A QUANTITATIVE EXAMINATION OF TITLE I AND NON-TITLE I ELEMENTARY SCHOOLS IN DISTRICT 8 OF NORTH ALABAMA USING FOURTH GRADE MATH AND READING STANDARDIZED TEST RESULTS

by

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ABSTRACT

The purpose of this study was to determine if there is a difference over time on standardized test scores for reading and math between fourth grade students attending Title I and Non-Title I schools in three select school systems within District 8 of North Alabama. In an effort to determine if Title I schools are successfully closing the achievement gap of Title I and Non-Title I schools, a quantitative and ex-post facto design was used to analyze the data. The study was limited to the aggregated longitudinal school data of fourth grade students on the Alabama Reading and Math Test (ARMT). Data used were collected from the Alabama State Department of Education. A Repeated Measures Analysis was conducted to gain an understanding of the effects federal Title I funding has on the achievement of low socioeconomic status students. The independent variable was the type of school the student attended (Title I School vs. Non-Title I School), and the repeated measure over time was the years that these students were tested (2004, 2008, and 2012). Gender and ethnicity were controlled variables. Dependent variables were math and reading achievement. Elementary schools served as the unit of analysis for the study.

The results of the study revealed that during the years of 2004, 2008, and 2012, students who attended Non-Title I schools performed at a higher achievement level then their Title I peers. However, Title I schools decreased the achievement gap over time. White students had the highest performance in each year studied. Black students had the lowest performance in each year studied; however, of all the groups studied, Black students had the sharpest increase in performance between 2008 and 2012.
While the performance for both Whites and Blacks improved over time, Whites outperformed Blacks in every year studied. In fact, Whites were the highest performing subgroup and Blacks were the lowest performing subgroup. Similarly, Whites outperformed Blacks regardless of the type of school they attended. Female students outperformed their male counterparts in all areas. Females outperformed males in every year studied regardless of the type of school they attended.
DEDICATION

This dissertation is dedicated to my family, who supported me throughout this endeavor. I want to give a special thanks to my husband and best friend Quinn. I could not have picked a better person to share my life with. To my two little redheaded angels, Quinn II (Lil’ Quinn) and Ashley Rose. It is because of you that I continued my education. To my parents, Nathaniel and Rose Ashley, who were my first and, certainly, my most influential teachers, you taught by example and I learned from your actions. To my sister, Tammie Cameron, for all the good times we had growing up. You often believed in me when I failed to believe in myself. To my handsome nephew, Victor (Trey), and my beautiful niece, Madison, for all the beautiful smiles. To my gracious cousin, Santrice Turner, thank you so much for your help with my children. Last but not least, to my gorgeous aunts, Mary, Dorothy, and Lutisha, at New Image Beauty Salon for always making me feel special.
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CHAPTER 1

INTRODUCTION

In April of 1965, President Lyndon B. Johnson, as part of his War on Poverty, signed into law the Elementary and Secondary Education Act (ESEA). President Johnson’s goal was to provide federal funding to the states to help improve achievement levels of underprivileged children (Patterson, 2010). James T. Patterson in his book, *Freedom is Not Enough*, quotes President Lyndon B. Johnson stating,

“Freedom is not enough. You do not wipe away the scares of centuries by saying: Now you are free to go where you want, do as you desire, and choose the leaders you please. You do not take a person who, for years, has been hobbled by chains and liberate him, bring up to the starting line of a race then say, “You are free to compete with all the others,” and still justly believe that you have been completely fair (p.ix).”

In 2002, President George W. Bush began implementation of the reauthorization of ESEA under a new name. The No Child Left Behind Act (NCLB) is the instrument used for determining accountability in American schools that accepts any federal funds. The goal of NCLB is to have all students proficient by 2014, which means each year all schools are required to make Adequate Yearly Progress (AYP). AYP is based on a specific formula established by the government under NCLB. The authorized guidelines of NCLB are currently being reviewed by the United States Congress for reauthorization (USDOE, 2002a). Several states have submitted letters requesting permission to dismiss portions of the requirements of its regulations. Research should be conducted to analyze if any parts of NCLB worked. It is important to note that the requirements of No Child Left Behind are law until redirected by our government. NCLB is the
only guidelines our government has to determine if schools are successfully meeting the goals of accountability or Adequate Yearly Progress (AYP).

This study compared longitudinal data of Title I and Non-Title I schools in the academic content areas of reading and math in three select North Alabama school systems within District 8. Data were gathered from the Alabama Reading and Math Test (ARMT) to determine if there is an academic difference based on gender and race in Title and Non-Title I schools. In essence, the goal of No Child Left Behind and the disbursement of Title I funds is to close the achievement gap that exists between Title I and Non-Title I schools. The Alabama Reading and Math Test (ARMT) are used to evaluate Adequate Yearly Progress (AYP) of schools and school systems throughout the state of Alabama, as determined by the No Child Left Behind Act (NCLB). The scores are generated and displayed by the State of Alabama Department of Education and are widely accessible for review.

This study is a replica of a study conducted by Amy Scott in 2005 and again by Bland-Washington in 2009. Scott’s study focused on Title I and Non-Title I elementary schools in East Tennessee using Grade 4 math and reading standardized test scores. As in the study conducted by Scott, Bland-Washington’s study also focused on assessment data of Title I and Non-Title I elementary schools in West Georgia. Replication of Scott’s and Bland-Washington’s studies using a different cluster of students under like conditions should endorse the validity of these previous studies (Gall, Gall, & Borg, 2007). This study goes a bit further by reviewing aggregated longitudinal Reading and Math data from 2004, 2008, and 2012 of all schools involved. Subsequently, each of the before mentioned replicated studies was conducted in states surrounding the state in which this study took place. This adds an additional factor to the research topic.
To measure progress of elementary students, the state of Alabama uses mandatory standardized testing. The results of the ARMT standardized test scores are merely one element that determines the AYP status of a school. A minimum student participation rate of 95% is another requirement of NCLB for schools to make AYP (USDOE, 2002a). NCLB examines student performance using the subgroups of special education, race, and economic status of Title I and Non-Title I schools. Schools with a minimum of 40% of their students receiving free/reduced lunch can obtain the status of Title I. The purpose of Title I is to provide financial support to students of low-income families. The additional money may be used to hire qualified staff members or to purchase supplementary services that support the curriculum. Funds may also be used to support new teaching practices and initiatives (Sunderman, 2006).

Like the Elementary and Secondary Education Act (ESEA), the goal for NCLB is to improve the academic achievement of deprived students by ensuring they are given a fair, equal, and significant opportunity to obtain a high-quality education (USDOE, 2004a). The results of this study may be used to determine if federal funding of Title I schools is in fact leveling the field for identified subgroups. The purpose of this study is to add to the existing literature and to provide a better understanding of the academic differences among race and gender subgroups based on their school setting, thus answering the question, “Do students in these subgroups identified by NCLB perform better in Non-Title I schools as opposed to Title I schools?”

In 2005, a study was conducted by Amy Scott to determine a difference in Reading and Math of fourth grade students attending Non-Title I schools and Title I schools. Data collected from the 2002-2003 Terra Nova Standardized Assessment Test were analyzed to determine the academic progress of 172 elementary schools located in 21 East Tennessee school systems. As in the original study conducted by Scott (2005), a quantitative method was used to focus on the
following subgroups: race and gender. However, to eliminate the possibility of bias, the researcher followed the guide given by Bland-Washington (2009). The study conducted by Bland-Washington used a descriptive and ex-post facto design methodology. Bland-Washington’s study focused on the following subgroups: gender, economically disadvantaged students, and students with disabilities.

Statement of the Problem

Research shows that schools of low social economic status face the biggest discrepancy in academic success (Noguera, 2009). Academic success as measured by No Child Left Behind is the students’ ability to score proficient or to earn a passing standardized test score. For a school to be considered successful, students must show Adequate Yearly Progress (AYP) as determined by preset standards provided by NCLB (USDOE, 2004a). It has been well documented that certain subgroups, because of the lack of exposure and background knowledge, tend to be at a disadvantage for succeeding academically (Noguera, 2009). It appears, since President Johnson delivered his controversial speech encouraging all to realize that “Freedom is not Enough,” the United States has yet to come close to securing the egalitarian racial goals Johnson outlined in his speech. In an effort to level the playing field of all students, despite economic status, Title I funding is provided to schools with high poverty enrollment (Patterson, 2010). Although these additional funds are provided, schools receiving Title I funds are struggling to decrease the achievement gap. Now with the implementation of No Child Left Behind, low socioeconomic schools that fail to show adequate yearly progress are at risk of losing the federal financial support, which they so desperately need (USDOE, 2004a).

Schools receiving federal funds to decrease the gap of students in low social economic homes are now held accountable for student achievement. It is evident that the test results are
lower in Title I elementary schools than the test results of Non-Title I schools (Bland-Washington, 2009). Student with a minimum of 40% of enrolled students labeled economically disadvantaged may apply for Title I status. As in Bland-Washington’s study, students receiving free or reduced lunch are considered economically disadvantaged students. No Child Left Behind holds schools/school districts accountable by requiring each school to show an increase in student proficiency levels or Adequate Yearly Progress (AYP) within each subgroup every year (USDOE, 2002b). All states, including Alabama, have been directed by No Child Left Behind to devise assessment methods to measure the progress of students. Schools and school districts that fail to make AYP may lose funding. Consequences are given to schools constantly failing to achieve AYP status. Consequences may include the creation of school and district-wide improvement plans, restructuring, and rigorous state monitoring. Failing to achieve AYP status over time also provides students who attend schools that receive Title I funding the choice of receiving additional tutoring from an outside provider and/or the option of transferring to another school (USDE, 2004a).

Purpose of the Study

The purpose of this study was to determine if there is a difference in standardized test scores in reading and math between fourth grade students in Title I schools and those in Non-Title I schools. This study focused on the following subgroups: race and gender. The data from this study will add to the existing body of knowledge concerning the academic achievements of students based on gender and race in both Title I and Non-Title I schools. The researcher analyzed aggregated longitudinal data from the Alabama State Department website for evidence of improvement within a 6-year span in Non-Title I and Title I schools.
To analyze the changes in achievement over time a repeated measures ANOVA was selected as the instrument. The three time points (2004, 2008, and 2012) and the types of school (Title I or Non-Title) served as independent variables. Gender, and ethnicity were control variables for this study. Math and Reading assessment results from the Alabama Reading and Math (ARMT) test served as dependent variables for the study and schools was the unit of analysis.

Research Questions

1. What is the difference in the academic achievement in Math and Reading between Title 1 and Non-Title 1 schools in 2004, 2008, and 2012 academic years?

2. Are there differences in the academic achievement based on ethnicity between Title 1 and Non-Title 1 schools in the 2004, 2008, and 2012 academic years?

3. Are there differences in academic performance based on gender between Title 1 and Non-Title 1 Schools in the 2004, 2008, and 2012 academic years?

4. Have the differences in academic achievement between Title 1 and Non-Title 1 schools in academic achievement significantly decreased between 2004, 2008, and 2012?

Definition of Terms

*Academic achievement:* Measured by earning a passing standardized test score. The progress that students make in school as determined by preset standards (Drake & Burns, 2004, p. 19).

*Accountability.* Each state sets academic standards for what every child should know and learn. Student academic achievement is measured for every child every year. The results of these
annual tests are reported to the public. The state identifies those schools requiring improvement (Drake & Burns, 2004, p. 19).

*Achievement gap:* The difference between the performance of subgroups of students such as gender, ethnicity, disability, and social economic status (Glossary of Education, 2011).

*Adequate Yearly Progress (AYP):* A measurement indicating whether a school, district or the state met required federal academic goals devised under the Elementary and Secondary Education Act as mandated by the No Child Left Behind Act (Glossary of Education, 2011USDOE, 2008a).

*Assessment:* Assessment is a synonym for test. No Child Left Behind (NCLB) requires tests to be aligned with academic standards (Glossary of Education, 2008).

*Black or African American:* For the purpose of this study Black or African American is defined as a person having origins of any of the Black racial groups of Africa.

*Corrective action:* When a school or school district does not make AYP, the state will place it under corrective action plan. The plan will include resources to improve teaching, administration, or curriculum. If a school continue to be identified as in need of improvement, then the state has increased authority to make any necessary, additional changes to ensure improvement (USDOE, 2004b).

*Disaggregated data:* Data broken into segments of the student population. Segments include economically disadvantaged students may include but are not limited to ethnicity, disabilities, race, gender, and limited language (Glossary of Education, 2008).

*Elementary and Secondary Education Act (ESEA):* Federal act devised in 1965 in an effort to ensure an equal education to all students in Grades K-12 (Glossary of Education. 2011).

Head Start: A federal matching grant program that aims to improve the learning skills, social skills, and health status of low social economic children (Glossary of Education, 2011).

Highly qualified teacher: a teacher who has obtained full state teacher certification or has passed the state teacher licensing examination and holds a license to teacher in the state (Glossary of Education, 2008).

Individualized Education Plan (IEP): A document that outlines the student’s measurable goals and objectives for children identified with a disability (Daugherty, 2001).

Local Educational Agencies (LEAs): A public board of education, or other public authority within a state, that maintains administrative control of public elementary or secondary schools in a city, county, township, school district, or other political subdivision, of a state (USDOE, 2004b).

National Assessment of Educational Progress (NAEP): An independent benchmark, NAEP is the only nationally representative and continuing assessment of what American students know and can do in various subject areas. Since 1969, the National Center for Education Statistics has conducted NAEP assessments in reading, mathematics, science, writing, U.S. history, geography, civics and the arts (Glossary of Education, 2011).

No Child Left Behind: The federal law was originally proposed in 2001, which enacts the theories of standards-based education placing accountability on school districts to provide a quality education for all students. An assessment of basic skills via standardized test determines if states have made improvements under the Act’s regulations (USDOE, 2008c).
Proficient: Results of an assessment signifying that the student demonstrated mastery of the skills and knowledge outlined in required standards (Glossary of Education, 2011).

Race/ethnicity: For the purpose of this study, race refers to students who identified themselves as Black/African American or Caucasian/White (USDOE, 2002, p.16).

Reading First: A federal program dedicated to implementing research based methods of early reading instruction into the classroom (Glossary of terms, 2011).

Restructuring: A school that fails to make adequate yearly progress (AYP) after 1 year of corrective action. Such a school has failed to make AYP for 5 consecutive years. (Glossary of Terms, 2011)

Social capital: Features social relationships, such as interpersonal trust, norms of reciprocity, and membership in a civic organization, which act as resources individuals and facilitate collective action for mutual benefit.

School improvement: A school in school improvement status is a school that fails for 2 consecutive years to make adequate yearly progress (AYP). A school can be in school improvement status for 2 consecutive year: in the year it was first identified (after having failed to make AYP for 2 consecutive years), and the following year (if AYP is not met for the third consecutive year).

Socioeconomic status (SES): SES is determined by the student’s family income.

Student with disabilities (SWD): A student who has been evaluated and determined to have a documented impairment that requires additional educational related service. A student with a disability will usually have an Individualized Education Plan (IEP) that guides his or her special education instruction to ensure he/she meets his/her learning goals. Students with
disabilities are often referred to as special education students and may be classified by their school as learning disabled (LD) or emotionally disturbed (ED) (USDOE, 2002, p. 16).

Subgroup: Categories of race, gender, economic status, and disability (Definitions, 2012).

Supplemental Educational Services (SES): Students from low-income families who are attending schools that have been identified as in need of improvement for two years will be eligible to receive outside tutoring or academic assistance. Parents can choose the appropriate services for their child from a list of approved providers. The school district will purchase the services (USDOE, 2004b).

Targeted Assistance Programs: Schools that are not eligible for (or do not choose to operate) school-wide programs must use Title I funds to provide targeted services to low-achieving students (USDOE, 2002, p. 15).

Title I: Title I is a federal assistance program that allocates funds to school districts with high percentages of students who are economically disadvantaged (U.S. Department of Education, 2002, p. 13).

Title I schools: Schools that have a high population of students determined to be economically disadvantaged and that receive funding based on this status. (USDOE, 2002, p. 13).

Unsafe schools: Persistently dangerous public elementary or secondary schools or if the school has victims of violent crime in schools.

Limitation of Study

This study was limited to the achievement of all fourth grade students attending both Title I and Non-Title I schools in three select North Alabama school systems of Regional District
8. Regional District 8 consists of 14 school districts. The school districts are as follows: Athens City Schools, Attalla City Schools, Boaz City Schools, Decatur City Schools, Dekalb County Schools, Etowah City Schools, Fort Payne City Schools, Gadsden City Schools, Huntsville City Schools, Jackson County Schools, Limestone County Schools, Madison City Schools, Madison County Schools, and Scottsboro City Schools. The researcher included the system in which she works in an effort to provide information that may benefit the system. The schools involved included a mixture of urban, suburban, and rural elementary schools. The school systems selected consists of 98 elementary school, 31 middle schools, 31 high schools, 5 K-8 schools, 10 K-12 schools, and six 6-12 grade schools. There were no foreseeable risks.

The researcher analyzed data from the Alabama State Department website. The researcher assumed all information collected from these sources, including subgroups, were reported accurately using information provided by individual schools. Subgroups are recorded as gender and race.
CHAPTER 2
REVIEW OF LITERATURE

Introduction

With the signing of the No Child Left Behind Act on January 8, 2002, came the requirements of approved accountability plans devised and carried out by every district and school receiving federal funding. Districts were required to submit accountability plans for approval by the United States Department of Education. Plans had to include goals and strategies directly related to subgroups (gender, ethnicity, special needs, and social economic status) of learners. In essence, this plan requires states to focus more on the achievement gap. Under former Presidents Bush’s plan, every child will learn regardless of race, socioeconomic background, or family status. The success or failure of the No Child Left Behind Act is based on a yearly test given to students in every state (USDE, 2001).

The scrutiny of accountability came with the adoption of No Child Left Behind. Now more than ever, schools are being held accountable for the outcome of high-stakes tests. With the Chicago teachers’ strike in 2012, it is important to understand the extent that accountability plays in the careers of teachers. Chicago teachers felt the pressure of the national debate over how to improve failing schools. Eighty percent of Chicago Public School students receive free or reduced lunch, many of them struggling academically. Chicago leaders began to focus on closing poor performing schools only to reopen with a new staff (Wisniewski, 2002). Test results are now being used as a form of evaluating teachers.
The Beginning of Accountability in Education

Kessinger (2011) explained the launching of Sputnik by the Soviet Union over 60 years ago and its impact on American education as one that is still affecting education today. The launching spurred a movement to improve math and science instruction in America’s schools.

The National Defense Education Act (NDEA) was passed by Congress in 1958 as a direct result of the launching of Sputnik. Policymakers and civilians alike thought the United States Education System was losing ground to the Soviets. The NDEA provided money to school organizations at all levels. The act has two major purposes: (1) provide the country with specific defense-oriented personnel, to include providing federal assistance to foreign language scholars, area studies centers, and engineering students; and (2) provide financial assistance through a government sponsored loan program. The act placed enormous emphasis on math, science, and foreign language education (Kessinger, 2011).

Since the launching of Sputnik in the 1950s, the United States government has developed several reforms in an effort to improve the quality of education in the United States. One reform introduced by President Johnson, a former teacher who had witnessed poverty’s impact on his students and believed that equal access to education was vital to a child’s ability to lead a productive life, devised the ESEA as part of the “War on Poverty.”

On April 9, 1965, Congress enacted the Elementary and Secondary Education Act of 1965 (ESEA) (P.L. 89-10), the most expansive federal education bill ever passed to date. The purpose of ESEA was to provide equal education opportunities to all children. The ESEA had six original titles: Title I--Financial Assistance To Local Educational Agencies For The Education Of Children Of Low-Income Families; Title II--School Library Resources, Textbooks, and other Instructional Materials; Title III--Supplementary Educational Centers and Services; Title IV--
Title I

The purpose of Title I funding is to improve the academic achievement of the disadvantaged students by ensuring that these students are given a fair, equal, and significant opportunity to obtain a high-quality education. The U. S. Department of Education (2004) gives an outline of how this purpose can be accomplished:

(1) ensuring that high-quality academic assessments, accountability systems, teacher preparation and training, curriculum, and instructional materials are aligned with challenging State academic standards so that students, teachers, parents, and administrators can measure progress against common expectations for student academic achievement;
(2) meeting the educational needs of low-achieving children in our Nation’s highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance;
(3) closing the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers;
(4) holding schools, local educational agencies, and States accountable for improving the academic achievement of all students, and identifying and turning around low-performing schools that have failed to provide a high-quality education to their students, while providing alternatives to students in such schools to enable the students to receive a high-quality education;
(5) distributing and targeting resources sufficiently to make a difference to local educational agencies and schools where needs are greatest;
(6) improving and strengthening accountability, teaching, and learning by using State assessment systems designed to ensure that students are meeting challenging State academic achievement and content standards and increasing achievement overall, but especially for the disadvantaged;
(7) providing greater decision making authority and flexibility to schools and teachers in exchange for greater responsibility for student performance;
(8) providing children an enriched and accelerated educational program, including the use of school wide programs or additional services that increase the amount and quality of instructional time;
(9) promoting school wide reform and ensuring the access of children to effective, scientifically based instructional strategies and challenging academic content;
(10) significantly elevating the quality of instruction by providing staff in participating schools with substantial opportunities for professional development;
(11) coordinating services under all parts of this title with each other, with other educational services, and, to the extent feasible, with other agencies providing services to youth, children, and families; and
(12) affording parents substantial and meaningful opportunities to participate in the education of their children. (p. 1)

Schools with a minimum of 35% of their student population receiving free or reduced lunch can qualify for Title I support, thus, agreeing to the aforementioned requirements (McCargar, 2003).

In an effort to document the improvement of student achievement and the effectiveness of Title I funds, the federal government began to look closer at tests as a means to monitor student progress. The National Assessment of Educational Progress (NAEP) began monitoring public schools progress in the 1960s. NAEP and the Elementary and Secondary Education Act of 1965 were the first to officially use testing as a means of monitoring student progress (Moon, 2009). The idea was to continuously monitor the progress of America’s school children. It was to provide patterns of achievement in core subjects such as math, reading, science, and writing. NAEP is considered the nation’s report card and has monitored students in Grades 4, 8, and 12. NAEP is the only test that one can use to compare all students based on like material, in the United States. Federal law states NAEP is a voluntary test for all students, schools, school districts, and states, and it requires all test takers to remain anonymous. However, federal law requires all states that receive Title I funding to participate in the assessments for Grades 4 and 8 (Kessinger, 2011).

James Coleman’s report went a little further to assist in the understanding of poverty in America. The 1966 report issued by James Coleman is viewed as one of the quantitative works
completed on social issues in the United States. Coleman used a provision in the 1964 Civil Rights Act that called for study on equality of educational opportunity based on race, color, religion, or national origin. Coleman documented racial composition, per-pupil expenditures, the college degrees teachers had earned, teacher ability (as measured by performance on test), the number of books in the school library, and family background of the students. According to Khlenberg (2001), Coleman determined that a student’s economic standing was more detrimental to his or her educational achievement than school funding and that peer interaction played a part in student success.

As policymakers began looking at education as a national issue, the Department of Education was established in 1979 and was elevated to a cabinet level in 1980. Secretary of Education Terrell H. Bell, in 1981, created the National Commission of Excellence in Education to study education in the United States. *A Nation at Risk: The Imperative for School Reform* was released by the commission in 1983. *A Nation at Risk* looked at the past and provided an outline for the future of education in the United States (Cunningham & Gressso, 1993).

*A Nation at Risk* (ANAR) offered America six findings: (1) the top students graduating from high school and college were not entering into the teaching profession, (2) more time should have been spent on teaching the content instead of method classes in the teacher education programs, (3) salaries for teachers were too low, (4) teacher shortages of certain areas, (5) shortages in teachers for math and science were at an alarming rate, and (6) teachers that were being employed were not qualified to teach Math, Science, and English. The findings issued by *A Nation at Risk* were followed by recommendations the commission thought would direct American Education to be the world leader once again (Cunningham & Gressso, 1993).
In 1989, *America 2000: An Education Strategy* was devised by George. H. W. Bush and the American Governors Association that outlined a 9-year plan to improve education in the United States. This plan involved changes in public and private schools, as well as changes in the home and community environment of students. The objective of Goal 2000 was to provide better and more accountable schools, a new generation of American schools, a nation of students, and communities where learning takes place (Cunningham & Gressso, 1993).

The Clinton administration amended *America 2000* to create *Goals 2000: Educate America*. *Goals 2000* was an attempt to articulate a national curriculum by adopting the goals laid out by *America 2000* and adding two additional goals focused on parent participation: teacher education and professional development. As *Goals 2000* was being passed by Congress, the *Elementary and Secondary Education Act* was being reauthorized as the *Improving America’s Schools Act*. *Improving America’s School’s Act* looked to reform local and state education agencies to meet the national goals set in place by *Goals 2000* (Kessinger, 2011). Under the Clinton plan,

Every eight year old must be able to read, every twelve year old must be able to log onto the internet, every eighteen year old must be able to go to college, and all students must be able to keep learning. (Cunningham & Gresso, 1993, p. 14)

This brings us to Bush’s *No Child Left Behind Act*.

*No Child Left Behind Act*

The Elementary and Secondary Education Act was reauthorized again in 2002, ushering in the Bush Administration’s education policy which became known as *No Child Left Behind* (NCLB). With the signing of NCLB, requirements for approved accountability plans must be devised and carried out by every state, district, and school receiving federal funding. Goals and
strategies for all learners must be included in the plan before being submitted and approved by the United States Department of Education. This new law reinforced the most sweeping reform of the *Elementary and Secondary Education Act* (ESEA) since it was enacted in 1965 (McCargar, 2003). Accountability plans must be directly related to the performance of all learners and must be submitted to the U.S. Department of Education in the form of an Accountability Workbook. Also, as a result of NCLB, states were required to increase standards, create high stakes tests for accountability, and all teachers were to be highly qualified (Kessinger, 2011).

*No Child Left Behind* (NCLB) requires schools to look at individual groups of students as well as the individual student. NCLB not only holds schools accountable for the overall school performance but this reform requires schools to identify the performance of students based on subgroups. It holds schools accountable for student success based on ethnicity, social economic status, and gender.

**Components of No Child Left Behind**

The adoption of *No Child Left Behind* requires teachers to earn the status of Highly Qualified to teach students in Grades K-12. The requirements of the Highly Qualified Teachers component of NCLB proved to be harder than anticipated. In October 2005, as the deadline approached for teachers to have gained the status of highly qualified, Secretary Spellings announced a policy change that would allow states an extension to meet the highly qualified teacher requirements. These changes wavered from the original policy designed to insure all teachers were highly qualified to allowing each state to devise separate plans approved by the federal government (Wong, 2008).
The minimum requirements to earn this status are as follows: Teachers must hold a bachelor’s degree, obtain a teaching certificate from their state, pass one or more rigorous tests demonstrating pedagogical competency series of state owned certification examinations, and demonstrate mastery of their content area either by taken 24 hours of college-level coursework in their subject area or by passing rigorous subject matter tests (NCLB, 2001).

Another component of NCLB includes provisions that provide choices to parents of students who attend failing schools. The public school choice and supplemental services provision of the NCLB allow schools that are classified as low performing; substantial incentives to improve test scores. Schools that do not make Adequate Yearly Progress for 5 years stand to lose students to schools that are on academic clear. In essence, students are allowed to transfer out of schools labeled failing to attend an academically successfully school of their choice.

For every child that transfers the school loses funding for that child. The failing schools also run the risk of reconstitution under a restructuring plan if they do not improve test scores (Coulson, 1998). Ideally, the government’s goal is to improve teaching and learning and to provide the average parent a choice and a chance to seek out and find the best educational opportunities that the United States has to offer.

Coulson (1998) stated,

For many years, school choice was considered a theory espoused by free-market enthusiasts and libertarians. Today, the powerful idea that all parents should have the ability to choose their child’s school is taking hold in neighborhoods throughout the nation. New supporters are speaking out every day, and some of the strongest voices can be heard in minority communities. (p. 2)

Weiss (1996) provided a brief, but comprehensive overview of the many plans that fall under the umbrella of school choice:

Choice plans include magnet schools: public schools with special emphasis and/or facilities that draw students from across a district, such as technology school or music
and art schools. Choice plans include charter schools, authorized by a number of state legislatures to be free of most local school district regulations; students apply for admission. There are also within-district public choice schemes that allow students to apply to any public school in the district. Some of these are “controlled” plans, in the sense that they seek to maintain racial diversity in each school within the rubric of choice. Other plans allow parents and students to choose public schools across district lines. A further set of choice plans allow students to choose private schools as well as public schools; some of these plans limit the private schools to non-sectarian schools, but some include religious schools as well. In the most inclusive plans, ‘vouchers’ are issued to parents to pay for the tuition at private schools (up to some dollar limit) and give them free rein on where and how they “spend” the vouchers. (pp. vii, 50)

According to USDE (2002a), one of the most critical components of NCLB is Public School Choice, because it allows students who are zoned for low-performing or failing schools to transfer to a school that is not performing at such a low standard. The idea is to use school improvement strategies along with public school choice to insure all students receive a high quality education. NCLB believes that giving parents the information to make good decisions affecting the education of their children will increase equality and excellence in schools.

Legal Issues

According to the United States Department of Education (2001),

A Local Education Agency (LEA) may not discriminate on the basis of race, color, national origin, sex, disability, or age, consistent with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans Disabilities Act of 1990 (ADA), and the Age Discrimination Act of 1975. (p. 16)

The United State Department of Education (2001) stated,

The statute requires LEAs to provide public school choice in accordance with 1116 unless such choice is “prohibited by state law.” This simply means that a state has a law that prohibits public school choice through restrictions on public school assignments or the transfer of students from one public school to another public school. Other laws, such as those that mandate specific student-teacher ratios, may make providing choice options more difficult, but do not constitute a prohibition of school choice. The Title I public school choice program can also become a part of a State’s open enrollment programs,
provided that the requirements in Title I are met. This includes the priority for low-achieving, low-income students. (p. 16)

Title I Funding

Kantor and Lowe (2006) explained that NCLB continued the trend of reducing the poverty threshold for schools that receive Title I funds and also limiting the restrictions of what the funds could be used for. According to Paige (2002), the federal government has spent more than $321 billion dollars in funding to improve the education of underprivileged students. The amount of federal support provided to schools is determined by the number of enrolled students receiving free and reduced lunch. There is a 40% threshold that schools must meet of students receiving free or reduced lunch in order to qualify for funding to improve teacher quality and student achievement of low-social economic status schools. Schools with higher percentages of disadvantaged students receive more funding (McCargar, 2003).

Currently, the federal government supports 50,000 Title I schools. Title I of the ESEA has been a resilient program, as several Presidents have tried to change its purpose of distributing funds for a specific reason into one that distributes funds generally. Policymakers are now trying to change its purpose not by adding on to Title I, but instead trying to dismantle the program (Kantor & Lowe, 2006).

Supplemental Services Funded by Title I

Since the start of Title I funding, billions of federal dollars have been granted to schools with large enrollment numbers of high poverty students. The purpose of this funding is to provide additional support outside of the regular curriculum to students working below grade level in reading and math.
While the overall purpose of Title I funding is to provide additional funding for supplementary support in reading and math to schools with high poverty rates, these funds may also go toward improving achievement in other core subjects as well. Funds can also be used to provide professional development for teachers, hiring of additional teachers, classroom aids, and tutors. Furthermore, the flexibility of federal funding can be used for any supplementary services tied to improving student achievement. Services including, but not limited to, enhancing parent improvement and extended learning time for struggling students. Raising student achievement is the ultimate goal for the additional supplementary funds (USDOE, 2002a).

Math and Reading Intervention

Title I funding was designed to support schools in core areas such as reading and math. A review of data in 1996 showed a significant drop in mathematics scores. This brought about a transformation in math instruction. Title I funding has always encouraged the use of reading specialists. In an effort to increase student mastery in math, Title I schools were encouraged to employee math specialists (Ysseldyke, Betts, Thill, & Hannigan, 2004). In the past, math and reading specialists worked with small groups of students struggling in the areas of math and reading. This pull-out program allowed students to be removed from the classroom setting to receive additional support for reading and math instruction. These specialists are now required to support teachers in planning instruction, modeling/demonstrating lessons, team-teaching/side-by-side instruction, and providing feedback on lessons taught by the regular classroom teacher (Dole, 2004).

Using Title I funding, many states such as Massachusetts opt to expand the school day. Massachusetts established the Expanded Learning Time (ELT) Initiative to help high-poverty
students be more successful in schools. ELT looks to add an additional 300 hours to the school calendar. The effort is to target students in high-poverty areas that need additional academic help (Reis, 2013). Other supplementary services funded by No Child Left Behind include summer school, before and after school tutoring programs, the hiring of reading and math interventionists, and the purchase of research-based programs that support the curriculum.

_Supplemental Services Provider_

According to the California School Boards Association (2004), in order to be eligible to be a supplemental service provider under NCLB, the district must provide the following:

1. Have a record of effectiveness in enhancing student academic achievement
2. Use instructional strategies that are high quality, based upon research, and designed to increase student academic achievement
3. Ensure that instruction and content provided are aligned with the State adopted curriculum content standards and instructional materials
4. The supplemental services must also be aligned with local and state assessments
5. Be financially sound
6. Meet all applicable federal, state, and local health, safety, and civil rights laws
7. Ensure that supplemental educational services are coordinated with the student’s school program;
8. Be capable of providing supplemental educational services to eligible students based on individual needs consistent with the instructional program of the local educational agency and the State academic standards, frameworks and instructional materials;
9. Provide evidence of recent successful experience in improving student achievement (If the student population being served by the provider is composed in large part of English learners, the provider must demonstrate experience in improving the student achievement of English learners)
11. Ensure that all instruction and content under this subsection are secular, neutral, and non-ideological.
12. Guarantee that the staff working with students and their parents have undergone background checks; and abide by the conditions of the contract with the district. (p. 3)

Schools failing to meet AYP may provide supplemental services using corrective actions plans. However, the faculty and staff or anyone employed by the school itself cannot be the
supplemental service providers, but the school district can opt to provide services at the schools site. Nevertheless, parents still have the right to choose a provider other than the district.

*Students’ Grade and Sex*

According to Bielick and Chapman (2003),

In 1993, there were few differences in enrollment in types of schools among grade groups. However, by 1996 and 1999 there were differences in enrollment. In 1996 and 1999, a higher percentage of students in Grades 6 to 8 attended public, assigned schools than did students in Grades 1 to 5, while a higher percentage of students in Grades 1 to 5 and Grades 9 to 12 attended public, chosen schools than did students in Grades sixth to eighth. In the private school types, in all survey years, students in Grades 1 to 5 were more likely to attend private, church-related schools than were students in upper Grades, 9-12. There were no differences detected among grade groups and years for students in private, not church-related schools. (p. 13)

Bielick and Chapman concluded,

Overall, girls and boys followed the same patterns of enrollment in school types as the overall population with a decrease in public chosen school enrollment. Slightly more girls attended private, church related schools in 1993 (8 percent vs. 7 percent) and slightly more boys attended private, not church related schools in 1996 (3 percent vs. 2 percent). (p. 13)

*Race and Ethnicity*

Every year, a smaller percentage of Black students than White students attend public, assigned schools. In 1999, the rate of assigned school enrollment for Black students was 6% less than the rate of enrollment for White or Hispanic students. In each year, Black students had a higher rate of enrollment in public, chosen schools than did Hispanic students, and Black and Hispanic students had higher enrollment rates in public, chosen schools than White students. In 1993, 19% of Black students were enrolled in public, chosen schools and 23% in 1999. Hispanic students were enrolled at a rate of 14% in 1993 and 18% in 1999. Findings revealed a significant
difference with 9% of White students enrolled in 1993 and 11% enrolled in public, chosen schools in 1999. However, the percentages of White students enrolled in each type of private school were much larger than that of Black or Hispanic students in all 3 years (Bielick & Chapman, 2003).

Segregation and Racial Issues in Our Schools

During the Civil Rights era of the 1950s through the 1970s, the plight of equal opportunity in education was fought in many different arenas. With the landmark Brown v. Board of Education decision of 1954, education for minorities was trying to give African American students the same resources as their White counterparts by segregating schools (Kantor & Lowe, 2006). The passage of NCLB shifted focus from desegregating schools that sought to level the playing field for African Americans through integration to focusing more on providing support for low income students. (Kantor & Lowe, 2006).

The National Working Commission (2003) questioned rather school choice in its efforts to decrease segregation actually increased segregation. The results from existing choice programs are mixed and confusing. Data involving school choice level is vague. Voucher programs specifically targeted to low-income families have the potential to improve integration, but the extent to which this potential is realized in existing programs is unknown. Findings prove that almost all schools are segregated in most big cities, so choice is unlikely to make it worse. Even in public schools with mixed student bodies, students often segregate themselves socially. Moreover, findings report that levels of integration, both between and within schools, are difficult to measure and scarcely ideal. There is some evidence that positive choice affects private schools actively recruiting low-income and minority children, and greater contact
between White and minority students in private schools. Some private schools appeal to people of many races, all of whom are attracted to school climate and instructional methods. However, it is not known whether these private schools phenomena can be reproduced in publicly supported schools of choice.

Some studies have shown that the single most inconspicuous theme that factors into the causes for the achievement gap is racism. Racism is at the center of the poverty issue, ability grouping in schools, stereotyping, cultural differences, teacher expectations and perceptions, and test bias (William, 2003).

According to Darling-Hammond (1998), the four factors that influence educational achievement the most are small class size, high quality teachers, smaller school size, and a challenging curriculum, factors which minority students are far less likely to have at their school. Darling-Hammond went on to determine whether the prediction stated publically by Dr. W.E. B. DuBois implying that the color line would serve as the biggest problem of the 20th century would also hold true as the biggest problem faced in the 21st century?

Williams (2003) alluded to a Gallup poll that was given in 1978 and again in 2001 asking the question, “Do Black children and other non-Asian minorities have the same educational opportunities as White children?”

While many may argue the impossibility of all students working on or above grade level, eliminating No Child Left Behind and accountability would exemplify the belief of failure. The implementation of No Child Left Behind and the strategic review of the disparities between the different ethnic groups and low social economic status students have forced American schools to confront an issue that has long been ignored throughout much of American history. While critics of NCLB may consider it a failure due to teaching to the test or teaching skills rather than
actually learning, they must also admit the mere fact of acknowledging the achievement gap between the subgroups and holding schools/districts accountable for closing these gaps is a step in the right direction.

Technology Equality among Schools

According to Yau (1999), no shortage of technology resources is apparent at the aggregate level, but the distribution of these resources across different populations is a cause for concern. A report by the Educational Testing Service concluded that Title I funds had been effective in keeping the poorest schools on par with other schools technologically at some earlier stage of the technology “boom,” but that they were no longer sufficient as of 1997 (Coley et al., 1997). Furthermore, data compiled by NCES in 1997 indicated that the level of Internet access is significantly lower for the poorest schools in comparison with other schools. Specifically, among public schools with 71% or more of its students eligible for the federal lunch program, only 63% had access to the Internet C in contrast to the aggregate figure of 78% for all schools across the United States. The inequalities in technology funding between the poorest schools and other schools most probably indicate unequal computers-per-student ratios between schools with predominantly White populations and schools with predominantly Black and/or Latino populations because significantly higher percentages of Black families and Latino families live at or below the poverty level as compared with White families.

Yau (1999) also stated that the above statistics are based on a notion of “access” defined by a ratio of the number of students to the number of computers. Where “technology access” is defined by frequency of use of a school computer, some data show that traditionally disadvantaged groups such as Blacks and Latinos are not lagging behind the “mainstream”
population. For instance, among fourth graders who took the 1996 National Assessment of Educational Progress (NAEP) in Mathematics, 41.9% of Black students reported using school computers at least once a week to learn math, as compared with 33% of Asian students, 32.3% of Latino students, and 31.7% of White students. Thus, signifying that students of color actually spend more time working with school computers than White students who are part of the cultural mainstream (Wenglinsky, 1998). Among eighth graders who took the 1996 NAEP, 33% of Black students, 30% of Asian students, 28% of White students, and 26% of Latino students reported using school computers at least once a week to learn math (Wenglinsky, 1998). In this case, Latino students were at the bottom of the distribution curve, but, as the numbers show, the differences between groups are relatively small. However, where “access” is defined according to the types of computer-learning tasks assigned, Black students and Latino students lag significantly behind in access to tasks involving “simulations and applications”—which exercise higher-order thinking skills and correlate with higher achievement—as opposed to “drill and practice” tasks, which do not correlate with higher achievement. Thus, as explained by one researcher, “[d]isadvantaged groups seem to lag behind in access to those aspects of technology that do affect educational outcomes, but not in access to those aspects of technology that do not affect educational outcomes (p. 3).

Teaching Techniques

How students are taught can also affect achievement gains among students. Teaching techniques used to teach students in a gifted program and not used in classrooms or schools with high levels of poverty have been found to work just as well with students of low socioeconomic status as it does with students in gifted programs (Battsitich, & Ham, 1996).
A common factor found in high poverty schools was the amount of student interaction and self-direction. High poverty school teachers tend to have tighter control over student interactions than their counterparts in low poverty schools (Solomon et al., 1996).

Access to educational resources has been a problem in the United States for some time. High-poverty and disadvantaged Americans have lacked in resources for many years. African Americans in the North and South; Latinos in California, Texas, and New York; and poor Whites in Appalachia have poorly funded schools and little accountability (Carnoy, 2001).

Poverty and Education

Murphy (1971) explained that Title I did not come from a demand by the underprivileged citizens of America, but it came from reformers in the executive branch of government. School officials did not believe funds should be allocated based solely on poverty; however, Arvin (2009) stated that teachers believe in order to meet all children’s needs there must be total equity and fairness in education. Teachers in high-poverty schools also believe the students attending these schools have the ability to be as successful as students attending non-poverty schools. Although their focus is on AYP and grade-level standards, teachers in high-poverty schools strive to try and reach their students’ individual needs (Arvin, 2009).

According to Bennett (2008), poverty in America is growing due to the decline of wages. He goes on to explain that while extreme poverty is increasing in children of single-parent homes some blame can be placed on the changes in the welfare system. Black and Hispanic children make up a large number of American children in poverty and combined, their population is the majority of children living in poverty in America, while White children make up the majority of a singular racial group living in poverty (Bennett, 2008).
There are a disproportionate number of minority students referred to special education programs due to their low socioeconomic status or their poverty status (Skiba, Poloni-Staudinger, Simmons, Feggins-Azziz, & Chung, 2005). According to Murphy (1971), the purpose of the *Elementary and Secondary Education Act* was to promote improvement in education and make the underprivileged students of America’s schools the top priority. Title I of the ESEA focused on underprivileged youth with the notion that given the chance to be successful in school these same students would be productive adults (Murphy, 1971).

There are many factors associated with poverty and achievement in schools. These factors, such as access to physical and mental health services, healthy food, access to early child care, how well parents read, and the parents’ educational attainment, play a vital role in a student’s education outlook. This disadvantage for poverty students makes closing the achievement gap difficult and leads us to focus on the opportunity gap (Kaufmann & Weiss, 2013).

Kaufmann and Weiss (2013) argued that the second finding of the Coleman report is reaching an all-time high level. The second finding was that of concentrated school poverty. Concentrated poverty is when individuals or families that are living at or below the poverty line are living in the same areas in neighborhoods or regions of the country. As a result of concentrated poverty, these areas see an increase in crime rates, poor housing, subpar health conditions, very limited access to job opportunities, and underperforming public schools (Keneebone & Berube, 2011).

Studies such as the Coleman Report, provide documentation of the effects poverty has on academic achievement. According to Saporito and Sohoni (2007), poverty has a direct correlation to a student’s academic performance in school. They go on to state that there are high
concentrations of poverty across neighborhoods identifying this as segregated concentrated poverty. Black students are more likely to attend a school in which most students live below the poverty line, while White students usually attend school with students who live above the poverty line (Saporito & Sohoni, 2007).

Policymakers have ignored the staggering research on concentrated poverty and how it has affected the achievement of thousands of students across America. Over the last several decades, income for the middle and bottom classes of American society has decreased and the top 1% of Americans have experienced an enormous growth (Kaufmann & Weiss, 2013).

The American Recovery and Reinvestment Act of 2009

In 2009 the federal government, under Title I Part A of the American Recovery and Reinvestment Act, made available an additional $10 billion in funds for school districts with high concentrations of students living in poverty. These funds were to be used for teaching and learning for students most at risk to fail the state standards and to help decrease the achievement gap. The federal government added four principles that were to be used to guide the distribution and use of the ARRA funds. Spending of funds quickly to save and create jobs, use reform and school improvement to improve student achievement, ensure transparency, reporting and accountability and use funds on a one time bases to shore up budgets. The funds distributed under ARRA should be used for short-term goals, because the level of funding decreases in the coming years (USDOE, 2009).
Background of Head Start

Head Start began as a means of leveling the playing field or to condense the achievement gap of students living in poverty and those living in economically stable homes. In January of 1965 committees assembled by President Johnson, with assistance from Sargent Shriver, met to devise a plan of action to help children overcome setbacks or obstacles caused by poverty. Members of this committee included Dr. Robert Cooke, a pediatrician at John Hopkins University and other specialists in various fields involving children. Project Head Start was started using funds from the Office of Economic Opportunity. Serving over 560,000 American students, Project Head Start provided 8 weeks of instruction to upcoming kindergarten students living in low income communities. Project Head Start continued under President Richard Nixon’s administration (http://sitemaker.umich.edu/365.bell/background_history).

Head Start later grew into a half-day program available during the school year, and it now serves more than 900,000 children including over 800,000 between 3 and 5 years of age. The goal of Head Start, the federal government’s only pre-K program, is to serve children in families of poverty. Holt (2012) goes on to cite the 2011 report from Head Start and Child Experiences Survey as it reported the median income of Head Start families to be around $22,000 a year. Moreover, to qualify for enrollment of their children in Head Start, families must have an income that places them at or below 100% of the federal poverty level or meet other criteria. For example, foster parents and families that include children with special needs are provided these services. Additional funds offered under the American Recovery and Reinvestment Act of 2009 has allowed the government to provide Head Start opportunities to more students. In 2002, the government spent over $2 billion dollars to fund Head Start. This increased tremendously in 2009 with the government providing over $7 billion dollars to fund Head Start. While funding
for Head Start is still significantly more than the amount provided in 2002, it has decreased since 2009. In 2012, the federal government spent over $6 billion on Head Start.

In 1995, Congress approved an extension of Head Start known as Early Head Start. Like Project Head Start, the purpose of Early Head Start is to serve impoverished children. The difference is Early Head Start also provides support to mothers and children from birth to age 3. In 2011, Early Head Start provided support to 114,469 children. In 2012, the program received $1.28 billion in federal funds (Holt, 2012).

According to Currie and Thomas (1998), Whites and Hispanics performed better on tests and in school when they attended a Head Start program, while Blacks that attended Head Start programs did not perform better on tests or in school. White and Black students who attend a school with a Head Start program seem to leave the program headed in different directions. The majority of White students leave the Head Start school and go on to schools that are of equal or better quality than the one attended with the Head Start program; however, Black students tend to move on to schools of lesser quality than the schools attended under the Head Start program. This trend leads to the fading out of the progress made by Black students that attended Head Start programs (Currie & Thomas, 1998).

According to Garces, Thomas, and Currie (2000), students who attended a head start program were more likely to attend college. However, White participants in Head Start programs made up the bulk of this finding. African Americans were more likely to graduate high school, and less likely to commit a violent crime.
Special Education

In 1975 the US Congress passed the Education of All Handicapped Children Act which was later renamed the Individuals with Disability Act (IDEA). This Act was passed to ensure all handicapped students receive a free and appropriate education. Under the reauthorized of IDEA in 2004, schools were required to implement policies to protect against the over identification of minority students for special education services (Russo, Osborne, & Borreca, 2005). Under IDEA states can receive federal funds to help educate students with disabilities if states comply with IDEA regulations. (Krahmal, Zirkel, & Kirk, 2004).

According to Zirkel (2009), students with disabilities are protected by the *Individuals with Disability Act*, which is legislation that provides funding if certain regulations are followed. Under the reauthorized IDEA of 2004, schools were required to implement policies to protect against the over-identification of minority students for special education services (Russo et al., 2005).

*No Child Left Behind* requires schools to test at least 95% of its student body including those who qualify for an Individualized Education Plan (IEP) and/or a 504 plan. In an effort to close the achievement gap, *No Child Left Behind* increases the accountability for schools/school districts of at-risk groups of students.

According to Lefave (2010), NCLB has benefited and hindered special education students since its inception. The federal government placed more school accountability on students with disabilities. This was unprecedented, but it also had a negative effect as school funds are now tied to the achievement of special education students.
Accountability in Alabama

According to the Alabama Interpretive Guide 2010, a state law was passed in 1995 that made it mandatory for all Alabama students in Grades 3-11 to take a nationally normed achievement test for accountability. The Stanford Achievement Test was the high stakes test used to determine if a school would be labeled as Alert, Caution, or Clear status.

The passage of The No Child Left Behind Act gave clear instructions for states to use in assessing school accountability. NCLB required the use of criterion-referenced tests and they were to be administered in Grades 3-8. The Alabama High School Graduation Examination was given in high schools. Schools were now being judged based on their adequate yearly progress (AYP).

Beginning in the 2009-2010, the State of Alabama used several assessments to determine AYP. Those assessments were as follows: Alabama Reading and Math Test (ARMT), Alabama High School Graduation Exam (AHSGE--reading, mathematics, science, and social studies subject areas), Alabama Alternate Assessment (AAA), and ACCESS. The ARMT was given to students in Grades 3-8, the AHSGE was taken by students in Grade 11, AAA was designed for special education students whose IEP determined they could not participate in the state assessments with or without accommodations, and ACCESS was given to students with limited-English proficiency. Students graded on the assessments were given one of four levels: Level I means students did not meet academic content standards, Level II means a student partially meets standards, Level III students were considered proficient, and Level IV students exceeded academic content standards.
Alabama Reading and Math Test (ARMT)

The ARMT, a criterion-referenced test (CRT), was first administered to students in grades 3-6 in 2004. Its primary purpose is to provide data pertaining to the strengths and weaknesses of individual student’s performance on grade level content standards over time. Each year schools are provided with individual student reports that consist of scores that include the possible points earned (how many possible points for content standard and how many points possible by question/item type), the total points earned (total points earned by the student for each question/item type), the percent correct (percent of total points correct per content standard), a scaled score (number indicating where the student falls on the scale) and achievement levels (Four levels that explain if the student does not meet, partially meets, meets, or exceeds understanding of content standards tested) (ALDOE, 2010).

The ARMT assessment plays a big part in determining the success of a school. Schools were required to have a certain percent of its students scoring proficient, a level 3 (on grade level) or a level 4 (exceeding grade level) each year. The use of the ARMT to determine the status of schools is a form of high stakes testing.

High Stakes Testing

The reauthorization of the Elementary and Secondary School Act of 2001, which became known as The No Child Left Behind Act by President George W. Bush, established high-stakes tests as the measurement for school improvement (Baker & Johnston, 2010).

Polnick and Reed (2006) defined high-stakes testing as tests used in academic settings to determine the health of a school or its students.
According to Noguera (2009), high stakes testing has forced schools to focus more on teaching basic skills that can be evaluated via standardized tests, and students’ performance on these tests has served as the basis for how schools are judged. Teaching to the test has become a tireless and harmful phenomenon. Noguera goes on to express the importance of finding a way to reestablish the proper balance between assessment and instruction and the significance of developing higher order thinking skills.

Recent changes to No Child Left Behind allow school districts to focus on more college and career ready standards. Schools are required to be more data driven. Low performing schools are provided more funds that permit district leaders to provide more support for faculty and staff including turnaround intervention programs. Schools receiving Title I funding are offered additional funding to assist in closing the achievement gap.

Donlevy (2003) explained that using high stakes testing in education today has its place to determine accountability, but testing does more harm than good on students from low socioeconomic backgrounds.

Achievement Gap

The racial gap among American students is one of the most pressing concerns for stakeholders today (Bali & Alvarez, 2004). There must be a statically significant difference in scores between two groups of students for there to be considered an achievement gap if the difference means larger than the margin of error (NAEP, 2007). According to Bali and Alvarez (2004), racial gaps among Hispanics and Blacks develop and widen at different rates in the early grades. Black students are affected more by their family situations than their Hispanic and White
counterparts, while Hispanic and White students are affected more by their neighborhood conditions than Black students (Bali & Alvarez, 2004).

Bali and Alvarez (2004) explained the significance of school factors as students move through school. Their research showed that Black students benefit from having more minority teachers and Hispanic students benefit from having smaller class sizes.

As policymakers attempt to use policy changes to decrease the achievement gap, it must be noted that one policy change may have an effect on one group but may not affect another. The hope for a successful policy may have to address the differences in each racial group (Bali & Alvarez, 2004). The National Center for Education Statistics in 2007 reported that while mathematics assessment results for Black and White students in fourth and eighth grades attending public schools were significantly higher than previous scores since 1990, the results of White students were much higher than those of Black students. These results were also found to be true in Reading for fourth grade students on the NAEP assessment in 2007. In fact, test results in 2005 showed a significant difference in the results of Black and White students to document a significant achievement gap in both reading and math between Blacks and Whites in the United States.

State Black-White Achievement Gaps in Mathematics

1. At the state level, gaps in Grade 4 mathematics existed in 2007 in the 46 states for which results were available.
2. At Grade 8, mathematics gaps existed in 2007 in the 41 states for which results were available. The gaps were narrower in 2007 than in 1990 in four states: Arkansas, Colorado, Oklahoma, and Texas. In all four, scores for both Black and White students increased, but scores for Black student increased more.
3. At Grade 4, five states had mathematics gaps in 2007 that were larger than the national gap of 26 points, while 10 states had gaps that were smaller.
4. At Grade 8, seven states had mathematics gaps in 2007 that were larger than the national gap of 3 points, while 12 had gaps that were smaller.
State Black-White Achievement Gaps in Reading

5. At the state level, gaps in Grade 4 reading existed in 2007 in the 44 states for which results were available. Gaps narrowed from 1992 to 2007 in Delaware, Florida, and New Jersey, due to larger increases in Black students’ scores.

6. At Grade 8, reading gaps existed in 2007 in 41 of the 42 states for which results were available. In Hawaii, the 7 points difference between Black and White students’ scores in 2007 was not statistically significant, and thus there was no gap for Hawaii. There was no significant change in the gap in any state from 1998 to 2007.

7. At Grade 4, eight states had reading gaps that were larger than the 2007 national gap of 27 points, while nine had gaps that were smaller.

8. At Grade 8, one state had a reading gap that was larger than the 2007 national gap of 26 points, while nine had gaps that were smaller. (Vannema, Hamilton, Anderson, & Raham, 2009, p. iv)

Positives of the No Child Left Behind Act

Noguera (2009) explained that, because of the No Child Left Behind Act and its expansion of the role of the federal government in public education, the Bush administration may well be remembered as having had a greater impact on public education than any other presidential administration. He documents how before President Bush the federal role in education was merely to enforce civil rights and federal policies.

No Child Left Behind digs deeper into testing data to determine areas of weakness. This act holds states accountable for the learning of all students.

Negatives of the No Child Left Behind Act

The No Child Left Behind Act was created as a way to help America’s students better attain a quality education and ensure that all students, even the ones who were labeled at risk, become proficient by the year 2014. However, Arce, Luna, Borjian, and Conrad (2005) found that the students in need of the most help were not getting what was promised and that the educational publishing companies were profiting more than the students from NCLB.
According to Noguera (2009), while No Child Left Behind identified the gap in achievement as a problem it has done little to close this gap. In fact, Noguera stated that it has taken schools backwards because it provides a misleading definition of achievement and did nothing to address the problem it identified. Critics question the fact that students classified as English learners are at a disadvantage under NCLB; they enter a school with limited English, but are required to take and pass the same high-stakes test as the general student population (Arce et al., 2005).

According to Hill and Barth (2004), the framers of NCLB failed to see the impact the Act would have on teachers as they looked to close the achievement gap among minorities, students with disabilities, and students of low socioeconomic status. The retooled requirement of what qualifies a teacher to be highly qualified drove many veteran teachers to retirement.

The No Child Left Behind Act requires cohorts of students to meet a set percentage score to be labeled as proficient of meeting annual yearly progress. However, the core does not accurately identify some schools (Heck, 2006). According to Heck (2006), it is impractical to believe that schools can eliminate the disparity among minority students and the achievement gap. Because the No Child Left Behind Act relies on mean proficiency scores and requires all subgroups to meet the same goals for accountability, it places high-poverty schools and racially diverse schools at a disadvantage (Kim & Sunderman, 2005).

Arce et al. (2005) argued that President Bush’s family and friends profited from NCLB, as companies with direct ties to the Bush family were selling software to improve test scores for students who were required to take high-stakes tests under NCLB. Most of the software was being sold to low-income school districts and schools.
Recent Studies on Title I/Non-Title I Schools

A recent study conducted by Scott (2005), titled *A Quantitative Examination of Title I and Non-Title I Elementary Schools in East Tennessee Using Fourth-Grade Math and Reading Standardized Test Scores*, focused on determining the difference in standardized test scores in reading and math between fourth-grade students in Title I schools and those in Non-Title I schools.

Scott’s (2005) study used gender, economically disadvantaged, and students with disabilities as variables. Scott analyzed the data of fourth grade students in 172 elementary schools located in 21 East Tennessee school systems. The Terra Nova Test (a component of the Tennessee Comprehensive Assessment Program) completed by all students in Grades 1 through 8 served as the instrument for this study. A one-way ANOVA, Tukey post-hoc test, Tamhane’s T2, and t tests were used to analyze the data. The findings from Scott’s study revealed the following:

The Tamhane’s T2 post hoc test was used to test for pair-wise differences. A summary of these findings indicated that Title I females scored higher than Title I males. This was the only pair of comparisons that indicated a Title I school out-performed a Non-Title I school in reading. Non-Title I females out-performed both Title I females and Title I males. Non-Title I males out-performed both Title I females and Title I males. In comparison of these pairs of gender groups, Non-Title I students always performed higher than Title I students.

The Tukey HSD post-hoc test was used to further test for significant differences. In the content area of math, it appeared that Non-Title I students consistently performed better than Title I students. Female Non-Title I students scored higher than both female and male Title I
students. Male Non-Title I students also scored higher than both female and male Title I students.

The t test for reading showed there was no significant difference between economically disadvantaged students in Title I schools and economically disadvantaged students in Non-Title I schools. Some of the research suggested that economically disadvantaged students attending Non-Title I schools performed higher than did economically disadvantaged students who attended a Title I school. It appears, based on this study, that there is no relationship between the Title I status of the school and the reading scores of fourth grade students who are economically disadvantaged.

The t test for math showed there was no significant difference between economically disadvantaged students in Title I schools and economically disadvantaged students in Non-Title I schools. This result indicates that Title I status of the school does not affect the math scores of fourth-grade students who are economically disadvantaged. It appears that the mastery of math skills is similar between Title I and Non-Title I schools in the state of Tennessee for students who are economically disadvantaged. Based on the results of this study, there is not a gap between Title I schools and Non-Title I schools in the subcategory of economically disadvantaged students in the content areas of reading or math. Although this outcome is surprising, it helps validate the efforts made by Title I schools in East Tennessee.

The t test showed there was a significant difference between the reading scores of students with disabilities in Title I schools and students with disabilities in Non-Title I schools. Students with disabilities who attended Title I schools had a lower mean in reading than students with disabilities who attended Non-Title I schools. It appears that fourth-grade students with
disabilities who attend Non-Title I schools are performing higher in reading than those students with disabilities who attend Title I schools.

The t test showed there was no significant difference in the math scores of students with disabilities who attended Title I schools and Non-Title I schools. It appears, based on this study, that Title I status of the school does not affect the math scores of fourth grade students with disabilities. Based on the evaluation of this subcategory, the mastery level of math skills appears similar in Title I and Non-Title I schools for students with disabilities.

In 2009, Bland-Washington replicated the quantitative study conducted by Amy Scott in 2005. Bland-Washington’s study was titled, *Are Title I Schools Helping Students Make the Grade? A Comparison of Grade 4 Standardized Test Scores in Title I and Non-Title I Schools in West Georgia.* Much like Scott, Bland-Washington completed a quantitative and ex post facto study that focused on gaining a clearer understanding of the differences between the reading and math test scores of students attending Title I and Non-Title I schools in Grade 4. While the population of Bland-Washington’s study consisted of 19 elementary schools that housed approximately 11,019 students located in a West Georgia school district, the emphasis was merely on the 1,892 fourth grade students. Bland-Washington used a two-factor analysis of variance (ANOVA) to analyze the findings of her study. Her subgroups were gender, disability, and economically disadvantaged.

She reported that her descriptive findings were statistically significant with differences in all areas. Bland-Washington asserted the gains on the Georgia’ Criterion-Referenced Competency Tests (CRCT) were expected considering the amount of extra supportive services provided to Title I schools. The study used passing rates for reading and math on the CRCT to
compare five West Georgia Elementary Schools to other elementary schools throughout the county.

The study showed that the Non-Title I males outperformed the Title I males. The analysis indicated that the Non-Title I females outperformed Title I females. When comparing the overall Title I female performance to the Non-Title I schools in the county, the analysis further indicated that females for the overall school district significantly outperformed females from Title I schools ($z = -3.40, p < .01$) with regard to CRCT reading.

The results indicated that the percentage of male students who passed the mathematics portion of the CRCT was higher for the county than for the Title I schools in most cases. The county had a higher percentage of males who passed the mathematics portion of the CRCT.

As with the reading results, the percentage of female students who passed the mathematics portion of the CRCT was higher for the county than for the Title I schools. The results indicated that when comparing Title I females to the females in the overall county, the county females had a higher passing rate on the mathematics portion of the CRCT.

The research compared students from five county schools to students in Title I schools, regardless of gender or disability status. The descriptive statistics indicated that the county students had a higher passing rate than did the Title I students.

The descriptive statistics indicated that students with disabilities at the county level had a higher passing rate than did students with disabilities from Title I schools.

Summary

Chapter 2 highlights and outlines the educational accountability movement in the United States. The No Child Left Behind Act, a reauthorization of the 1960s Elementary and Secondary
Act, is reviewed to determine if indeed it is achieving the goal of decreasing the achievement gap between Title I and Non-Title I schools.

Accountability in the United States came to the forefront with the launching of Sputnik by the Union of the Soviet Socialist Republic (USSR) over 60 years ago. The U.S. Congress passed the NDEA to try and combat the perceived lack of educational progress in America at that time. However, one of the most sweeping legislations by Congress that deals with education came under Lyndon B. Johnson’s War on Poverty. Coming out of the War on Poverty was the passage of the Elementary and Secondary Education Act (ESEA). When passed, the ESEA focused on providing all children, especially those of poverty, an equal opportunity. One of the most defining Titles of ESEA was its first title. The goal of Title I was to allot money to states and school districts which would, in essence, improve the academic achievement of underprivileged students.

During the 1980s, the Department of Education produced a report on America’s schools called A Nation At Risk (ANAR). ANAR findings were that American schools were mediocre and in need of improvement. A call for education reform rang out throughout America. Following ANAR the subsequent presidential administrations produced their ideas of reforming education in America. George H.W. Bush gave us America 2000; Bill Clinton outlined his reform strategy in Goals 2000: Educate America; and George W. Bush pushed through the reauthorization of ESEA and it became known as the No Child Left Behind Act (NCLB). NCLB used several components to determine how students were being educated and how to keep track of schools’ performance.

Chapter 2 also gives a cursory look at Title I funding and its use in improving academic achievement in America. The interventions that attributed to Title I funds, such as those for
Reading and Math, were reviewed. Factors that may influence student achievement, for example type of school attended, gender, and ethnicity, were also examined to show the impact. These are all causal assumptions to address or explain the achievement gap.

Another factor in achievement discrepancies is poverty. The Coleman Report explained the connections between poverty and, in particular, concentrated poverty and educational achievement. The American Recovery and Reinvestment Act of 2009 added $10 billion to help improve achievement in districts with high concentrations of poverty.

Several programs have been put in place to help students from low socioeconomic households close the achievement gap. One of the signature programs is Head Start. The purpose of Head Start is to provide students coming to public schools academically behind an avenue to catch up with their peers.

Finally, Chapter 2 examines past studies that focused on fourth grade students in both Title I and Non-Title I schools and their achievement. One study was conducted in Tennessee and the other in Georgia, each reaching similar results.
CHAPTER 3

METHODOLOGY

Introduction

Chapter 3 describes the research design, population, and sample selection procedures. The instrumentation, data collection planning, and data analysis planning are also explained.

The best method to analyze the numerical data of this study was the quantitative method. The study analyzed fourth grade aggregated longitudinal ARMT data from information provided by the Alabama State Department of Education, which are published online for public availability. Unlike the studies conducted by Scott and Bland-Washington, this study included aggregated Reading and Math longitudinal test data from 2004, 2008, and 2012 instead of analyzing disaggregated Reading and Math test data for 1 year. This study was limited to fourth grade students in the three Madison County Schools Systems of North Alabama’s District 8. The school systems selected consists of 98 elementary schools, 8 middle schools, and 6 high schools. However, there was a total of 50 elementary schools in the three selected North Alabama school districts. There were no foreseeable risks or identifiers in this study. The three school systems selected from District 8 of North Alabama involved a mixture of urban, suburban, and rural elementary schools.

The purpose of this study was to determine if there is a difference in the standardized test scores of reading and math between fourth grade students attending Title I and Non-Title I schools in three select North Alabama schools within District 8. The researcher gathered ARMT data dealing with subgroups (gender and race). The data collected showed scores of students
meeting, exceeding, and not meeting standards in reading and math. Each research question was examined and a variety of charts and tables were used to display the results of the data. Ethical matters were considered. However, as in previous studies, no ethical matters were anticipated that affected the outcome of this study.

Statement of the Problem

In an effort to level the playing field for all students, despite economic status, Title I funding is provided to schools with high poverty enrollment. Although these additional funds are provided, schools receiving Title I funds are struggling to decrease the achievement gap. While the achievement gap has decreased over time, the gap is still evident.

Research Questions

1. What is the difference in the academic achievement in Math and Reading between Title 1 and Non-Title 1 schools in 2004, 2008, and 2012 academic years?

2. Are there differences in the academic achievement based on ethnicity between Title 1 and Non-Title 1 schools in the 2004, 2008, and 2012 academic years?

3. Are there differences in academic performance based on gender between Title 1 and Non-Title 1 Schools in the 2004, 2008, and 2012 academic years?

4. Have the differences in academic achievement between Title 1 and Non-Title 1 schools in academic achievement significantly decreased between 2004, 2008, and 2012?
Research Methodology

The results of the ARMT were interpreted based on numerical scores. The design method used a quantitative and descriptive ex post facto design. Numerical values gave concrete data on students, schools, and school districts. Results were available to the United States Board of Education. The research design retrospectively examined the data on standardized tests.

Research Design

This research was a quantitative study in which the investigator surveyed standardized data in an ex post facto manner. An ex post facto comparative design was used to gather, analyze, and interpret existing school data. The data were gathered in this order: school system, school grade level, subject, and the two focus subcategories of gender and race of economically disadvantaged versus non-economically disadvantaged schools. Each school was categorized as Title I or Non-Title I. This study, like that of Bland-Washington, used the two-factor ANOVA design to analyze data. The analysis of the data allowed the researcher to deduce whether a difference in academic achievement could be identified between Title I and Non-Title I schools and each of the subcategories (gender and race). While this study has much in common with both the studies conducted by Scott and Bland-Washington, the researcher feels the two-way ANOVA design used by Bland-Washington best analyzed the data collected.

Population and Sample

The population used in this study consisted of 50 elementary schools in three select school systems of North Alabama’s District 8. This study focused on school aggregate data for fourth grade students and their performance on the Alabama Reading and Math Test (ARMT) in
the content areas of reading and math. The data reflect the past 3 years of academic performance (2004, 2008, and 2012).

The study focused on three main subgroups: students in Title I schools and students in Non-Title I schools, race, and gender. Teachers have received training on how to give the Alabama Reading and Math Test (ARMT) as well as training dealing with various curriculum programs necessary to ensure student understanding of standards tested.

**Selection Procedures**

Data for fourth grade students were used from selected schools. The study used the ex post facto design to analyze data collected from 2004, 2008, and 2012. Data were selected from approximately 50 elementary schools that had elementary schools operating on a traditional school year calendar (August-May), using a traditional grading scale (A, B, C, D, F), and were geographically located in District 8 of North Alabama.

All elementary schools chosen operated on traditional school schedules. They had a summer break, winter break, and a spring break. These schools shared a similar grading scale for communicating academic growth to parents. The students at these schools received instruction in physical education, music, art, and library in some form during the school year. All schools had at least one computer lab and many had extended services for children before/after school.

Each school was classified as Title I or Non-Title I for the purpose of this study. Title I schools receive federal funding if the number of students receiving free or reduced-price lunch is greater than 35%. Non-Title I schools have some students receiving free and reduced price lunches but they do not have enough to receive or have chosen to not take on the label of Title I to receive federal financial support from the government.
The ARMT test data was analyzed for these students in the content areas of reading and math. The collected data only represented the learning that took place during 2004, 2008, and 2012 school terms. After each school was coded Title I or Non-Title I, the data were collected on fourth grade students in the curriculum areas of reading and math. This data were then aggregated into subcategories. These subcategories (race, gender, and school type) are defined in *No Child Left Behind*.

**Phases of Data Collection**

To ensure validity, the phases of data collection were taken from Amy Scott (2005).

Phase 1: All fourth-grade test results of students present during the first 20 days of a traditional school year calendar determined the academic status of the school.

Phase 2: All fourth grade students who attended the selected schools had taken the ARMT within the window of time provided by the Alabama State Department of Education.

Phase 3: The data were reported to the state department of education and desegregated into content areas and subgroups.

Phase 4: The data were collected by the researcher and entered into the SPSS program analysis.

Phase 5: The researcher examined the results provided by the SPSS program, and assessment data provided by the Alabama State Department of Education.

**Instrumentation**

All students in Grades 3-8 are required to take the Alabama Reading and Math Test (ARMT) in March. The ARMT is a criterion-referenced test that measures student mastery
(proficiency) of content standards devised by the Alabama Department of Education. It consists of selected items from the Stanford Achievement Test (Stanford 10) that match the Alabama state content standards in reading and mathematics. Additional test items were developed to be included so that all content standards were fully covered. The ARMT is the accountability measure for all public schools in Alabama.

With approval from No Child Left Behind, the Alabama Reading and Math Test has been labeled as a reliable and valid assessment. Reliability refers to the measure with which constant measurements will consistently result in the same ending. Validity is the degree to which the instrument measures what it is supposed to measure.

In 2004, with the piloting of the ARMT assessment to all fourth, sixth, and eighth grade students, an effort was made to fully assess student achievement of Alabama’s content standards before the full implementation of the assessment in the spring of 2005.

Summary

In this chapter, the researcher described the research design, population, and sample selection procedures. The instrumentation, data collection planning, and data analysis planning are also explained. The unit of analysis for this study was schools. This was chosen as a way to examine the achievement gains and deficits of fourth grade students in both Title I and Non-Title I schools in District 8 of North Alabama. Four research questions are being analyzed in this study. This study anticipates adding to the body of knowledge on achievement in North Alabama elementary schools.
CHAPTER 4
DATA ANALYSIS

There were four research questions that this research attempted to shed light on. The questions were as follows:

1. What is the difference in academic achievement between Title I and Non-Title I schools in 2004, 2008, and 2012 academic years?

2. Are there differences in academic achievement based on ethnicity between Title I and Non-Title I schools in the 2004, 2008, and 2012 academic years?

3. Are there differences in academic performance based on gender between Title I and Non-Title I Schools in the 2004, 2008, and 2012 academic years?

4. Have the differences in academic achievement between Title I and Non-Title I schools significantly decreased between 2004, 2008, and 2012?

In an attempt to answer these questions, fourth grade math and reading data was collected from elementary schools in three select North Alabama school districts. This study focused on school aggregate data for fourth grade students and their performance on the Alabama Reading and Math Test (ARMT) in the content areas of reading and math. The data will reflect three years of academic performance (2004, 2008, and 2012).

The study focused on two main subgroups: students in Title I schools and students in Non-Title I schools.
The ARMT test data were analyzed for students attending Title I and Non-Title I schools in the content areas of reading and math. The collected data only represented the learning that took place for three school terms. After each school was coded Title I or Non-Title I, the data were collected on fourth grade students in the curriculum areas of reading and math. The data were then disaggregated into subcategories. These subcategories are defined in *No Child Left Behind*.

To analyze the data, a Repeated Measures Analysis was conducted. The independent variable was the type of school the student attended (Title I School vs. Non-Title I School) and the repeated measure over time was the years that these students were tested: 2004, 2008, and 2012. Gender and ethnicity were the controlled variables for the study. Math and Reading results from the Alabama Reading and Math (ARMT) test served as dependent variables for the study and schools was the unit of analysis.

The descriptive statistics in Table 1 suggest that all student groups showed some level of improvement over time. In other words, students who attended Title I Schools and those who attended Non-Title I Schools showed improvement over time. That means that, generally speaking, a higher percentage of students was more proficient in 2008 compared to 2004, and a higher percentage was proficient in 2012 than in 2008.
## Table 1

**Repeated Measures Descriptive Statistics**

<table>
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<th>Year</th>
<th>School type</th>
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<th>M</th>
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<td></td>
<td>Non-Title I</td>
<td>27</td>
<td>90.55</td>
<td>09.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td>85</td>
<td>90.55</td>
<td>09.75</td>
</tr>
</tbody>
</table>
Also, Black students were, as an ethnic group, the least proficient, regardless of subgroup, in the study. In fact, the Black student subgroup was the lowest performing regardless of the type of school they attended. On the contrary, the White student subgroup, as an ethnic group, was the highest performing group regardless of the type of school they attended.

To determine if these observed differences are statistically significant, each research question was analyzed using the Repeated Measures Multivariate Tests and Test of Between Subjects Effect (see Table 2).

### Table 2

*Repeated Measures Multivariate Tests*

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>(F)</th>
<th>(df)</th>
<th>(p)</th>
<th>(n^2)</th>
<th>Power</th>
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</thead>
<tbody>
<tr>
<td>Proficiency</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
<td>0.57</td>
<td>58.42</td>
<td>130</td>
<td>.000</td>
<td>.574</td>
<td>1.000</td>
</tr>
<tr>
<td>Wilks Lamda</td>
<td>0.43</td>
<td>58.42</td>
<td>130</td>
<td>.000</td>
<td>.574</td>
<td>1.000</td>
</tr>
<tr>
<td>Hottelling’s Trace</td>
<td>1.35</td>
<td>58.42</td>
<td>130</td>
<td>.000</td>
<td>.574</td>
<td>1.000</td>
</tr>
<tr>
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<td>1.35</td>
<td>58.42</td>
<td>130</td>
<td>.000</td>
<td>.574</td>
<td>1.000</td>
</tr>
<tr>
<td>Proficiency*YR</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai’s Trace</td>
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<td>3.04</td>
<td>262</td>
<td>.007</td>
<td>.065</td>
<td>.908</td>
</tr>
<tr>
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<td>262</td>
<td>.007</td>
<td>.066</td>
<td>.907</td>
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<tr>
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<td>3.03</td>
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<td>.007</td>
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<td>.906</td>
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<tr>
<td>Roy’s Largest Root</td>
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<td>4.36</td>
<td>262</td>
<td>.006</td>
<td>.091</td>
<td>.862</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>130</td>
<td>.012</td>
<td>.080</td>
<td>.805</td>
</tr>
<tr>
<td>Wilks Lamda</td>
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<td>3.79</td>
<td>130</td>
<td>.012</td>
<td>.080</td>
<td>.805</td>
</tr>
<tr>
<td>Hottelling’s Trace</td>
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<td>3.79</td>
<td>130</td>
<td>.012</td>
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<td>.805</td>
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<tr>
<td>Roy’s Largest Root</td>
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<td>130</td>
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<td>.080</td>
<td>.805</td>
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<td>.034</td>
<td>.050</td>
<td>.799</td>
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<td>262</td>
<td>.033</td>
<td>.051</td>
<td>.801</td>
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<tr>
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<td>.051</td>
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<td>4.02</td>
<td>262</td>
<td>.009</td>
<td>.084</td>
<td>.830</td>
</tr>
</tbody>
</table>

The first research question was, “What is the difference in academic achievement between Title I and Non-Title I schools in 2004, 2008, and 2012 academic years?”
Table 3

Repeated Measures Test of Between Subjects Effect

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
<th>$n^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
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<td>Intercept</td>
<td>3747078.25</td>
<td>1</td>
<td>3747078.25</td>
<td>12096.98</td>
<td>.000</td>
<td>.989</td>
<td>1.000</td>
</tr>
<tr>
<td>Year</td>
<td>14074.28</td>
<td>2</td>
<td>7037.14</td>
<td>22.72</td>
<td>.000</td>
<td>.256</td>
<td>1.000</td>
</tr>
<tr>
<td>School</td>
<td>1259.45</td>
<td>1</td>
<td>1259.45</td>
<td>4.07</td>
<td>.046</td>
<td>.030</td>
<td>0.517</td>
</tr>
<tr>
<td>Year*School</td>
<td>2124.57</td>
<td>2</td>
<td>1062.28</td>
<td>3.43</td>
<td>.035</td>
<td>.049</td>
<td>0.635</td>
</tr>
<tr>
<td>Error</td>
<td>40887.43</td>
<td>132</td>
<td>309.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a statistically significant difference between the performance of students who attended Title I schools and those who did not, over time (Wilks Lamda = 0.90; $F = 2.33$; $df$, 262; $p < .05$). In fact, the Test of Between Subjects Effects reveals that there is a statistically significant interaction effect between time and type of school attended--Title I Schools and those who did not ($SS = 2124.57$; $MS = 1062.28$; $F = 3.43$; $df$, 2; $p < .05$).

Table 4

Repeated measures Multiple Comparison Post Hoc

<table>
<thead>
<tr>
<th>(I) YR</th>
<th>(J) YR</th>
<th>Mean</th>
<th>SE</th>
<th>$p$</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tukey</td>
<td>04</td>
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<td>1.84</td>
<td>.005</td>
<td>-10.24 -1.52</td>
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<tr>
<td>HSD</td>
<td>08</td>
<td>-12.33</td>
<td>1.90</td>
<td>.000</td>
<td>-16.83 7.83</td>
</tr>
<tr>
<td></td>
<td>12</td>
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<td>1.84</td>
<td>.005</td>
<td>01.52 10.23</td>
</tr>
<tr>
<td></td>
<td>08</td>
<td>-6.45</td>
<td>1.79</td>
<td>.001</td>
<td>-10.70 -2.20</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>12.33</td>
<td>1.90</td>
<td>.000</td>
<td>7.83 16.83</td>
</tr>
<tr>
<td></td>
<td>08</td>
<td>06.45</td>
<td>1.79</td>
<td>.001</td>
<td>2.20 10.70</td>
</tr>
</tbody>
</table>

Additionally, according to the Repeated Measure Multiple Comparison Post Hoc (see Table 4), the Estimated Marginal Means for Title I Schools and Non-Title I Schools (see Figure 1), and the Estimated Marginal Means for Each Year--2004, 2008, and 2012 (see Figure 2) all
reveal that students who attended Title I schools performed lower than those who did not. Also, students’ performance consistently improved over time.

The second research question asked whether differences existed in academic achievement based on ethnicity between Title I and Non-Title I schools in the 2004, 2008, and 2012 academic years. Based on the descriptive statistics (Black, $M = 78.10$, $SD = 13.89$; and White, $M = 90.55$, $SD = 9.75$), it is clear that White students outperformed Black students (see Table 1). Additionally, the Estimated Marginal Means (see Figure 2) indicate that the performance for both Whites and Blacks improved over time. However, Whites outperformed Blacks in every year studied. In fact, Whites were the highest performing subgroup and Blacks were the lowest performing subgroup. Similarly, Whites outperformed Blacks regardless of the type of school they attended. Whites who attended Title I schools outperformed Blacks who attended Title I schools. Also, Whites who attended Non-Title I schools outperformed Blacks who attended Non-Title I schools. In short, while the type of school attended (Title I School vs. Non-Title I School) seemed to make a difference for White students, that factor did not seem to make a difference for Black students (see Figure 1).
Figure 1. Estimated marginal means for Title I schools and Non-Title I schools.

Figure 2. Estimated marginal means for each year—2004, 2008, and 2012.
There was a statistically significant difference in achievement based on the type of school they attended based on the students’ ethnicity. White students (White, $M = 90.55$, $SD = 9.75$) outperformed their Black counterparts (Black, $M = 78.10$, $SD = 13.89$) overtime regardless of the type of school they attended (see Figure 1). Over time, based on ethnicity, the type of school students attended--Title I Schools (Whites, $M = 86$; Blacks, $M = 78$) and Non-Title I Schools (Whites, $M = 92$; Blacks, $M = 77$) indicated that White students who attended Non-Title I school performed better than those who attended Title I Schools. However, the type of school had no effect on the performance of Black students. White students outperformed their Black counterparts on that metric.

The third research question was concerned with differences in academic performance based on gender between Title I and Non-Title I Schools in the 2004, 2008, and 2012 academic years. Based on the descriptive statistics of Females ($M = 87.80$, $SD = 11.70$) and Males ($M = 85.52$, $SD = 10.67$), it seemed that Female students outperformed their male counterparts (see Table 1). Additionally, the Estimated Marginal Means (see Figure 2) indicated that the performance of both females and males improved over time. Females seemed to have outperformed Males in every year studied. Similarly, Females seemed to have outperformed Males regardless of the type of school they attended (see Figure 1). Females who attended Non-Title I schools outperformed their counterparts who attended Title I schools. The type of school attended seemed to have an effect on performance. Therefore, there was a statistically significant difference in achievement over time and type of school attended based on the students’ gender.

The fourth research question asked if the differences in academic achievement between Title I and Non-Title I schools significantly decreased over time--between 2004, 2008, and 2012. There is a statistically significant increase in performance over time of students who attended
Title I schools and those who attended Non-Title I schools (Wilks Lamda = 0.90; \( F = 2.33; df; 262; p < .05 \)). In fact, the Test of Between Subjects Effects revealed that there is a statistically significant interaction effect between time and type of school attended--Title I Schools vs. Non-Title I Schools (\( SS = 2124.57; MS = 1062.28; F = 3.43; df; 2; p < .05 \)).

In addition, the Repeated Measures Multiple Comparison Post Hoc results (see Table 4 and Figure 2) all indicated that students’ performance improved over time. White students had the highest performance is each year studied. Black students had the lowest performance in each year studied. However, of all the groups studied, Black students had the sharpest increase in performance between 2008 and 2012.
CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to determine if there is a difference between fourth grade students in Title I schools and fourth grade students in Non-Title I schools in three selected school districts within District 8 of North Alabama. Reading and math data were collected from 50 schools from three school districts in Madison, Alabama. Data dealing with the subgroups of gender and race were collected to show students meeting, exceeding, and not meeting standards in both reading and math.

Summary of Findings

During the years of 2004, 2008, and 2012, there was a statistically significant difference in the achievement of students who attended Title I schools and those who did not. Results revealed that students who attended Non-Title I schools performed at a higher achievement level than their Title I peers. However, Title I schools decreased the achievement gap over time. Based on the descriptive statistics, it is clear that White students outperformed Black students. The performance for both Whites and Blacks improved over time. However, Whites outperformed Blacks in every year studied. In fact, Whites were the highest performing subgroup and Blacks were the lowest performing subgroups. Similarly, Whites outperformed Blacks regardless of the type of school they attended. Whites who attended Title I schools outperformed Blacks who attended Title I schools. Also, Whites who attended Non-Title I schools outperformed those who attended Non-Title I schools. In short, while the type of school attended (Title I School vs. Non-Title
Non-Title I School) seemed to make a difference for White students, that factor did not seem to make a difference for Black students.

The study also found that female students outperformed their male counterparts; however, the performance of both females and males improved over time. Females seemed to have outperformed males in every year studied. Females seemed to have outperformed males regardless of the type of school they attended. Females who attended Non-Title I schools outperformed their counterparts who attended Title I schools. The type of school attended seemed to have an effect on the performance of the students.

Over time, the academic performance of both students who attended Title I schools and those who attended Non-Title I schools increased significantly. White students had the highest performance in each year studied. Black students had the lowest performance in each year studied. However, of all the groups studied, Black students had the sharpest increase in performance between 2008 and 2012.

As President Johnson stated, freedom is not enough. It is imperative that the educators/stakeholders of the free world find a way to prepare our young people to be college and career ready. We have to remember that just a few decades ago it was illegal for people of color to read. While everyone is now allowed a free and appropriate education, we must now work to ensure everyone is not just provided an equal education but also find a way to define and correct the true elephant in the room. The fact that African Americans are now able to compete in the race is not enough. African Americans have been behind in the race from the beginning, which is why President Johnson and his staff devised the Elementary and Secondary Act. With the implementation of the ESEA and the availability of Title I funds, President Johnson’s goal was to provide support to students in need. He set out to overcome the elephant.
Implication of the Study

The study shines further light on the topic of achievement in education and the gap that is said to be between different ethnic groups. This study focused on the achievement of Title I and Non-Title I schools using gender and race as variables. The findings of the study reveal to us that in three school districts in North Alabama’s District 8, there are still achievement disparities among Blacks and Whites. What are the implications for the state of Alabama as well as the three school districts in the study?

The data gained gives the state of Alabama a longitudinal look at proficiency levels of Title I and Non-Title I schools broken down as aggregated data using gender and race as variables. The data revealed that although not at the pace desired, Title I funding is working to improve achievement of low socioeconomic students. As found in the study, White students are still outperforming their Black peers, with White females being the top performers. Alabama can use this data to determine what Title I programs are working and try to replicate those programs in areas that have not seen as much growth in their Title I schools.

The implications for the school district’s study should be a charge to continue to seek growth in its Title I schools and among all students; however, more attention should be placed on Black males as they were the lowest achievers in the study. As females continue to outpace males in all categories of this study, some Title I funding should be diverted to help Black and White males in the areas of math and reading.

Alabama will implement a new assessment in the spring of 2014. The results have the potential to be mixed with many students performing worse than they had on the previous assessment. These results should be managed so that stakeholders do not take a negative look at the achievement of students or the quality of schools and teachers. Before publicizing the results
of the new test, it is important to consider the aftermath that may affect the schools, school
districts, teachers, and students. This is indeed a stipulation of implementing a new assessment
for the first time.

Conclusions

All stakeholders, based on the information gathered and analyzed in this study, can
conclude that there are differences within Title I and Non-Title I schools that go beyond the
social economic status of the students that attend the schools. It was the purpose of this study to
inform stakeholders in and around the state of Alabama (specifically the area of North Alabama)
of the results of this study. The results of this study should provide insight in the effectiveness of
the No Child Left Behind Act and the funds used to support Title I schools.

Significance of the Study

The significance of this study is that Title I funding is working, as the achievement is
increasing in both Title I and Non-Title I schools. However, one must consider the possibility of
the achievement increase of both Title I and Non-Title I schools may be due to teachers and
students becoming more familiar with the test, in which case, teaching to the test could have led
to the result of increase achievement. With the adoption of a new test this possibility may be
revealed. If indeed the achievement gap increases between students attending Non-Title I schools
and Title I schools, much consideration must be taken to the effects of test familiarity and
teaching to the test.

Other variables that may affect the outcome of the new assessment, Act Aspire, would be
the implementation of new curriculum standards. Alabama Common Core Standards were
adopted and implemented into curriculum in 2012. Teachers are undergoing professional development to increase their knowledge of these standards. This would permit different demographics and possibly different subgroups for comparison.

Recommendations for Further Research

While it seems as if Title I funding has helped to close the achievement gap in fourth grade reading and math, much improvement is still necessary. Blacks in every setting scored much lower than their counterparts. If replicated, I would suggest that the researcher study schools in other parts of the United States as well as schools in more affluent and extreme poverty communities. A replicated study within District 8 of North Alabama that includes more school districts will add to the research conducted for this area thus providing more insight for decisions on the use of Title I funds for this area.

This same study could be replicated using different grades, subcategories, and content areas. This study could also be replicated in other districts across the state of Alabama. The research in this study consisted of aggregated school data taken from the Alabama Reading and Math Assessment of three select school districts within District 8 of North Alabama. A future study can be conducted using the disaggregated data of students, rather than the aggregated data of schools, using gender and race as variables. This would permit different demographics and possibly different subgroups for comparison. A replicated study should also be conducted using gender, race, and/or social economic status variables. Moreover, a future study should go a step further in comparing the achievement gap of students of low social economic status who attends Title I schools to those who attend Non-Title I schools. Ideally, a study should be conducted using a more diverse population of students enrolled in Title I schools.
The Alabama Reading and Math Test (ARMT) is no longer the assessment used to measure student achievement for the state of Alabama. Beginning in May 2014, students across Alabama will complete the ACT Aspire assessment, which will replace the ARMT assessment. A replica of this study using data from the ACT Aspire should be conducted to determine the difference/patterns between the first administered assessment of ARMT and the first administered assessment of Act Aspire. A longitudinal study should also be conducted to compare the long-term differences of the two assessments. This should answer the question, “Is education improving or are we simply teaching to the test?”

Summary of the Study

In conclusion, this study took a closer look at the differences of Title I and Non-Title I schools. Moreover, it focused on the likelihood of closing the achievement gap of the two types of schools. It is the hope of the federal government to assist in raising the educational level of Title I schools by providing additional funding for curriculum resources. One may assume that the funds provided by the federal government have, in fact, leveled the playing field by closing the achievement gap between Title I and Non-Title I schools. However, findings of this study proved different. This study focused on aggregated longitudinal data for reading and math scores of both gender and ethnicity subgroups within Title I and Non-Title schools. While all of the schools involved showed improvement in test scores over a period of time, Non-Title I schools steadily scored better than Title I schools. Blacks consistently performed the worst when compared to the other groups, regardless of school setting, and females outperformed their male counterparts regardless of school setting. However, females in Non-Title I schools outperformed females in Title I schools.
REFERENCES


APPENDIX A

IRB EXEMPTION LETTER
October 3, 2013

Renee Headen
Department of ELPTS
College of Education
The University of Alabama
Box 870302

Re: Protocol ID # 4795: “A Quantitative Examination of Title I and NonTitle I Elementary Schools in District 8 of North Alabama Using Fourth Grade Math and Reading Standardized Test Results”

Dear Ms. Headen,

This letter comes as a response to your request for IRB review received on September 16, 2013. Following initial review by the University of Alabama Office for Research Compliance, it has been determined that the activities outlined within the project description do not meet the criteria for human subjects research as set forth within UA IRB Form # 31 titled “Human Research Determination Checklist”.

Because the activity is not considered research involving the use of human subjects, the activity does not require IRB approval and is therefore excluded from review by the IRB.

If you have any questions or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,

[Redacted]

Director & Research Compliance Officer
Office for Research Compliance
The University of Alabama

cc: Douglas McKnight, Ph.D.