors have observed that many schools have placed all of their students into high-level courses and have stopped teaching the low-level classes. Third, students who have trouble with academics need additional support. Next, students should be assessed regularly in order to determine needs. Finally, successful schools communicate clearly about achievement and involve the entire educational community in the problem solving process.

Narrowing the achievement gap.

A major focus of NCLB is the elimination of the achievement gap between minority, low-income, disabled, and limited English proficient students, and their peers. Barton (2004) links the achievement gap to many factors. Out-of-school factors include the child's birth weight, nutrition, mobility, and parent availability and participation. Other causes include lead poisoning, reading to young children, and the watching of television. School factors that can affect achievement include safety, curriculum rigor, class size, technology, and teacher experience and preparation.

Secretary Margaret Spellings (2007) stated that NCLB was working. According

to NAEP results, from 1999-2004, more reading progress had been made in the fourth grade group as compared to the preceding 28 years combined. She also confirmed that fourth and eighth math scores have "reached new heights" (p. 2) and fourth grade racial achievement gaps in reading and math "have fallen to all-time lows" (p. 2). Furthermore, she found that 90% of the nation's teachers were highly qualified, disabled students were receiving more classroom time, and at-risk students were obtaining help earlier. In addition, students receiving Reading First instruction average 100 extra reading instruction minutes per week.

According to Uline, Johnson, and Joseph (2005), the theory of action behind the federal policy to close the achievement gap included many factors. For the closing of the achievement gap, schools must have common standards that all children should know. Student learning must be monitored by assessments; and teachers must have the knowledge, skills, and dispositions necessary to teach in their subject area with the knowledge, skills, and dispositions to implement instructional improvements and strategies. In addition, adequate resources to implement improvements and the resources to handle the necessary data are important. Leadership targeted to assist schools in improvement is vital along with providing parents with other options if necessary.

Lee (2006) in his research tracking National Assessment of Educational Progress score trends as they related to the racial achievement gap, focused on the math and reading scores of fourth and eighth grade students before the enactment of NCLB and for the years afterward. Lee found that in the 1970s and 1980s the racial and economic achievement gaps were narrowed based on civil rights and anti-poverty reforms. However, these gaps stopped narrowing or in some cases, began to grow in the 1990s. In

his research, Lee found that that when comparing NAEP scores before NCLB (1990-2001) and scores after NCLB (2002-2005), NCLB had not been a significant influence on the improvement of math or reading scores across the states and for the nation. Reading achievement scores had remained flat and growth in math is at the same rate as before NCLB. He predicted that by 2014 when 100% proficiency will be required that only 24 to 34% of the students would reach this goal in reading and 29 to 64% in math. Consequently, the racial achievement gap in reading and in math had not been narrowed according to NAEP scores. By 2014, Lee predicted that less than 25% of African-American and low-income students will achieve proficiency in reading and less than 50% in math.

Lee (2006) also found that academic improvement was not enhanced by test-driven accountability for the states that instituted programs before NCLB, nor for the states that started test-based accountability after NCLB was implemented. Furthermore, Lee showed that discrepancies existed between the state assessments and the NAEP. He found that the higher the stakes at the state level, the greater the discrepancy. Accordingly, he found that the discrepancies tend to be large for the Hispanic, African American, and low-income students.

Taylor (2006) stated that an obstacle to closing the racial achievement gap was the lack of "convincing and useful systems of exposing radicalized customs and practices in U.S. education in order to eliminate racial differentials in testing outcomes" (p. 72). He further explained that "race is a poorly understood construct" (p.72) with differing opinions between the races as to whether minority children were treated the same as non-minority children or not. Taylor used the Critical Race Theory (CRT) to expose racial

inequity and legal injustice as they relate to the achievement gap and policies related to NCLB.

With CRT, Taylor (2006) listed many factors that attributed to the racial achievement gap. These included the factors of hiring, schooling, lending, and of home ownership. Taylor stated that these factors put African American students at both political and economic disadvantages even before they start school. Taylor also explained that high-quality preschools were not readily available for low-income students and the racial gap was up to half of its maximum by the time these students entered kindergarten. Furthermore, many African-American children do not receive any early childhood intervention programs. By twelfth grade, Taylor stated that the reading and math scores of African-American youth were at the level of eighth grade Caucasian students.

Taylor (2006) further explained that many factors created an achievement gap between the races including the teachers' expectations, inadequate instruction, inexperienced teachers, and unequal conditions. He emphasized that having an effective teacher is a very important factor for student achievement. He also emphasized the importance of a small class size. Other factors that attribute to the racial achievement gap include the claim that minority students do not want to act like Caucasian students and will thus avoid obtaining a quality education.

Rothstein (2004) stated, "The achievement gap can be substantially narrowed only when school improvement is combined with social and economic reform" (p. 17). This author explained that the achievement gap included gaps in reading, conversation, role models, housing, and health. In order to narrow the achievement gap, Rothstein

stated that, “school improvement must combine with policies that narrow the social and economic differences between children” (p. 21). One important idea Rothstein suggested would be to increase the quality of early childhood programs including programs for infants and toddlers. The author explained that younger children needed to be a part of the same type of rich, intellectual environment that most middle-income children experience. Furthermore, Rothstein stressed that school-aged children should be exposed to quality after school and summer programs. He also stated that disadvantaged children need good health care services.

Rothstein and Jocobsen (2006) explained that increasing reading and mathematics instruction not only narrowed the curriculum, but also it could have a negative impact on the achievement gap. Mickelson and Southworth (2005) and Weaver (2007) also supported this claim. The decreasing time spent on other subject areas such as science, history, civics, geography, foreign languages, and the arts was actually increasing the achievement gap in these areas. McReynolds (2006) found that 71% of America’s schools have essentially narrowed the curriculum to allow for test preparation. Furthermore, Rothstein and Jocobsen found that a decrease in time spent in physical education could have an impact on African American children who were 60% more likely to have diabetes and 20% more likely to be obese.

Various authors offered suggestions for closing the achievement gap. Aronson (2004) stated that student achievement is suppressed by negative stereotypes. He suggested that educators need to look at all of the complex factors that affect the achievement gap such as family, school, poverty; not just one aspect. Gurian and Stevens (2004) stated that schools needed to look at gender-specific needs of students. Landsman

(2004) explained that racist attitudes of teachers and schools, and the class placement and low expectations for minorities affect the achievement gap. Hale (2004) reported that learning opportunities, not outcomes, for African American students needed to be equalized. Smith (2004) called for a national high-quality early education program for all children to ensure that all children are ready to learn by the time they start school.

Popham (2004) stated that the testing process needed to be changed because wrong measures have been used to measure the achievement gap. Kirst (2004) and Gandara (2004) both explained that minority students needed to be better prepared for college course work. They stated that colleges needed financial resources in order to help minority and low-income students enter college, and these students needed help in understanding how to succeed in college once they arrive. Furthermore, teachers and counselors should be considered as valuable assets in the process to help these students to succeed.

The effect of accountability on education.

Sloan (2007) noted that the current conservative Bush administration, which normally leans toward less government control in local government, is supportive of NCLB. The administration defended this act because of the belief that raising standards creates a strong educational system that supports national and economic security.

Sloan (2007), after reviewing much educational research on the effect on accountability on teachers, curriculum, and instruction, found both positive and negative aspects. A positive effect was that teachers knew exactly what to teach, which helped to increase their professional satisfaction. Accountability measures also helped teachers to have higher expectations for the minority students in their classrooms and to improve on

the standard of instruction that is delivered to all students. The negative effects that accountability has had on teachers included teachers experiencing higher stress and anxiety, leaving the profession, having to succumb to inferior instructional programs, and having to change the delivery of their instruction. Some teachers feel that accountability measures also undermine their own professional knowledge. In addition, the negative aspects include a narrowing of the curriculum, losing teaching time, and having to rely on *skill and drill* techniques (Sloan, 2007).

Research Based Education

A second important principle of NCLB provided for the implementation of proven educational methods that have been determined effective through rigorous scientific research. According to the *Virginia School Report Card: Accountability Terminology,* scientifically based research involves the "application of rigorous, systemic, and objective procedures to obtain reliable and valid knowledge regarding the effectiveness of educational activities and programs" (VDOE, 2006, ¶33). Liston, Whitcomb, and Borko (2007) further explained that scientifically based research was modeled after medical research and was based on experimental or quasi-experimental designs.

> According to Yell and Drasgow (2006) scientifically based research:
>
> (a) uses systematic, empirical methods that draw on observation or experiment, (b) involves rigorous data analyses that are adequate to state hypotheses and justify the conclusions, (c) relies on measurement or observational methods that provide valid data evaluators and observers and across multiple measures and observations, and (d) has been accepted by a peer-reviewed journal or approved

by a panel of independent experts through a comparably rigorous, objective, and scientific review. (p. 16)

The term *scientifically based research* can be found over 100 times in NCLB. In NCLB, the use of the term, scientifically based research, is applied to such areas as teacher training, school safety, drug prevention, and reading instruction. NCLB supports the thought that all aspects of teaching and learning should be based on scientific research. Through the requirement of using scientifically based instruction, the federal government became an active participant in determining classroom instructional methods and thus, set "a new precedent of federal involvement in curriculum and instruction (Hess & Pertilli, 2006, p. 94).

The federal government supports proven educational methods such as Reading First, a scientifically based program for implementing reading instruction in the early grades (ED, 2004). Another way the federal government supports proven educational methods can be noted in the Department of Education's goal to help limited English proficient students learn English as effectively and quickly as possible through scientifically based teaching methods. Furthermore, NCLB promotes English proficiency by consolidating the bilingual and immigrant federal programs. This consolidation simplifies programs operations and increases flexibility and support for all limited English proficient students. Limited English proficient students are tested in reading after they have been in a United States school for three years (ED, 2003).

Historical and theoretical basis for research based education.

Over the years, teachers have advocated curriculum that was based on tradition, theory, and their own ideologies. Accordingly, many have bought in to a current

educational fad. Some of these fads have seemed almost cyclic in nature. Millions of dollars have been spent on curricula that have all claimed to work miracles with children. Kimmelman (2006) explained that educators in the 1970s declared that open classrooms were the answer. Educational uses of the television began to increase. The 1980s and 1990s saw much emphasis on mathematics and reading. Whole language was the buzzword for reading instruction in the 1980s and its use versus phonics was the main talk of reading professionals. Mathematics took the spotlight in the 1990s with the debate between conceptual or computational mathematical processes. Educational computer programs have also been a major topic among educators. Brain research was also at the forefront. However, as Kimmelman explained, much of this past debate was not founded on scientific research. Thus, it has not been unusual for teachers, administrators, and districts to implement the unproven fads that have manifested over the years.

Thus, a predominate theory behind NCLB was to use educational research in order to improve teaching and learning in the schools. As a result in 2002, Congress changed the title of the Office of Education Research and Improvement into the Institute of Educational Sciences. This organization was used to provide research and data on educational practices that improve student achievement. However, as Kimmelman (2006) pointed out, teachers and administrators still need to choose from programs that will work in their own unique educational settings and situations.

Empirical research.

The Center on Educational Policy (2006) found that districts were placing more emphasis on teaching practices with a reliance on approved scientifically based teaching

practices. Liston, Whitcomb, and Borko (2007) explained that the traditional kindergarten through twelfth grade schools, which were affected by the application of scientific based research practices, could experience the narrowing of curriculum and classroom practice.

Hess and Petrilli (2006) found many challenges to implementing scientifically based research. First, they found that using scientifically based methods such as Reading First required a shift in decision making by educators who may not be trained to use this kind of research or do not have the time during the school day to devote to research. Second, educational research studies may not always agree. Next, Hess and Petrilli explained that the randomized-controlled study is the best way to determine the effects of an intervention. However, this type of research study does not exist in most of the areas mandated by NCLB to be based on research.

A database of scientifically based research for teachers and administrators to use is available, but very limited. The federal government has recently started a What Works Clearinghouse in order to collect research on all the core subject areas (Kimmelman, 2006). The What Works Clearinghouse has developed its own method for the identification of scientifically based practices called the Design and Implementation Assessment Device and a related validation process (Simpson, LaCava, & Grave, 2004). Because of limitations of the clearinghouse, many teachers have to locate research based curriculum themselves in order to support their school improvement requirements.

Increased Flexibility and Local Control

A third provision of NCLB focused on creating more freedom for how the states can use federal funding in education. The purpose of this freedom was to create

flexibility at both the state and local levels to reduce federal red tape and to enhance local control. As an example, federal funds can currently be used for individual school needs such as hiring new teachers, increasing teacher pay, and providing training and professional development for teachers (ED, 2004). Under NCLB, federal money could also be spent for bonus pay for teacher in high-need subject areas, for merit-based performance systems, and for schools to develop ways for measuring teacher performance that would be based on student performance (Hess & Petrilli, 2006).

Yell and Drasgow (2005) reported that the philosophy behind this provision was that the state and local school districts have a better understanding of their needs and thus, should have a greater flexibility on how to spend the federal money provided. Hess and Petrilli (2006) reported that lawmakers thought that flexibility and consolidation were important because the school would function better when they were given the autonomy to make decisions about educating their students. Consolidation of funds and programs was important to allow investment that was more widespread instead of on limited programs reaching a small percentage of students.

Many provisions were given in NCLB to increase the state's and local school district's ability to be flexible in spending federal aid. First, states may transfer up to fifty percent of funds from certain educational grants to another. Second, because of the smaller nature of the allotted federal formula grants, flexibility was increased to small, rural school districts in order to help them be able to more effectively spend these funds. Next, the State and Local Flexibility Demonstration project was created by NCLB to help states and school districts to enter into a performance agreement with the Secretary of Education in order to waive various federal requirements so that they could transfer funds

to meet specific educational needs. Furthermore, NCLB allowed for Title I schools to change from targeted assistance, where the targeted students can be served, to school wide assistance, where any student in a Title I school may be served (Hess & Petrilli, 2006). However, as Hess and Petrilli found, the politics involved in the measures to increase flexibility may be quite complicated and may involve politicians with individual agendas.

Increased Options for Parents

Under NCLB, the federal government stressed the importance for parents to have more choices and options in educating their children. Currently, under NCLB, disadvantaged children, who are enrolled in failing schools, have several educational options. These options include public school choice and supplemental services (ED, 2003).

Historical and theoretical basis for increased options.

In his article on school choice, Cooley (2007) told that the roots of school choice could be traced back to certain developments in the United States economy and politics. Like education, the government had little intervention in the early stages of American economic policy. This began to change when President Theodore Roosevelt challenged the trusts and President Franklin D. Roosevelt implemented social welfare programs and regulated business practices as a part of the New Deal. Cooley explained that at this time Friedrich Hayek was a critic of the increasing role of government involvement. Hayek became known as the forefather of the "modern, small-government conservative movement, which had come to influence public education debates in a substantial manner" (Cooley, 2007, p. 248). A fellow economist, Milton Friedman, became the first

scholar to promote vouchers and school competition. By 1997, Friedman was also promoting privatization of schools. Thus, because of a general dissatisfaction in public education, many Americans started to seek other options.

According to Yell and Drasgow (2005), the philosophy behind increasing options for parents was that student achievement may increase as parental options were increased and as low-performing schools improve. Hess and Finn (2004) stated that parental choice hinges on three rationales. These include society owing sound alternatives for education to its needy children, the competition encouraging low-performing schools to do better while providing new entrepreneurship opportunities, and above all, the right of parents to control their children's education.

Sunderman & Kim (2005) also reported that the theory behind increasing educational options was due to the problem of schools refusing to comply with restructuring measures and of schools fearing the loss of students to other schools. Others thought that competition would force the lower performing school to do what is necessary in order to raise student achievement. Civil rights activists believed that a transfer policy would help to better integrate the disadvantaged students with students and schools of higher-achieving levels, thus breaking down economic isolation.

Empirical research.

Colvin (Hess & Finn, 2004) explained that in past, parents have been given school options in order to deal with issues of racial integration, overcrowding, and specialized education. Furthermore, school options helped to encourage middle-class support, to expand opportunities, and to comply with court orders. Colvin also reported that alternatives in education have been present in the public school system since the 1960's.

Since then, parents have had the option of magnet, alternative schools, and open-enrollment transfer plans between schools.

Under NCLB, if a child's school was not performing to certain standards for at least two consecutive years, then parents had the choice of sending their children to a better performing school or to a charter school in their district. If the school did not meet the standards for at least three years, then the child was eligible to receive supplemental educational services. If the school was classified as a dangerous school or if a child was a victim of a violent crime, the parents also have the option to transfer the child to a safe school within the district (ED, 2004).

However, Sunderman and Kim (2005) pointed out that the transfer options were not widely used by parents after this law was enacted. Furthermore, many of the receiving schools did not have a much greater student achievement level that the failing schools. Sunderman and Kim (2005) also reported that the students in large urban school districts, because of widespread poverty rates, do not have many choice options. Colvin (Hess & Finn, 2004) reported that a parent's right to choose could be hindered by capacity, transportation, geography, procedures, logistics, political resistance, or lack of involvement of the parent.

In their study of school choice and the Charlotte-Mecklenburg school system in North Carolina, Mickelson and Southworth (2005) found that the school system could not support the number of transferring students needed to make this an adequate school improvement tool. Furthermore, these researchers noted that 92% of eligible students stayed in their home schools and opted not to transfer and for those who did transfer, the trend found that students were not going to higher-performing schools.

Howell (2006) reported of similar findings in Massachusetts. He found that by 2006, only 298 or 0.3% of the students who were eligible for transferring to a higher-performing school actually did. Furthermore, of the 46 members of the Council of the Great City Schools, during the 2003-2004 school year, only 3.8% of the eligible students asked for a transfer with 0.1% actually receiving one.

Hess and Petrilli (2006) noted one problem of school choice. After the tests were given and the school year is finished, the states needed to calculate the AYP ratings for the schools and to notify parents of which schools are failing. However, the AYP determinations may not be made until the end of the summer or even into the beginning of the next school year. Thus, many parents were not informed until after school started that they qualified for school choice. Hess and Petrilli also note that information about school choice options for parents can be limited in many instances and only the more involved parents take advantage of this option.

Borkowski and Sneed (2006) reported that a very low percentage of students actually transfer, and of these students, many chose schools that would not necessarily serve them any better than their old schools. Furthermore, those students who did transfer were not necessarily those that have failed the state standards. These researchers also reported that many of the receiving schools did not have the space for transferring students.

Like the school choice option, the Supplemental Educational Services (SES) option was also designed to help low performing students and to encourage the low performing schools to improve (Sunderman & Kim, 2005). Private tutoring has always been available at parent expense. Currently, under NCLB, the low-performing public

school provides free tutoring for its students. Gorman (Hess & Finn, 2004) noted that tutoring programs included corporate, national, non-profit, online, and school district providers.

Gorman (Hess & Finn, 2004) explained that the basic theory behind providing SES services was that low achieving students would increase in their performance if they received additional help after school by public or private organizations. NCLB required that these programs be scientifically based and proven to increase achievement. Thus, the districts and not the schools had the additional responsibility of informing the parents and of monitoring these services. They also must provide locations, monitor progress, set goals, and provide a timetable for achievement. Furthermore, Title I schools had to set aside 20% of their Title I funds to pay for these services. In many instances, this money had to be taken away from other programs. Mathis (2005) also supported this claim. These services and their providers do not necessarily coordinate with the current school curriculum or communicate with the school's educators. Irons and Harris (2007) also reported that some of the problems of the SES program were price gouging, and a lack of low-income families having Internet access for the provided programs, a lack of student attendance, and a lack of district monitoring.

During the first few years after NCLB was implemented, participation in SES programs was low. Gorman (Hess & Finn, 2004) added that quality control was another problematic factor. He also noted that more data collection of these services need to be performed, especially in light of the importance of accountability under NCLB. Irons and Harris (2007) reported that nationally during the 2004-2005 school year, only about 18% of eligible students received the extra tutoring services. However, as Sunderman

and Kim reported (2005) there is no clear or consistent evidence of how the SES effects student achievement. Furthermore, there is no evidence that the SES gave the schools motivation to improve student achievement.

Irons and Harris (2007) stated that the cost of using certified teachers was high and little evidence was available to document the effectiveness of using volunteers in these programs. Hess and Petrilli (2006) reported that NCLB required that schools in need of improvement could not serve as its own provider for SES services. Secretary Spellings relaxed this requirement for the larger, urban school districts in 2005.

Ascher (2006) noted another problem with the SES mandate. He found that with the 20% Title I cap, school districts could only serve 20% of the eligible children. Ascher also found that urban districts could serve only 18%.

In his research, Ascher (2006) found that the U. S. Department of Education reported that only 11% of the two million eligible students opted to receive services. Furthermore, the Government Accountability Office reported that of the districts that offered supplemental services, 20% had no students who actually enrolled. Ascher noted that some of these problems stem from parents not being notified because the schools received delayed improvement status information. Ascher does state that little is known of the effect of SES tutoring on student achievement.

Secretary Spellings at the 2007 National Summit on Supplemental Educational Services and Public School Choice revealed their findings of research that focused on student achievement and the SES services and school choice. This study focused on nine urban districts. The research showed that students were benefiting from the Supplemental Service Providers as both math and reading scores increased for these

students. The students involved had statistically significant gains in both reading and mathematics. Furthermore, students who participated in the program for two or more years showed almost twice the gains over students who participated for one year. This study also revealed that participation in school choice and in the supplemental services was the highest in the elementary grades. Of the eligible elementary students, 24% to 28% participated. Of all the ethnic groups, African-American students had the highest participation rates (NCLB Update, 2007).

Highly Qualified Teachers

Besides accountability, using proven methods, increasing flexibility and local control, and giving parents more options, Kimmelman (2006) also added the explanation of an additional major mandate of NCLB, that the districts and schools hire only *highly qualified* teachers (Kimmelman, 2006). In order to implement the proven programs, NCLB required the schools to hire only highly qualified teachers and teachers' aids by the 2005-2006 school year. Hess and Petrilli (2006) reported that teachers greatly affect student learning, either positively or negatively. Thus, the nation's lawmakers chose to address the achievement gap by requiring the hiring of highly qualified teachers with the state, not the local schools, supervising this mandate (Hess & Petrilli, 2006).

NCLB required that all teachers of a core subject have a bachelor's degree, a state teaching certificate, and have knowledge of their subject area. Special education teachers also had to comply with this ruling by the 2005-2006 school year. They, too, had to be highly qualified in each core area that they taught. Since many special education teachers, especially in self-contained classes, teach a variety of subject areas, many had to take classes in order to receive the highly qualified designation. If they were

not qualified to teach a particular core subject, then they were required to collaborate with a regular education teacher. Schools were also required to notify the parents of the highly qualified status of the teachers in their children's school (Irons & Harris, 2007; McGuinn, 2005; Mickelson & Southworth, 2005; Simpson, LaCava, & Graner, 2004). In addition, Simpson, LaCava, and Graner (2004) stated that paraprofessionals must also be highly qualified. These individuals needed to have at least an associate's degree, two years of college, or pass a state or local assessment in reading, writing, and math.

Historical basis for the highly qualified teacher mandate.

Walsh (2004) stated that the focus on teacher quality by the federal government could be traced back to the 1990s. George Miller, a Democrat Congressman, started the process toward having the results of teacher licensure tests made known to the public. This was made a requirement in the reauthorization of the Higher Education Act of 1998. In 2000, presidential candidate Al Gore proposed that states include teacher data as a part of the accountability process. With input from key legislators such as Edward Kennedy, teacher quality became an important part of NCLB. When the law was enacted, both teacher candidates and experienced teachers were included in the highly qualified teacher standards in NCLB.

Walsh (2004) further explained that the highly qualified requirement was the first time that Congress "formally acknowledged that state certification systems were broken" (p. 23). Walsh explained that the reasons for this include the lack of empirical evidence showing that the traditional teacher certification process produced effective teachers. Furthermore, Walsh told that the school districts have placed too much credence on teacher training as the final judge of teacher quality.

Empirical research.

Because of the highly qualified requirement of NCLB, improving teacher quality has been major focus in recent years. In 2005, NCLB allocated 2.9 billion dollars for reducing class sizes and for professional development. This allotment could also be used for other initiatives including hiring learning coaches, allowing peer coaching, and forming teacher study groups. A practice called, *walk-throughs*, in which administrators analyze student behavior and learning by briefly walking through classrooms, could also be funded through this initiative (Irons & Harris, 2007).

Hess and Petrilli (2006) reported on the continuous debate as to the predictors of excellent teachers in light of the absence of research focusing on teacher quality. They found that some educators consider training and licensure to be the best indicators of teaching success because of the formal college preparation. Others educators state that the teacher's academic proficiency and experience produced the best-qualified teachers. Most agree that the best teachers have a high level of academic proficiency. The most proficient secondary teachers possess a greater knowledge of their respective fields. Hess and Petrilli noted that at both elementary and secondary levels, there is a lack of research showing the effect of a teacher's content knowledge and student achievement in English or social studies. However, research does show that experienced teachers were more effective than the beginning teachers were.

However, Sunderman and Kim (2005) stated that NCLB only focused on the sanctions and the labeling of schools as failures to motivate teachers to improve, rather than offering other, more positive incentives. Thus, lower-achieving, lower-economic schools have the added problem of needing to be able to hire and pay for the best teachers

for their students. Furthermore, these authors explained that because of the instability of all involved in a high-poverty community, the administrators, teachers, parents, and students have much more difficulty meeting the NCLB requirements as many poverty related obstacles confront them. In fact, Sunderman and Kim told that if a student was from a home where family members are poorly educated, then he/she typically would not do well on standardized tests.

Senator Edward Kennedy (2005) stated that in 2001, if a student went to a high-poverty middle or high school, they were 77% more likely to be taught by a teacher without the necessary background in the subject area. Thus, because it is traditionally difficult to find highly qualified teachers to teach in hard-to-staff schools, many states such as Virginia, offer a few incentives. In a pilot program, Virginia offers experienced teachers who have proven to raise student achievement a hiring bonus of $15,000 if they teach for at least three years in a hard-to-staff school. Furthermore, experienced teachers receive a $3,000 bonus if they stay in a pilot district and have academic degrees in their subject area. These schools also earn extra money if their students achieve state proficiency goals. Additionally, highly qualified math teachers can receive $10,000 for every three-year commitment in a hard-to-staff school (Irons & Harris, 2007).

Tuerk (2005) found while reviewing various studies with differing samples and methodologies that a statistically significant relationship between student achievement and teacher quality exists. Tuerk explained that data from the Tennessee Value-Added Assessment system showed that teacher effects on student achievement are cumulative. Furthermore, the subject-area certification of a teacher is consistently the most important factor for student achievement.

Tuerk (2005) also showed evidence that this subject-area knowledge may be more beneficial for student achievement than ability or motivation. He observed in his own research of schools in Virginia that students who attend schools with high-poverty populations have less access to qualified teachers. He found as the poverty level raised, the number of less highly qualified teachers rose in the school. He also found that students in rural or inner city areas also have less access to highly qualified teachers. Tuerk's research also supported his hypothesis that a statistically significant relationship between high-stakes test achievement and teacher quality exists. Thus, he concluded that many students who need to improve their academic performance do not have the benefit of highly qualified teachers.

Positive Aspects of No Child Left Behind

With the reauthorization of NCLB scheduled for 2007, many educators in the United States have started to assess the successes and shortcomings of this federal law. Some of the positive aspects of this act include an increase of highly qualified teachers (Darling-Hammond & Berry, 2006), and an unprecedented focus on reading and mathematics (Guilfoyle, 2006). Furthermore, both Wright (2006) and Haycock (2006) noted that the achievement gap seemed to be closing as this law forces schools to focus on poor and minority students, English language learners, and disabled students. Many school systems have greatly improved their curriculum by aligning the curriculum between the grades (Zavadsky, 2006). In addition, best practices are being emphasized and data are used effectively to drive instruction and remediation.

Hess and Petrilli (2006) told that desegregation and the providing of a quality education for America's minority students that started with *Brown v. the Topeka Board of*

Education was completed with No Child Left Behind. These authors stated that currently all children, no matter of their race, disability, language, or place of residence have an equal opportunity for a quality education because of NCLB. Lawyers, Borkowski and Sneed (2006), also agreed that the main benefit of NCLB is its strong emphasis on educating all children.

Hess and Petrilli (2006) reported that U.S. Secretary of Education Margaret Spellings declared NCLB to be a success in a speech given in 2005. She stated that states that were embracing the law were working hard to meet the challenge and were becoming increasingly successful. She told that students were achieving and that the achievement gap was narrowing in the early grades. These positive changes were gaining the confidence of the public.

Haycock (2006) explained that NCLB helped African American students in the wealthy county of Fairfax, Virginia by breaking down the data into subgroups. This county found that their African American students were scoring lower than those in the Richmond City schools were. Consequently, improvement measures for these students were implemented. Accordingly, Haycock reported that Richmond City schools attributed their improvement to the use of student data to support instruction and tutoring and to the use of student data to monitor progress in order to ensure that the students are meeting the proficiency targets.

Haycock (2006), the director of Education Trust, has gathered data from the states and from the National Assessment of Educational Progress. She reported positive effects of NCLB including student achievement and the closing of achievement gaps at elementary Title I schools. The state assessments from 2003 to 2005 showed 27 of 31

states showing improvement, and 22 of 29 states had narrowed the gap between African American students and the white students. In the area of mathematics, 29 of 32 states showed improvement with 26 of 30 states closing the African American/White achievement gap in this subject. In the middle grades, 20 of 31 states showed reading improvement and 29 of 31 showed improvement in mathematics. In reading, 22 of 29 states narrowed the African American/White achievement gap and 18 of 29 in mathematics.

Negative Aspects of No Child Left Behind

Even with numerous positive aspects, many authors report on the negative aspects of the No Child Left Behind Act. According to Abernathy (2007), these negative aspects can be categorized into seven general areas including the use of standardized tests and the use of cross-sectional test score data. Other negative aspects of NCLB included the problems with the 100% proficiency requirement, the implementation of AYP sanctions, the lack of funding for NCLB mandates, a lack of flexibility in implementation, the inclusion of secondary provisions, and the requirement of hiring highly qualified teachers and paraprofessionals.

Standardized Testing

Abernathy (2007) stated that critics question the measuring of student achievement with a standardized test, and the subsequent consequences upon the school and curriculum such as the importance of improving test scores, becoming a central focus. Furthermore, he reported that high-stakes testing damaged education. Hess and Pertilli (2006) found that opponents questioned the quality and accuracy of the states' standards and of the tests. The opponents questioned whether content mastery was

defined, whether tests were measuring the whole spectrum of skills, and if math and reading instruction were replacing instruction in other subject areas. Hess and Petrilli also related that critics of NCLB stated that standardized testing took a focus off student needs, narrowed the curriculum, and cut instruction in the arts. These authors also revealed that a principal, George Wood, stated that a school's quality would actually decline as the emphasis is placed on one test score. Furthermore, it was noted that this principal affirmed that since the students are tested only once a year, that the actual rate of the student's performance was not measured throughout the entire school year.

The *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005) stated that student's scores fluctuate naturally by schools, grade levels and by individual students. Furthermore, a student's attitude on the day of testing or the fact that some students test better than others can affect test scores. Schools with a smaller student population would also be affected since this smaller sample size could greatly affect outcomes.

Sloan (2007) stressed that the standardized tests put too much emphasis on using multiple-choice tests to show student achievement. McReynolds (2006) found that 42% of this country's students take the required reading and mathematics tests by using the multiple-choice format. It is his belief that multiple-choice tests are efficient and easy to score by computer, but they are better at assessing the basic skills and not the higher-order thinking skills. He explained that this type of testing gears itself towards teaching the basic skills and places a lesser emphasis on subject areas that are not tested.

While some promote standardized testing because it provides objective assessments and reduces the achievement gaps between low-income students and their

peers, Hursh (2005) explained that many standardized tests and questions were poorly constructed. Furthermore, Hursh found that many localities lowered the cut score in order to raise the passing rate. Another weakness he pointed out was that AYP was based on meeting certain requirements that the entire state was required to meet instead of the academic gains in that school. He also noted that other factors, such as a family's income, could affect test scores.

In addition, Hursh (2005) concluded that standardized testing could narrow the curriculum. He also noted that the lower students could be left out while teachers concentrate on those students who are close to passing. Hursh furthermore explained that standardized testing hurts the top performing schools since they are required to teach just the basic standards for the test. Other ways that standardized testing can narrow the curriculum included causing increased time in test preparation and forcing low achieving high school students out of school.

Liston, Whitcomb, and Borko (2007) explained that the traditional kindergarten through twelfth grade schools were affected by this narrowing of what is expected in the curriculum, as research is linked to classroom practice. The Center on Educational Policy (2006) revealed that 71% of schools that were surveyed stated that instructional time was diminished in other subject area in order to increase time for the teaching of mathematics and reading. They also noted that districts were placing more emphasis on teaching practices with a reliance on approved scientifically based teaching practices.

The Use of Cross-Sectional Test Score Data

"…standardized test scores offer nothing more than snapshots, often fuzzy ones, of student achievement at a single moment in time" (Guisbond & Neill, 2004, p. 13).

Abernathy (2007) and Hess and Petrilli (2006) reported on the drawback of taking a snapshot of a one time only testing opportunity. Hess and Perrilli found that those in opposition of standardized testing feel that annual assessments are not reliable. Abernathy stated that because of this, school could be seen as failing even though they are making gains. Thus, if a school is starting at a very low proficiency level, it will be harder for that school to meet the current benchmark scores. Even with the safe harbor provision of NCLB, these school would have to make a 10% gain each year in all subgroups. Another problem occurred when determining the minimum number of students from a particular subgroup to be included in the testing pool. A lower number of included students could cause the school to fail while a higher number could mean that the needs of these students were ignored.

Sloan (2007) noted that AYP compares successive groups of students instead of the achievements that one group of students made over a number of years. He also was concerned with test scores that show achievement on one day out of the school year. Furthermore, he noted that federal AYP benchmarks could be different from other standards used by the states. Thus, a school can pass the state requirements and not the federal standards. This double standard could cause much confusion among parents, especially those parents who desire to send their child to a certain college. For example, the community could suffer the consequences attributed to the possibility of real estate prices being lowered because of the school being labeled as a failure.

Guisbond and Neill (2004) reported that according to various researchers, test-based reform may not show real progress due to yearly fluctuations and should not be used for rewards or punishments. They also found that norm-referenced tests were

specifically made to include a certain amount of failing scores. Furthermore, test errors such as questioning, scoring, and reporting may increase as standardized testing increased. Other problems with standardized testing included measurement error, lack of high-order thinking measurement, and bias. Furthermore, Cawelti (2006) emphasized that the focus on high-stakes testing affected teacher morale in a negative manner.

One Hundred Percent Proficiency

By the school year 2013-2014, all schools and school districts are to achieve 100% proficiency in mathematics and reading according to NCLB. Abernathy (2007) and Hess and Petrilli (2006) stated that they and other critics argue that this goal in unrealistic and unobtainable since the schools are no where near this level, and the rate of improvement to attain 100% proficiency would be almost impossible. Irons and Harris (2007) stated that there is no research "that supports the premise that all students and all subgroups of students can reach meaningful high standards by 2014 as required by NCLB" (p. 29). Irons and Harris explained that the schools, coupled with a lack of family, social, and economic assets, do not have the ability to provide enough support for 100% of the students to pass. Thus, the potential for most of the nation's schools to fail is great.

The National Education Association reported that with the 100% proficiency mandate that by 2014, 80% of America's schools would be labeled as a failure (Sloan, 2007). Sloan also reported that the Great Lakes Center for Educational Research and the Education Policy Studies Laboratory at Arizona State University predicted a 95% failure rate in the Midwest Great Lakes region. These researchers are concerned with the future effect on public education if Americans loose their confidence in the public school

system.

Linn (2003) compared the 100% proficiency level to the increases noted on the NAEP scores. He found that from 1990 to 2000, the yearly increases in the mathematics scores average about 1% for grades 4 and 8, with half of 1% on the twelfth grade test. He calculated that at this rate, the fourth grade would take 57 years to reach a 100% proficiency level while the eighth grade would take 61 years, and the twelfth grade would take 166 years. Linn drew similar conclusions from the reading scores. Thus, he concluded that the 100% proficiency requirement was unrealistic.

However, former Secretary of Education, Paige (2007) stated that it is not too demanding to expect all students to be performing at grade level. In light of the millions spent on education, he challenged critics by asking at what level Americans want their students performing if not at 100% proficiency.

Welner (2005) explained that there are two presuppositions to the NCLB Adequate Yearly Progress 100% proficiency requirement. First, every school in America is capable of accomplishing the 100% passing rate on the standardized tests. Second, this 100% proficiency rate is solely the school's responsibility. Welner stated that these presuppositions are not supported by legitimate research. He explained that the 100% proficiency level was against the due process principle that "laws must not arbitrarily distribute punishments and rewards" (p.174). However, he noted that the states have a choice whether to accept federal Title I money or not. He surmised that test scores were a result of many factors including the student, interventions, and the composition of the students in the class. Even though Welner believed that NCLB will help some school improve, he stated, "this improvement will be achieved at a steep cost for the families

and teachers in these and other school communities who will watch their schools stumble inexorably through the annual rite of escalating NCLB penalties" (p. 177).

Implementation of AYP Sanctions

Another consequence of NCLB as reported by Abernathy (2007) was the implementation of AYP sanctions. He stated that because of the high cost of sanctions, schools and districts have the need to set the proficiency benchmarks to the lowest possible level. This may provide many opportunities for cheating by the districts and the schools to avoid the sanctions. In addition, schools might be tempted to move lower performing students into other programs, or not accept these students from other districts. Furthermore, a wide variation in the baseline levels from state to state can be noted with the possibility of one school passing in one state while it would fail in another.

Guisbond and Neill (2004) reported that the studies that they have reviewed showed that with AYP, a more integrated school would have a better chance of failing because of its multiple subgroups. Accordingly, these authors stated that because of the wide variety of definitions of proficiency between the states, it was hard to make accurate state-to-state comparisons.

Offenberg (2004) studied the mobility rate of students in the Philadelphia public schools and found that the AYP policy of requiring schools to pass a certain number of requirements could be invalid in urban schools because of high student mobility. Because of student mobility, the values and trends and the achievement scores of the students in these schools as assessed by AYP, may not actually reflect the quality of the school. He suggested that evaluation should be based on measures that were not affected by school-to-school mobility.

Abernathy (2007) explained that schools do not have control over the student's motivations, ability, and previous school experience. Furthermore, schools cannot control language, economic status, or parent involvement. Another concern reported by Abernathy was the implementation of the exit options for parents of children in failing schools. He reported that only a small group of parents was actually sending their children to another successful school or to supplemental services.

Borkowski and Sneed (2006) also reviewed many reports and found only a limited number of eligible students were receiving supplemental educational services. These authors explained that this lack of student involvement and enrollment with providers may actually cause a decrease in the district's number of available providers for certain subject areas. Borkowdki and Sneed noted that district resistance, lack of information to the parents, and a lack of capacity in the successful schools could also account for this problem. Borkowski and Sneed (2006) reported of the lack of educational research to support that the provision of supplemental educational services would actually improve educational outcomes in students.

Cortese (Solmon, Cortese, Driscoll, Rees, & Rotherham, 2005) stated that more accountability is needed for supplemental education services providers. Rotherham (Solmon, Cortese, Driscoll, Rees, & Rotherham, 2005) expressed concern with the supplemental services not being aligned with the school's curriculum. Rees (Solmon, Cortese, Driscoll, Rees, & Rotherham, 2005) expressed concern about the outcome when schools were asked to restructure after failing AYP after five years. Rees stated that the new, restructured school needed to have undergone actual improvement and not just an old school with a new face where actual change has not taken place.

Pond noted in the *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005), that schools should not be evaluated by comparing them to a static standard. This report stated that this comparison forces all schools to hold to the same benchmark and does not make allowances for demographic factors or for prior achievement. Rather, the report supported evaluation that included other measures besides a standardized test. Furthermore, the report noted that the rigid nature of AYP with its numerous requirements could cause more schools than necessary to be in improvement and thus, cause funding to be spread too thinly.

In the *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005), the authors did not agree with the NCLB requirement of allowing students in failing schools to transfer before allowing the schools time to address the deficiencies. They also stated that many rural and urban schools do not have practical transfer option or access to supplemental service providers. Furthermore, Sunderman and Kim (2005) reported that the transfer requirement has caused overcrowding at some schools. Besides defeating their own goal of reducing enrollment and class size, Sunderman and Kim explained that local school officials fear that the transfer students will pull down their school's test scores.

The National Conference of State Legislatures (2005) also reported that they were concerned that the purpose of NCLB to raise student achievement may actually cause schools to lower standards in order to meet federal requirements. The National Conference of State Legislatures also noted that in order to close the achievement gap, states might actually choose to segregate by social class and to push low-performing students out of its system. Furthermore, NCLB stifled any future state educational

innovations.

Unfunded Mandates

Abernathy (2007), as well as Darling-Hammond and Berry (2006), revealed that all levels of the educational system report the lack of sufficient funds for implementing the requirements of NCLB. Borkowski and Sneed (2006) stated that NCLB has not increased federal funding for education in any significant manner. They reported that in 2002, $26.3 billion was authorized for education, but only $22 billion was appropriated. In 2006, NCLB funding was $23.3 billion and proposed to be $24.3 billion in 2007. Borkowski and Sneed also reported that most of the increase in funding from 2002 to 2006 was in the area of Title I. However, flexibility in spending was limited as 20% of Title I funding to the schools must be spent on school choice and supplemental educational services.

Pond reported that in the *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005) that Section 9527(a) of Title IX declared that states should not have to fund mandates set forth by federal law, including NCLB. Furthermore, states and schools should not have to change instruction or curriculum because of federal law. During the first year after NCLB was implemented, The National Conference of State Legislatures reported that the federal government increased educational spending by $4.7 billion or 17% over the previous year. However, they noted that the 2005 share of federal funding for NCLB was 8% or only a 2% rise over the previous year. Yet, this increase was offset by a 2% rise in administrative compliance costs. Pond also noted that states have to provide extra funding to the schools in order to meet the remediation and educational opportunities as mandated by

NCLB. Furthermore, federal funding is not available to help the states to meet the 100% proficiency by 2014 mandate. In a lawsuit brought on by the National Education Association against the Secretary of Education Margaret Spellings in April 2005 over the under funding issue, the U.S. General Accounting Office ruled that NCLB was not an unfounded mandate because technically the law was voluntary (Abernathy, 2007).

The National Conference of State Legislatures (2005) also wrote of the problematic issues that would arise if a state refused to comply with NCLB. For example, in 2004, the state of Utah made a formal request to the United States Department of Education the state's intention not to participate in NCLB. The U.S. Education Department informed Utah that the state would lose its Title I funds as well as two times as much as the Title I funds in other formula and categorical funds.

Sunderman and Kim (2005) reported four problem areas associated with NCLB funding. First, the increases in federal funding did not materialize after the first year. Next, schools received less funding from their districts and states than expected. Third, the requirements set forth by NCLB were costly. Finally, it proved to be very costly to transfer or provide supplemental educational services for students whose schools did not meet AYP standards.

When explaining the problematic nature of funding NCLB at the conclusion of the initial year after passage of the law, Sunderman and Kim (2005) reported that a part of the compromise in Congress to pass NCLB was the increase in Title I funding. Spending was increased 18% for Title I and 17% for education in general during the first fiscal year of this law in 2002. However, Sunderman and Kim found that this rate of increase in spending was not sustained in subsequent years, and an actual decline can be

noted. In 2004, spending for the Title I program increased by 5.6%, and a 5.1% increase for education in general over the previous year. The Republicans claimed that the government was spending more money that ever for education. The Democrats claimed that the promise to fund NCLB reform adequately was broken by the administration. Sunderman and Kim explained that federal spending for education did increase, but the total share of federal educational expenditures remained at about 7%.

The second problem area of NCLB funding that Sunderman and Kim (2005) reported was that schools were receiving less funding than expected from the district and the state. Accordingly, these authors reported that the problem was caused when the cost of implementing NCLB proved to be greater than funds apportioned to the states. In order to implement the law, schools and districts required additional administrative costs and the amount of money needed to devise, implement, and score the additional assessments. Furthermore, extra money was needed to support the additional data collection and funding the increased remedial services for students who do not pass the tests. These costs continued to grow as more schools were placed in improvement for not meeting the AYP standards.

Sunderman and Kim's (2007) last two problems with NCLB funding centered on the costly nature of the NCLB requirements and the high cost of transferring students and providing supplemental educational services. They reported that under the previous federal policy, Title I funds and program flexibility were increased in order to help low-performing schools. However, under NCLB, school improvement strategies include taking money away and giving the parents the choice to leave the school. Furthermore, Sunderman and Kim reported that during 2004, 31 state legislatures considered bills or

resolutions that would prohibit that state from spending state money for the federal program. They noted that when NCLB was implemented, the states were facing a substantial decline in revenue.

Goertz (2005) revealed an additional problem to NCLB funding. He found that the national costs for the development and the implementation of the new state assessments ranged from $1.9 billion to $7 billion. However, between 2002 and 2007, the federal government only authorized $2.34 billion to be spent on state assessments.

In his research, Mathis (2005) explored six differing opinions of NCLB funding. First, some state that NCLB was fully funded since the federal government included increases in the federal appropriation. Mathis explained that that these increases may not cover the actual costs of implementation. Second, some claim that NCLB was adequately funded because of unspent federal money. However, Mathis found no empirical evidence to support this claim. In fact, he found that the actual appropriations were below the authorization level. The next two opinions about NCLB funding stated that NCLB was fully funded according to actual appropriations versus authorized appropriations. Mathis found that the federal appropriation was only 41% of the federal definition of full funding for 2004. Fifth, some stated that new administrative costs were covered by new appropriations. Mathis found that new appropriations added 0.9% to the total amount of spending on education. However, the states incurred additional costs between 2 to 2.5%. Thus, $4.6 billion was appropriated in new funds for administrative costs while the actual cost was $11.3 billion. The sixth opinion centers on the cost of teaching children to meet the state standards. Mathis stated that based on 40 studies, additional new costs were estimated at $137.8 billion. He concluded that to meet all of

the goals of NCLB, that the states need $144.5 billion or an increase of 29% for teaching, administrative costs, and support services for children in need.

Lack of Flexibility in Implementation

Abernathy (2007) reported that schools experienced frustration as they tried to meet the benchmarks for academic success with their special needs and limited English proficient student populations. The *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005) recognized the conflict of requiring that student with disabilities and limited English proficiency be tested with the same tests and benchmarks as the regular education population. The conference noted that students with disabilities are required to be tested at their age-appropriate grade level by NCLB, while disabled students under the Individuals with Disabilities Education Act were mandated to be taught according to their abilities. Only 10% of disabled students can participate in out-of-level testing according to NCLB. Thus, 90% of a school's disabled students must be tested at grade level.

The authors of the *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005) believed that the goal of disabled students passing with a 100% pass rate by 2014 is unreasonable. Thus, if these students actually achieved the benchmark for their grade level, then they would no longer be in the special education subgroup. Accordingly, the requirement of special education teachers to be highly qualified in each core area that they teach conflicted with the current certification practices by the states. The authors also expressed their concern for limited English proficient students to be tested only in English and questioned the time limit as to when these students should be proficient at their present grade level.

Secondary Provisions

Abernathy (2007) reported that the secondary provisions contained in NCLB could be problematic under certain circumstances. For example, the withholding of federal funds for schools that deny constitutionally protected prayer or deny access to the Boy Scouts of America or any other patriotic group could become an issue, as the states understand further the total ramifications of all of the provisions of NCLB. Currently, schools have to submit in writing to the state that they are not involved in any activity that would interfere with a student's right to participate in school prayer (Sloan, 2007). In addition, NCLB requires that high schools that receive federal funds allow military recruiters to have access to the students. If requested, the schools must provide student names, phone numbers, and addresses to the recruiters (Sloan, 2007). Many parents oppose this access of the military to high school students as an invasion of privacy.

Highly Qualified Teachers and Paraprofessionals

The *Task Force on No Child Left Behind Final Draft* (National Conference of State Legislatures, 2005) explained the problematic nature of the highly qualified teacher provision. The authors of this document also noted that NCLB's highly qualified teacher and paraprofessional requirements could present problems in rural, urban, and other hard-to-staff school districts. In addition, Jimerson (2005) suggested that the highly qualified teacher requirements of NCLB were creating a widening gap between low-income and high-income schools that employ highly qualified teachers. He also explained that this provision made it increasingly difficult for rural districts to attract and retain competent teachers.

Furthermore, those areas affected by teacher shortages before NCLB would have

an increasingly difficult job in staffing classrooms with highly qualified teachers as defined by NCLB. Sloan (2007) stated that since the states set the highly qualified teacher requirements, they might lower certification standards in order to comply with NCLB. Furthermore, schools in improvement may find it hard to hire highly qualified teachers who are willing to work in a school that is facing sanctions or in schools with a high percentage of low-income minority students. Small, rural communities also have a hard time meeting the highly qualified mandate, since they often find it necessary to require their teachers to fill multiple positions.

Other Negative Aspects of No Child Left Behind

Cawelti (2006) noted that NCLB narrowed the curriculum as increased emphasis was placed on reading and math. Furthermore, Cawelti stated that the negative school accountability labels and the pressures of state and federal sanctions drive teachers away from the schools in greatest need. Accordingly, this author also noted that hard-working special education teachers frequently experience failure as their special needs students find it difficult to impossible to pass the mandated grade-level tests. Other problematic issues included mandating the same achievement benchmark levels for troubled students who attended alternative or experimental schools, and hiring tutors who were highly qualified according to NCLB standards (Sloan, 2007). Thus, Cawelti and many other educators stressed that the added demands of state and federal requirements in education and the mandatory sanctions have put increased pressure on already over-loaded teachers who must strive to raise test scores, close the achievement gaps, and to make sure that, "No Child is Left Behind."

No Child Left Behind and National Focus on School Improvement

Historical Perspective

"Successful schools do not happen by accident, and they are not guaranteed by the presence of nice families and orderly classrooms. Rather, success is fashioned by the educators, students, and community members in a way that is context-specific" (Lipson, Mosenthal, Mekkelsen, & Russ, 2004, p. 534). In the light of NCLB, many challenges face educators and administrators who serve in America's K-12 school system. Milken (Milken, Amato, Fattah, Marshall, Payzant, Simon, & Vallas, 2005) reported that according to the National Assessment of Educational Progress (NAEP) by the U.S. Department of Education, almost no progress has been made in closing the achievement gap over the last 30 years. The NAEP in 2003 also showed that most fourth and eighth grade students scored at or below the basic level (an understanding of just the literal meaning of what is read) in reading. In urban districts in 2003, the NAEP showed a very high percentage of fourth grade students scoring below basic level. These percentages ranged from 45% in Central City to 69% in Washington D.C. The NAEP scores also showed 60% of African-American and 56% of Latino students scoring below basic level in fourth grade. Milken (2005) also reported that students score below other countries in both mathematics and in science. In 2003, the U.S. ranked 23 out of 31 countries in math literacy.

However, Rees (2005) revealed that progress had been incremental in the NAEP scores before 1999, and that from 2000-2005, the fourth grade reading scores jumped 7%. She attributed these highest scores to date, as a direct result of the implementation of NCLB directing resources to the younger students. She also noted that since the

implementation of NCLB, the achievement gap in reading between Caucasian and African-American students was smaller than any other time. She also stated that math scores for this same period for fourth and eighth grade students in all subgroups had also risen. She found that the test scores were also rising in individual states. Rees quotes Secretary of Education Margaret Spellings as saying, "accountability plus high expectations plus resources equals results" (p.106), as the new equation for education.

Empirical Research

An empirical review of the literature revealed several major factors that researchers found to be instrumental to the improvement of schools since the implementation of No Child Left Behind. These specific categories of key school improvement factors included adequate implementation strategies, high standards, effective teachers, engaged students, aligned curriculum, planning, implementation of data, and involved local and district leadership. In congruence with current educational practice, other researchers stressed the importance of basing school improvement on scientifically based research. Research groups such as the National Education Association and the Governor's Best Practice Center support a more comprehensive approach. Finally, school improvement in schools serving minority children could be a challenge, but a necessary one.

Milken (Milken, et al., 2005) explained that the lack in progress of student outcomes is not because of a lack of reforms. At the Milken Foundation, Milken and the other researchers have studied over 300 school reforms. He noted that their research had found six major elements needed if school reform is to succeed. These six elements included focusing on human capital, being comprehensive in nature, being based on

sound research, encompassing sound design and implementation, having commitment of all involved, and including effective evaluative measures. Furthermore, Milken stated that reform must include continuity and sustainability.

When Milken asked the panel at the Milken Family Foundation National Education Conference in 2005 why they thought that student achievement had made such little progress over the last 30 years, many interesting insights were revealed. Amato (Milken, et al., 2005) stated that the lack of achievement was due to inadequate implementation strategies. He also promoted the implementation of a community-based, full-service school in order to deal with all aspects of the many emotional, physical, and social challenges that daily effect students. Furthermore, he asserted that student's strengths needed to be maximized and teachers needed adequate professional development.

At the Milken Foundation conference, Vallas (Milken, et al., 2005) commented that successful school reform needed high academic standards. He noted that the most effective curriculum models were used across the local school district, and included intense professional development, increased time on task, data-driven instruction. Furthermore, he explained that successful school reform needed long-range financial planning with the operational capacity to implement and continue reform. Finally, he noted that those in leadership positions at both the local and district levels needed to be well trained and their positions stable.

Payzant (Milken, et al., 2005) promoted the necessity of having high standards for students as the basis for effective school improvement. He explained that standards-based reform was based on the belief that specific standards were in place that students

needed in order to meet high school graduation requirements. For successful reform, Payzant stated that schools have to have a common, clear set of goals, support for teachers, effective principal leadership, and sustainability of the improvement process. He also stated that relying on disaggregated data was essential.

Simon (Milken, et al., 2005) stated that the difference in the NCLB education reform as compared to past reforms was that NCLB identified the teacher as the central figure. He also explained that a system needed to be created in order to get the best teachers where they are most needed. Vallas (Milken, et al., 2005) agreed and stated that teachers needed to be provided with the best instructional models and curriculum. Furthermore, teachers needed effective professional development with teacher mentors and coaches working with them. In addition, class sizes needed to be reduced or a teacher aid needed to be placed in the large class.

Protheroe, Shellard, and Turner (2003) in reviewing many studies, found many characteristics of effective teachers. In fact, they and Porter-Magee (2004) found that the most influential factor to student learning was the teacher. Characteristics of effective teachers included the teacher having clear learning goals and having the students engaged in the learning process. In addition, the teacher was focused on the content and time on task was optimal. The teacher balanced skills-based instruction with high-level instruction and provided individualized instruction when necessary. Furthermore, the classroom climate and the teacher's management style supported learning.

Protheroe, Shellard, and Turner (2003) also reported that schools in improvement used teacher evaluation and development in order to improve teaching skills and thus, improve instruction. In fact, these authors noted that the current practice was to treat

teacher evaluation as the foundation of teacher development. Traditionally, teacher evaluation consisted of a yearly visit from the principal with a checklist of desired competencies. The current belief of teacher evaluation included differentiating the observation in order to meet the needs of the teacher. Thus, the new teacher's observation would look much different from the experienced teacher's evaluation. The observations could also address specific areas of improvement in teaching. Administrators sometimes use a short, focused observation called a *walkabout*. This type of observation could be used to focus on one or two specific areas that the school is concentrating on improving.

Other effective teaching practices for improving schools as found by Protheroe, Shellard, and Turner (2003) included the use of effectively implemented teacher professional development as a way for the faculty to focus on the areas needing improvement. They also noted the necessity of allowing teachers the time to work together as they are learning and implementing new strategies. Another important aspect of school improvement was to build a caring school community. The authors also noted the importance of strong family and community involvement in the school.

In their research, Protheroe, Shellard, and Turner (2003) found that student achievement was higher when students were actively engaged in their learning. They noted that highly engaged students were confident and that they were in control of their learning. Furthermore, the engaged students perceived their work as meaningful, were committed to their work and to their school, and were competent. The researchers suggested that in order to increase student engagement, the school needed to build smaller learning communities within the school. Classroom practices that effect student

engagement include a positive climate, sufficient student opportunities, effective presentation of the lesson by the teacher, strategic questioning, grouping students in a variety of ways, and individualized instruction. The researchers also found that the instructional methods that increased student achievement by incorporating student engagement included the use of projects, experience-based learning, thematic integrated curriculum, and cooperative learning. Thus, Protheroe, Shellard, and Turner found that successful schools in the improvement process had student achievement as their main goal.

Protheroe, Shellard, and Turner (2003) found that high achieving and improving schools not only had good teaching practices within the school, but also the curriculum, instruction, and assessment was aligned and incorporated across all grade levels and subject areas. They also found that the instructional programs in the schools needed to have coherence. Thus, these researchers stated that all of the materials, resources, and programs work together and support each other without overwhelming those involved.

Mintrop and MacLessan (2002) in their research on school improvement found that planning was a key element for elementary and middle schools that were on probation. They studied 46 school improvement plans in schools in Maryland and found that the state involved the districts and schools in designing an improvement plan that reflected the required accountability standards of the state. These plans helped the educators involved to align their own ways of thinking with state accountability. Even though many of the other classroom teachers had a very limited knowledge of their school's improvement plan, it was found that they were willing to comply with the necessary improvements.

With the implementation of high-stakes testing and NCLB, Protheroe, Shellard, and Turner (2003) reported that improving schools relied on data based decision-making and instruction. NCLB required that data be disaggregated by student subgroups. This information with a teacher's desegregation of her test scores could greatly improve the effectiveness of instruction by forming instruction to student needs. The information gained could also be used for diagnostic and remedial purposes.

Protheroe, Shellard, and Turner (2003) also noted that if the district staff was involved with the school staff in the improvement process, then the school and the district could be more successful. They also explained that the leadership in these successful schools did not accept lower standards for students who traditionally scored lower. These authors also found that successful schools hold high expectations for all students and expected all of the students to be successful and to achieve. To do this, the teachers and administrators did not allow students to fall too far behind. In order to help these students, in school tutoring, after school tutoring, computerized tutoring, and summer school were implemented. Furthermore, instructional practices were incorporated and curriculum adopted that would meet the needs of the students.

Protheroe, Shellard, and Turner (2003) found improving schools had effective leaders at both the district and local levels. Furthermore, these leaders worked together to build an effective school community. Not only must the people in the key leadership positions support the faculty and the improvements needed, they must also understand the change process. The school leaders must also be able to effectively communicate the goals, be committed to the process, and include faculty who would be directly affected by the change. Those in leadership must also institute effective staff development, and

provide both the fiscal support and the technical assistance needed for change.

Chrisman (2005) found that improving achievement depended on strong and quality leadership from administrators and teachers, effective programs, and effective practices. Surveys sent to principals of both successful and unsuccessful schools also revealed the importance of strong district leadership. Successful schools gave more services including professional development with follow-up opportunities. Practices were based on disaggregated student data and intervention provided.

In her 1998 report, Grossen explained that the major problem with American education was that the professional knowledge base of teaching was not founded on scientific research. She stated that large-scale reform should be based on large-scale research. She noted that massive educational research projects such as Project Follow-Through had been ignored by a majority of educators.

Hirsch (1998) also supported Grossen and emphasized the need for basing educational policy on reliable educational research. He reported that in order to determine the scientific reliability of research, one must take note of what the top researchers in scientific fields are agreeing on and what the ideology of the research is based on. He stated that educators should embrace scientific research rather than conforming to an ideology.

National Education Association's research supported a comprehensive approach to school improvement. Rollie (Hawley & Rollie, 2007) listed several guidelines that were essential for improving schools and instruction. He noted that educators should share understanding and work together in order to determine which actions and methods are the best for the determined outcomes. Thus, the entire educational community

needed to be involved in improvement with the implementation of continuous assessments of learning and of teaching with a special emphasis on two-way communication. Furthermore, regular, professional development should focus on student learning needs with consistent data to document the implemented changes. Finally, the necessary materials and personnel support should be present to support change.

Rollie (Hawley & Rollie, 2007) also reported on the National Education Association's research findings about the characteristics of effective schools. According to the research, quality schools were multidimensional, and the school's goals and objectives were clear. A commitment of long-range, continuous improvement existed in quality schools; and the teachers, administrators, and the school community shared achievable outcomes. In addition, the belief that all students can learn was present, and a variety of assessments were performed on a regular basis. Furthermore, teachers were involved in planning, barriers to learning were eliminated, professional development was centered on student needs, and evaluation was based on the school as a whole. Newmann (2007) also added that effective schools had high expectation for all students and schools used a variety of instructional approaches.

In a study performed by the Governor's Best Practice Centers (2000) on effective practices for improving student achievement and the accompany activities that effectively support the practices, the researchers focused on 26 schools of different sizes, in various locations, and with different income status. All schools had be fully accredited, had shown improvement on the Standards of Learning tests, and had to overcome challenges such as low-income. They reviewed elementary, middle, and high schools. From their research, 16 effective practices for student achievement were identified including,

"administrative support, assessment, classroom instruction, community and parent support, curriculum alignment, curriculum mapping and pacing, data analysis, intervention strategies, leadership, use of research-based programs, schedule considerations, school wide focus on test success, staff development, student motivation, teacher planning accommodations, and technology" (p. iv).

Through interviews and surveys, the researchers at the Governor's Best Practice Center noted seven of the practices listed above that were deemed the most important for school improvement. These included, "assessment, curriculum alignment, curriculum mapping and pacing, data analysis, intervention strategies, leadership and student motivation" (Governor's Best Practice Centers, 2000, p. 13). Leadership was identified as the most important practice to increase student achievement. The other practices in order of importance were student motivation, intervention strategies, data analysis, assessment, curriculum alignment, and curriculum mapping and pacing. Staff development was not specifically identified, but could be seen within the context of the other practices. Accordingly, a school culture that employed teamwork, shared responsibility, ownership, and collaboration as a part of the entire process was also seen as a common thread in schools with effective school improvement practices.

A study by Brock and Groth (2003) of 50 schools in school improvement serving minority children revealed common characteristics among those schools that were making the most progress. These characteristics included a change in culture, a change in leadership, and a relocation of funding to support the improvement plan. Other characteristics include a common vision with a commitment to the vision, professional development, involvement of all staff in all areas of the improvement process, and a

principal who leads the improvement process. Furthermore, the process of implementing the plan drives all that is done at the school. These researchers also noted that school personnel who believed in their ability to improve academic achievement in spite of their students' circumstances or demographic factors, also contributed to successful school improvement.

Reading Improvement

Historical Perspective

A central focus of NCLB is improving the reading proficiency of America's children. Throughout American history, reading instruction has shifted between many pedagogical and philosophical instructional theories. For the most part, though, educational professionals governed literacy instruction. However, with the release of *A Nation at Risk* in 1983, Americans started to fear that the seeming decline in education would pose as a national security threat. Thus, after the publishing of *A Nation at Risk,* politicians began to play an increasing role in education, including reading instruction (Reutzel & Mitchell, 2005).

In 1994, the NAEP results continued to show a decline in reading, specifically in fourth grade. Paradigm wars between quantitative and qualitative researchers during the 1990s further confused literacy efforts. Consequently, a reading instructional method termed, whole language, was instituted as the cure. Phonics instruction became obsolete. However, children at risk continued to score low in reading (Reutzel & Mitchell, 2005).

President Clinton's Goals 2000 supported nationwide testing in both reading and in mathematics as well as increased professional development for teachers of reading. The federal government funded the Center for Improvement of Early Reading

Achievement in order to bring a clear focus on reading instruction and achievement (Reutzel & Mitchell, 2005).

At this point, though, Reutzel and Mitchell (2005) explained that both public and political opinions on the education community's ability to teach reading effectively continued to decline. As a result, the Reading Excellence Act of 1998 was instituted as one of the national policy makers' first effort at reading reform. This reform focused on low-income low-performing schools and was based on scientific standards.

In 2001, with the enactment of NCLB, reading policy shifted from being a local concern to the national political arena. This law required the narrowing of the achievement gap in reading. The achievement gap in reading was blamed on educators not relying on scientific evidence for reading instruction and remediation. Allington (2006) reported that all of the subgroups score lower in reading than do their peers. With the gap between the subgroups and their peers not decreasing in spite of 50 years of legislation, Congress passed NCLB in order to make some necessary changes including having reading curriculum and instruction to become more scientifically-based instead of relying on the current fads.

As a result, both the Reading Excellence Act of 1996 and NCLB required that federal money be spent only on the implementation of scientifically based programs. While the Reading Excellence Act did not specifically regulate or monitor the school districts' evidence of compliance, NCLB did (Allington, 2006). NCLB allowed Title I and Reading First funds to not only help the low-income students, but to also include limited English proficient and students with disabilities. Accordingly, NCLB also required assessments that are more frequent, and corrective action for schools not

meeting the standards for the various subgroups. Furthermore, NCLB required the implementation of a limited number of approved reading programs to be put into practice in Title I schools (Allington, 2006).

Early reading instruction also was aligned with the current scientifically based research to include "attention to early, systematic, explicit phonics instruction" (Reutzel & Mitchell, 2005, p. 608) as a part of educational law. Conley and Hinchman (2004) stated that NCLB authorized $900 million to be spent on scientifically based early literacy instruction. NCLB also provided funds for limited English proficient students and others who need help learning to read.

At the time NCLB was implemented as law, Yell and Drasgow (2005) reported that the National Assessment of Educational Progress Report for 2002 showed that America's students did not perform well in reading. This report noted that of the fourth grade students in the United States in 2002, about 68% performed at the below basic or at a basic level. Only about 30% performed at a proficient level or above. Of these fourth grade students, about 50% of urban students and 70% of the economically disadvantaged students performed below basic level. The National Institute of Health's longitudinal studies showed that if effective instructional procedures were used to teach young at-risk children, then the failure rate could be reduced to 5-6% (Lyons, 2003).

Yell and Drasgow (2005) explained that below average reading achievement was a critical problem since reading was a fundamental skill for all educational endeavors, and a student who does not read well has a greater chance of failing in school. Accordingly, if a student does not learn to read in the early elementary grades, then he/she will continue to be a poor reader for the rest of his/her school career. Furthermore,

as they grow older, poor readers also become less responsive to remedial measures.

In order to ascertain effective beginning reading instruction, Congress formed the National Reading Panel to review research and to report their findings to back to Congress. The National Reading Panel, focused on only experimental or quasi-experimental research studies. After two years, they were able to find enough research to support that beginning reading practices were evidence based, including the practices of phonemic awareness, phonics, comprehension, vocabulary, and fluency. Congress used these findings when writing NCLB, especially the Reading First initiative (Allington, 2006).

Empirical Research

The National Reading Panel (2002) identified the necessary critical reading skills that good readers need, and this organization has shown that scientifically based reading instruction does work in developing these skills. Thus, Yell and Drasgow (2005) stated that teachers should know these skills and have intensive training in the best reading practices. The necessary skills included "phonemic awareness, phonics, vocabulary development, reading fluency, and reading comprehension" (Yell & Drasgow, 2005, p. 70). An example of a scientifically based reading program for young children is the federally funded Reading First program.

Fletcher and Lyons (1998) reviewed thirty years of research sponsored by the National Institute of Child Health and Human Development (NICHD) that focused on how children learn to read and why they fail. They found that children need "explicit, systematic instruction in decoding and word recognition skills … as a part of a complete program that includes emphasis on comprehension, literature, and writing" (p. xiv). They

suggested that since learning to read can be a difficult and lengthy process, that interventions should be continuously provided and adjusted when necessary to meet student needs. They also promoted informing parents to involve their children in reading from the earliest stages of life, including reading aloud. The NICHD studies also showed the importance of reading instruction starting early in development with early intervention measures in place. Furthermore, this study also showed that effective teacher preparation was essential.

According to Gunning (2006), a literacy gap is "a persistent, pervasive, and significant disparity in educational achievement and attainment among groups of students" (p, 1). He stated that a gap exists between economic classes, races, gender, and mental abilities. Gunning explained that the literacy gap starts early. All students are equal in language ability at eighteen months of age, but by age three, the gap is noticeable. By kindergarten, those children with one or more risk factors start school behind other students and make fewer gains than those with no risk factors.

Gunning (2006) explained that the literacy gap is caused by society-related and school-related problems. Society-related problems are caused by poverty. Thus, the achievement gap is caused by such factors as poor health care, limited resources, limited background experiences, and high mobility. Parents in poverty are less likely to participate in school activities and have lower academic achievements. Schools with a high number of students in poverty tend to have limited resources, less qualified teachers, lower funding, and lower education expectations. School-related achievement gap problems include teacher attitudes and limited expectations for the students.

Gunning (2006) stated that the purpose of NCLB is to close the achievement gap

in America. Thus, states now have standards and accountability systems in place to meet the goal of 100% proficiency by the year 2014. Gunning reports that NCLB is having a positive effect on closing the literacy achievement gap. Currently, schools in improvement are focusing on helping those students in need, aligning their curriculum with standards, using assessments for curriculum and instruction planning, and increasing after-school programs and other opportunities for learning. Furthermore, educational research is being used to drive reading improvement strategies.

Other factors that help to close the literacy gap are to provide effective tutoring with knowledgeable professional and volunteer tutors, peer tutoring, summer school, working to lower retention rates, and giving preschool opportunities. Furthermore, all of these extra programs should be monitored and assessed for effectiveness (Gunning, 2006).

The 2003 NAEP showed that minority and low-income students were two years behind in reading by the end of fourth grade. Students with mental or physical disabilities and/or limited English proficiency were even further behind. By fourth grade, the NAEP scores also showed almost a year's difference in girls and boys with boys having a more negative attitude toward both academic and recreational reading. A greater number of girls graduate high school and attend college.

However, many schools in America beat the odds produced by low-income and high minority students. Gunning (2006) reported that over 4,500 schools in the U.S. have a high percentage of low-income and/or minority students but still have a high performance rate. These schools have a strong focus on academic achievement and a clear curriculum, frequent assessments, teachers working together to score student work,

students given many opportunities for help to improve, and a strong focus on nonfiction writing. Most importantly, the schools have a positive attitude toward student achievement and link assessment to instruction.

Successful schools use a balanced approach and all areas of literacy receive much attention. These schools have effective teachers who demonstrate classroom management and use a wide-variety of instructional techniques. These teachers work together toward shared vision and goals. They spend more time on task and integrate reading and writing into all content areas. They also encourage extensive reading and build student independence (Gunning, 2006).

Successful schools in the area of literacy also have effective administrators and the school places an emphasis on meeting the needs of all children. Other characteristics of successful schools include teachers having a sense of common purpose, collaborating with other teachers, being flexible, being determined, and using coaching techniques instead of lecturing the students. In addition, students in successful schools are involved in small group learning and use higher-level thinking skills (Gunning, 2006).

To create the optimal literacy program, Gunning (2006) found the main ingredient was to continue to strive for improvement. He also noted that the literacy program must also create a shared vision, with measurable goals and objectives. Students should be involved with setting goals for their education. Needs assessments should be performed and instruction based on the results, with teachers continuously monitoring progress. Furthermore, in order to close the gap in literacy, schools must close the gap in language by vocabulary development, emphasizing higher-level thinking skills with comprehension, by including informational reading and writing with extensive reading

practice, and by including phonological awareness and word analysis. In addition to teaching the necessary skills, successful schools must hold high expectations, which are based on progress. Accordingly, teachers must genuinely care for the students and include motivational factors with their instruction. Teachers also must assign tasks that can be performed by the students and engage all students is the reading process (Gunning, 2006).

Lipson, Mosenthal, Mekkelsen, and Russ (2004), during a three-year period, studied successful and unsuccessful schools in one state. The schools chosen for their study were from different settings and had met the same success standards according to a challenging literacy standards-based assessment. Their study revealed three types of schools: affluent urban or suburban area schools; high-poverty, small, rural schools; and middle-income schools located in small to medium-sized towns and villages. Of all of the schools in the state, only 16 met their criteria for success and these schools were located in each of the three types. For the study, two successful schools were chosen from each type. The next year, one unsuccessful school from each school type was chosen to study. Two years later, they studied the successful schools again.

As the result of their longitudinal study, Lipson, Mosenthal, Mekkelsen, and Russ (2004) found that success was not based on socioeconomic level or to a specific reading program. These researchers did find that success was linked to the "fidelity and rigor with which a specific strategy was implemented" (p. 537). They found success in reading to be linked to expertise, opportunity, and commitment. First, expertise was a result of the teachers' knowledge, commitment, and skill with balanced literacy instruction at all grade levels in a school. The teachers in the successful schools had effective classroom

management, time-on-task, and students were taught at an appropriate pace. Furthermore, these teachers were a part of extensive professional development. Next, reading success in the area of opportunity included the presence of successful literacy programs, with students having numerous opportunities to read and write. A large selection of books was found in each classroom and block scheduling gave the students and teachers ample time to spend on a variety of literacy activities.

Finally, in the area of commitment, Lipson, Mosenthal, Mekkelsen, and Russ (2004) found that all successful schools in their study were dedicated to literacy improvement. They found that stable administration provided direction and greatly helped teachers stay focused to the common literacy goals of the school. Strong outside influences were also found as a part of a successful literacy program. Other important characteristics of successful schools included a sense of professional community with teachers being able to make professional decisions, and teachers and the school community involved with creative thinking and problem solving. These authors gave a list of items that a school must do or implement to be successful. These included the teachers building expertise, providing a wide variety of literacy experiences for the students, committing to the process for many years, and immediately starting to build success.

In an International Reading Association (IRA) survey of their members, there was strong agreement that NCLB helped reading achievement through research-based instruction and curriculum and by providing schools the necessary technical assistance to implement these programs. The members strongly believed that NCLB was under funded. In changes made because of NCLB, the survey found that funds were

reallocated, staff members reassigned, and reading curricula was revised. The survey showed that the IRA members believed that NCLB positively helped to identify students needing reading remediation while NCLB does not give a good basis for evaluating teachers. When asked about NCLB sanctions, IRA members were positive about the gains made through SES and the extension of the school day or year. They responded negatively to the other sanctions. They also did not think that the highly qualified teacher mandate helped to provide quality instruction (International Reading Association, 2007).

No Child Left Behind and Rural Education

Rural schools educate about 30% of America's children and employ 21% of all public school teachers. However, many of these schools have a more difficult time meeting the NCLB requirements, as the implementation of the NCLB mandates is more successful in areas that contain a high concentration of people. As told by Jimerson (2005), the main provisions of NCLB are biased against small and rural schools and she termed this bias, *placism*. The provisions that especially hurt the rural schools are AYP, sanctions, and the providing of highly qualified teachers.

One problem of implementing NCLB in a rural school system is the difficulty of meeting AYP. In many rural schools, the student body population contains a large number of low-income students and many of those students are African American. About 35% of rural children are low-income, 58% of the rural schools qualify for Title I funds, and 22% are African American. As Jimerson (2005) explained, these two subgroups traditionally do not do as well academically. Thus, a disproportional number of rural schools have difficulty meeting AYP and are in improvement. The small size of a rural school makes the test pool small and the subgroups even smaller. Therefore, just a

few students who fail a test make a greater impact on scores. As Jimerson notes, "In general, the smaller the sample size, the more volatility in the results, thus rendering judgments based on these data unreliable and inappropriate" (p. 214).

Another problem of implementing NCLB in rural schools is the fact that schools in rural areas do not receive the amount of funding from the state, as do the larger districts. In addition, rural schools as compared to larger districts do not receive the amount of property taxes and local taxes. Thus, it is very difficult for the rural areas to meet the highly qualified teacher mandate since rural salaries are lower, the facilities are in poorer condition, and the locations are in remote areas. In smaller schools, many teachers have to teach multiple subjects and obtaining the necessary professional development can be expensive. The rural areas can also have difficulties financing transportation to comply with school choice and with obtaining quality SES services for rural children. Furthermore, up to 20% of the Title I funding has to be set aside for the SES providers, taking other valuable resources from a small school with limited funds (Jimerson, 2005).

Jimerson (2005) also noted that the younger and more educated rural population is moving to areas that can afford better opportunities. This leaves the older, less educated, lower income people living in the rural areas. However, all schools, including those in rural area schools, must show continuous improvement according to NCLB.

No Child Left Behind Implemented in Virginia

Virginia's Standards of Learning

In Virginia, accountability started in 1994 when the Virginia Board of Education made major changes in educational policies and practices. The goals of the changes were

to improve the education of all Virginia students and to make sure that they could compete in the 21st century global economy. In order to do so, the Board adopted new kindergarten through twelfth grade standards for minimum academic achievement in all academic areas. These standards were called the Standards of Learning (SOL) and were adopted in June 1995 (Thayer, 2000).

Tests were then developed to measure the progress of the students. The first SOL tests were given in the spring of 1998. Students in grades three, five, and eight took tests in English, mathematics, history, social science, and science. Third and fifth grade students also took computer technology tests. Reading and math tests were also given in grades four, six, and seven, with science tests being added for the 2007-2008 school year. Additionally, 11 tests were administered at the end of certain core high school courses with high school graduation pending on the successful passing of specific tests (Thayer, 2000). In 2004, the test results could be considered for promotional purposes in grades three, five, and eight, and for graduation requirements in high school. In order to communicate school performance to parents and the community, Virginia publishes the yearly *School Performance Report Card* detailing the scores for every school and district (VDOE, 2006).

In addition to the Standards of Learning testing requirements, Virginia also mandated that a school or school division meet or exceed a total of 29 benchmarks in order to comply with NCLB's Adequate Yearly Progress requirement. A school or school division had to meet all of the 29 benchmarks or it would not meet AYP for the year. These benchmarks included reading and mathematics scores and attendance or science scores at the elementary and middle school levels, and graduation at the high

school level. AYP also included a special focus on student subgroups in reading and in math. These benchmarks increase each year until the year 2014 in which 100% proficiency is expected (VDOE, 2005). Irons and Harris (2007) reported that in 2005, 81% of Virginia's schools met AYP and 6% were identified as in need of improvement.

The Virginia Board of Education reported in January of 2005 that on its ten-year anniversary to raise academic standards and to hold schools accountable by implementing the Standards of Learning program, the Commonwealth has seen much success. The school year of 2003-2004 was the first school year in which students were required to pass SOL tests in order to graduate. Of these seniors, 94.3% graduated and more students earned the Advanced Studies diploma (44.8%) than the Standard diploma (44.2%). They also noted that 1,500 more disabled students completed high school than the previous school year. They attribute this to the Modified Standard diploma that helped these students to stay in school.

In 2004, high school English/reading saw an increase of 17 points over 1998 to an 89% passing rate. During this same year, the English/writing test scores showed a 16-point gain to 87%. In math for the same school year, Algebra I rose 40 points to 80% passing rate, Algebra II a 55 point increase to 86% passing rate, and geometry gained 30 points to an 82% passing rate. The Virginia Board of Education also reported 85.5% of its schools are Fully Accredited and 74% met the AYP (Virginia Board of Education, 2005).

The National Assessment of Educational Progress in Virginia

In addition to the state tests, all of the states are required to participate in the National Assessment of Educational Progress (NAEP) assessments. Sloan (2007) and

Welner (2005) reported that the federal government has used the National Assessment of Educational Progress to assess the nation's children since 1969. These tests are given every other year in reading and mathematics to selected fourth and eighth grade students. The data gathered from these assessments helps the United States Department of Education to compare and assess the rigor of the assessments given by all of the states. These assessments were given since 1990 to a representative number of students within the state and scores reported. Presently, a combined sample of public school scores is used to represent both state and national achievement.

The National Assessment of Educational Progress test scores during the years 1994, 1998, and 2002 showed that Virginia's fourth grade students increased the reading scores by ten points while the national average decreased by one point. The 2003 reading scores showed a nine-point gain in Virginia's scores over all (Irons & Harris, 2007). The Virginia Board of Education (2005) reported that according to the NAEP, since 1995, the fourth grade students' reading test achievement has risen 10 points and was higher than national average. Furthermore, fourth and eighth grade students achieved higher that national average on the 2002 writing tests, and the 2003 mathematics test showed a rise of nine points by fourth grade students and seven points by eighth grade students. When noting scores of African-American students, the 2003 NAEP revealed the fourth grade students increasing in math by 12 points and eighth grade students increasing by nine points. A reported increase in SAT and ACT scores was also noted with an increase of students taking Advanced Placement courses.

Christie (2004) reported that Virginia acknowledged that a gap existed between the high and low performing schools in the Commonwealth. The General Assembly

requested that a study be performed to document the best practices used in the higher performing schools in Virginia. The Joint Legislative Audit and Review Commission conducted the study and performed a quantitative analysis of SOL test results and a qualitative review of divisions and schools in the state. The resulting report was entitled, *Review of Factors and Practices Associated with School Performance in Virginia.*

The *Review of Factors and Practices Associated with School Performance in Virginia* reported six major findings (Christie, 2004, April). First, SOL scores and pass rates were substantially increasing since the first implementation of the tests. Next, differences in test scores between school divisions could be attributed to the demographic nature of students and the community. These factors included the qualifications of teachers, family support, fiscal conditions of the district, and varying characteristics of the schools and school divisions. Third, those schools with challenging demographic factors that have incorporated best practices have become successful. Fourth, successful schools have the direct support of their district offices. Fifth, of the schools studied, administrators along with teachers in successful schools believe that the implementation of the SOLs have helped improve performance. A final finding showed that the Commonwealth of Virginia still has future challenges in providing the best education possible to all of its children including improving low performing schools, lowering the dropout rate, decreasing retention rates, and meeting other NCLB requirements.

The U.S. Commission on Civil Rights (2004) reported that since the implementation of the Standards of Learning, Virginia has had an overall increase in student achievement and in most of the subgroups. Even though the achievement gap had not been closed, this commission states that Virginia has implemented the necessary

components that will help the Commonwealth achieve its goals. These components include clear standards, aligned assessments, student remediation programs, monitoring of teacher quality and accreditation, school accountability, and accreditation based on student performance. Furthermore, student graduation requirements are based on Virginia's standards.

Virginia School Accreditation

In 1997, Virginia Board of Education adopted Standards of Accreditation. Full accreditation was based on a passing rate of 70% for the school. The third grade rate was 50% on science, history, and social science. No school would loose accreditation until the 2006-2007 school year (Thayer, 2000).

In Virginia, school accreditation ratings are based on SOL achievement. Adjustments to the SOL scores for the school may be made for students with limited English proficiency and for students who have transferred into the school. A school may receive one of five accreditation ratings: Fully Accredited, Accredited with Warning, Accreditation Denied, Accreditation Withheld/Improving School Near Accreditation, or Conditionally Accredited. For a Fully Accredited rating, high school or middle school students have to achieve an adjusted pass rate of 70% or better in all four content areas. Elementary schools must have a combined pass rate of 75% or better on the English SOL tests and an adjusted pass rate of 70% or more on the math, grade five science and grade five history SOL tests. Furthermore, an elementary school must have a pass rate of 50% or better on the third grade science and history tests (VDOE, 2006).

A school is Accredited with Warning if the students score below the required levels of a fully accredited school. A school can only be at this accreditation level for

three years. A school at this level of accreditation must adopt and implement a school improvement plan and is subject to academic reviews by the Board of Education. If a school is warned in either English or mathematics, then it is required to adopt instructional programs that are proven, based on scientific research, to improve student achievement (VDOE, 2006).

Once a school fails to meet accreditation requirements for three consecutive years, then the school receives a Denied Accreditation rating. Schools that are denied accreditation are subject to corrective action by the Virginia Board of Education in cooperation with the local school board through a signed memorandum of understanding. If one-third or more of the schools in the district receive this rating, then the local school board evaluates the superintendent. Action may be taken against the local school board by the Board of Education as well. Accordingly, within 30 days of receiving a denial of accreditation, the parents must be notified in writing, given a copy of the proposed corrective action plan, and given the opportunity to comment on the plan (VDOE, 2006).

A school in danger of being denied accreditation may apply to the Board of Education only during the 2006-2007 school year for an Accreditation Withheld/Improving School Near Accreditation rating. In order to receive this type of accreditation, the school must have a 70% pass rate in English or 75% in the elementary school. Furthermore, the school must have a 60% passage rate in the other three academic core areas. In the areas that are below the rate for full accreditation, the school must have increased its passing rate by 25 percentage points since 1999 (VDOE, 2006).

Finally, a school being denied accreditation may reconstitute and be given the Conditionally Accredited status. This conditional accreditation rating can only be given

this status one year at a time for up to three consecutive years. Furthermore, a reconstituted school will be denied accreditation if it fails to meet the requirements for full accreditation by the end of the agreed term (VDOE, 2006).

School Improvement in Virginia

The *Review of Factors and Practices Associated with School Performance in Virginia* (Governor's Best Practice Center Division of Accountability, 2000) found nine practices of successful schools in Virginia. These practices included effective teaching and strong leadership, positive learning environment, instruction based on data-driven assessments, alignment of the curriculum to state standards, remediation, differentiation, teamwork, collaboration, intensity and structure of the educational programs, and vertical integration. The study found these practices were needed in greater measures in the schools that required the most improvement.

In 2001, Virginia implemented the *Partnership for Achieving Successful Schools* or PASS initiative. This program was designed to help Accredited with Warning schools by providing intervention and assistance. By July 2002, 117 schools in Virginia participated in this program. A PASS Priority School included Title I schools that failed to meet reading and math standards according to NCLB. This PASS initiative addressed only low performance by schools due to a lake of alignment with the Standards of Learning (U.S. Commission on Civil Rights, 2004). Within this program, the at-risk school collaborates with businesses and community organizations to supply additional support and resources. The three components of this program are commitment, consistence, and coordination (VDOE, 2007).

Within the PASS program, Virginia developed four intervention models. Model I

implements staff development to target the school's specific academic weakness. This model also helps with the implementation of the school's improvement plan by the aid of an academic review team. Model II incorporates instructional assistance teams to provide an immediate increase in student performance in PASS Priority schools. This is achieved by soliciting technical assistance with the business and community and by ensuring that the curriculum is aligned with Virginia's Curriculum Framework, pacing guides, and assessments. Model III assists schools with full time support teams with an academic review process. Model IV provides division wide assistance by the Virginia Department of Education (U.S. Commission on Civil Rights, 2004).

No Child Left Behind and a Local School in Virginia

A small, rural, intermediate school located in Virginia is the primary focus of this study. This school is struggling to meet both the NCLB Adequate Yearly Progress requirements and Virginia's accreditation standards. While the community pressured the county to improve the physical appearance and structure of the school, NCLB and the Commonwealth of Virginia mandated improvements in academics. Consequently, the school in this research experienced many physical as well as physical changes.

During the 2006-2007 school year, this school consisted of grades five through eight with 485 students. About 50% of the school's students receive free or reduced lunch and thus, this school receives Title I targeted assistance from the federal government (VDOE, 2006).

This intermediate school was placed in school improvement during the fall of 2004 and received the accompanying Accredited with Warning status, as the school did not meet the required state and federal benchmarks. Three years later, this intermediate

school is still in school improvement since it has not met all of the appropriate state and federal benchmarks and requirements. Because this school is a Title I school, it went into Year One of school improvement in English for the 2004-2005 school year. For the 2006-2007 school year, this intermediate school was in Year Two for English improvement and in Year One for mathematics improvement. It was also designated as a Model III PASS school (VDOE, 2006).

Thus, because it is a Title I school, the intermediate school in this study has had to comply with many federal and state mandates. In order to meet the No Child Left Behind AYP requirements for a Title I school in improvement, the school has had to write an implement school improvement plans for the areas of English, mathematics, and attendance. Since English was the first subject area that did not meet required benchmarks, the school's primary focus for the past three years concentrated on raising its reading achievement for all students with a special focus on subgroups. The students in the subgroups who did not meet the benchmarks were identified, and specific goals were implemented for these students. Furthermore, the teachers were required to participate in scientifically based teaching strategies trainings that focus on raising student achievement. As suggested by the state, school wide parent meetings were planned and implemented. Supplemental educational services, or SES, provided extra help for students. After school enrichment programs and summer programs were made available. Other changes included adopting new reading textbooks, increasing testing, and changing teaching schedules. These improvements are documented in chapter 4 of this research.

Summary

This chapter covered the historical, theoretical, and empirical research dealing with the No Child Left Behind Act of 2001 and its major provisions of accountability, scientifically based research, increased flexibility and local control, increased options for parents, and the hiring highly qualified teachers. It also documented the positive and negative aspects of NCLB. Another focus of this chapter was the implementation of school improvement and reading improvement since the enactment of NCLB. Furthermore, chapter 2 included how NCLB affects rural education and how this law is implemented in Virginia. Finally, this chapter explained the impact of NCLB in a local intermediate school in Virginia. Chapter 3 will focus on the methodology of this study.

Chapter 3

Methodology

The methodology used in conducting this research is presented in chapter 3. The focus of this mixed-methodology study was on school improvement, particularly in the area of reading, as documented in an intermediate school in Virginia having difficulty meeting both No Child Left Behind mandates and Virginia's accreditation standards. The general research perspective, context, participants, instruments, and procedures, and a data analysis are specified in detail in this chapter.

The General Perspective

The research was based on a mixed-methodology design approach in order to answer the two research questions. Within the mixed-method design, components of case study, historical, and education evaluation research can be found along with the use of test data to support the findings. The research contained aspects of a case study in that it featured one group of students at a small, rural, intermediate school and the reading improvement measures that were implemented during a three-year period at this school. Aspects of historical research were utilized in that reading and school improvement historical documentation were collected from various sources located at the school in order to answer the first research question. These historical documents were used to determine the improvement practices that were implemented as mandated by federal and state law during the three-year focus of this study. This study also contained aspects of educational evaluation research in that the merit of the reading improvement process was presented. Finally, reading test data was used to answer the second research question and

to support the results of the reading improvement practices at the school.

Research Context

The focus of this research was a small, rural, intermediate school in Virginia. This school is one of three schools in the county. In 2006, the focal school of this research, the intermediate school, consisted of grades five through eight with approximately 485 students. The elementary school educates children in pre-school programs to the fourth grade. The high school contains grades nine through twelve. In 2006, the total student population for this county was 1,690.

The 2006 population of this intermediate school consisted of 41.9% Caucasian, 55.3% African-American, and 1.8% Hispanic. In this school, 48.3% of this school's students qualified for free or reduced lunch which qualified this school for Title I assistance. Furthermore, the student population of this school consisted of 1.1% limited English proficient students and 15.8% disabled students (ED, 2006).

In Virginia, 138 schools of 1,839 were Accredited with Warning during the 2006-2007 school year. Of these schools, 92 or 59% were middle/intermediate schools (VDOE, 2006). Because the middle/intermediate schools represented a higher proportion of school in the Accreditation with Warning category, this intermediate school in Virginia with a rural location and small student population was chosen. This school had trouble with meeting both the No Child Left Behind AYP mandates and Virginia accreditation requirements since the release of the Reading Standards of Learning test scores in 2004. Thus, this mixed-methodology research encompassed the period of May 2004 to June 2007 and including the school years of 2004-2005 to 2006-2007. The purpose of initiating this study in May 2004 was that the Reading Standards of Learning

Tests given at that time initially placed this school into improvement. The focus of this research was the school improvement process at this intermediate school, especially the reading improvement measures implemented during this time.

Research Participants

The participants of this research were students who were fifth graders at the intermediate school in this study during the 2003-2004 school year. This group of students first experienced Virginia's Standards of Learning test in third grade, as they were required to take tests in the core areas of reading, mathematics, science, and social studies. In the fifth grade, these students took reading, writing, mathematics, science, and social studies tests. The year 2004 was the seventh year that Virginia had given these tests. At this time, the spring 2004 reading Standards of Learning scores placed this school into school improvement, as it did not meet federal or state standards. This study followed the reading progress of the 2003-2004 fifth grade class to their eighth grade year in 2006-2007. Accordingly, this research documented the reading improvement process of this school during this period.

Instruments Used in Data Collection

Several recording processes were used in the data collection process to answer the first research question, "What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?" The historical documentation was collected and chosen for the relevance to the reading improvement focus of the school improvement process of the school in this study. The documents had to date between May 2004 and June 2007. The documents were reduced into handwritten notes, placed in a notebook, and divided into

the two categories: school improvement and reading improvement. The historical evidence was then listed and placed into tables and presented in chapter four. A special emphasis was placed on noting the reading improvement strategies that took place during the school years of focus in this research

To answer the second research question, "What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?" scores from various reading tests were located at the school. The test data collected were required to be specifically the reading tests given at this school during the time from May 2004 through June 2007. These tests included the Virginia Reading Standards of Learning Tests, the *Tests for Higher Standards*, the *Gates-MacGinitie Reading Tests*, and *STAR Reading* scores. The testing data were collected and placed into tables created by the researcher. Separate tables were made for each of the reading tests. The tables reflected the reading test score data during the designated time of this study. A special emphasis was placed on the scores of the focal group of students in this study. The school and reading improvement documentation, reading test scores, and a chronological narrative of the improvement strategies are presented in chapter four.

Virginia's Standards of Learning Tests

In conjunction with the national movement to create and implement statewide learning standards, Virginia initiated its Standards of Learning tests in 1998. The results from the SOL tests are used to determine No Child Left Behind's Adequate Yearly Progress mandates as well as to determine state accreditation for each school in Virginia. The Standards of Learning testing begins in third grade with the administration of

reading, mathematics, science, and social science tests. Writing, reading, mathematics, science, and social science tests are given in the fifth and eighth grades. Reading mathematics, science, and certain social studies tests are given in grades four, six, and seven. At the high school level, certain end-of-course tests are administered towards the fulfillment of graduation requirements with English and writing tests being required for eleventh grade students (VDOE, 2005).

The SOL tests proved reliable measures as the KR-20 reliability coefficients ranged from .85 to .89 in all subject area at the third grade level. The KR-20 ranged from .85 to .90 with the fifth grade tests and .89 to .94 on the eighth grade tests. After reviewing the Technical Report for the SOL tests, the Technical Advisory Committee (TAC) found ample evidence of content validity. The TAC noted that teachers in Virginia and measurement specialists were consulted in the construction of the tests and the TAC determined that the content validity of the SOL tests to be sufficient. Evidence was also found to show that methods to identify bias in the test questions were in place. Construct validity of the SOL tests was based on correlations between the SOL scores and the Stanford 9 Achievement Test for grades four, six, and eight. The correlations confirmed the validity of the SOL tests (Hambleton et al., 2000).

The Tests for Higher Standards

The Tests for Higher Standards (*TfHS*) were used as the benchmark tests for the intermediate school in this study. These tests were given during both the 2005-2006 and 2006-2007 school years. The goal of the *TfHS* is to measure student proficiency by using the same competencies that are stated in Virginia's Standards of Learning. Tests are available to evaluate students at various grade levels in the content areas of reading,

writing, science, social studies, and mathematics. The primary purpose of this test is to be a predictor for SOL achievement and to provide diagnostic feedback to administrators, teachers, and students (Flanagan & Mott, 1997-2006).

The reliability evidence for the *TfHS* was based on the KR-20 internal consistency reliability estimates. Data were gathered in the spring of 2000 from 55 schools in several school divisions in Virginia. The fifth grade reading test has a KR-20 estimate was .87 with the equivalent reliability estimate for the SOL test as .89. Thus, since the other tests have shown similar results, the authors state that the reliability statistics for the *TfHS* are appropriate for a diagnostic test (Flanagan & Mott, 1997-2006).

The *TfHS* used content validity as the primary validity evidence since this test was based on assessing students for the acquisition of content as based on Virginia's SOL tests. Thus, each test item on the *TfHS* was based on measuring a specific SOL standard. The authors closely followed the development procedures of the SOL tests when developing the *TfHS*. Furthermore, many Virginia school systems, consultants, and specialists were utilized in creating and revising the *TfHS* (Flanagan & Mott, 1997-2006).

While a diagnostic test, the predictive score validity results for the *TfHS* do show a correlation with predicting how well students will score on the SOL tests. A high correlation between the *TfHS* and the Virginia SOL tests was noted when testing small as well as large school systems including schools that exhibit a very wide range of performance. At all schools tested, the test scores fell within the range of valid measurement (Flanagan & Mott, 1997-2006).

The Gates-MacGinitie Reading Tests

The *Gates-MacGinitie Reading Tests Fourth Edition* (*GMRT*) assesses the

reading achievement of students from kindergarten through twelfth grades. This test measures both reading vocabulary and comprehension. A total score is also calculated.

The reliability for the *GMRT* is based on computing the K-R 20 reliability coefficients from the data of the item analyses. The K-R 20 reliability coefficients range from .91 to .96 on both fall and spring testing for both Form S and Form T on vocabulary, comprehension, and total scores and for all grade levels. Thus, the *GMRT* is a reliable test (MacGinitie, W. H., MacGinitie, R. K., Maria, & Dreyer, 2002).

The validity results for the *GMRT* include the completion rates, ceiling and floor data, contributions of test design and development, correlations with other reading tests, and correlations with course grades. The authors of this test explain that the *GMRT* is a power test. It measures the student's knowledge of reading and the related concepts, not how quickly they can complete the tests. Thus, this test measures the student's true ability to apply their knowledge and skills of word decoding, word knowledge, and reading comprehension to the test questions (MacGinitie et al., 2002).

When determining the ceiling and floor levels of a test, the *GMRT* authors explain that an achievement test that measures the highest levels possible in any given classroom can be overwhelmingly difficult for the lower achieving students. Thus, the questions on the *GMRT* were constructed with appropriate difficulty for the range of reading achievement in an average classroom. For higher achieving students, the *GMRT* provides out-of-level forms for students who need easier or more difficult tests (MacGinitie et al., 2002).

Another important contribution to validity is the test design of the *GMRT*. The *GMRT* was constructed to measure the progression of the students' reading development,

comprehension, and vocabulary from kindergarten to high school. The tests are based on research findings and rely on pilot studies to ensure that the tasks and administration directions were clear. The tests were constructed with care to make them free of unintended influences. An analysis was completed to ensure that the time allotment for the tests would give the students sufficient time to complete the tests in order to show how well they can read. The words, stories, and answer choices for these tests were carefully considered and selected. The authors made a special effort to alleviate any bias in the tests. Extensive field-testing was completed with data collection and analysis to provide the necessary data to ensure high reliability and validity (MacGinitie et al., 2002).

Other evidences of this reading test's validity include the result of the high correlations between the *GMRT Third Edition* and the *GMRT Fourth Edition*. The designs and development of these two editions were similar. Thus, the findings of the correlations between the *GMRT Third Edition* and other reading tests were essentially the same for the *GMRT Fourth Edition.* The findings showed that the correlations between the *GMRT Third Edition* and other reading tests to be high (MacGinitie et al., 2002).

STAR Reading

The *STAR Reading* test is a part of the Renaissance Learning program. *STAR Reading* is a computer-adaptive reading test for students in grades 1-12 and can be given in 10 minutes. The total number of questions asked on this test is 25.

Since *STAR Reading* is a computer-adaptive test, internal consistency methods to assess reliability were not appropriate. Thus, four direct methods were used to estimate the reliability of the *STAR Reading* tests. These include the split-half method, the test-

retest method, the alternate forms method, and the estimation of generic reliability. The split-half method showed a reliability range of .89 to .93 across the grade levels. The test-retest coefficients given were corrected correlation coefficients. The estimated test-retest reliability for all grade levels was .94. The authors explain that this estimate compares favorably with other reading tests that contain more test items and require more time. The alternate forms reliability averaged .85. The generic reliability estimates range from .89 to .92 consistently across all grade levels. Thus, this reading test proved to be reliable (Renaissance Learning, Inc., 2006).

To show the external validity of the *STAR Reading* tests, the authors obtained over 12,000 student test results on popular standardized reading test instruments including the *Comprehensive Test of Basic Skills, the Iowa Test of Basic Skills*, the *California Achievement Test*, the *Stanford Achievement Test*, the *Metropolitan Achievement* test, and other state tests. The correlation coefficients between the various tests and *STAR Reading* proved the validity of the *STAR Reading* test as a valid test of reading performance. The results of the meta-analysis of *STAR Reading* correlations with other tests showed an overall estimate of validity to be .72. The standard error was .005. The true validity was within the range of .71 to .73 with a 95% confidence level. With 233 correlations from a wide variety of tests and from students in grades one through twelve, the results supported the validity of the *STAR Reading* test. Furthermore, other predictive, longitudinal, and construct studies supported the validity of this test (Renaissance Learning, Inc., 2006).

Procedures Used

In this mixed-methodology research, historical data and test documentation were

gathered in order obtain the various test scores for this research. In carrying out the research design, a conference was held with the school's principal in order to inform her of the intent of the study. Next, permission was requested by the researcher and granted by the county's superintendent for the use of reading test scores in this study. A copy of this document is evidenced as Appendix A. Only the group scores of the specified reading tests would be used in the study. Especially important to this study was the documentation of the local, district, state, and federal mandated changes that were implemented because of the school improvement designation. The documents were chosen for their relevance to the reading improvement of the focal school in this research. The documents had to date between May 2004 and June 2007. The documents were coded according to three main categories. These categories included school improvement, reading improvement, and reading tests.

For the collection of data to answer the first research question, "What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?" the appropriate school improvement and reading documents were located. These documents were located in the principal's office, in the library, in the file cabinet containing the school improvement data, and in the English teachers' and the reading specialist's personal files. This information was in both hard copy and electronic forms. The documents obtained included school improvement documents, the principal's memos, the English Core meeting notes, in-service documentation, staff meeting notes, scheduling documents, teaching resources, adopted textbooks, parent involvement, curriculum maps and other related materials. The numerous local, district, and state mandated changes in the reading

program at the school during the designated time were reviewed and included.

For the collection of test data in order to answer the second research question, "What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?" the appropriate reading test scores were located. These scores were located on the Virginia Department of Education's Website and in the principal's and guidance counselor's files. Reading test scores were also obtained from the Instructional Coordinator for Gifted Education and Literacy Education as well as from hard copy and electronic files located at the school. The reading tests selected were given during May 2004 to June 2007. These tests consisted of the reading Standards of Learning scores, the *Gates-MacGinitie Reading Test* scores, the *Tests for Higher Standards*, and *STAR Reading* scores. The test scores were placed in tables created by the researcher. The scores were categorized according to the test, date taken, and grade level. A special emphasis was placed on the scores of those students who were fifth graders during the 2003-2004 school year whose scores could be traced until their eighth grade year of 2006-2007.

Data Analysis

The data for this research were collected, placed into a file, and analyzed. The raw data were coded and reduced into three main categories. The categories that emerged and were used in the research were school improvement, reading improvement, and reading tests. The information was read, reduced, and placed into a notebook. Documents found at the school that related to school improvement, reading improvement, or to the reading tests that were given were listed in a table. A table was also created to

denote the school improvement strategies, reading improvement strategies, and the tests given for each of the school years in the study. A special emphasis was placed on the focal group of students.

The test data were categorized into the various reading tests given and placed into tables for the school years that encompassed the May 2004 to June 2007 timetable. The reading scores were emphasized of the students who were fifth graders during the 2003-2004 school year and were traced until their eighth grade year of 2006-2007 since this group was the focal group of this study.

Additionally, a chronological narrative was written. Using documents located in this research, the chronological narrative explained the reading improvement strategies with other related school improvement strategies implemented at this school from May 2004 to June 2007.

After all the school improvement and test data were put into categories and refined, relationships and patterns across the categories were considered and major categories of school improvement, reading improvement, and reading testing were identified. The data were confirmed through triangulation. The data were summarized and presented in both table and narrative forms. Interpretations of the data were made to report the major findings of the study. Generalizations were made based on the common findings and connections among the categories (Ary, Jacobs, Razavieh, & Sorensen, 2006). Relationships between school improvement, reading improvement, and the reading test scores were reported.

After the data were analyzed, the answers to the following research questions were determined:

1. What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?
2. What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?

Summary

In summary, this research focused on an intermediate school in Virginia that was chosen for its small size and rural demographics. Furthermore, this school was studied because of the problematic nature of not being able to meet state and federal academic requirements. This study documented school improvement changes implemented, particularly in the area of reading. The focal group of students was the 2003-2004 fifth grade students. Their progress in reading was documented until their eighth grade school year. This group of students was chosen because their fifth grade test scores initially put this school into school improvement. The data were analyzed and conclusions drawn as to the relationships in school improvement procedures and the reading test scores from May 2004 to June 2007. The results of this analysis are discussed in chapter 4.

Chapter 4

Results of the Study

Introduction

As stated in chapter 1, the purpose of this study was to describe the reading curriculum and instructional changes that have occurred in a small, rural, intermediate school in Virginia as a result of the No Child Left Behind legislation and Virginia's Standards of Learning requirements. The research questions explored in this study were:

1. What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?
2. What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?

In order to answer the research questions proposed in this study, this chapter is divided into three sections. The first section focuses on the school improvement and reading improvement measures implemented because of this school not achieving Adequate Yearly Progress or state accreditation during the school years of 2004-2005, 2005-2006, and 2006-2007. The second section reports the statistical data of this study. Included in this section are the Adequate Yearly Progress statistics, the Virginia accreditation ratings, and the reading scores from May 2004 to June 2007 of the intermediate school in this study. The final section is a chronological narrative of the reading improvement process at the school.

School Improvement Data

To answer the research questions, numerous documents related to school improvement, reading improvement, and reading testing were located within the school. The major documents used in this study were the school improvement plans for each of the school years reviewed in this study. Another important piece of information were the reading test scores for the school from May 2004 to June 2007. The test information is listed in the Statistical Data section of this chapter. In answering both research questions, a special focus was placed on the focal group of students in this study.

In order to answer the first research question, many documents were located within the school. This documentation included principal's memos, English Core meeting notes, teachers' letters and notes, in-service documentation, staff meeting notes, scheduling documents, teaching resources, adopted textbook information, parent involvement documentation, curriculum maps, pacing guides, and other related materials. All of the documentation was analyzed in order to ascertain what the impact of No Child Left Behind and Virginia Standards of Learning had on the reading curriculum and instruction at the school in this study. The documentation was sorted into the categories of school improvement, and reading improvement. The table in Appendix A denotes the documents that were located at this school. This evidence was tallied according its placement into the three main categories of school improvement, reading improvement, and reading testing. 103 documents were used in this research.

After the documents were sorted into the three main categories, the predominate strategies used each year to improve reading instruction emerged. These strategies are listed in the tables located in Appendices B and C. The tables are divided into the school

years presented in this research and the strategies implemented in each of those years. Some of the school improvement strategies also applied to reading improvement since reading was the first focus of school improvement at this school. Thus, the school improvement strategies that also effect reading improvement are listed. The Chronological Narrative of Reading Improvement section of this chapter further denotes and explains the reading improvement strategies implemented during the period of this research. The documents used in this study were compared through data triangulation to ensure that the reading improvement evidence was accurate.

Statistical Data

The second research question stated: "What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?" To help answer the second research question, student enrollment figures are given to aid the reader in understanding the size of the student population, namely the focal group of students in this study. Furthermore, reading test scores from the four main reading tests are presented in the form of charts for each test. The scores shown in Appendices E through J include the Virginia Reading Standards of Learning test, the *Tests for Higher Standards*, the *Gates-MacGinitie Reading Test*, and *STAR Reading*. The scores for the focal group of students in this study are highlighted. The test scores were found in many of the documents used in this study. The accuracy of the data were confirmed through data triangulation.

Student Enrollment

The central focus of this study was to follow the progression of a group of

students who were fifth graders during the school year 2003-2004 until their eighth grade school year of 2006-2007. To note the size of the student population and the focal group of students in this study, enrollment facts were compiled in a table found in Appendix D for the school in this research by grade level. While reporting grade level and school enrollment, this table shows the relatively small size of the student population of the intermediate school featured in this study. However, as the total student enrollment decreased over the span of time documented in this study, the enrollment of the focal group of students increased.

Federal and State AMO, AYP, and SOL Data

According to No Child Left Behind, each state is to set Annual Measurable Objectives (AMO) for each of the reporting categories of reading, mathematics, and attendance or science. These annual goals, represented in percentages, increase each year until 100% achievement is met during the 2013-2014 school year. NCLB also mandates that the school meet Adequate Yearly Progress requirements. These requirements include that students in the subgroups also meet the AMO requirements. Virginia has implemented 29 AYP requirements all of which each school must meet or it will fail to meet AYP for the year. To determine if the schools meet these requirements, Virginia implemented its Standards of Learning tests in 1998.

The table in Appendix E shows the AMO, AYP, and accreditation results for the school in this study from May 2004 to June 2007. The table in Appendix F shows the Virginia Reading and Writing Standards of Learning results and the total scores of the state. The scores for the focal group of students in this study are highlighted.

The Tests for Higher Standards

As required by the VDOE, this school implemented benchmark testing starting in the spring of 2006. Flanagan's *Tests for Higher Standards* (*TfHS*) were used for this requirement. In the spring of 2006, the complete simulated test (SIM) was given at all grade levels. During the 2006-2007 school year, benchmark testing was required for each quarter. Simulation tests were given as pre and posttests in September 2006 and March 2007. Portions of the *Tests for Higher Standards* were given in November 2006 and January 2007. These tests were constructed using questions from the *TfHS* and reflected the skills covered in class according to the teachers' pacing guides for these quarters. The table in Appendix G denotes these scores.

Gates-MacGinitie Reading Test

The *Gates-MacGinitie Reading Test* (*GMRT*) is a norm-referenced reading achievement test. This timed test is divided into vocabulary and comprehension. The school chose this test to record student achievement in reading during the school year. The test was also used for diagnostic measures and results were also shared with the content area teachers as needed. The school chose to report the individual students' grade equivalent scores. The grade equivalent scores were then grouped into the percentages of students above, on, and below grade level for each grade level.

The table in Appendix H shows the *GMRT* scores for the intermediate school in this study with the scores of the focal group of students highlighted. The sixth grade scores for the 2005-2006 school year could not be located. After the implementation of the benchmark testing, the administration decided to test students with the *GMRT* only in the spring. Furthermore, testing using the *GMRT* was discontinued for the eighth grade

since the *GMRT* included only one form to test seventh through ninth grade students. Administration felt that using the same form for both seventh and eighth grade students would not produce reliable information.

STAR Reading

The school in this study utilized the *Accelerated Reader* program as a part of the reading/language arts curriculum. The computer-adaptive, norm-referenced *STAR Reading* test was the reading assessment and database component of *Accelerated Reader*. The school implemented *STAR Reading* at the beginning of the 2004-2005 school year. All students were to be tested each quarter. This testing was phased out with the introduction of the benchmark tests in 2006. Scores for each of the marking periods were available for the 2004-2005 school year and is presented in Table I1 in Appendix I. Only summary scores were available for the 2005-2006 school year and are noted in Tables I2 and I3 in Appendix I. However, at the time that this information was retrieved from the data component of *STAR Reading* on June 14, 2007, the students that had been promoted to the high school had already been deleted from this program. Furthermore, not all students were tested since the reading teachers had the option whether to use *STAR Reading* or not.

Chronological Narrative of Reading Improvement

Fifth Grade Reading Textbook Adoption 2004

Prior to the implementation of school improvement in the fall of 2004, but related to the reading improvement measures initiated at that time, was the adoption of the fifth grade reading textbook. Even though the adoption of a new reading text in the fifth grade was out of the normal adoption cycle, an updated text that correlated with the Virginia

Standards of Learning was deemed necessary.

A letter from the Director of Gifted Education and Literacy Education to the Assistant Superintendent documented the fifth grade reading textbook adoption process at the school of this study. The letter gave evidence that the textbook adoption committee met six times and consisted of the principal, the reading specialist, three fifth grade teachers, one fifth grade learning disabilities teacher, two fourth grade teachers, one parent, and one community member (Director of Gifted Education and Literacy Education, 5th Reading Textbook Adoption, letter to Assistant Superintendent, May 7, 2004).

Each member of the textbook adoption committee used a verification form to correlate the textbook selection to the fifth grade reading SOL objectives. A Virginia Department of Education (VDOE) rubric was also used to help describe the degree of correlation. The three reading textbooks chosen to review were Scott Foresman, Houghton Mifflin, and SRA Corrective Reading. Even though Scott Foresman was used at the elementary school, the committee unanimously chose Houghton Mifflin. The fourth grade teachers did not see any difficulty in the students transitioning from Scott Foresman to the Houghton Mifflin text. The textbook adoption committee recommended the purchase of additional leveled readers and the purchase of lower level texts for special education students. The committee also recommended the purchase of the SRA Corrective Reading series for students reading two years below grade level. This direct instruction method for the teaching of the remedial *Reading Plus* classes would be implemented during the 2004-2005 school year (Director of Gifted Education and Literacy Education, 5th Reading Textbook Adoption, letter to Assistant Superintendent,

May 7, 2004).

Improvement Measures for the School Year 2004-2005

As the spring 2004 English SOL scores did not meet the necessary Annual Measurable Objective of 61% according to NCLB requirements, the school in this study was placed into Year One of school improvement in English. Thus, the school was required to devise a School Improvement Plan for the 2004-2005 school year in reading. Faculty members were chosen to serve on a newly formed School Improvement Team with the principal choosing a chairperson to head the team. Together, the School Improvement Team with the principal and the county's director of instruction devised a school improvement plan for the school featured in this study. Separate improvement plans were written to implement improvement measures in the fifth and eighth grade reading and language arts program. Since the sixth and seventh grade classes were not being tested at this time, it was not necessary to include them in the improvement plan. The final improvement plan outlined many strategies for reading improvement to be implemented during the school year.

Fifth Grade Reading Improvement Measures

According to the improvement plan for fifth grade reading during the school year of 2004-2005, the long-range goal stated that at least 80% of the fifth grade students would pass the Reading/Language Arts SOL test by the end of the 2007-2008 school year. In order to meet this goal, the improvement plan listed the objective that by the end of the 2005-2006 school year, at least 70% of the fifth grade students would receive a passing scores in the SOL reporting categories: using word analysis strategies, understanding a variety of printed materials/resource materials, and understanding the

elements of literature. Administration chose to concentrate on these reading skills since they received the lowest scores on the spring 2004 Student Performance by Question (SPBQ) Division Report. The assessments to be used as listed on the School Improvement Plan included *STAR Reading*, *Gates-MacGinitie*, *Lightspan* (also known as *eduTest)*, the Reading Standards of Learning test, and practice tests utilizing the released reading and language arts test items (School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004).

In order to meet the fifth grade reading improvement goal and objectives, the School Improvement Plan outlined three main strategies. First, the fifth grade curriculum was to be revised and aligned with the Virginia's *English Standards of Learning Curriculum Framework*. In addition, a pacing guide was to be established for the reporting category of using word analysis strategies. Furthermore, the principal, literacy supervisor, assistant superintendent, fourth grade teachers, and fifth grade teachers were to receive training from a curriculum alignment specialist (School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004).

According to the documentation listed in the Evidence of Implementation of the Strategy column of the School Improvement Plan, the curriculum was reviewed and pacing guides were developed. A curriculum specialist conducted a workshop, which was completed on August 1, 2005 (School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004). Documentation of this process was found in the principal's files consisting of the pacing guide template and samples of individual teacher's pacing guides. Examples of the first pacing guides for 2004-2005 were written to show pacing for all four quarters of instruction and were

presented in a table consisting of four squares on one sheet of paper. The pacing guides for 2005-2006 were more detailed in that pacing for each quarter was presented in four detailed tables. The 2006-2007 pacing guides were even more extensive in that pacing was documented by each week for each of the nine-week marking periods and presented in much larger tables (Teachers, samples of pacing guides, 2004-2007).

To align the pacing guides, grade level and subject area committees were to be formed to review the SOL Student Performance by Question (SPBQ) data, and the *English Standards of Learning Curriculum Framework* with a special focus on word analysis strategies. The school improvement documentation showed that grade level and core area committees were established, and a schedule was devised for regular meeting times during the 2005-2006 school year. Furthermore, the improvement plan stated that research strategies and supplemental materials were to be used to implement a stronger instruction in word analysis. The fifth grade *Essential Knowledge, Skills, and Process* manual provided by the Virginia Department of Education was used as a resource to implement teaching/learning strategies. Differentiation and flexible grouping was implemented with continued collaboration and teaming for students with disabilities. In addition, quarterly data collection and disaggregated student achievement data were used for guiding instruction. Staff development was provided for using assessment tools and for reading strategies. Accordingly, the documentation also showed that the reading textbook representative was scheduled and met with the teachers on August 25 and 29, 2005 in order to provide training for the new text. The representative also provided strategies for implementing the text and for using the supplementary materials (Director of Instruction, 2003-2004 Adequate Yearly Progress Review, 2004; School Improvement

Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004).

The next strategy employed in order to meet the fifth grade goal, was to implement a *double reading class* for fifth and sixth grade students. This class would be taught by a trained teacher, would be taken in addition to the regular reading class, and would replace the students' exploratory classes. The school improvement documentation and the master schedule showed that additional fifth and sixth grade reading classes were provided. In order to fulfill this strategy, a qualified reading teacher would need to be hired to teach these supplemental reading classes. Additionally, materials would need to be bought and the program implemented. Training and follow-up training would need to be provided for the teacher involved. To meet this strategy, a teacher was hired in August 2004. The *SRA Corrective Reading* series was adopted and implemented in August 2004. The teacher was trained in August 2004 and a consultant was hired to provide several follow-up visits to evaluate the implementation of this program at this school (Director of Instruction, 2003-2004 Adequate Yearly Progress Review, 2004; School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004).

The double reading classes were funded by Title I and the classes were called Reading Plus. Documentation showed that the county's director of instruction compiled a matrix that was used in order to identify students for this program. This matrix showed that the students with the highest total score gained from several criteria, representing the lower achieving students, were placed into the program. The documented criteria areas included a reading performance rating by the classroom language arts teacher and the student's average reading grade for the year in reading. Furthermore, points were given

if the student was previously recommended for Title I services and if the student was retained. Points were also given for low *Gates-MacGinitie Reading Test* scores and failing Reading SOL scores. The students receiving the highest number of points were placed into Reading Plus classes according to placement testing results (Director of Instruction, Matrix, 2004).

The third strategy for the improvement of the fifth grade reading/language arts program was to provide an after school remediation program for the fifth grade students who demonstrated the greatest need in reading. The action steps proposed to meet this strategy included the utilization of the SES state approved providers list for the selection of a suitable after school program. Next, a list of the neediest fifth grade reading students was to be compiled and letters sent home to the parents of the identified students. Teachers and materials would need to be selected and the teachers trained using the materials. Pre and posttests focusing on word analysis were to be developed using *Lightspan*. Finally, this program was to be evaluated and recommendations made (School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004).

The school improvement documentation showed that a reading program called, *SAIL*, was purchased to provide after school assistance in reading on Tuesday and Thursday afternoons from October 2004 to May 2005. In September, a meeting was held and *SAIL* materials were selected. A matrix, incorporating *Gates-MacGinitie Reading Test* scores and other criteria, was developed to identify students needing special assistance in reading. A list was also developed to determine eligibility status of these students. Parents were notified in September 2004. Teachers were hired in October 2004

and *SAIL* materials were purchased. In October, a representative from the Voyager Company was hired to provide training for the *SAIL* program. An exit meeting was held in May of 2005 in order to evaluate the *SAIL* program (School Improvement Committee, School Improvement Plan, Grade 5 Reading/Language Arts, 2004). As a note, because of this NCLB requirement to use supplemental educational service providers, a successful after school homework camp program had to be discontinued

On a list compiled by the head of the School Improvement Team (2005), *SAIL* served 12 fifth grade students, 19 sixth grade students, 12 seventh grade students, 11 eighth grade students, and 20 special education students totaling 74 students. Additionally, the School Improvement Plan also documented that other school divisions were contacted in order to collaborate efforts of developing a bank of skills tests, which correlate with the reading SOL objectives.

Eighth Grade Reading Improvement Measures

Many strategies for reading improvement were a part of the improvement plan for the eighth grade of this school for the school year 2004-2005. The long-term goal for improving reading/language arts scores for the eighth grade stated that at least 80% of the eighth grade students would pass the Reading/Language Arts SOL test by the end of the 2007-2008 school year. To meet this goal, the improvement plan listed the objective that by the end of the 2005-2006 school year, at least 70% of the eighth grade students would receive passing scores in the reporting SOL categories: understanding a variety of printed materials/resource materials, and understanding elements of literature. Administration chose to concentrate on these reading skills since they received the lowest scores on the spring 2004 Student Performance by Question Division Report. The assessments used as

listed on the School Improvement Plan included *STAR Reading*, *Gates-MacGinitie*, *Lightspan*, the Reading Standards of Learning test, and practice tests utilizing the released reading and language arts test items (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

In order to meet these goals, five strategies were listed on the improvement plan. The first strategy pertained to the revision of the eighth grade curriculum in order to align it with the *English Standards of Learning Curriculum Framework*. Pacing guides were to be established that focused on the reporting categories of understanding a variety of printed materials and resource materials and understanding the elements of literature. The school improvement documentation showed that the curriculum was revised and pacing guides were developed (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The first action step for the first strategy of aligning the curriculum was for the principal, literacy supervisor, assistant superintendent, and the sixth, seventh and eighth grade teachers to receive training from a curriculum alignment specialist. Records showed that this workshop was completed on August 1, 2005. The second action step proposed the formation of grade level and subject area committees whose purpose was to review the SOL SPBQ data, the *English Standards of Learning Curriculum Framework*, and the eighth grade reading pacing guide. A special emphasis was to be placed on the SOL reporting categories of understanding a variety of printed materials and resource materials and understanding the elements of literature. Documentation showed that grade level and core area committees were established and a calendar was developed to schedule meetings for these committees on a regular basis during the 2005-2006 school

year. The third action step stated that research strategies and materials to supplement instruction were to be implemented to focus on the reporting categories of understanding a variety of printed materials and resource materials, and understanding the elements of literature for grade eight. The eighth grade *Essential Knowledge, Skills, and Process* manual provided by the Virginia Department of Education was used as a resource to implement teaching/learning strategies. Differentiation and flexible grouping were implemented with continued collaboration and teaming for students with disabilities. In addition, quarterly data collection and disaggregated student achievement data were used for guiding instruction. Staff development was provided for using assessment tools and for reading strategies. Documentation also showed that the textbook representative was scheduled and met with the teachers on August 25 and 29, 2005 in order to provide training for the new text. The training included suggestions for successful implementation of the text and the accompanying supplementary materials (Director of Instruction, 2003-2004 Adequate Yearly Progress Review, 2004; School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The second strategy provided for the implementation of an after school program for those eighth grade students showing greatest academic need in reading. The first action step for this strategy included using the state approved SES providers list to evaluate which programs would meet the need. Next, a list of students in greatest academic need in reading was to be compiled and letters sent home to inform the parents of the identified students. Then, teachers would need to be hired and materials purchased for this program. Training would need to be provided for the teachers. Pre and posttest evaluations using the *Lightspan* program would need to be developed in order to provide

baseline and gain information. Finally, the program would need to be evaluated and recommendations made (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

In order to meet the strategy of providing after school reading remediation, the school adopted the *SAIL* program. The program would be held on Tuesday and Thursday afternoons from October 2004 to May 2005. In September 2004, materials were selected. A matrix was developed to identify those students in greatest need of reading assistance. The *Gate-MacGinitie Reading Test* scores were used in this matrix. Parents were notified in September 2004. In October 2004, teachers were hired and *SAIL* materials were ordered. A representative from the Voyager Company provided the training. An exit meeting was held for the SAIL program in May 2005 with the teachers to evaluate the program. In addition, the documentation also showed that the school was working with surrounding school divisions to develop a bank of skills tests that correlate with the reading SOL objectives (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The third strategy to improve eighth grade reading instruction provided for the adoption of new textbooks that were aligned with the eighth grade reading and language arts SOL objectives. In order to meet this strategy, the action steps included the formation of a book adoption committee that would review the approved materials from the VDOE. Next, it was to be determined which materials best addressed the identified weaknesses in reading according to the 2003-2004 Reading SOL tests. Then, a text would be selected and submitted to the school board for approval. Once approved, the new texts and materials would be ordered and in-service training provided (School

Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The school improvement documentation showed that this strategy was met. After a review of the available texts, the Holt text, *Elements of Literature*, was adopted for the 2005-2006 school year. Supplementary materials were ordered to assist in addressing the SOL requirements. The school board approved the new textbooks in July 2005 and the texts were ordered on July 23, 2005. In-service meetings for the implementation of the new Holt test were held in August 2005 (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The fourth strategy for improving eighth grade reading as stated on the School Improvement Plan called for the reduction of class sizes for the eighth grade reading and language arts classes. To achieve this strategy, several action steps were stated. First, a committee was to be established to research the impact of lower teacher/student ratios of the scores on the Reading and Writing Standards of Learning test scores. Next, these findings and recommendations were to be presented to the school board. Additional teachers and support staff would then be hired to meet the recommendations of the committee (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The documentation showed that the research was conducted on the positive relationship between lower class sizes and student performance. An open discussion was held with the faculty. As a result, an additional part-time eighth grade teacher was hired and added to the faculty in April 2005 (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004). Accordingly, in other school

improvement documentation, the chairperson of the school improvement committee noted the addition of the new teacher, and that the current eighth grade language arts teacher mentored this new faculty member (School Improvement Chairman, June 16, 2005).

The final strategy for eighth grade reading improvement stated that a variety of reading choices needed to be provided for the students. To meet this strategy, an inventory would need to be made of the current library and classroom materials available to students. Next, the teachers would need to be surveyed in order to find out what kinds of materials they would like the students to have access to that were not currently available. Next, the data would be collected from the teacher surveys to find trends in perceived and actual deficiencies in the availability of literary materials in the school. Finally, materials would need to be purchased based on the findings of the surveys (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

The documentation showed that a Follett library consultant conducted an inventory study in the fall of 2004. In addition, the teachers evaluated the classroom reading materials and made requests to the librarian. Finally, additional books were purchased and added to the collection based on the Follett library study. Additional classroom sets of novels study were also purchased (School Improvement Committee, School Improvement Plan, Grade 8 Reading/Language Arts, 2004).

Academic Review

To observe the progress of the school improvement measures, the VDOE scheduled an academic review to be held on February 23, 2005. Before the visit, the

faculty was given a copy of a discussion draft in preparation for the academic review. Meeting times were established with the School Improvement Team, the director of special education, and the lead learning disabilities teacher. The reading/language arts review would include the review team's focus on the revision of the curriculum since the adoption of the new Holt textbooks. The review team would also concentrate classroom observations on differentiation and classroom assessment, and the SOL data. Another point of interest for the team would be to evaluate the master schedule to determine a better use of teacher assignments given the fact that there were a limited number of faculty members and the school had to share teachers with the high school. Finally, the discussion draft stressed that the review team wanted to observe teachers using data to direct differentiation within the classroom (Review Team, Staff Preparation for On-Site Review, February 17, 2005.)

On February 23, 2005, the school underwent an academic review conducted by the VDOE. The final report to the school was entitled, "Academic Review, Technical Assistance Report 2004-2005, Report of Findings." The findings from this review committee reported both strengths and weaknesses of this school in several categories. These findings were reported in this research to denote school wide improvement strategies that also directly or indirectly affected the reading program at the school.

Under the first category of Curriculum Alignment, the school's strength was noted as being able to engage students in active learning experiences. The weakness found was that greater differentiation was needed in the classrooms and that teachers needed to increase the variety of assessments used to better identify students in need (Chairman of academic review team, Academic Review Technical Assistance Report

2004-2005 Report of Findings, February 23, 2005).

Pertaining to the Use of Time and Schedules category, the strength of this school was that instruction was organized to utilize maximum student time on task and that time on task was regularly monitored. Furthermore, the school was able to extend the learning time to include after school programs. However, increased time was needed for teachers to collaborate with other teachers, students, and parents. It was noted that the schedule was constrained by the limited number of faculty members at this school. The report also stated that the shortage of teacher positions negatively affected the school's schedule and instructional outcomes (Chairman of academic review team, "Academic Review Technical Assistance Report 2004-2005 Report of Findings," February 23, 2005).

Under the category, Use Data for Making Decisions, the committee suggested that teachers needed additional training in using data to determine student needs. The category of Professional Development showed that this school had strength in this area in that professional growth and development was embedded into job performance. Furthermore, the review team noted that the administrator conducted regular evaluations (Chairman of academic review team, Academic Review Technical Assistance Report 2004-2005 Report of Findings, February 23, 2005).

The area of School Culture showed strength of this school was that teachers were placed in areas of endorsements, strengths, and student needs. Furthermore, students had opportunities to make choices, to learn responsibility, and to practice leadership skills (Chairman of academic review team, Academic Review Technical Assistance Report 2004-2005 Report of Findings, February 23, 2005).

Under the Systems and Processes category, the school had strength in establishing

school wide systems to develop student achievement and motivation. Furthermore, these systems were monitored and adjusted to promote a continuous rate of improvement (Chairman of academic review team, Academic Review Technical Assistance Report 2004-2005 Report of Findings, February 23, 2005).

The result of the review team's visit prompted the development of a school improvement plan to include the strategies as set forth by the VDOE evaluation. The review team recommended many essential actions because of the visit and the school devised an improvement plan based on these recommendations. The goal for the school according to the revised improvement plan was to meet or exceed the benchmarks as determined by AYP and the Virginia State Standards of Quality. The objective for this school was to put into place or act on the essential actions as outlined by the academic review team (School Improvement Committee, School Improvement Plan 2004-2005, Grade 5-8 Academic Review Essential Actions, 2005).

The first strategy to achieve the goal and objective of the updated improvement plan was for the faculty to analyze all available student performance data. This data was to be used to help determine the student's skill and content area strengths and weaknesses. Furthermore, this data was to be incorporated into the teachers' daily lesson plans for differentiation of instruction. In order to meet this objective, the school planned to hold in-service meetings on differentiation of instruction, assessing individual student needs using assessment, and to incorporate assessment data into lesson plans.

Documentation was found that in-service meetings were planned for August/September 2005 on differentiation for administration and teachers. Furthermore, teachers were to team in order to create vertical and horizontally aligned classroom

assessments. Spreadsheets were to be devised in order to help teachers track student performance on SOL assessment tests. Documentation showed that the spreadsheets were devised, data entered, and completed by April 25, 2005. Furthermore, these spreadsheets to were placed on the network and made available to all teachers. Finally, a spreadsheet was to be developed to show student performance by question on SOL data. Documentation showed that completed spreadsheets were handed out and made available to teachers via the school's computer network on April 14, 2005 (School Improvement Committee, School Improvement Plan 2004-2005, Grade 5-8 Academic Review Essential Actions, 2005).

The second strategy devised because of the February 23 and 24, 2005 Academic Review was to provide common planning time for teachers within the same grade level. Action steps included building professional days into the school schedule, contacting other successful schools to see how they schedule for planning, reviewing the schedule to make adjustments that would allow for collaborative planning, and considering the possibility of hiring additional staff to help in this process. To meet this goal, the master schedule for the 2005-2006 school year allowed for both vertical and horizontal planning (School Improvement Committee, School Improvement Plan 2004-2005, Grade 5-8 Academic Review Essential Actions, 2005).

A third strategy was to provide training for teachers on the analysis and use of data to plan instructional objectives. The action steps proposed were to hold in-service meetings for central office staff and building principals on classroom data analysis and the use of technology to analyze data. Furthermore, training was needed on the use of data to plan instructional objectives (School Improvement Committee, School

Improvement Plan 2004-2005, Grade 5-8 Academic Review Essential Actions, 2005).

The fourth strategy was to research alternative scheduling practices to find ways to maximize the use of a limited instructional staff. To meet this goal, the action steps proposed were for the central office staff and building principals to contact other school divisions of similar size to learn how they schedule with limited personnel and to see if alternative schedules would work at this school. Furthermore, the master schedule was to be analyzed and revised to allow for more cooperative planning time. As this Academic Review took place in February 2005, it was determined that no changes could be made to the current 2004-2005 schedule. Instead, the proposed changes would be considered when designing and implementing the master schedule for the 2005-2006 school year (School Improvement Committee, School Improvement Plan 2004-2005, Grade 5-8 Academic Review Essential Actions, 2005).

Because of the findings of the Academic Review, the principal wrote a list of actions that were to take place in the school by March 1, 2005 (Principal, Information for Actions to Meet Improvement Plan Recommendations, February 28, 2005). These actions included maintaining the areas of focus and implementing changes and new techniques as needed. The principal stated that the teachers' unit tests should reflect the SOL format and be written to include questions that require the student to write a paragraph using the correct writing process. The school wide rubric would be followed when correcting the students' writing on tests. Moreover, each unit test was to be placed in the principal's box. The next action stated that teachers should rotate the responsibility of taking minutes from each grade level meeting and a copy placed in the principal's box. Across subject area correlation would be emphasized. Daily and regular assessments

were to be conducted and should be data driven. The data gained from these assessments should be used to determine students' strengths, weaknesses and if re-teaching and retesting would be necessary. Copies of these tests would be placed in the principal's box.

Other needed actions included implementing a transition activity at the beginning of each class period, exploring the idea of using classroom learning centers, and teaching test taking strategies. Furthermore, a school discipline committee should be established and an immediate review of the *SAIL* program was needed. All decisions for the program were to be based on hard data. Additionally, the reading/language arts classes must use a research-based instructional model to be implemented across all grade levels. Finally, each grade level and/or subject area must develop a bank of questions. This bank of questions could be used for review tests in all subject areas and at all levels.

On a list generated by the principal and the reading and language arts teachers, many additional strategies were noted. Suggestions were made to review the reading and writing curriculum maps and to create scope and sequence charts for each grade level in the areas of reading, language arts, and writing. Another suggestion was to employ additional reading/language arts teachers, especially in the eighth grade. Accordingly, the principal wanted to research the necessity of increased reading/language arts instructional time. Next, the reading/language arts teachers requested a purchase of additional classroom sets of novels, *Accelerated Reader* novels, and *Accelerated Reader* novel tests. Finally, it was suggested that a focus be placed on cross-curricular vocabulary, writing, and reading skills (Principal & teachers, Reading/Language Arts Strategies, 2004).

On a handwritten list, a reading teacher recorded additional reading strategies. These included implementing a policy as to the maximum number of language arts students that could be placed in a class. A suggestion that chapter books be purchased for reluctant readers was also noted. Furthermore, it was proposed that an instructor from Virginia Commonwealth University be hired to help teachers with classroom reading strategies and to implement ways to make reading more enjoyable. Funding for additional resources as well as the formation of smaller SOL prep groups were also listed as suggestions (Teacher, Reading Strategies, handwritten list, 2004).

Additional School Improvement Measures

As mandated by the state, the school implemented a twice-yearly parent/student academic activity night headed by the school improvement team. These activity nights were called, *PEP Nights*, standing for *Parents as Educational Partners*. The purpose of implementing such a night was to open the school and allow the parents to participate in educational activities with their children through "life-long participation in reading for learning and pleasure and active, healthy life through exercise and nutrition" (Teacher, PEP Night, letter to parents, October 29, 2004). Useful academic information was also disseminated to the parents during the time.

The first PEP Night was held on November 18, 2004. The night was entitled, "Energize Your Mind, Body, and Spirit!" and included a special focus on reading. All students with their parents/guardians were invited. Those students who participated in the *SAIL* program were particularly targeted and highly encouraged to attend. All teachers were required to participate (School improvement chairman, PEP Night!, tentative plan for review submitted to principal, October 2004). A memo from a lead

teacher to the school improvement chairperson indicated that the PEP Night would incorporate the school wide sea theme (Teacher, Parents as Educational Partners, October 29, 2004).

The activities for this night were organized into three different stations. The Mind Station consisted of three different reading areas. Areas were set up for silent reading, child/parent reading, and a book discussion area. Students were encouraged to bring a pillow, towel, or sleeping bag on which to read. The Body Station activities consisted of various games in the gym. The Spirit Station offered healthy refreshments prepared by the work and family studies teacher and students (School improvement chairman, PEP Night!, tentative plan for review submitted to principal, October 2004).

A second PEP night was held on March 23, 2005 also focused on reading. The theme of this parent/student night was, "Hangin' Loose with Dr. Seuss." According to an organizational memo, the goal of this PEP night was to "further a life-long participation in reading for learning as pleasure and to promote a positive partnership between home and school." Four stations would be organized for this night (Teacher, Parents as Educational Partners – Hangin' Loose with Dr. Seuss, informational/organizational memo, March 2005). According to a letter that was sent home to parents, the four stations for this night were Dr. Seuss' Fish Read Station for students to have a place to read silently or aloud. Another station was called, Dr. Seuss' Express Station, a place for thinking and expression activities. The Dr. Seuss' Hatsful of Snacks Station offered healthy snack foods. At the end of the night, everybody gathered into the gym for Dr. Seuss' Collection of Perfection, a talent show of students and teachers. Not including faculty, 273 students, siblings, and adults attended (Teacher, "PEP" Night Hangin' Loose

with Dr. Seuss, letter to parents, March 2005).

In an informational document compiled by the reading specialist for the English Core and given to the principal, various aspects and improvements of the language arts program were documented. The document showed that the fifth grade language arts teacher used the University of Kansas *Fundamentals of Sentence Writing*, *Sentence Writing Strategy,* and *Paragraph Writing Strategy* for writing instruction. The reading teacher used the Houghton/Mifflin Reading series and novel studies. Implementing a school wide spelling program was also suggested. This, document also noted that the sixth through eighth grade teachers were using the *Six Plus One Writing Traits*. These grade levels also used the Holt reading anthology with the Holt language text. These grade levels also incorporated novel studies into their reading program. The teachers suggested looking into the *Z-B Vocabulary* program with the possibility of purchasing the *Reader's Handbook.* It was suggested that reading testing for all grade levels would include the Reading and Writing SOL tests, the *Gates-MacGinitie Reading Test*, *STAR Reading*, and *Lightspan* (Reading Specialist, summary and suggestions of language arts program, 2005).

Suggestions by the English Core at the end of the school year included a request to increase from one to two eighth grade English teachers. An increase of eighth grade class time to the equivalent of two class periods was also recommended. The combination of the fifth grade reading and writing classes was also suggested with the class length being equal to two class periods. The English Core also planned to discuss a weekly or monthly meeting schedule. The school wide standardization of *Accelerated Reader* requirements was suggested with the continuation of the use of the ZPD, Zone of

Proximal Development, to help students choose Accelerated Reader library books. The English Core also sought to develop a useful quick-reference English handbook for teachers. Additional suggestions included the updating of the reading terms vocabulary list; purchasing teacher Holt Reading kits for special education teachers; purchasing Spanish materials for the Holt Reading curriculum; continuing with the *NCS Mentor* writing program; and incorporating the *6 Plus One Writing Traits* into math, science, and social studies core areas (Reading Specialist, summary and suggestions of language arts program, 2005).

To help supplement reading improvement, the English teachers used the resource by Kylene Beers entitled, *When Kids Can't Read.* This book was chosen since she is considered a predominant educator in the area of remedial reading, especially for middle school students. She was also the author of the Holt reading series adopted by the school.

To further supplement the school improvement process, the principal implemented practices found in the book, *FISH!,* by Dr. Stephen Lundin. This book started a fish, sea, and beach theme throughout the school, which continued over the next two school years. These practices were a part of the school improvement process over the next two years, also. For example, a new initiative called, SEA or Successful Educational Achievement was to be started to help create a positive academic school climate by implementing a positive reward system for the students (Director of Instruction, 2003-2004 Adequate Yearly Progress Review, 2004). Several staff meetings and after school teacher/family socials were held to implement the philosophy and suggestions found in this book.

A strong push to specifically incorporate Bloom's Taxonomy into the curriculum

at all levels and in all subject areas was started during the school year. Evidence of this included the observance of posters on classroom walls, flip charts on teachers' desks, and materials used at faculty meetings. Other supplemental reading materials utilized at this school for reading instruction included *Buckle Up*, *Blast Off*, and the released SOL test questions.

Improvement Measures for the School Year 2005-2006

The School Improvement Plan for the 2005-2006 school year was divided into the three main AYP reporting categories of attendance, mathematics, and reading/language arts. Besides the addition of attendance and mathematics into the plan, the improvement plan also encompassed all grade levels. According to the School Improvement Plan for 2005-2006 in the area of Reading/Language Arts, the goal was to have at least 81% of the students at the intermediate school in this study pass the Reading/Language Arts SOL test by the end of the 2008-2009 school year. In order to meet this goal, the stated objective was to have at least 69% of the students in each subgroup to receive a passing score in the reporting category of understanding a variety of printed materials/resource materials by the end of the 2005-2006 school year. The assessments used as listed on the School Improvement Plan included *STAR Reading*, *Gates-MacGinitie*, *Lightspan*, the Reading Standards of Learning test, and practice tests utilizing the released reading and language arts test items (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005).

To meet the goal and objectives as outlined in the School Improvement Plan, five strategies were implemented. Many of the strategies were stated as a continuation of the improvements implemented during the 2004-2005 school year. The first strategy was to

revise the reading and language arts curriculum to align with the VDOE *English Standards of Learning Curriculum Framework*, new textbooks, and to revise pacing guides. To meet this strategy, the first action step stated that grade level and subject area committees needed to be formed in order to review SOL SPBQ data, the VDOE's *Curriculum Framework*, and the pacing guides. The school improvement documentation showed that the reading/language arts teachers revised their pacing guides to include the newly adopted textbooks and to make sure they were aligned with the *Curriculum Framework*. The structure of the 2005-2006 pacing guides was markedly different from the previous years'. The English Core of teachers met weekly on Wednesday mornings during the common planning time to discuss issues related to reading and language arts including SOL data. Accordingly, the documentation showed that curriculum alignment training was held in the summer 2005, in the fall of 2005, and throughout the year into 2006 (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005; English Core, minutes of weekly meetings, 2005-2006).

The second strategy included the continued implementation of double reading classes for targeted fifth through sixth grade students with the addition of seventh and eighth grade classes. To meet this strategy, the action steps included identifying teachers to instruct the seventh and eighth grade classes. Next, students would need to be identified for the program. Training would need to be provided for the teachers involved in these classes. The school improvement documentation showed that the Reading Plus classes were expanded by adding two more teachers and the other grade levels. These two teachers and the teacher from the previous year received training in August 2006 by SRA. The Director of Instruction devised a matrix to determine which students were in

the greatest need for remedial Title I services. These students were given pretests and placed into an appropriate class (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005; Master Schedule, 2005-2006; Director of Instruction, Matrix, 2005).

The third strategy for improving reading included the provision of an after school remediation program for those students in greatest need in reading. To accomplish this strategy, the school would contract with state approved SES providers for the after school tutorial program. Next, a list of students would need to be compiled of students in greatest academic need in reading. Letters would then be sent home to parents of the identified students so that parents could select an SES provider. Contracts would then need to be secured with the vendors and a program administrator hired. Classrooms would also need to be assigned to the providers. Finally, the program would need to be evaluated and recommendations for improvement given (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005).

The school improvement documentation showed that the *SAIL* program was implemented again for the 2005-2006 school year and would meet on Tuesday and Thursday afternoons until May 2006. Teachers were hired and students were identified for this program. At the completion of SAIL, the teachers were surveyed about the success of the program and gave suggestions in September 2006 (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005).

The fourth strategy stated that the reduction of class size in the eighth grade language arts classes needed to be made. In order to accomplish this, the action step stated that additional teachers would be needed to accomplish this strategy. Since the

additional reading/language arts teacher hired for the eighth grade in April 2005 moved to the high school, another teacher at the school chose to move into the vacated position. Furthermore, a teacher who wished to teach part-time was also given eighth grade reading/language arts classes. Thus, the student teacher ratio in the eighth grade reading/language arts classes were notably reduced (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005; Master Schedule, 2005-2006).

The final strategy for the improvement of reading stated that a variety of reading choices was needed for the students. The action steps included the continuation of updating the library non-fiction inventory as recommended by the Follett library consultant. The school improvement documentation showed that additional books were purchases during the school year according to the suggestions given by the Follett library consultant (School Improvement Committee, School Improvement Plan 2005-2006, Reading/Language Arts, 2005). Hand-written on the analysis of the June 2006 Follett Curriculum Report, the librarian noted that 685 titles were added to the collection. Included were 228 nonfiction books, 14 professional books, 7 references, and 40 nonfiction videos (Title Wise, Collection Analysis, June 8, 2006).

Academic Review

The Virginia Department of Education conducted an academic review. A team came to the intermediate school of this study on December 12 and 13, 2005 to conduct a review of the strengths and weaknesses of this school as determined by the guidelines set forth by the VDOE. The findings were documented in the "Academic Review, Technical Assistance Report 2005-2006, Preliminary Report." The findings of this review were

included in this research since they relate directly or indirectly to reading improvement at this school.

The review committee found that in relation to the school's school improvement plan, that the school did include benchmark testing; however, a time schedule was needed for the listed strategies. Professional development was needed for teachers in the areas of data disaggregation and the utilization of the data. The committee found that an appropriate amount of time was allowed for instruction in each of the four core areas. The committee also stated that additional instructional time was created in providing after school programs starting in January 2006 with the implementation of the 21st Century Community Learning Center grant. *Failure Free Reading* was implemented as an after school program. The committee did note that parents, students, and community members needed to be included to serve on the School Improvement Team and that the School Improvement Plan needed to be made available to the public. The committee stated that the master schedule did allow for common planning for the four core areas from 7:45 to 8:15 in the morning. Furthermore, teachers were reporting student progress in the form of daily and weekly tests and on quarterly report cards (VDOE Office of School Improvement, Academic Review Technical Assistance Report 2005-2006, Preliminary Report, December 12-13. 2005).

The academic review committee commented that the school had developed committees to review SOL SPBQ data and that teachers met weekly across grade levels and content areas to document student strengths and weaknesses and to implement appropriate strategies. Furthermore, services were in place to help students in greatest academic need (VDOE Office of School Improvement, Academic Review Technical

Assistance Report 2005-2006, Preliminary Report, December 12-13. 2005).

The review committee commended the school for taking major steps toward improving the reading SOL scores. They noted that in 2005-2006 two additional eighth grade teachers were added to result in a 17.5 to 1 student/teacher ratio. They also applauded the lengthening of the reading/language arts classes in grades five through eight to a double, or block, class period (VDOE Office of School Improvement, Academic Review Technical Assistance Report 2005-2006, Preliminary Report, December 12-13. 2005).

Other successful programs as noted by this committee included the Successful Educational Achievement (SEA) incentive program, the Troopers on Patrol for Students (TOPS) program, after school tutoring by teachers and administrators, and the availability of mentors. Furthermore, the committee noted that a guidance counselor was in charge of the school's in-school suspension program and that the teachers formed teams to help provide counseling to students and parents (VDOE Office of School Improvement, Academic Review Technical Assistance Report 2005-2006, Preliminary Report, December 12-13. 2005).

Additional School Improvement Measures

With the many changes taking place in the language arts program at this school, the reading specialist compiled a list of changes implemented during the 2005-2006 school year. Since these changes relate directly or indirectly to reading improvement, they were included in this research. Documentation showed that all of the teachers were trained in the *Six Plus One Writing Traits* and that these strategies were implemented by the reading and language arts teachers as well as the other core teachers. The language

arts teachers as well as the other core teachers were to implement these writing traits throughout the school year. Furthermore, the Four Square writing method was implemented in the eighth grade. The list also noted the addition of one full-time English teacher and one part-time English teacher to the eighth grade. In addition, a writing rubric was drafted, approved, and adopted by the English department school wide (Reading Specialist, handwritten notes of reading improvements for the 2005-2006 school year, 2006). Other documentation also confirmed the establishment of a school wide writing rubric, which was created by the English Core to incorporate the SOL writing standards and scoring and to be used by all the core areas within the school. This rubric was implemented in the fall of 2005. This improvement was documented by a copy of the rubric and on notes taken by the principal on the Preliminary Report (VDOE, Preliminary Report, School Improvement Team, Office of School Improvement, December 12, 13, 2005).

The reading specialist at the school of this study also made note of other changes to the language arts program. In this list, it was noted that new Holt reading and language books were implemented in the reading and language arts classes. The language arts teachers revised their pacing guides to incorporate the new state English Blueprints. It was noted that the English Core continued to meet weekly before school to work on reading improvement measures, and on benchmark testing. To enhance the reading/language arts program, the school continued to implement the double reading classes. It was also noted that many grade level English teachers met in the library with their classes for intensive interactive group reviews before the SOL tests. Throughout the school year, novel study units were taught and these books were reinforced at the PEP

Night meetings. To support the language arts instruction, the school used *NCS Mentor*, and interactive computer writing program based on Virginia's Writing SOL objectives. The English department also used *STAR Reading* tests and the *Gates-MacGinitie Reading Tests* to document individual and group reading growth and the Flanagan's *The Tests for Higher Standards* for benchmark testing (Reading Specialist, handwritten notes of reading improvements for the 2005-2006 school year, 2006).

Additional improvement strategies can be noted by other documentation found at this school. In a letter to the parents and to the community by the principal and the assistant principal (September 2005) an incentive program called, Successful Educational Achievement (SEA), was announced. This program would offer a variety of prizes for those students who made Principal's List, Honor Roll and/or exhibited good behavior and regular attendance. These students would receive a SEA Pass that would allow them to take a prize from the SEA Chest. To further document the implementation of weekly assessments, a form was developed for teachers to use for this data, "Weekly Assessment Report" and was dated September 22, 2005.

Evidence was found in the form of a handout sheet to document the involvement of faculty in data analysis training. The handout was composed of a six-step process to analyze SOL data in order to align the educational program at the school. This handout, which was based on Jim Heywood's Data Workshop, was compiled and presented to the faculty by the principal. Other areas included analyzing the SOL Blueprint, the VDOE *Standards of Learning Curriculum Framework*, the Performance by Question Report, and the SOL released test items given by the VDOE. Accordingly, teachers were to examine their textbooks to look for gaps in the areas of the weak reporting categories.

In a PowerPoint presentation to the school board in 2007, the principal and the PASS coach noted several improvements achieved in 2006. These improvements included the alignment of pacing guides and curriculum maps and the establishment of the nine-week benchmark testing. An increased usage of instructional strategies was documented with improved student behavior and engagement. By June of 2006, team meetings became more frequent and focused. The principal also commended the faculty for their commitment and time dedicated to seeking solutions that improve instructional strategies (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

Improvement Measures for the School Year 2006-2007

During the 2006-2007 school year, the primary focus for school improvement was in mathematics. Reading and language arts were the secondary focus (Principal's report, School Improvement Plan 2006-2007, 2006). According to the School Improvement Plan for 2006-2007 in the area of Reading/Language Arts, the goal stated was to have at least 81% of the students at this intermediate school pass the Reading/Language Arts SOL test by the end of the 2008-2009 school year. In order to meet this goal, the stated objective was to have at least 75% of the students in each subgroup to receive a passing score in the reporting category of understanding a variety of printed materials/resource materials by the end of the 2006-2007 school year. The assessments used as listed on the School Improvement Plan included *STAR Reading*, the *Gates-MacGinitie Reading Test*, the Reading Standards of Learning test, practice and teacher created tests made with released English test items using the *eduTest* program (also known as *Lightspan*). In addition, the administrator was to develop benchmark tests

with the use of Flanagan's *The Tests for Higher Standards*. Failure Free Reading's pre and posttests, and Plato English would also be used as assessments (School Improvement Committee, School Improvement Plan 2006-2007, Reading/Language Arts, 2006).

Eight strategies were implemented to support the goal. Many of these strategies were a continuation of the previous years' school improvement measures. The first strategy listed was to revise the reading/language arts curriculum to align with the VDOE *English Standards of Learning Curriculum Framework*, the new textbooks, and to establish pacing guides. In order to do this, several action steps were stated. Teachers were to receive additional training on the process of developing pacing guides. The documentation showed that many English teachers were a part of a local in-service meeting. Furthermore, the teachers at this school were involved in mandatory monthly in-service meetings presented by a company hired by the county entitled, *Simply Achieve.* Revised curriculum guides were implemented as working documents. Copies were also submitted to the principal and kept in a binder for English Core meetings.

The second strategy stated that SOL-based assessments were to be developed for classroom use. Documentation showed that teachers did develop SOL-based assessments. The third strategy required grade level and subject area committees be established to review SOL SPBQ data, the VDOE's *English Standards of Learning Curriculum Framework*, and the pacing guides. The documentation showed that weekly English core meetings were held throughout the school year. The fourth strategy stated that research-based, instructional strategy training was to be provided to focus on student engagement in learning. Documentation showed that all faculty members were required attend the monthly *Simply Achieve* in-service meetings that presented specific research

based teaching an learning strategies. Furthermore, various administrators performed observation walk-throughs to monitor implementation of these strategies in the classroom.

The fifth strategy stated that the administrator was to develop benchmark tests for each nine-week marking period. This strategy was met when a complete simulated SOL pre-test was given in September with a posttest given in March. Flanagan's *The Tests for Higher Standards* were used for the simulated tests and for the benchmark tests given in November, and January. The sixth strategy was to hire a literacy coach. Documentation showed difficulty in obtaining a literacy coach due to lack of availability of coaches. Consequently, coaches were not hired until the second semester. A former high school English teacher, who was also working in another position in the county, was hired for the job in January 2007. Finally, a school wide writing rubric was to be implemented and monitored. Because of collaboration among English core teachers, a school wide writing rubric was devised, approved, and implemented (School Improvement Committee, School Improvement Plan 2006-2007, Reading/Language Arts, 2006).

The sixth educational strategy for reading improvement stated that in school and after school programs were to be implemented for the most academically needy reading students. The action steps to meet this strategy included the continuation of the double reading classes for targeted students in grades five through eight. Two teachers were involved with the Reading Plus classes for grades five through eight. Letters were to be sent home to inform parents of AYP status and the availability of SES services. Next, the school system would contact with the SES state approved providers for after school tutorial services. The school would also implement a 21st Century Community Learning

Center grant that would provide after school homework, academic, and enrichment programs. A building level administrator would be hired to monitor providers and transportation. The program would be evaluated and recommendations for improvement noted. Documentation showed that after school programs were implemented. The SES services were provided at the elementary school on Monday and Wednesday afternoons. The after school-tutoring program utilized funding from the 21st Century Community Learning Center grant (School Improvement Committee, School Improvement Plan 2006-2007, Reading/Language Arts, 2006).

A seventh strategy for reading improvement included the continued emphasis to reduce the size of the eighth grade reading and language arts classes. To achieve this strategy, additional teachers were to be placed in the eighth grade. To meet this strategy, the two full-time eighth grade reading/language arts teachers remained in their current positions and another full-time teacher was hired (School Improvement Committee, School Improvement Plan 2006-2007, Reading/Language Arts, 2006).

A final strategy was to increase the variety of non-fiction reading resources. To meet this strategy, the action step stated was to continue to update the library non-fiction inventory as recommended by Follett library consultants. Additional non-fiction books were purchased during this school year, and out-of-date books were discarded. Reading/language area teachers also used more nonfiction selections in the reading textbook (School Improvement Committee, School Improvement Plan 2006-2007, Reading/Language Arts, 2006).

Other documents confirmed the school improvement strategies and the additional strategies implemented during the school during the 2006-2007 school year. These

strategies were reported since they relate directly or indirectly to reading improvement at the school. The principal's report (Annual Yearly Progress Report 2005-2006, 2006) listed several strategies for the 2006-2007 school year. This report stated that the school would participate in Virginia's Partnership for Achieving Successful Schools (PASS) initiative and that the school would hire literacy and math coaches. The administrators planned to monitor instruction by using observation walk-throughs, evaluations, and informal observations. After giving *The Tests for Higher Standards* benchmark tests, the principal would use the resulting data to determine changes in instructional focus. The school would work with community leaders to improve student motivation, to provide outside opportunities, and to reestablish the homework camp. Students in each subgroup were identified. The principal's report (School Improvement Plan 2006-2007, 2006) noted that the SPBQ data would be disaggregated when it was make available to the school.

After the final calculations were made of the spring 2006 SOL scores, the principal made a chart of the scores and listed strategies for improvement. This information was given to the teachers as a reference. The strategies that the principal listed included the reviewing of sixth and seventh grade reading and math curriculum to make sure that it was aligned with the SOL objectives. Furthermore, the continuation of using Flanagan's *The Tests for Higher Standards* for benchmark testing was noted. The principal stated that the eighth grade writing strategies should be continued with a review made of the fifth grade writing strategies. To assist teachers, the *Simply Achieve* trainings would be implemented with the learned strategies incorporated into classroom practice. Furthermore, a PASS coach, a math coach, and a literacy coach would be assigned to

help with classroom practices. The Reading Plus classes would continue to help with reading remediation, while math remediation would be implemented (Principal, chart generated by principal with suggestions, 2006).

In a PowerPoint presentation to the County School Board at their monthly meeting in February 2006, the principal highlighted the goals and improvement strategies implemented during the 2006-2007 school year under the direction of the PASS coach. The goals presented for the school year were to improve literacy and math instruction. The improvement of the use of curriculum materials was another goal. In addition, the PASS coach was utilized to strengthen the leadership performance of the principal. To do this, the principal and the PASS coach met weekly and implemented monthly plans of action (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

According to the information in this PowerPoint presentation, in September 2006, expectations were established for the PASS coach and the administrator and they conducted time-on-task observation sweeps. Together they reviewed student data, teacher handbooks, the master schedule, and the pacing guides (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

The October objectives that were implemented and met included the assurance that the math and English curriculums were aligned according to the PASS coach's pacing guides, SOL Blueprints, and the VDOE *Curriculum Framework* documents. The first nine-week curriculum maps were adjusted for the second nine-week marking period. Formal observations of new teachers and those teachers with concerns were conducted. Time-on-task observation sweeps continued. Written remediation plans for students were

developed from data taken from weekly assessments, benchmarks, and SOL objectives. The principal and PASS coach met with the math teachers to review lesson plans and ways to increase academic rigor (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

The November improvements implemented included a review of the first quarter benchmark data with remediation for students within a week after test results, and a review of Individual Education Plans and curriculum maps. A workshop was planned and implemented to help teachers improve student achievement and to achieve the ideal learning environment. An observation rubric was implemented for the math teachers and a plan for supporting the new teachers was implemented. Performance plans were implemented for three teachers experiencing difficulties (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

The December and January achievements included continued remediation within one week after the benchmark test results. Remediation was also monitored to ensure instruction matched student deficits. Attendance was also monitored. The grades from the first quarter were reviewed and teachers with the highest D/F grade averages were required to implement a plan for improved student performance. During this two-month period, the principal and the PASS Coach completed Individual Educational Plan reviews, performance plans, and formal observations (Principal & PASS Coach, Meeting the Challenge PowerPoint presentation to County School Board, 2007).

The remediation services provided by this school as documented in the PowerPoint presented to the school board by the principal and the PASS coach listed the *SAIL* program, which concentrated on math and reading remediation and served 126

students. The SES program served nine students. During school hours, the computer PLATO math program was implemented and 120 students were enrolled. Sixty-five reading students received remediation through the Reading Plus program. Furthermore, the classroom teachers conducted in-class remediation. The school used *STAR Reading*, *STAR Math*, and other tests given in the remediation programs to document student progress. Later in the school year, an after school program called, Academic Enrichment, was implemented to tutor students after school with both the classroom teachers and the administrators involved together in instruction (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

In a memo to teachers, the principal listed many SOL preparation strategies. These strategies included making positive banners, writing positive notes, and handing out a booklet to parents of the core content. Furthermore, the principal noted that students who did not pass the SOL test(s) last year would count twice on the total passing percentage scores if they passed the SOL this year. A classroom chant was recommended. Non-testing classes were to adopt a testing grade level to help them review questions. Teachers should motivate all students. Finally, teachers should stick to the SOL Push Plan (Principal, Considerations for SOL Preparation, 2007).

The principal generated several forms for the teachers to use to document the various school improvement strategies. One such form was a template made by the principal for the teachers to write an intervention plan for those children scoring at certain levels on the benchmark tests (Principal, Instructional Intervention Plan, 2006). The principal also created a template for teachers to use to report their weekly assessments (Principal, Weekly Assessment Report, 2006). A form was developed for teachers to use

when integrating vocabulary across the four cores subject areas and the five exploratory classes (Principal, School Wide Vocabulary Effort, 2007). The principal also devised a data action plan form for teachers to use after they have used data to identify a significant weakness and to develop a plan on implementing a strategy immediately to effect positive results (Principal, Data Action Plan 2006, 2006). Another form that was developed by the principal was used to document teacher peer evaluation (Principal, Peer-Evaluation Form, 2007). In addition, the principal created a "Where Are We Now?" form in 2007 for the classroom teachers to use to help plan additional strategies that would raise SOL scores.

The PowerPoint presentation given to the school board by the principal also documented the fall in-service trainings. Dr. Lisa Myers gave monthly *Simply Achieve* workshops based on research based learning strategies. Different members of the faculty participated in a data workshop and a math workshop (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007). On November 7, 2006, the PASS coach gave a workshop entitled, "Creating an Ideal Learning Environment." In this workshop, the coach demonstrated many learning tools that could be used in any classroom (PASS Coach, Creating an Ideal Learning Environment, PowerPoint to teachers, November 7, 2006). In addition, the principal and PASS coach conducted in-service training on "Personalization and Rigor" on April 17, 2007. This training included drawing attention to *invisible* students, Bill Gate's 3R's, the Frayer Model for instruction, and a definition of *rigor*. Released test items were also reviewed. To further support school improvement, the faculty read, presented, and discussed Dr. James H. Stronge's book, *Qualities of Effective Teachers*.

The PASS coach required the continuation of parent involvement nights for the fall and spring of each school year. Previously, this event was called, PEP Night, or Parents as Educational Partners. The name was changed for the 2006-2007 school year to implement an acronym using the school's name. While reading was a central focus of previous PEP Nights, this evening incorporated a math and science focus (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007). The spring parent/student night was held on March 29, 2007. This event adopted a theme based on the book, *Charlie and the Chocolate Factory.* The night involved students and their parents in activities reflecting the theme and the four core areas.

The PowerPoint presentation given at a county school board meeting also documented a community rally called, Lights on After School, which took place soon after school opened in 2006. This was a community rally that established community involvement and support and allowed open discussion on priorities deemed important by the community. Ways of achieving those priorities were discussed (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007).

A contest to encourage reading was initiated by the assistant principal and was implemented in the fall of 2006. The contest was called, "Rev Up for Reading," and features a motorcycle theme. Students and homerooms tallied the minutes that they had read each week (Principal & PASS Coach, Meeting the Challenge, PowerPoint presentation to County School Board, 2007). The student who read the most minutes received a bicycle and one of the teachers dressed in motorcycle racing uniform rode his motorcycle through the gym during the final celebration assembly.

To supplement school improvement by providing SOL practice in the four core

areas, a license was purchased to use the Internet-based program *Study Island*. This supplemental program contained information in all four subject areas and could be used by students both at school and at home. The program was geared toward the Virginia SOL objectives and was written in the same test question format as used by the SOL objectives. Test and game modes were a part of this program and teachers could edit the program to meet the needs of their classes.

When the SOL results were tallied at the end of the school year, the school in this study missed accreditation by one point in social studies. The school also did not meet AYP because of not meeting the AMO in the English subgroups. Consequently, the principal was forced to retire after over 30 years of continual service to this school. The assistant principal also left as did 14 teachers. As a point of reference, during the school years documented in this study, the county experienced a relatively high teacher retention problem. The 2003-2004 school year experienced 32 teachers either resigning or retiring. In 2004-2005, 24 teachers left the school system. After the 2005-2006 school year, the county experienced 23 teacher losses, and in 2006-2007, 27 tachers left the division ("School Board Meeting," 2007).

Summary

The focus of chapter 4 was to answer the two research questions posed in the study. To answer the first question, the documents utilized in this study were listed and categorized into three areas: school improvement, reading improvement, and reading tests. A special emphasis was placed on locating and presenting documentation of the reading improvement strategies implemented at a rural intermediate school in Virginia because of the No Child Left Behind legislation and subsequent Virginia accreditation

standards. To answer the second research question, chapter 4 presented the results of the reading tests given from May 2004 to June 2007 with a special focus on the fifth grade as they progressed through to the eighth grade class since their scores initiated school improvement. A chronological narrative was also presented to better explain the school improvement and reading improvement process at the school. A detailed discussion and summary of the findings are presented in chapter 5.

Chapter 5

Summary and Discussion

This final chapter of the dissertation restates the problem that was researched and reviews the main methods utilized in the study. The major sections of the chapter will summarize the results, discuss implications for practice, and recommend suggestions for additional research.

Statement of the Problem

The purpose of this mixed-methodology study was to describe the reading curriculum and instructional changes that have occurred in a small, rural, intermediate school in Virginia as a result of the No Child Left Behind legislation and Virginia's Standards of Learning requirements. The school was comprised of grades five through eight and was the only intermediate school in a small county consisting of three schools. A special focus was placed on the progression of reading scores of the 2003-2004 fifth grade students through their eighth grade school year of 2006-2007. The Standards of Learning reading scores given in the spring of 2004 initiated the school improvement process for this school. Thus, the focus of this research was based on documenting the reading scores and the school improvement process that incurred as a result.

The research explored the following questions:

1. What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?
2. What positive or negative changes in the reading scores can be noted for the

students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?

Review of the Methodology

As explained in chapter 1, the research was primarily a mixed-methodology design featuring reading improvement at a small, rural, intermediate school. A major instructional focus of this school was in the area of improving reading scores since the school failed to meet both No Child Left Behind Adequate Yearly Progress and Virginia accreditation requirements in the area of reading starting with the spring 2004 Reading Standards of Learning scores. This study followed one group of students at a small, rural, intermediate school during the three school years from May 2004 to June 2007. The reading test scores of the 2004-2005 fifth and eighth grade classes were below the mandated federal Annual Measurable Objectives and thus, the school failed to meet Adequate Yearly Progress standards and was placed into school improvement with the accompanying Accredited with Warning status.

To answer the first research question, the study consisted of a document analysis of the school improvement changes within the school, especially in the area of reading curriculum and instruction, implemented from May 2004 to June 2007. The document analysis was performed on all available written and electronic artifacts that related to school and reading improvements found in the various files and bookshelves located in the school. This documentation included the school's yearly School Improvement Plan, in-service notes, faculty and core meeting notes, adopted textbooks, teacher resources, and curriculum maps. Other documentation incorporated into this study was comprised of copies of schedule changes, documented materials of parent involvement, memos from

the principal and teachers, and various related materials. The numerous local, district, and state mandated changes in the reading program at this school during this time were reviewed and included in the dissertation. Since many resources were used to document the school improvement process at the school of this study, the documents were compared and confirmed through data triangulation to ensure the accuracy of the information reported in this study.

To interpret the findings related to the first research question, numerous strategies that were implemented to improve reading instruction were reviewed. Wide varieties of documents were collected to confirm the implementation of those strategies. The chronological narration of the reading improvement strategies showed the triangulation of multiple sources to document and to confirm the accuracy of the various strategies reported. Thus, during the process of this research, the data were analyzed and compared to document similar findings. Only findings that were consistent with other documentation were reported.

To answer the second research question, the study documented the reading scores of the 2003-2004 fifth grade class until they completed the eighth grade in 2006-2007. The documentation started with the spring 2004 reading SOL test scores since school improvement started with these scores. All available reading scores were documented including Virginia's Reading Standards of Learning tests, *STAR Reading*, the *Gates MacGinitie Reading Test*, and local benchmark scores using the *Tests for Higher Standards*. Data triangulation was performed on the test scores presented to ensure accuracy.

Summary of the Results

In answering the first research question, "What impact did the No Child Left Behind legislation and the Virginia Standards of Learning have on the reading curriculum and instruction at a small, rural, intermediate school?" the research showed that both the federal and state requirements had a great impact on this school's reading curriculum and instruction. During the period from May 2004 to June 2007 of this study, many significant school improvement strategies, especially in the area of reading, were put into place. The most important change in reading instruction at this school was the alignment of the curriculum with Virginia's Standards of Learning. Consequently, the pacing guides of the reading teachers became more developed and detailed during each year of school improvement. An increased emphasis on teachers teaching to the SOL objectives could be noted, while information not pertaining to the SOL objectives was eliminated. Accordingly, another important improvement was the teacher's reliance on student score data to direct instruction. Increased training and implementation of research based teaching and learning strategies were noted. Communication was increased among the English Core of teachers as weekly meetings were scheduled, and useful tools such as a school wide writing rubric were developed. Furthermore, teamwork could be seen in the documentation as the teachers worked together to implement new reading series and other instructional strategies. The decrease of student to teacher ratios in the reading and language arts classes and an increase of instruction time were other important factors relating to reading improvement.

Support personnel also played an important part to the school improvement process. The addition of a PASS coach to support the principal and an English coach to

work with the English teachers gave added personnel to a school with a limited number of teachers. These coaches were able to add much insight and many suggestions.

Even though the school had existing remedial programs implemented during school and after school hours, there was an increased effort to adopt research based remedial programs. A specific matrix was developed to target the students in greatest need in reading and these students received remediation through the remedial programs.

The increased desire to involve parents could be seen in the implementation of the PEP nights, which focused on reading and then branched out to encompass other subject areas as well. An increase of appropriate books in the school's library was another plus.

A negative result of school improvement was the forced retirement of a veteran administrator and the resignation of the assistant principal. In addition, during the three-year period of this study, the school and the county experienced high teacher turnover due to retirements and relocations. A few of the teachers left the field of education permanently. Even with the implementation of various improvement measures, the school still struggles to meet both NCLB mandates and Virginia accreditation requirements as the other subject areas had trouble in meeting federal and state standards.

To answer the second research question, "What positive or negative changes in the reading scores can be noted for the students who were in fifth grade during the 2003-2004 school year through their eighth grade school year of 2006-2007?" the quantitative reading data presented in this study did show an increase of reading progress as determined by the Reading Standards of Learning tests. As the Annual Measurable Objective increased each year according to Virginia guidelines influenced by No Child Left Behind mandates, so did the reading scores for the school in this study.

Accordingly, the reading scores for the focal group of students in this research also increased. The school did not meet the reading AMO in reading for 2004, but did achieve the annual reading AMO goals for 2005, 2006, and 2007. The black, disabled, and disadvantaged subgroups also increased their reading scores. However, these scores did not meet the AMO and consequently, the school did not meet AYP during the May 2004 to June 2007 time span of this study. Because the subgroups did not meet the annual reading AMO, the school did not meet AYP, and it was given the Accreditation with Warning status for the three school years of 2004-2005, 2005-2006, and 2006-2007. Since a school can only be Accredited with Warning for three years, the superintendent of this school system forced the principal to retire without an option to work in another position. The assistant principal also chose to leave. This and the county starting the necessary steps toward alternative governance as outlined in NCLB, allowed the school not to receive the Denied Accreditation status, but to be designated as Conditionally Accredited for the 2007-2008 school year.

In the table located in Appendix J, an increase in reading scores could also be noted in the focal student group of this study as well as for the other grade levels. Three of the four reading test results given to the focal group did show an increase of reading achievement. However, the comparison of the STAR Reading test scores is not valid since not all students were tested during the 2005-2006 and 2006-2007 school years.

Over all, the focal group of students in this study did show an increase in reading from the time that they entered the school in 2003 until they left the school in 2007. This class, as noted in Appendix F, had a 57% passing rate on Virginia Reading Standards of Learning in 2004 that contributed to the school being placed into school improvement by

not meeting AYP or Virginia accreditation requirements. However, by 2007, this group of students had a 70% passing rate in reading according to the state SOL reading tests.

Benchmark testing was not implemented until the spring of 2006. The school chose to use Flanagan's *Tests for Higher Standards* for this purpose. The benchmark testing for the focal group of students as noted in the table in Appendix G showed a decrease in percentage of students showing passing scored from spring 2006 to March 2007 on the complete simulated *Tests for Higher Standards*. However, an increase of students who passed the reading portion of this test can be noted between the September 2006 and March 2007 test dates.

According to the *Gates-MacGinitie Reading Test*, as noted in Appendix H, about 70% of the students in the focal group entering the intermediate school of this study as fifth graders were reading below grade level when they entered the school in 2003. By the spring testing period, the percentage of students testing below grade level was 62%. By the end of the sixth grade year, this group of students tested 67% below grade level. However, by the end of seventh grade, the percentage of students scoring below grade level in reading decreased to 50%. These students were not tested in the eighth grade.

STAR Reading tests were not implemented until the 2004-2005 school year. The STAR Reading scores as noted in Appendix I, Table I1, showed that the focal group of students in this study performed below grade level in reading during their sixth grade year. However, the scores did increase during the school year. With only about 49% of the summary scores available for this group in the seventh grade, the scores in Appendix I, Table I2, showed that this group of students was performing below grade level in reading. Accordingly, Table I3 in Appendix I showed that with only 46% of the

summary scores found, the students tested during the eighth grade year demonstrated an increase over the previous year, but were still performing below grade level.

Discussion of the Results

Interpretation of the Findings

The small, rural, intermediate school in this study experienced many dramatic changes because of federal and state school improvement mandates and sanctions. Most importantly, the curriculum was aligned to meet the state standards and pacing guides were put into practice to regulate and insure the teaching of the standards. Furthermore, many research based teaching practices were incorporated into the program that increased the quality of instruction. An increase of class time and of reading teachers was another notable improvement. Thus, with the implementation of sound reading curriculum and instruction practices, the school was able to raise the Reading Standards of Learning test scores to meet the Annual Measurable Objective in reading for 2005, 2006, and 2007, even though these objectives increased yearly.

The small, rural intermediate school in this study encountered a variety of obstacles including a clientele consisting of numerous minority, disabled, and disadvantaged students, a limited number of teachers and other resources, and a tight schedule; yet, the school in this study was able to make advances in reading during the three year time frame of this research. However, with a change in administration and a continued high teacher turnover rate, one can only guess the future of this school as it strives to meet increasing AYP and AMO standards as time runs out for it to meet state accreditation before it is denied accreditation. Being denied accreditation presents an unpleasant future for the intermediate school already working hard to improve by current

standards.

Relationship of the Current Study to Prior Research

The significance of this study to the educational community was to document the reading improvements made in the curriculum and instruction of a rural Title I school because of both NCLB and Virginia SOL requirements. With the relative newness of the No Child Left Behind Act of 2001, this research presented many effective reading improvement measures for a small, rural school struggling to meet Adequate Yearly Progress and state accreditation. With the Annual Measurable Objectives increasing in Virginia as well as in other states each year, until the mandated goal of 100% mastery in the 2013-2014 school year, only a few years' worth of research is available as school strive, and some fail, to meet the standards. Many of the schools failing to meet the necessary standards are only now experiencing the more strict sanctions. Thus, this research adds to the current body of knowledge of schools struggling to meet current state and federal educational standards. The findings of this study may also be informative to other schools and districts in other states that do not meet NCLB benchmarks or their own state's requirements and are required to implement school improvement plans.

In addition, with much research being focused on improving urban schools, this research contributes to the current research as it focused on a small, rural, Title I school. Furthermore, since 59% of the middle and intermediate schools in Virginia are finding themselves in improvement in Virginia, this study contributes to the limited amount of research available to educators, since a greater amount of research is focused on the elementary school. With its focus on the area of reading, this study can provide much needed specific information to middle and intermediate school administrators and

teachers who face the challenged of mandated school improvement.

Implications for Practice

As other schools in Virginia experience difficulty in meeting state and federal AYP and accreditation standards in reading, this study provides many useful reading improvement measures that have helped a small intermediate school to increase its reading scores. The alignment of the curriculum to Virginia's Standards of Learning with the creation of pacing guides seemed to be the major factors to reading improvement. The implementation of research based teaching strategies and the increased use of data to drive instruction were also instrumental in improving reading instruction at the school. As the requirements to meet No Child Left Behind mandates increase in the following years, other districts may find themselves in need of implementing similar school improvement measures. The reading improvement process as presented in this study can be used as a model for other school districts to follow that are facing difficulty meeting state and federal standards. This model can be adapted for use in other subject areas as well.

Limitations of this Study

This study was limited by its focus on one specific group of students in a certain small, rural, intermediate school in Virginia. Within school improvement at this school, only the subject area of reading was considered. This study was also limited to a specific three-year period. Accordingly, this study did not control for the transient rate of the student population. Furthermore, this research specifically focused on specific school and reading improvement trends and was not performed in collaboration with any other researchers.

Suggestions for Additional Research

With No Child Left Behind only on the law books since 2001, more research is needed that pertains to the factors that cause schools to fail and to those practices that can help schools become more effective and successful. An increased focus also needs to be made on middle and intermediate schools that fail to meet the required standards and the unique nature of these schools. With the date for the reauthorization of this law drawing near and a new presidential administration being decided in 2008, future studies will need to be conducted to ascertain the implications of future changes of the original Elementary and Secondary Education Act.

References

Abernathy, S. F. (2007). *No Child Left Behind and the public schools.* Ann Arbor, MI: The University of Michigan Press.

Allington, R. (2005, October/November). NCLB, Reading First, and whither the future? *Reading Today, 23*(2), 18.

Allington, R. L. (2006). Reading lessons and federal policy making: An overview and introduction to the special issue. *The Elementary School Journal, 107*(1), 3-5.

Aronson, J. (2004, November). The threat of stereotype. *Educational Leadership, 62*(3), 14-19.

Ary, D., Jacobs, L. C., Razavich, A., & Sorensen, C. (2006). *Introduction to research in education.* Belmont, CA: Thompson Wadsworth.

Ascher, C. (2006, October). NCLB's supplemental educational services: Is this what our students need? *Phi Delta Kappan, 88*(2), 136-141. Retrieved June 25, 2007 from Academic Search Premier database.

Azzam, A. M., Perkins-Gough, D., & Thiers, N. (2006, November). The impact of NCLB. *Educational Leadership, 64*(3), 94-96. Retrieved June 25, 2007 from Academic Search Premier database.

Barton, P. E. (2004, November). Why does the gap persist? *Educational Leadership, 62*(3), 9-13.

Borkowski, J. W., & Sneed, M. (2006, Winter). Will NCLB improve or harm public education? *Harvard Educational Review, 76*(4), 503-525. Retrieved July 5, 2007 from http://www.edreview.org/harvard06/2006/wi06/w06borko.htm

Brock, K. J., & Groth, C. (2003). "Becoming" effective: Lessons from one state's reform initiative in schools serving low-income students. *Journal of Education for Students Placed at Risk, 8*(2), 167-190.

Cawelti, G. (2006, November). The side effects of NCLB. *Educational Leadership, 64*(3), 64-68.

Center on Education Policy (2006). *From the capitol to the classroom: Year 4 of the No Child Left Behind Act: Summary and recommendations.* Washington, D.C.: Center on Education Policy. Retrieved July 20, 2007 from http://www.cep-dc.org/nclb/Year4/NCLB-Year4Summary.pdf

Chrisman, V. (2005, February). How schools sustain success. *Educational Leadership, 62*(3), 16-20.

Christie, K. (2004, April). Virginia's excellent adventure. *Phi Delta Kappan, 85*(8), 565-567. Retrieved August 1, 2007 from Academic Search Premier database.

Colvin, R. L. (2004). Public school choice: An overview. In F. M. Hess, & C. E. Finn (Eds.), *Leaving no child behind? Options for kids in failing schools.* New York: Palgrave Macmillian.

Conley, M., & Hinchman, K. (2004, September). No Child Left Behind: What it means for U. S. adolescents and what we can do about it. *Journal of Adolescent and Adult Literacy, 48*(1), 42-50.

Cooley, A. (2007, March). Reevaluating the politics and research of school choice. *Educational Studies, 40*(3), 246-264.

Darling-Hammond, L., & Berry, B. (2006, November). Highly qualified teachers for all. *Educational Leadership, 64*(3), 14-20.

DeBray, E. H. (2005). Introduction to the special issue on federalism reconsidered. The case of the No Child Left Behind Act. *Peabody Journal of Education, 80*(2), 1-18. Retrieved August 1, 2007 from Academic Search Premier database.

Diogenes, (Laertius). (1895). *Lives and opinions of eminent philosophers.* (C. D. Yonge, Trans.). London: George Bell and Sons. (Original work written circa 225).

DuFour, R. & Eaker, R. (1992). *Creating the new American school.* Bloomington, IN: National Education Service.

Flanagan, S., & Mott, D. E. W. (1997-2006). *Tests for Higher Standards – Virginia user guide*. Retrieved December 2, 2007, from http://www.tfhs.net/vaguide.pdf

Fletcher, G. H. (2004, March). Scientifically based research: Guidelines or mandates for product purchasing? *THE Journal, 31*(8), 156-160. Retrieved August 1, 2007 from Academic Search Premier database.

Flinders, D. J. (2005). Failings of NCLB. *Curriculum and Teaching Dialogue, 7*(1/2), 1-9. Retrieved August 1, 2007 from Academic Search Premier database.

Gandara, P. (2004, November). Building bridges to college. *Educational Leadership, 62*(3), 56-60.

Goertz, M. E. (2005). Implementing the No Child Left Behind Act: Challenges for the states. *Peabody Journal of Education, 80*(2), 73-89. Retrieved August 1, 2007 from Academic Search Premier database.

Gorman, S. (2004). The invisible hand of NCLB. In F. M. Hess, & C. E. Finn (Eds.), *Leaving no child behind? Options for kids in failing schools.* New York: Palgrave Macmillian.

Governor's Best Practice Center Division of Accountability. (2000, November). *A study*

of effective practices in Virginia schools. Richmond, VA: Virginia Department of Education. Retrieved June 4, 2007 from http://pen.12.va.us/VDOE/Accountability/effectivepractice.pdf

Guilfoyle, C. (2006, November). NCLB: Is there life beyond testing? *Educational Leadership, 64,*(3), 8-13.

Guisbond, L., & Neill, M. (2004, September/October). Failing our children. *Clearing House, 78*(1), 12-16. Retrieved August 1, 2007 from Academic Search Premier database.

Gurian, M., & Stevens, K. (2004, November). With boys and girls in mind. *Educational Leadership, 62*(3), 21-26.

Gunning, T. G. (2006). Closing the literacy gap. Boston, MA: Pearson Education, Inc.

Hale, J. (2004, November). How schools shortchange African American children. *Educational Leadership, 62*(3), 34-39.

Hambleton, R. K., Crocker, L., Cruse, K., Dodd, B., Plake, B. S., Poggio, J. (2000, November 20). *Review of selected characteristics of the Virginia Standards of Learning (SOL) assessments*. Retrieved December 2, 2007, from http://www.pen.k12.va.us/VDOE/Assessment/virginiareport.pdf

Haretos, C. (2005). The No Child Left Behind Act of 2001: Is the definition of "Adequate Yearly Progress" adequate? *Kennedy School Review, 6*, 29-46. Retrieved August 1, 2007 from Academic Search Premier database.

Harris, D. N. (2007, May). High-flying schools, student disadvantage, and the logic of NCLB. *American Journal of Education, 113,* 367-394.

Hawley, W. D., & Rollie, D. L. (Eds.). (2007). *The keys to effective schools: Educational*

reform as continuous improvement. Thousand Oaks, CA: Corwin Press.

Haycock, K. (2006, November). No more invisible kids. *Educational Leadership, 64(*3), 38-42.

Hess, F. M. (2005, Winter). Commentary: Accountability, policy, and scholarly research. *Educational Measurement: Issues and Practice, 24*(4), 53-57. Retrieved August 1, 2007 from Academic Search Premier database.

Hess, F. M., & Finn, C. E. (Eds.). (2004). *Leaving no child behind? Options for kids in failing schools.* New York: Palgrave Macmillian.

Hess, F. M., & Petrilli, M. J. (2006). *No Child Left Behind primer.* New York: Peter Lang.

Hirsch, E. D. (1998). Research-based education policy. In W. M. Evers (Ed.), *What's gone wrong in America's classrooms?* Stanford, CA: Hoover Institution Press.

Howell, W. (2006). Switching schools? A closer look… *Peabody Journal of Education, 81*(1), 140-179. Retrieved August 1, 2007 from Academic Search Premier database.

Hunter, R. C., Bartee, R. (2003). The achievement gap: Issues of competition, class, and race. *Education and Urban Society, 35*(2), 151. Retrieved August 1, 2007 from Academic Search Premier database.

Hursh, D. (2005, October). The growth of high-stakes testing in the USA: Accountability, markets, and the decline in educational equality. *British Educational Research Journal, 31*(5), 605-622. Retrieved August 1, 2007 from Academic Search Premier database.

International Reading Association. (2007, February/March). IRA members speak out on

NCLB. *Reading Today, 24*(4), 1, 4-5.

Irons, E. J., & Harris, S. (2007). *The challenges of No Child Left Behind.* New York: Rowman & Littlefield Education.

Jimerson, L. (2005, August). Placism in NCLB – How rural children are left behind. *Equity and Excellence in Education, 38*(3), 211-219. Retrieved August 1, 2007 from Academic Search Premier database.

Kennedy, D., Cohen, L., & Bailey, T. A. (2002). *The American pageant.* New York: Houghton Mifflin Company.

Kennedy, E. M. (2005, Fall). The No Child Left Behind Act. *Human Rights Journal of the Section of Individual Rights and Responsibilities, 32*(4), 16-18. Retrieved August 1, 2007 from Academic Search Premier database.

Kimmelman, P. L. (2006). *Implementing NCLB: Creating a knowledge framework to support school improvement.* Thousand Oaks, CA: Corwin Press.

Kirst, M. W. (2004, November). The high school/college disconnect. *Educational Leadership, 62*(3), 51-55.

Landsman, J. (2004, November). Confronting the racism of low expectations. *Educational Leadership, 62*(3), 28-32.

Lee, J. (2006). *Tracking achievement gaps and assessing the impact of NCLB on the gaps: An in-depth look into national and state reading and math outcome trends.* Cambridge, MA: The Civil Rights Project at Harvard University.

Linn, R. L. (2003). *Accountability, responsibility, and reasonable expectations. CSE report 601.* Boulder, CO: National Center for Research on Evaluation, Standards, and Student Testing.

Lipson, M. Y., Mosenthall, J. H., Mekkelsen, J., & Russ, B. (2004, March). Building knowledge and fashioning success one school at a time. *Reading Teacher, 56*(6), 534-542. Retrieved August 1, 2007 from Academic Search Premier database.

Liston, D., Whitcomb, J., & Borko, H. (2007, April/May). NCLB and scientifically-based research: Opportunities lost and found. *Journal of Teacher Education, 58*(2), 99-107. Retrieved July 6, 2007 from OCLC FirstSearch database.

Lyons, C. A. (2003). *Teaching struggling readers: how to use brain-based research to maximize learning*. Portsmouth, NH: Heinemann.

MacGinitie, W. H., MacGinitie, R. K., Maria, K., & Dreyer, L. G. (2002). *Gates-MacGinitie Reading Tests technical report*. Itasca, IL: Riverside Publishing.

Mathis, W. J. (2005). The cost of implementing the federal No Child Left Behind Act: Different assumptions, different answers. *Peabody Journal of Education, 80*(2), 90-119. Retrieved August 1, 2007 from Academic Search Premier database.

McGuinn, P. (2005, Winter). The national schoolmarm: No Child Left Behind and the new educational federalism. *Publis, 35*(1), 1-3.

McReynolds, K. (2006, Summer). The No Child Left Behind Act raises growing concerns. *ED Review, 19*(2), 33-36. Retrieved August 7, 2007 from Academic Search Premier database.

Mickelson, R. A., & Southworth, S. (2005). When opting out is not a choice: Implications for NCLB's transfer option from Charlotte, North Carolina. *Equity and Excellence in Education, 38*, 249-263. Retrieved August 1, 2007 from Academic Search Premier database.

Milken, L., Amato, A., Fattan, C., Marshall, J., Payzant, T., Simon, R., & Vallas, P. G.

(2005). The challenges of school reform: Implementation, impact, and sustainability. In L. C. Solmon, K. F. Agam, & C. Priagula (Eds.), *The challenges of school reform: Implementation, impact, and sustainability.* Greenwich, CT: Milken Family Foundation.

Mintrop, H., & MacLessan, A. M. (2002, March). School improvement plans in elementary and middle schools on probation. *Elementary School Journal, 102*(4), 275. Retrieved August 1, 2007 from Academic Search Premier database.

National Conference of State Legislatures. (2005). Task force on No Child Left Behind – Final report. Denver, CO: National Conference of State Legislatures.

National Reading Panel. (2002). *Evidence-based reading instruction: Putting the National Reading Panel report into practice.* Newark, DE: International Reading Association.

NCLB update. (No Child Left Behind Act of 2001). (2007, June 29). *ED Review.* Retrieved August 21, 2007 from Expanded Academic ASAP Gale database.

Newman, F. M. (2007). Improving achievement for all students. In W. D. Hawley & D. L. Rollie (Eds.), *The keys to effective schools: Educational reform as continuous improvement.* Thousand Oaks, CA: Corwin Press.

Offenberg, R. M. (2004, October). Inferring adequate yearly progress of schools from student achievement in highly mobile communities. *Journal of Education for Students Placed at Risk, 9*(4), 337-355. Retrieved August 1, 2007 from Academic Search Premier database.

Paige, R. (2006, Winter). No Child Left Behind: The ongoing movement for public education reform. *Harvard Educational Review, 76*(4), 461-473.

Popham, W. J. (2004, November). A game without winners. *Educational Leadership, 62(*3), 46-50.

Porter-Magee, K. (2004, September/October). Teacher quality, controversy, and NCLB. *Clearing House, 78*(1), 26-29. Retrieved August 1, 2007 from Academic Search Premier database.

Protheroe, N., Shellard, E., & Turner, J. (2003). *A practical guide to school improvement: Meeting the challenges of NCLB*. Arlington, VA: Educational Research Service.

Rees, N. S. (2005). Remarks by Nina S. Rees before the Midwest equity assistance center October 4-5, 2005. In L. C. Solmon, K. F. Agam, & C. Priagula (Eds.), *The challenges of school reform: Implementation, impact, and sustainability.* Greenwich, CT: Milken Family Foundation.

Renaissance Learning, Inc. (2006). *Understanding reliability and validity*. Wisconsin Rapids, WI: Renaissance Learning.

Resnick, R. M. (2005). *The impact of No Child Left Behind (NCLB) – Educational leaders speak out.* Shelton, CT: Market Data Retrieval.

Reutzel, D. R., & Mitchell, J. (2005, April). High-stakes accountability themed issue: How did we get here from there? *The Reading Teacher, 58*(1), 606-608. Retrieved August 1, 2007 from Academic Search Premier database.

Rothstein, R. (2004, October). Class and the classroom. *American School Board Journal, 191*(10), 16-21. Retrieved August 1, 2007 from Academic Search Premier database.

Rothstein, R., & Jocobsen, R. (2006, December). The goals of education. *Phi Delta Kappan, 88*(4), 264-272. Retrieved June 25, 2007, from Academic Search

Premier database.

School board meeting. (2007, July 4). *Rappahannock Times*, pp. A1, A5.

Simpson, R. L., LaCava, P. G., & Graner, P. S. (2004, November). The No Child Left Behind Act: Challenges and implications for educators. *Intervention in School and Clinic, 40*(2), 67-75.

Sloan, K. (2007). *Holding schools accountable: A handbook for educators and parents.* Westport, CT: Praeger Publishers.

Smith, E. (2005, July). Raising standards in American schools: The case of No Child Left Behind. Journal of Educational Policy, 20(4), 507-524. Retrieved August 1, 2007 from Academic Search Premier database.

Smith, R. A. (2004, November). A call for universal preschool. *Educational Leadership, 62*(3), 38-39.

Solmon, L. C., Cortese, A., Driscoll, D. P., Rees, N. S., & Rotherham, A. (2005). Meeting the requirements of No Child Left Behind. In L. C. Solmon, K. F. Agam, & C. Priagula (Eds.), *The challenges of school reform: Implementation, impact, and sustainability.* Greenwich, CT: Milken Family Foundation.

Spellings, M. (2007, January). *Building on results: A blueprint for strengthening the No Child Left Behind Act.* Washington, D.C.: U. S. Department of Education. Retrieved June 15, 2007 from http://www.ed.gov/policy/elsec/leg/nclb/buildingonresults.pdf

Spring, J. (2000). American education. Boston, MA: McGraw-Hill.

Sunderman, G. L., & Kim, J. S. (2007, May). The expansion of federal power and the politics of implementing the No Child Left Behind Act. *Teachers College Record,*

109(5), 1057-1058.

Sunderman, G. L., Kim J. S., & Orfield, G. (2005). *NCLB meets school realities.* Thousand Oaks, CA: Corwin Press.

Taylor, E. (2006, March). A critical race analysis of the achievement gap in the United States: Politics, reality, and hope. *Leadership and Policy in Schools, 5*(1), 71-87. Retrieved August 1, 2007 from Academic Search Premier database.

Thayer, Y. (2000, February). Virginia's standards make all students stars. *Educational Leadership, 57*(5), 70. Retrieved August 1, 2007 from Academic Search Premier database.

Tuerk, P. W. (2005, June). Research in the high stakes era: Achievement, resources, and No Child Left Behind. *Psychological Science, 16*(6), 419-425. Retrieved August 1, 2007 from Academic Search Premier database.

Uline, C. L., Johnson, J., & Joseph, F. (2005, Winter). This issue: Closing the achievement gaps: What will it take? *Theory Into Practice, 44*(1), 1-3. Retrieved August 1, 2007 from Academic Search Premier database.

U. S. Commission on Civil Rights Office of the General Counsel. (2004, July 2). Closing the achievement gap: The impact of standards-based education reform on student performance. Washington, D.C.: U. S. Commission on Civil Rights. Retrieved August 21, 2007 from http://www.law.umaryland.edu/marshall/uscrr/documents/closingachiegap.pdf

United States Department of Education. (2003, August). *Fact sheet on the major provisions of the conference report to H. R. 1, the no child left behind act.* Retrieved May 19, 2007 from

http://www.ed.gov/print/nclb/overview/factsheet.html

United States Department of Education. (2004). *Four pillars of NCLB.* Retrieved May 19, 2007 from http://www.ed.gov/print/nclb/overview/intro/4pillars.html

United States Department of Education. (2006). *School matters*. Retrieved June 15, 2007 from http://www.schoolmatters.com/app/location/q/stid=47/llid=116/stllid=157/locid=959495/stype=/catid=-1/secid=-1/site=pes

Virginia Board of Education. (2005, January). *Raising student achievement.* Richmond, VA: Division of Policy and Communications.

Virginia Department of Education. (2005, January). *Virginia standards of learning assessments technical report: 2003-2004 Administration*. Retrieved December 2, 2007 from: http://www.pen.k12.va.us/VDOE/Assessment/VA03-04TechnicalReport.pdf

Virginia Department of Education. (2006). *Virginia school report card.* Retrieved May 19, 2007 from http://www.pen.k12.va.us/VDOE/src/index.shtml

Virginia Department of Education. (2007). *Partnership for achieving successful schools*. Retrieved June 4, 2007 from http://wwww.doe.virginia.gov/VDOE/SchoolImprovement/pass.html

Walsh, K. (2004, September/October). Through the looking glass: How NCLB's promise requires facing some hard truths about teacher quality. *Clearing House, 78*(1), 22-25. Retrieved August 1, 2007 from Academic Search Premier database.

Weaver, R. (2007, Spring/Summer). NCLB: The view up close. *Social Policy, 37*(3/4), 45-48. Retrieved August 1, 2007 from Academic Search Premier database.

Weiner, R., & Hall, D. (2004, September/October). Accountability under No Child Left Behind. *Clearing House, 78*(1), 17-21. Retrieved August 1, 2007 from Academic Search Premier database.

Welner, K. G. (2005, August). Can irrational become unconstitutional? NCLB's 100% presuppositions. *Equity and Excellence in Education, 38*(3), 171-179. Retrieved August 1, 2007 from Academic Search Premier database.

Wright, W. (2006, November). A catch-22 for language learners. *Educational Leadership, 64*(3), 22-27.

Yell, M. L., & Drasgow, E. (2005). *No Child Left Behind: A guide for professionals.* Upper Saddle River, NJ: Pearson Education, Inc.

Zavadsky, H. (2006, November). How NCLB drives success in urban schools. *Educational Leadership, 64*(3), 69-73.

Appendix A

Documents Utilized in Study

Documents	School improvement	Reading improvement	Reading tests
School Improvement Plan 2004-2005 Grade 5 Reading/Language Arts		X	X
School Improvement Plan 2004-2005 Grade 8 Reading/Language Arts		X	X
School Improvement Plan 2004-2005 Academic Review Essential Actions	X	X	X
School Improvement Plan 2005-2006	X	X	X
School Improvement Plan 2006-2007	X	X	X
Successful Educational Achievement "SEA" Principal's letter to parents 2005	X	X	
Teachers' lesson plans		X	
Academic Review Technical Assistance Report Feb. 2005	X	X	
Academic Review Technical Assistance Report (Preliminary) Dec. 2005	X	X	
SAIL Master Student List 2004-2005		X	
Weekly Assessment Report – Form 2005	X	X	
Information for actions to meet Improvement Plan recommendations 2005	X	X	
"Where are We Now?" 2007 SOL Planning Sheet	X	X	
"Considerations for SOL Preparation" 2007	X	X	
"Staff Preparation for On-Site Review" 2005	X	X	
"Personalization and Rigor Agenda" In-service 2007	X		X
Samples of first pacing guides 2004-2005	X	X	
Strategies for Improvement – chart 2005-2006	X		

Documents	School improvement	Reading improvement	Reading tests
"Meeting the Challenge" PowerPoint presentation to school board 2007	X	X	
"Data Action Plan 2006"	X		X
Peer Evaluation – form 2007	X		
"Creating an Ideal Learning Environment" PowerPoint in-service	X		
Parent/student night letter 2007	X		
Notes of reading improvement measures implemented by Reading Specialist 2005-2006		X	
6 Writing Traits In-service notes 2006		X (writing)	
School Wide Writing Rubric 2005		X (writing)	
4 Square Writing handouts		X (writing)	
Paragraph Writing Strategies		X (writing)	
"Part 1: Profile" county/school info.	X		
"PEP (Parents in Educational Partnerships) Night!" organizational plan 2004	X	X	
Parents as Educational Partners memo 2004	X	X	
"Parents as Educational Partners" informational/organizational memo 2005	X	X	
"PEP" Night! Letter to parents 2005	X	X	
"Parents as Educational Partners" organizational memo 2004	X	X	
PEP Night letter to parents 2004	X	X	
Matrix generated for Title I reading student placement		X	
Summary and suggestions to principal of langrage arts program by reading specialist 2005		X	
Written note by school improvement chair about addition of 8th reading/language arts teacher 2005		X	
English Core meeting notes & memo to principal – adoption of Holt text 2005		X	
Holt text – "free" novels chosen note to principal from reading specialist		X	

Documents	School improvement	Reading improvement	Reading tests
"School Board Meeting" newspaper article – teacher turn-over	X		
Enrollment figures – handwritten note to school improvement chair	X		
Population Summary 05-06 Excel file	X		
Annual Yearly Progress Report 2005-2006	X	X	
2003-2004 Adequate Yearly Progress Review	X	X	
School Report Card VDOE 2004			X
School Report Card VDOE 2005			X
School Report Card VDOE 2006			X
School Report Card VDOE 2007			X
School 2004 SOL report (chart)			X
Percentage of students passing SOL – Excel file 2004-2005			X
"Addendum to NCLB Amendment Request" 2006	X		
SOL scores Excel file – staff documents			X
State AYP Detail Report 2004			X
State AYP Detail Report 2005			X
State AYP Detail Report 2006			X
Preliminary Accreditation Report 2004			X
Principal's chart showing SOL scores from 1998-2005			X
Writing scores – email from Director of Instruction 2007			X
SOL scores chart with suggestions 2005-2006			X
Writing scores – email from Director of Instruction 2005			X
Chart of SOL scores 2001-2004 by Director of Instruction			X
"School Accreditation Detail Report PRELIMINARY 2006-2007	X		
Excel file of SOL score results 1998-2005			X
Preliminary SOL results handwritten by principal 2007			X

Documents	School improvement	Reading improvement	Reading tests
STAR Reading test results Excel file 2004-2005			X
STAR Reading Snapshot Report 2004			X
STAR Reading Summary Report 2005			X
STAR Reading Summary Report 2006			X
STAR Reading Summary Report 2007			X
GMRT - summary of scores 2004			X
GMRT – summary of scores 2005			X
GMRT – chart of scores grades 2-7 2005			X
GMRT – scores passing percents 5th grade 2007			X
GMRT – Master list of 6th grade student data 2003-2004			X
GMRT 6th scores spreadsheet 2003-2004			X
GMRT 6th sorted 2007			X
GMRT 5th sorted 2007			X
GMRT 5th sorted 2005-2006			X
GMRT 5th sorted 2005-2006			X
GMRT Spring 2007 scores sorted 7th grade			X
GMRT Fall 2005 scores sorted 7th grade			X
Benchmark testing Excel spreadsheet 2006			X
Benchmark 1 Totals 2006 Excel			X
Second Benchmark Excel files 2007			X
Benchmark Spring Excel files 2006			X
Benchmark Post-SIMS Report Excel 2007			X
Benchmark testing memo to teachers noting test dates 2006			X
Benchmark Testing schedule 2006			X
School Master Schedules	X		
Title Wise Collection Analysis of Library Inventory 2004		X	
Title Wise Collection Analysis of Library Inventory 2006		X	
AYP subgroup identification spreadsheet 2006-2007	X		
SRA Training documentation		X	
Master Schedule 2005-2006	X	X	

Documents	School improvement	Reading improvement	Reading tests
School/Division/State AYP Detail Report 2004-2005	X		
School Board Agenda – Textbook adoption 2005		X	
State Report – Accreditation History 2005	X		
"School Wide Vocabulary" – form 2007		X	
"Instructional Intervention Plan" – for 2006	X	X	
"Weekly Assessment Report" – form 2006	X	X	
"A Six Step Process: Analyzing SOL Test Data for Program Alignment" – in-service handout	X		
Letter to Assistant Superintendent from Director of Literacy and Gifted Education explaining adoption of reading text process		X	
TOTALS – 103 documents	41	44	49

Appendix B

Strategies Implemented

Grade of focal group of students/year	School improvement	Reading improvement	Reading tests
Fifth grade 2003-2004		• Adoption of Textbook	• *SOL* • *GMRT*
Sixth grade 2004-2005	• Implement *FISH* philosophy by Dr. Stephen Lundin (started sea/beach theme at the school) • SEA – Successful Educational Achievement – positive reward system • Use of Bloom's Taxonomy	Reading improvement measures resulting from low scores obtained in 2004 resulted in reading improvement for 2004-2005 fifth and eighth grade students (See Strategies Table 3) Even though written specifically for 5th and 8th, these strategies were also applied to the sixth and seventh grade classes • PEP Night November 18, 2004 – parent/student night with a focus on reading • PEP Night March 23, 2005 • Adoption of Holt text • Use of supplementary SOL reading materials include *Buckle Up*, and *Blast Off*	• *GMRT* • *STAR Reading* • *Lightspan*
Seventh grade 2005-2006	• Implement *Six Plus One Writing Traits* school wide • Implement Four Square paragraph writing in 8th grade • Implement school wide writing rubric • Data analysis training	• Revise alignment and pacing guides • Implement double reading classes 5-8 • Remediate students after school • Reduce 8th grade language arts class sizes • Provide a variety of reading material • Implement Holt reading text in grades 6-8	• SOL • *TfHS* • *GMRT* • *STAR Reading* • *NCS Mentor* (Writing)

Grade of focal group of students/year	School improvement	Reading improvement	Reading tests
Eighth grade 2006-2007	• Implement Virginia's PASS program • Monitoring of instruction by administration • Use benchmark scores to determine educational focus • Re-establish homework camp • Target membership in student subgroups • Continue PEP nights • Hold a community rally after school	• Revise curriculum and pacing guides to align with VDOE *English Standards of Learning Curriculum Framework* • Develop SOL-based strategies • Formation of grade and subject-level committees to review SPBQ data • Implement *Simply Achieve* teaching strategies training • Implement in-school and after school remedial reading programs 5th-8th grades • Reduce size of 8th grade reading/language arts classes • Increase variety of non-fiction reading resources • Hire literacy coach • Implement Academic Enrichment-after school program • Purchase computer-based reading (and other core areas) programs	• *SOL* • *TfHS* • *STAR Reading* • *eduTest (Lightspan)* • Teacher created tests • *Failure Free Reading* pre and posttests • Plato English

Appendix C

Strategies Implemented 2004-2005

Grade/year	School improvement	Reading improvement	Reading tests
5th Grade 2004-2005		• Align curriculum • Create pacing guides • Create double reading classes • Implement after school remediation	• *SOL* • *GMRT* • *STAR Reading*
8th Grade 2004-2005		• Align curriculum • Write and implement pacing guides • Provide after school remediation • Adopt new reading textbooks • Reduce class sizes • Provide variety of reading choices	• *SOL* • *STAR Reading*
2005 School Improvement Plan implemented as a result of Academic Review (school-wide implementation)	• Analyze student performance data to determine strengths and weaknesses • Create common planning time for all teachers • Provide training on analysis and use of data to plan instructional objectives • Analyze scheduling to determine ways to maximize use of limited staff		

Grade/year	School improvement	Reading improvement	Reading tests
Additional actions put into place by principal as a result of Academic Review	• Write tests to reflect SOL format • Use of school wide writing rubric by all teachers • Submit unit tests to principal • Rotate responsibility of team members documenting meetings • Correlate instruction across all subjects • Devise regular, data driven assessments • Initiate a transition activity at beginning of each class period • Review SAIL program • Develop a bank of SOL questions to be used school wide	• Implement a research-based instructional model in language arts classes • Review curriculum maps • Create scope and sequence charts • Reduce of class size • Add reading/language arts teachers especially in 8th grade • Increase instructional time • Purchase additional classroom sets of novels, AR novels, AR tests • Purchase chapter books for reluctant readers • Provide In-service on classroom reading strategies • Focus on cross-curricular vocabulary, writing, and reading skills • Provide funding for additional resources • Create SOL prep groups	

Appendix D

Student Enrollment

Grade level	2003-2004	2004-2005	2005-2006	2006-2007
Fifth grade	122	105	109	111
Sixth grade	159	126	113	123
Seventh grade	140	144	138	111
Eighth grade	136	148	144	140
Total	557	523	504	485

Note. Shaded rows denote the focal group of students.

Appendix E

Federal and State AMO, AYP, and SOL Data

AMO, AYP designations	2003-2004	2004-2005	2005-2006	2006-2007
AMO reading	61	65	69	73
AMO met	No	Yes	Yes	Yes
School reading total	58	69	71	77
State reading total	79	81	84	85
School improvement	Not in improvement	Year 1	Year 1 holding	Year 2
School improvement English	-	Year 1	Year 1	Year 2
Action required	-	Public school choice	Public school choice	Public school choice, SES
AYP met	No	No	No	No
State accreditation	Fully accredited	Accredited with warning	Accredited with warning	Accredited with warning
Subgroups not meeting AYP in English	Black – 50 Disabled – 30 Disad-vantaged - 49	Black – 59 Disabled – 39 Disad-vantaged - 48	Black – 60 Disabled – 48 Disad-vantaged – 61	Black – 70 Disabled – 48 Disad-vantaged - 71

Note. Scores listed are the percent of students passing. Data from Virginia Department of Education. (2006). *Virginia school report card.* Retrieved May 19, 2007 from http://www.pen.k12.va.us/VDOE/src/index.shtml

Appendix F

Standards of Learning Reading and Writing Test Totals by Grade

Grade level	2003-2004	2004-2005	2005-2006	2006-2007
5th Reading	57	69	58	77
5th Writing	81	79	74	84
State 5th Reading	85	85	87	87
6th Reading	-	-	83	83
State 6th Reading	-	-	83	84
7th Reading	-	-	66	77
State 7th Reading	-	-	81	82
8th Reading	57	67	75	70
8th Writing	77	54	70	85
State 8th Reading	72	76	78	80

Note. Scores listed are percentage scores. Shaded rows denote the focal group of students. Data from Virginia Department of Education. (2006). *Virginia school report card.* Retrieved May 19, 2007 from http://www.pen.k12.va.us/VDOE/src/index.shtml

Appendix G

School Benchmark Total – Tests for Higher Standards

Grade levels	Spring 06 SIMS[a]	Sept. 06 SIMS pre-test	Nov. 06	Jan. 07	March 07 SIMS post-test
5th Grade	53	50	57	76	63
6th Grade	63	49	54	69	61
7th Grade	65	52	60	54	65
8th Grade	52	40	61	69	51

Note. Scores listed are percentage scores. Shaded rows denote the focal group of students.

[a]Complete simulated *TfHS* test

Appendix H

Gates-MacGinitie Reading Test Scores

Grade level	Fall 2003	Spring 2004	Fall 2004	Spring 2005	Fall 2005	Spring 2006	Fall 2006	Spring 2007
5th Grade								
Above	27.66	33.00	26.09	31.43	32.35	40.00	-[a]	34.61
On	2.13	5.00	3.26	4.76	2.94	2.00	-[a]	4.80
Below	70.21	62.00	70.65	63.81	64.71	58.00	-[a]	60.57
6th Grade								
Above	30.88	32.59	25.49	31.62	-[b]	-[b]	-[a]	45.37
On	4.41	5.93	.98	1.71	-[b]	-[b]	-[a]	5.56
Below	64.71	61.48	73.53	66.67	-[b]	-[b]	-[a]	49.07
7th Grade								
Above	-[a]	41.22	-[a]	38.28	64.52	47.70	-[a]	44.21
On	-[a]	3.05	-[a]	2.34	6.45	2.75	-[a]	2.11
Below	-[a]	55.73	-[a]	59.38	29.03	49.54	-[a]	53.68
8th Grade								
Above	36.70	41.07	-[a]	-[a]	-[a]	-[a]	-[a]	-[a]
On	2.75	7.14	-[a]	-[a]	-[a]	-[a]	-[a]	-[a]
Below	60.55	51.79	-[a]	-[a]	-[a]	-[a]	-[a]	-[a]

Note. Scores listed are percentage scores. Shaded rows denote the focal group of students.

[a]Not tested.
[b]Scores not found.

Appendix I

STAR Reading Test Results

Table I1

STAR Reading Test Results 2004-2005

Type of score	5th Grade[a]			6th Grade			7th Grade			8th Grade		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
Scaled score	503	507	553	562	600	637	652	670	696	776	754	802
Grade equivalent	4.6	4.7	5.1	5.3	5.6	5.9	6.1	6.2	6.4	6.9	6.7	7.2
Percentile ranking	40	37	40	30	34	34	29	30	31	36	30	34
No. of students tested	104	102	99	123	95	122	134	127	134	138	128	123

Note. Shaded rows denote the focal group of students.
[a]Listed by marking periods.

Table I2

STAR Reading Summary Scores 2005-2006

Type of score	5th Grade	6th Grade	7th Grade	8th Grade
Scaled score	499	652	772	160
Grade equivalent	4.6	6.1	6.8	1.8
Percentile ranking	30	35	39	1
No. of students tested	88	101	68	2

Note. Not all students' scores were posted. Shaded rows denote the focal group of students.

Table I3
STAR Reading Summary Scores 2006-2007

Type of score	5th Grade	6th Grade	7th Grade	8th Grade
Scaled score	541	515	679	904
Grade equivalent	5	4.8	6.3	8.2
Percentile ranking	35	18	29	45
No. of students tested	3	59	87	65

Note. Not all students were tested. Shaded rows denote the focal group of students.

Appendix J

End-of-Year Reading Test Totals for Focal Group

Reading test	5th Grade 2003-2004	6th Grade 2004-2005	7th Grade 2005-2006	8th Grade 2006-2007	Increase/decrease
Reading SOL (percent passing)	57	-[a]	66	70	Increase of 13 percentage points
TfHS– End-of-year complete simulated test (percent passing)	-[a]	-[a]	65	51	Decrease of 14 percentage points
GMRT – Students scoring above grade level at the end of the year (percentage)	33	32	47	-[a]	Increase of 14 percentage points
GMRT – Students scoring below grade level at the end of the year (percentage)	62	67	50	-[a]	Decrease of 12 percentage points
STAR Reading – end-of-year grade equivalent scores	-[a]	5.9	6.8	8.2	Increase noted, but not reliable since not all students' scores were available from school years 2005-2006 and 2006-2007

[a]Not tested

Appendix K

Permission Letter by Superintendent to Use Group Scores

COUNTY PUBLIC SCHOOLS

School Board
Chairperson
Vice Chairperson

Superinten
Assistant Superi
Director of Ins

May 23, 2007

Mrs. Meredith Furrow

Dear Mrs. Furrow:

I give you permission to report group scores (classroom, grade level, or school) for the Gates MacGinitie Reading Test, STAR Reading, and benchmark reading tests provided no individual student scores will be reported. I am aware your request for this information is for the purpose of your dissertation and the name of the school and the county will not be stated.

Sincerely,

Superintendent