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Effective Instructional Strategies Utilized in Successful and High Performing Secondary Schools in the Southern Region of Mississippi

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EFFECTIVE INSTRUCTIONAL METHODS UTILIZED IN SUCCESSFUL
AND HIGH PERFORMING SECONDARY SCHOOLS IN
THE SOUTHERN REGION OF MISSISSIPPI

by

Jeanifer Lynn Pearson

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

December 2014
ABSTRACT

EFFECTIVE INSTRUCTIONAL METHODS UTILIZED IN SUCCESSFUL
AND HIGH PERFORMING SECONDARY SCHOOLS IN
THE SOUTHERN REGION OF MISSISSIPPI

by Jeanifer Lynn Pearson

December 2014

The schools in the United States have implemented measures intended to close the achievement gap for over fifty years (Solomon, 2009). The mandates handed down by the federal government cannot be altered. Therefore, schools are required to determine specific measures that increase student academic success. Prior research has demonstrated that schools can be successful if effective leadership at the district, school, and classroom level was present (Gregory, 2003; Johnson, Livingston, & Schwartz, 2000). At the classroom level, it was the leadership of the individual teacher to determine the creation of innovative techniques aimed at academic success of all students (Farr & Teach for America, 2010).

The purpose of this quantitative study was to determine the effect that specific researched based instructional methods, assessments, and student learning methods had on student academic achievement as measured by school accountability rankings. The study included seven high performing and 15 successful secondary schools in south Mississippi that were located in districts that had a minimum of 70% of its student body that received free or reduced lunch. Data was collected using a purposeful, voluntary survey. Based upon the findings of this study, no significant differences were found in the instructional practices, assessments, or student learning methods utilized by the teachers.
at high poverty successful schools and high poverty, high performing schools. For this study, findings indicated that the teachers from the identified schools utilized research-based instructional strategies such as practice on a specific skill, vocabulary, and checking for understanding. In addition, the findings indicated that the teachers used technology to aid in their instruction. Finally, the teachers noted the positive results in student achievement that resulted from being under the supervision of a visible effective principal. As an effective instructional leader, it is the principal who ultimately determined the culture for the school, and for a school to be successful that culture must be focused on teaching and learning.
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A Dissertation
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Approved:

Dr. David Lee

Dr. J. T. Johnson

Dr. Leslie Locke

Dr. Chuck Benigno

Dr. Karen Coats
Dean of the Graduate School

December 2014
DEDICATION

The completion of this dissertation and doctoral degree has been a long journey. Many days have passed in which I felt like quitting, but I knew that I would only regret that decision. I want to thank my Lord and Savior Jesus Christ for the abundance of blessings in my life. I want to thank my parents for their continued support and guidance. I have had a lot of cheerleaders and supporters along the way including my Aunt Mary, Uncle Clyde, Stephanie H., and Daniel W. who helped with Aiden or just offered a push when needed. Thank you all! I dedicate this dissertation to two of the most influential people who I have had the honor of calling family. First and foremost, to the man who I have loved since I was a young girl, Jamie. You were my first love, and the voice inside my head telling me to persevere when I felt like giving up. You were and always will be my sweetpea. I would also like to dedicate this dissertation to my Aunt Diane. My Aunt Diane was the woman I admired and modeled my life after. She instilled in me the importance of family, education, and independence. I only wish that both of you could be in the audience the day that I finally walk across that stage to receive my degree. Thank you both for loving me and accepting me. I love and miss you every second of the day. Finally, I would like to dedicate this dissertation to my son, Aiden, who has helped me to realize my purpose. My life is brighter and more fun with your presence, and I thank God every day that you are my son. I love you to the moon and back.
ACKNOWLEDGMENTS

I want to thank my committee members, Dr. David Lee, Dr. Leslie Locke, Dr. J. T. Johnson, and Dr. Chuck Benigno. I could not have asked for a better support team. I am extremely grateful and so appreciative of Dr. J. T. Johnson and his remarkable statistics guidance.
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LIST OF ABBREVIATIONS

AYP  Adequate Yearly Progress
ESEA  Elementary and Secondary Education Act
HSCI  High School Completion Index
IASA  Improving America’s Schools Act
MANOVA  Multivariate Analysis of Variance
MCT  Mississippi Curriculum Test
MDE  Mississippi Department of Education
NAEP  National Assessment of Educational Progress
NAR  A Nation at Risk
NCLB  No Child Left Behind
QDI  Quality Distribution Index
SATP  Subject Area Testing Program
SEF  Southern Education Fund
SES  Socioeconomic Status
CHAPTER I
INTRODUCTION

The United States Bureau of the Census defined the poverty rate for a family of four by those who had an annual income of $23,492 or less (National Center for Law and Economic Justice, 2012). In 2012, 46.5 million people lived in poverty in the United States and of those individuals, 21.8% were under the age of 18 (National Center for Law and Economic Justice, 2012). Students of poverty who are not provided an adequate education to overcome the circumstances of their birth “may become a burden to our society by draining our social services and our health care system and fill our prisons” (Tileston & Darling, 2009, p. 17).

Studies that explored the effects of educational achievement and socioeconomic status found a strong correlation between areas of concentrated poverty and low achievement (Capraro, Capraro, & Wiggins, 2000; Jacobson, Olsen, King- Rice, & Sweetland, & Ralph, 2001; Webster, Young, & Fisher, 1999). A study conducted by Brooks-Gunn, Duncan, and Maritato (1997) reported that poor families were more likely to live in neighborhoods with other poor families, and Black and Latino children were more likely to experience living in poverty for longer periods of time than Whites. Furthermore, schools in poor neighborhoods lacked access to fewer resources and typically did not staff teachers who were highly qualified and experienced.

The inequalities associated with educational accountability across racial and ethnic groups are not a new topic in education. The public’s interest in closing the achievement gap and improving student achievement is at an all-time high. State and federal policymakers, business leaders, community members, as well as parents place
high demands on public schools for high standards and accountability. For example, the Federal No Child Behind Act of 2001 held schools and districts liable for meeting yearly growth in the achievement of all students, including students with English as a second language, disabilities, underprivileged, and those from various racial and ethnic groups (U. S. Department of Education, 2002).

For Mississippians, improving educational equality and closing the achievement gap are essential for the growth and financial success of the state. Mississippi schools must ensure that the students have the education needed to succeed in a world economy in the 21st century. According to a study conducted by The Southern Education Foundation (SEF) in 2009, Mississippi had the “highest poverty rate in the nation and ranks 49th in the nation in per capita income” (p. 9). Mississippians earned $9,570 less than the average American in 2005. The SEF also reported that 53% of the difference in income was “due solely to the state’s lower levels of education” (p. 9). Mississippi K-12 public schools and districts enrolled a student body that was 50% Black (SEF, 2009). In 2010, almost two-thirds of the 490,000 students in Mississippi were eligible for free or reduced meal prices, an indication of poverty (National Center for Education Statistics, 2010).

In the upcoming chapter, various topics related to the achievement gap will be introduced and discussed. The achievement gap in relation to the effect it has on educational reform at both state and federal levels, and determining its importance to bring about change to the educational system will be addressed. Furthermore, information on the achievement gap in Mississippi will be analyzed and presented as justification for the study.
Background

The expression “achievement gap” invokes different ideas to different people. To some individuals, it referred to the achievement gap between Black students and White students at all income levels. To others, the gap refers to the difference in achievement between male and female students or the gap between students of different cultures, ethnicities, primary languages, or socio-economic statuses (Achievement Gap, 2013). However, when educators speak of the achievement gap, they are typically referring to the idea that as a group, poor traditionally underserved students achieve lower scores on student achievement (Hess & Petrilli, 2009). In general, the achievement gap is the difference in academic performance between groups of students (Hess & Petrilli, 2009). The achievement gap is visible in standardized test scores as well as grades, drop-out rates, college completion rates, and course selection (Ford, Grantham, & Whiting, 2008; Hess & Petrilli, 2009).

Developing policies that equalized educational outcomes for traditionally underserved and economically disadvantaged students has been a central objective of federal and state governments for over fifty years (U. S. Department of Education, 2013). The federal government’s involvement has been traced back to the Supreme Court’s 1954 Brown v. Board of Education decision to end racial segregation in schools (U. S. Courts, 2010). Initially, federal policymakers were hesitant to become involved in Brown v. Board of Education (U. S. Courts, 2010). However, their involvement in ending racial segregation led to the implementation and expansion of policies such as the Elementary and Secondary Education Act (ESEA) of 1965 (U. S. Courts, 2010).
In the 1960s, the student population in the public schools in the United States changed. According to Orfield (2001), the number of White students enrolled in public schools declined by 5.6 million since the 1960s, while the number of Black and Latino students increased by 5.8 million due to “low birth rates and massive immigration” (p. 18). Based on information obtained in the 2000 census, Latinos were the largest traditionally underserved group in the United States (Orfield, 2001). The Latino student population had increased their population from 2 million in 1968 to 6.9 million in 1998, which resulted in a 245% rise in student enrollment (Orfield, 2001). In addition to the increase of enrollment, an increase in segregation of Black and Latino students had occurred. Currently, more than 60% of Black and Latino students attended segregated high poverty, low-performing schools (Orfield, 2001; Orfield & Lee, 2005).

Observing the gap between poor underrepresented groups and their affluent White peers, Congress approved the education reform package known as No Child Left Behind (NCLB) in 2001, which increased accountability under Title I of ESEA (U. S. Department of Education, 2002). Title I was originally designed to close the achievement gap between low-income and traditionally underserved students by means of creating and enforcing clear timelines and reporting provisions that required states to analyze assessment results by poverty, race or ethnicity, disability, and limited English proficiency (U. S. Department of Education, 2008). NCLB (2001) law required that students of various racial, income, and language subgroups make “adequate yearly progress” (AYP) in relation to state-determined proficiency standards (U. S. Department of Education, 2002). AYP was the method that individual states used to measure student progress (U. S. Department of Education, 2008). In general, meeting AYP was
considered the minimum level of competency for a school’s achievement (U. S. Department of Education, 2002). Therefore, the law was chiefly planned to center attention on students who were traditionally underserved by the education system (U. S. Department of Education, 2002).


The State of Mississippi, as part of the accountability system for public schools, assigned school and district ratings based on student performance on state mandated tests and academic growth (Mississippi Department of Education, 2012). Using determined performance standards, the accountability system in Mississippi was designed to increase the level of accountability for districts and individual schools and to improve student achievement (Mississippi Department of Education, 2012). In addition, secondary schools (9-12) rankings included a component for graduation titled high school completion index (HSCI) (Mississippi Department of Education, 2012). Districts that served students in grades 9-12 also received classification based on HSCI (Mississippi Department of Education, 2012).

Mississippi updated the statewide status labels in 2009 (Mississippi Department of Education, 2010a). The accountability status of a district and school depended upon
achievement (QDI), growth, and high school completion (Mississippi Department of Education, 2010a). The QDI was calculated by multiplying set points for each student’s scores on statewide assessments: basic (1 point), proficient (2 points), and advanced (3 points) (Mississippi Department of Education, 2010a). The overall QDI was determined by adding the total points for the three levels (Mississippi Department of Education, 2010a). Depending upon the total QDI calculated and growth, the schools and district received rankings (Mississippi Department of Education, 2010a) (Table 1). In addition, the QDI ranges for the top three rankings increased over a three year period (2009-2012) (Mississippi Department of Education, 2010a) (Table 2).

Table 1

<table>
<thead>
<tr>
<th>Mississippi Statewide Accountability System (2009-2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QDI Ranges</td>
</tr>
<tr>
<td>(2009 Values)</td>
</tr>
<tr>
<td>200-300</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>166-199</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>133-165</td>
</tr>
<tr>
<td>100-132</td>
</tr>
<tr>
<td>Below 100</td>
</tr>
</tbody>
</table>

* Schools and districts without a graduating class are assigned this level.

Note: The Mississippi Accountability system was updated in 2013, and schools no longer utilized this system. Instead, schools were assigned letter grades (A-F).
Table 2

2009-2012 QDI Range Increase

<table>
<thead>
<tr>
<th>Top Range</th>
<th>200-300</th>
<th>214-300</th>
<th>227-300</th>
<th>240-300</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>166-199</td>
<td>176-213</td>
<td>185-225</td>
<td>194-239</td>
</tr>
<tr>
<td></td>
<td>133-165</td>
<td>138-175</td>
<td>143-184</td>
<td>147-193</td>
</tr>
<tr>
<td></td>
<td>100-132</td>
<td>100-137</td>
<td>100-142</td>
<td>100-146</td>
</tr>
<tr>
<td>Bottom Range</td>
<td>Below 100</td>
<td>Below 100</td>
<td>Below 100</td>
<td>Below 100</td>
</tr>
</tbody>
</table>

Regardless of a century of slight progress in the equalization of academic outcomes of all children, gaps still remain. White students scored, on average, 26 points higher than Black students on all of the 2007 National Assessment of Education Progress (NAEP) assessments (Vanneman, Hamilton, Baldwin-Anderson, & Rahman, 2009).

When comparing the achievement gap between Blacks and Whites on the NAEP from 1992 to 2007, the achievement gap narrowed in fourth grade mathematics in 15 states, including Mississippi (Vanneman et al., 2009). In eighth grade mathematics, the scores increased for both Blacks and Whites, but only four states (Arkansas, Oregon, Oklahoma, and Texas) were able to narrow the gap (Vanneman et al., 2009). Similarly, in fourth grade reading, scores increased in 13 states, but only three states (Delaware, Florida, and New Jersey) were able to narrow the gap. However, in eighth grade reading no significant changes were found in the achievement gap (Vanneman et al., 2009).
The achievement gap has clearly been documented to illustrate the difference between the academic performances of suburban and urban schools when there was an unequal number of underrepresented minorities (Darling-Hammond, 1999; Jencks & Phillips, 1998; Ladson-Billings, 1997). The inequality in education was reported in *A Nation at Risk* (National Commission for Excellence in Education, 1983), which presented urgency for the equity of education for diverse populations. The goal of NCLB was to equalize educational opportunities for all students with the implementation of stipulations for highly qualified teachers and high academic standards for all students (U. S. Department of Education, 2002). However, neither reform has resulted in making substantial gains in academic achievement.

**Statement of the Problem**

Creating schools that receive high performing rankings has been a part of the educational tradition for years (Huberman & Miles, 1998). The 90/90/90 Study by Reeves (2000, 2003) investigated a large number of high poverty (90% free or reduced price lunch, 90% minority), high performing (90% meeting standards) schools to determine the measures these schools utilized that resulted in positive student achievement. From his research, Reeves (2000, 2003) identified five school wide characteristics universal to each school: (a) reading, writing, and mathematics were taught across all curricula; (b) recurrent assessments; (c) concentration on school wide academic achievement; (d) emphasis on writing at every grade level and subject; and (e) standardization of grading. Reeves (2003) noted that effective educators of children from poverty were achieving results using various techniques including building positive
student-teacher relationships, effective instructional strategies, and differentiated teaching techniques.

Research conducted by Marzano (2003) examined a small number of high performing, high poverty schools. Marzano (2003) identified factors at the student, teacher, and school level that were present in schools that were successful in closing the achievement gap. At the school level, the center of the curricula emphasis was placed on teaching and learning. Teachers provided regular feedback, and all students were held to high expectations. Marzano (2003) reported that a safe school culture involved parents and community involvement, and school leaders played an important part in the development of a professional and collegial environment. In addition, Marzano (2003) reported that the schools that demonstrated academic achievement were effective due to the implementation of school wide interventions aimed at overcoming the student’s background characteristics. Teachers were responsible for the implementation of interventions and creating a learning environment that fostered a deeper understanding of concepts; therefore, a teacher’s instructional strategies must be carefully contemplated and planned (Marzano, 2003).

Jacob and Ludwig (2008) stated that at the core of a successful school in a low income area was the presence of an effective educator. Students under the instruction of teachers whose instruction and curriculum design focused on content design instead of simple coverage, reasoning instead of memorization, and creating relevance instead of completing tasks, outperformed students in classrooms that did not utilize those strategies (Newman & Wehlage, 1995). Effective educators of children in poverty employed holistic instructional strategies meaning they teach beyond the realm of the academic
material (Howard, 2001). These educators believed that in addition to academia, moral and social education such as responsibility and perseverance were instructed (Howard, 2001). Effective educators of children in poverty also used personal connections that motivated students by showing genuine interests in the student’s life (Ladson-Billings, 1997; Ware, 2006).

Accountability measures apply to all children and educators. Children living in poverty confront the same world as their peers. Therefore, educators in high poverty districts must identify and utilize effective instructional strategies aimed at increasing the academic achievement of their students. The goal of this study was to add to the existing body of knowledge on effective instructional methods and student academic success in Mississippi.

Purpose of the Study

NCLB (2001) required students to perform at higher levels of thinking, make meaningful connections, and to apply new skills to real world settings (Wiggins & McTighe, 2005). After the implementation of NCLB (2001), researchers analyzed the factors affecting student learning and the role that teachers played in closing the achievement gap and in improving of student achievement (Wright, Horn, & Sanders, 1997). According to Wright et al. (1997), effective teachers were “the most important factor affecting student learning” (p. 63). Successful teachers utilized teaching practices, which emphasized authentic learning and understanding (Bransford, Brown, Cocking, Donovan, & Pellegrino, 2000).

The purpose of this study was to identify successful and high performing Mississippi schools and to determine the effect that specific teaching methodologies,
instructional practices, and assessments had on student academic achievement as measured by school accountability rankings. The schools included in the study were located in districts that had a minimum of 70% of its student body population that received free or reduced lunch. In addition, schools received a state ranking of successful or high performing for the 2010-2011 school year. The participants in this study were secondary school teachers who provided instruction in a successful or high performing school in the 2010-2011 school year.

Research Questions

The primary issues investigated in the study were to determine the effect that specific research based instructional practices, assessments, and student learning methods had on student academic achievement as measured by school accountability rankings. This study was designed to answer the following questions:

1. To what degree, and to what extent, do certification level, teaching experience, and highest degree earned of the subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

2. To what degree, and to what extent, do the instructional practices employed by subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?
3. To what degree, and to what extent, do the assessments of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

4. To what degree, and to what extent, does the type of student learning methods of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

Definition of Terms

The following terms were used in this study:

**Accountability System**: In Mississippi, the accountability system had three components, which were achievement, growth, and graduation rate in the districts with secondary schools (Mississippi Department of Education, 2010a).

**Achievement Gap**: The term utilized to refer to any significant inequality in educational achievement and achievement among groups of students as determined by standardized measures (Achievement Gap, 2013).

**Achievement Model**: The measurement of a district or school’s overall academic performance using state mandated measures from the previous year based on the percentage of students scoring basic, proficient, and advanced on state mandated standardized measures (Mississippi Department of Education, 2010a).

**Adequate Yearly Progress (AYP)**: AYP is the method used to measure a student’s progress on annual standardized tests. Each state was required to establish AYP
measures, and to determine if the students at schools and within districts met the achievement standard set over a specific period of time as determined by the state. States may use a two- or three-year averaging formula to determine AYP and the measurement must be made for each category: major racial and ethnic groups, economically disadvantaged students, students with disabilities, and students with limited English proficiency. States had to define their own AYP by determining their own standards, definition of “proficiency,” theoretically meticulous assessments, and data based on those assessments (U. S. Department of Education, 2008).

*Free and Reduced-Price Lunch:* Federally contributed meal program that provides nutritionally balanced, low-cost, or free lunches to students. It was an indicator of poverty. If a family had an income below 100% of the poverty line, which was considered to be officially living in poverty, the children were provided free meals in schools (U.S. Department of Health and Public Services, 2009).

*Growth Model:* A measure of a student’s academic gain by determining if academic growth occurred on state mandated standardized measures by comparing scores from the previous year to the current year (Mississippi Department of Education, 2010a).

*High-Poverty School:* A school located within a district that had a minimum of 70% of its student population receiving free or reduced lunch (study specific).

*High-Performing School:* A school within the southern region of the state of Mississippi that received the second highest quality distribution index (QDI) ranking by the state accountability system (Mississippi Department of Education, 2010a).

*Quality distribution index (QDI):* A measurement of the distribution of student performance on state assessments around the cut points for Basic, Proficient, and
Advanced. The QDI formula was calculated by awarding one point for basic, two points for proficient, and three points for advance (Mississippi Department of Education, 2010a).

Poverty: The term used by the United States Census Bureau to identify the economic status of a family whose annual gross income was $23,492 or less (Institute for Research on Poverty, 2012).

Student Achievement: The measure of performance as determined by scores of basic, proficient, and advanced on state mandated standardized measures (Study specific).

Subject Area Testing Program (SATP): In 1999, Mississippi passed the Mississippi Student Achievement Act, which created a set of norm-referenced tests given to Mississippi secondary students in the areas of Biology I, Algebra I, English II, and U.S. History. Each test was designed to meet a minimum of mastery in each subject. Students were required to pass each test in order to graduate (Mississippi Department of Education, 2008).

Successful School: A school within the southern region of the state of Mississippi that received the third highest quality distribution index (QDI) ranking by the state accountability system (Mississippi Department of Education, 2010a).

Delimitations

The following delimitations were imposed:

1. The study was limited to the teachers, tutors, and administrators who work in successful or high performing secondary schools in the southern region of Mississippi.
2. The study was limited to the analysis of a survey conducted at selected Mississippi secondary schools.

3. The study was limited to the identified schools that met set student achievement measures determined by the researcher.

Assumptions

For the purpose of this dissertation, the researcher assumed the following:

1. SATP was a valid measure of student achievement, and scores would not be manipulated.

2. The responses provided to the researcher on the survey were provided freely and honestly.

Justification of the Study

According to the 2010-2011 report card for Mississippi, the state had 152 school districts and 806 schools (Mississippi Department of Education, 2012). The largest district in Mississippi had an enrollment of 30,197, and the smallest district had only 167 students enrolled. Of the states 806 schools, 65 (8%) schools were Star; 181 (23%) were high performing; 231 (29%) were successful; 187 (23%) were placed on academic watch; 128 (16%) received ratings of low performing; one school received a rating of at risk of failing; and 11 (1%) received ratings of failing (Mississippi Department of Education, 2012). In addition, 12% of the schools in Mississippi were on improvement plans in 2010-2011 (Mississippi Department of Education, 2012). Total enrollment for the state was 490,526 students of which 46% were White, 50% were Black, >1% were Asian, and 2% were Latino (Mississippi Department of Education, 2012). Males outnumbered females in total enrollment by 3% (Mississippi Department of Education, 2012).
Furthermore, 70.7% of the study population were eligible for free or reduced lunch (Mississippi Department of Education, 2012). Mississippi schools had a graduation rate of 73.7% (Mississippi Department of Education, 2012). Of the 806 schools in Mississippi, 720 (80.4%) received Title I funds. The state funded $9,338.84 per student and spent a total of $4.6 billion total on public education (Mississippi Department of Education, 2012).

In 2005, Rocha and Sharkey of the Center of American Progress published a study for the state of Mississippi that reported 11% of low-income fourth graders were proficient in reading compared to 36% of non-poor students. Rocha and Sharkey (2005) reported that only 8% of Black fourth graders in Mississippi were proficient in reading compared to 30% of White students. Furthermore, 87% of fourth grade students were proficient on the Mississippi state reading tests, but only 18% were proficient on the National Assessment of Educational Progress (NAEP) reading test (Rocha & Sharkey, 2005). The percentage of students scoring proficient in fourth grade math on the Mississippi state exam was 74% compared to 17% who scored proficient on the NAEP math exam. Among the eighth grade students who participated in the Mississippi state reading tests in 2005, only 57% scored proficient or above while only 21% scored proficient on the NAEP reading exam (Rocha & Sharkey, 2005). Finally, Rocha and Sharkey (2005) reported that only 48% of the eighth graders scored proficient or above on the Mississippi state math exam compared to 12% who scored proficient or above on the NAEP math test.

Vanneman et al. (2002) reported that between 2002 and 2004 Mississippi schools narrowed the Black-White achievement gap in fourth-grade reading by five percentage
points and by eight percentage points in mathematics. However, the achievement gap between fourth grade Latinos and Whites in mathematics only lessened by three percentage points (Vanneman et al., 2002). Furthermore, the achievement gap between the poor and non-poor children in fourth-grade mathematics closed only by three percentage points (Vanneman et al., 2002).

In addition, the National Assessment of Educational Progress (NAEP) stated that Mississippi children were far below most other states in every grade level and subject. The NAEP reported that in 2005, fourth and eighth grade students scored at least one grade level behind the average student in the nation in mathematics. According to the Southern Education Foundation (2009), Mississippi students were behind the national goal, but they were not in the largest achievement gap by race. Furthermore, the Southern Education Foundation (2009) stated that the Mississippi gap “is comparatively smaller than in several other states, but only because both Black and White students in Mississippi were performing near the bottom in national rankings” (p. viii).

Although the achievement gap may be closing in some areas according to the NAEP report, less than 52% of the elementary and secondary schools in Mississippi obtained high performing (23%) or successful (29%) rankings in 2010-2011 (Mississippi Department of Education, 2012). The research identified 22 secondary schools located in the southern region of Mississippi that received an accountability ranking of successful or high performing for the 2010-2011 school year. Of the 22 identified schools, 15 were ranked as successful, and seven were ranked as high performing in 2010-2011. The identified schools were also located in a district that had a minimum of 70% of its student body that received free or reduced lunch.
Research on high performing high poverty schools nationwide has reported that among the reform efforts to improve student achievement, positive school leaders and school culture was closely linked to school change (Darling-Hammond, 2001). However, research on specific instructional methodologies and assessments utilized in Mississippi schools was limited. This study was designed to add to the body of literature addressing the effective methodologies, instruction, and assessment measures of Mississippi teachers.

Summary

This chapter provided background information pertaining to public schools and their efforts in meeting national accountability measures. A school’s success is not only measured by its students’ performance on standardized tests, but they are also measured on how the various subgroups are performing in comparison to other students. Schools must meet measures of adequate yearly progress, which indicate how well minorities and special populations are performing on these tests. Schools must constantly analyze data from the federal, as well as, the state level to improve test scores.

Academic achievement drives school policy efforts on both state and federal levels. Over the past 50 years, the federal government’s role in educational reform policy has increased, and their involvement has placed schools under tremendous amounts of pressure. The main focus of the federal government’s involvement has been to close the achievement gap, and progress has been made in this area (Viadero, 2003). Schools in urban areas are making strides in narrowing the achievement gap through effective leadership and the creation of a positive school environment. However, schools must provide effective instructional methods for all students to be successful.
CHAPTER II
REVIEW OF RELATED LITERATURE

Introduction

In the past decade, the educational system in the United States has faced many challenges. Marzano (2003) stated that public education in the United States has been restructured in efforts to decrease the achievement gap and to identify the most effective methods that ensured that students were knowledgeable and competent. Various commission and group study reports including *A Nation at Risk* (1983), *Action for Excellence* (1984), *A Nation Prepared: Teachers for the 21st Century* (1986), and *Prisoners of Time* (1994) all required schools to examine the relationships between their traditional practices and student achievement (Marzano, 2003). Currently, the most influential section of federal education legislation applicable in all aspects of the public education arena is the No Child Left Behind Act of 2001.

With the current focus on accountability, stress is placed on schools to ensure that all students reach levels of academic proficiency regardless of their circumstances (U. S. Department of Education, 2002). Nevertheless, it is also acknowledged that no two schools are the same, and those that served challenging student populations have very different levels of performance (EdSource, 2006). Data from various available resources reported the effects of standards-based curriculum, high-stakes testing and accountability, successful schools, school finance, and effective leadership on student achievement (Ali & Jerald, 2001; Carter, 2000). Researchers have identified high achieving schools across the nation and have published a sizeable amount of literature on the reasons associated with their success (Darling-Hammond, 1999; Harris, 2006; Ragland, Clubine, Constable,
& Smith, 2002; Reeves, 2000). The majority of these studies discussed the role of the leaders of the school in implementing programs that contributed to success. However, research on the role of the teachers in high performing, high poverty districts has indicated that the implementation of effective instructional practices produced academic success as well (Marzano, 2003).

This chapter discussed a theoretical framework for learning and the historical aspect of the federal governments’ role in the academic accountability. In addition, poverty and its impact on education, the achievement gap nationwide and in Mississippi, and strategies needed to close the achievement were presented. An analysis of high-performing, high-poverty schools was also presented in this section. Finally, effective instructional methods were discussed.

Theoretical Framework

Constructivism is defined as an educational theory which investigates the processes involved in student learning (Brooks & Brooks, 1993). Constructivism is identified as a component of the cognitive revolution in the 1950s (Royer, 2007). Developed by Thomas Kuhn, cognitive revolution was utilized as an approach to analyzing the change in psychology that included observed behavior and the understanding of the internal mechanisms of the mind (Royer, 2007). Constructivism learning theory occupied social or cognitive theories (Royer, 2007). In the constructivist learning theory, students go beyond the information that was presented by selecting and adjusting the new information thorough cognitive structures such as schema and mental models (Bruner, 1973). Therefore, constructivist learning theory emphasized that learning
only occurs when students actively connected to their cognitive structures through schema building experiences (Fosnot, 1996; Yager & Lutz, 1994).

Social constructivist theory stated that students construct knowledge by being active participants at the individual and social level (Hein, 1991). According to Vygotsky (1978), social interactions played a critical role in learning and cognition. Vygotsky (1978) also stated learning at multiple levels occurred at the individual level after the development of relationships with others. Furthermore, Dewey (1963) stated that constructivist learning theory was a social process that centered on the relationship between a student’s experiences and the environment. Dewey (1963) believed that teachers should begin a lesson based on a student’s experiences because students created connections (schema) from their experiences to the world.

Cognitive constructivist learning theory stated that authentic learning occurred through reflection of personal experiences of new material by connecting it to what was previously known (Brooks & Brooks, 1993). John Piaget’s cognitive constructivist learning theory was based on the idea learning occurred by creating mental maps at different stages, from birth to age 15 (Piaget, 1977). Piaget (1977) believed that as students were exposed to new ideas and experiences, they connected the experiences to the mental maps they had previously formed. Ernst von Glaserfield (1995) hypothesized that a person’s ideas and knowledge resulted from judging, performing, and thinking through their previous experiences. Bruner, Goodnow, and Austin (1956) reported that teaching and learning in the classroom occurred through discovery learning through the development of thinking or inductive reasoning. Bruner et al. (1956) stated that learning occurred by developing an understanding for subject structure and active learning.
Constructivist learning theory was based upon the idea that individuals gain knowledge by solving real world problems through collaboration with others (Newby, Stepich, Lehman, & Russell, 2006). Constructivism was rooted in the following beliefs: (a) learning occurs when students were actively participating in the process; (b) knowledge was created, instinctive; (c) knowledge was gained through formulating, not discovering; (d) learning was made through personal associations; (e) learning occurs through peer interactions; (f) solving problems that were challenging, unrestricted, and significant results in learning; and (g) learning allows students to find meaning in the world (von Glaserfield, 1995; Vgotsky 1978). Furthermore, Van de Walle (2004) stated that a student learned through reflecting on new concepts.

**Historical Perspective**

Research provided evidence that stated poverty was an indicator of academic success (Coleman et al., 1966; Jencks et al., 1972). Payne (2001) defined poverty as, “the extent to which an individual does without resources” (p. 22). Poverty resulted from the relationship among interrelated factors such as parental employment status and earnings, family structure, and parental education (Einbinder, 1993). The United States Department of Education has worked diligently over the past 40 years to develop a national curriculum designed to equalize educational opportunities for all American students regardless of their race, gender, or socioeconomic status.

Following World War II, individuals with a minimum eighth grade education provided for their family, purchased a home and car, and paid a child’s college tuition with the wages earned from a factory (Ravitch, 1974). However, today the working poor people included those with limited job skills who may be employed, but they lived below
the poverty level and were barely able to support themselves, let alone a family (U. S. Census Bureau, 2000). The majority of children from poverty lacked the resources that allowed them to compete for high-skill, high-wage jobs (Payne, 2001). Unfortunately, this precedent continued to repeat unless they were fortunate enough to experience good fortune or had personal resiliency (Tyack, 1974). McLoyd (1998) noted that Black and Latino children, who were currently living in low income (poverty), were more likely to “experience persistent poverty and to live in an area of concentrated poverty” (p. 186).

Elementary and Secondary Education Act and Title I

In 1962, 9.3 million families lived below the poverty level (Cornia, Court, & World Instituted for Development Economics Research, 2001). In the Economic Report of the President, President Lyndon B. Johnson presented an “unconditional war” on poverty (Cornia et al., 2001). Johnson outlined government policies aimed at diminishing the poverty rate close to zero by 1980 by improving the quality of American life by the creation of the Economic Opportunity Act (EOA) of 1964 (U. S. Printing Office, 1965). Johnson authorized over three billion dollars of federal assistance aimed at education, job training, and community development (U. S. Printing Office, 1965).

To fulfill a requirement of Johnson’s goal, Congress passed the Elementary and Secondary Education Act (ESEA) in 1965, a bill which was designed “to strengthen and improve educational quality and educational opportunities in the nation’s elementary and secondary schools” (U. S. Printing Office, 1965). ESEA (1965) authorized one billion dollars with the goal of financially supporting the education of the nation’s poorest children (U. S. Printing Office, 1965). In addition, it was designed to bring groups of Americans, who historically had been excluded from success, into middle-class society.
by providing an adequate education, training, and access to job opportunities (U. S. Council of Economic Advisers, 1965).

ESEA’s (1965) objective was to improve the achievement gap between urban and rural public school students because it was during this time that researchers documented the relationship between inadequate school achievement and poverty (Smith, Scoll, & White-Plisko, 1995). ESEA (1965) provided financial aid to urban schools for the assistance of meeting national education goals and to advance the nation’s global competitiveness by improving education (U. S. Printing Office, 1965).

For schools, the most important component of ESEA (1965) was the allocation of one billion dollars of federal assistance directed to schools with a high percentage of low income families (Editorial Projects in Education Research Center, 2004). This section of ESEA (1965) was known as Title I (Editorial Projects in Education Research Center, 2004). Title I was designed to assist in the inequality of educational opportunities among students in the United States by ensuring that all students would have equal access to a high quality education (U. S. Department of Education, 2002). The goals of Title I included providing supplemental services to eligible children, additional funding to districts and individual schools who serve a large population of students from low income homes, reducing the achievement gap, and improving academic achievement of all special need students (Editorial Projects in Education Research Center, 2004; Riddle, 1996).
A Nation At Risk

Based on the results of lower SAT scores in the late 1970s and early 1980s, society blamed the education system for having “lowered academic standards” and felt that schools had “shifted away from rigorous academic content” (Harris & Herington, 2006, p. 6). Researchers determined that achievement had most likely not declined, but there was a genuine concern about the direction of the educational system (Carson, Huelskamp, & Woodall, 1993; Grissmer, Flanagan, Kawata, & Williamson, 2000). In 1983, President Ronald Reagan’s education commission reiterated these concerns in A Nation at Risk (NAR).

NAR (1983) was not interested in underachieving groups but on the education of the “average graduate” (National Commission on Excellence in Education, 1983, p. 11). The committee for A Nation at Risk (1983) was concerned with the fact that foreign countries were “matching and surpassing our educational attainments” (p. 1). The NAR committee concluded that schools were focusing their efforts on rudimentary subjects such as reading and math and ignoring critical thinking areas (National Commission on Excellence in Education, 1983). According to NAR (1983), “we have, in effect, been committing an act of unthinking, unilateral educational disarmament. Our society and its educational institutions seem to have lost sight of the basic purposes of schooling and of the high expectations and disciplined efforts needed to obtain them” (National Commission on Excellence in Education, 1983, p. 1). Therefore, it was the recommendation by the committee of NAR for schools to focus on teaching and on academic content (Firestone, Fuhrman, & Kirst, 1990). The committee requested more rigorous standards and the development of accountability measures that allowed the
United States’ educational system to revive itself and allow Americans to compete with the industrialized world (Amrein & Berliner, 2002).

The Education Summit

The push for accountability and standards were officially initiated as a result of The Education Summit in 1989, where President George H. W. Bush and the nation’s governors met to develop national performance goals (Allen, 1994). During the summit, President Bush and state governors agreed that the key for continued development and success in the United States remained with education and that the sole responsibility of educating children should remain at the state level (Vinovskis, 1999). However, they disagreed on how to fund the education programs, which created an underlying conflict between the governors and President Bush because the governors wanted an increase in federal spending on education. The overall tension between setting the goals and providing the funds remained and reappeared during ensuing negotiations during the 1990s (Vinovskis, 1999). Although tension arose during the summit, lawmakers were able to establish performance goals (Vinovskis, 1999). The Education Summit (1989) encouraged efforts to establish standards in each of the main academic content areas including science, history, civics, and the arts to abolish illiteracy and impel American students to the top in the math and science field (Marzano & Haystead, 2008).

Goals 2000

Goals 2000, signed into law in 1994 by President Bill Clinton, used the 1990 educational standards agreed upon by the nation’s governors during the 1989 Education Summit (Riley, 1995). Clinton extended the standards and made them the law of the land (Riley, 1995). Goals 2000 (1994) provided states with grants for the development of
academic goals they were expected to reach by the year 2000, six years after its implementation. In particular, two of these goals were directly related to student achievement, where students in the 4th, 8th, and 12th grades would demonstrate competency in challenging subject matter. Specifically, the students were expected to perform in the top percentage in mathematics and science achievement (National Education Goals Panel, 1991). In addition, Goals 2000 (1994) provided additional monetary backing for states and communities that were trying to improve their schools and to obtain their own demanding goals and high standards (National Education Goals Panel, 1991). Unlike other federal programs, new mandates were not imposed under Goals 2000 (1994), and localities had the bipartisan support throughout both of Clinton’s presidential terms in office (Riley, 1995). However, Goals 2000 (1994) proposed a new role for federal education policy and how it affected student learning, particularly for special needs students who had traditionally been the focus of federal funded program (National Education Goals Panel, 1995).

Reauthorization of Elementary and Secondary Education Act

In 1994, the revamping of Title I of the ESEA allowed states to receive federal funds for schools that enroll socioeconomically disadvantaged students (EdSource, 2000). The reauthorization of ESEA triggered the onset of a national commitment to standards-based reform by requiring states to develop challenging content and performance standards for public schools, develop high-quality assessments, and identify low-performing schools (EdSource, 2000). Furthermore, for the first time, it included the phrase “adequately yearly progress” by including the requirement for schools to analyze annual student progress (EdSource, 2000). However, a deadline for the states to meet the
requirements was not included in the reauthorization (EdSource, 2000). Furthermore, the reauthorization of ESEA (1994) did not outline any type of consequences for the states that failed to oblige to the new mandates (EdSource, 2000).

**Improving American Schools Act**

Following the reauthorization of ESEA, Goals 2000 (1996), was revised and renamed the Improving America’s Schools Act (IASA) (Kendell & Marzano, 1997). IASA (1996) intended to “improve student learning through a long-term, broad-based effort to promote coherent and coordinated improvements in the system of education throughout the nation at the state and local levels” (Kendell & Marzano, 1997, p. 3).

IASA (1996) outlined the efforts to establish standards, which included academic content standards, performance standards and proficiency levels (National Center for Research on Evaluation, Standards, and Student Testing, 1994). By 1999, policymakers and research analysts concluded that funding should be clearly attached to considerable improvement in student performance and wanted provisions made to reflect this requirement (Smallwood & Segota, 2000). However, differences among the members of Congress prevented the passage of such measures, and for the first time in history, the ESEA was not reauthorized on time (Smallwood & Segota, 2000).

**No Child Left Behind**

Since the 1950s, President George W. Bush implemented the most significant federal regulation in education in 2001 (Hess & Petrilli, 2009). Only a few days after his inauguration, Bush proposed his plan for the reauthorization of ESEA, which was titled No Child Left Behind (NCLB) (Hess & Petrilli, 2009). Initially, NCLB (2001) contained
28 pages that summarized Bush’s willingness to work with Democrats to reach a bipartisan decision on education reform. According to Hess and Petrilli (2009):

It promoted transparency, disciplined accountability, parental choice, greater flexibility for states and school districts, more rigorous standards for educational research, using federal funds to encourage states to experiment in areas like merit pay and regulatory reform, and envisioned a federal role that was tight on results and loose on how those results were achieved. (p. 59)

Nonetheless, by January 2002, the original NCLB Act (2001) that Bush actually signed into law had evolved into a “mélange of grand aspirations, race-conscious program design, regulatory expansion, and invitations to federal micromanagement” (Hess & Petrilli, 2009, p. 59). In fact, the bill included: (a) an accountability model that was based upon race, gender, English language proficiency, disability and socio-economic status, (b) a mandate that required a 100 percent of students in all states to score at a proficient level by 2014, and (c) a provision that required all teachers to meet minimum standards nationwide (Hess & Petrilli, 2009).

NCLB (2001) established an educational system that accentuated accountability where states must develop and adopt standards based upon performance assessments that evaluated student progress and achievement (Hess & Petrilli, 2009). NCLB (2001) placed the responsibility of improving students’ academic performance at the school district and individual school level by requiring them to create and maintain high academic standards in reading, mathematics, and science (Lagana-Riordan & Aguilar, 2009). That is, if a school does not meet academic standards and was deemed as failing, states and school districts were required to act aggressively to improve or overhaul the
school within five years (Lagana-Riordan & Aguilar, 2009). Moreover, states were not
only responsible for ensuring overall student achievement but also the achievement of at-
risk students who were classified into several subgroups including: (a) low income
students, (b) traditionally underserved students, (c) students who speak English as a
second language, and (d) students with disabilities (Lagana-Riordan & Aguilar, 2009).

According to the United States Department of Education, the goal of NCLB
(2001) was to “improve the academic achievement of the disadvantaged” by ensuring
“that all children had a fair, equal, and significant opportunity to obtain a high-quality
education and reach, at minimum, proficiency on challenging state academic achievement
NCLB (2001) exposed achievement gaps and increased accountability for high-need
students, but it also encouraged states to lower standards and narrow curriculum, focused
on absolute test scores instead of student growth and gains, and created ‘one-size-fits-all’
federal mandates (Harris & Herington, 2006). Yet, some people believed that the
implementation of NCLB resulted from the fear that children in the United States were
not being adequately educated to standards that matched those of foreign countries such
as China and Japan; therefore, the loss of jobs for Americans would negatively impact the
United States’ economy (Shaker & Heliman, 2004).

With the election of President Barack Obama, new changes in NCLB were
proposed. On Saturday, March 13, 2010, the Obama administration requested a broad
overhaul of NCLB, proposing to reshape conflict-ridden provisions that encouraged
instructors to teach to tests, narrowed the curriculum, and labeled one in three schools in
the United States as failing (Dillon, 2010a). The Obama plan was designed to achieve a
balance, retaining some key features of the Bush-era law, including its requirement for annual reading and math tests, while proposing far-reaching changes (Dillon, 2010a). The Obama administration replaced the law’s pass-fail school grading system with one that measured individual students’ academic growth and judge schools based not on test scores alone, but also on indicators like pupil attendance, graduation rates, and learning climate (Dillon, 2010a). Moreover, while the proposal called for more vigorous interventions in failing schools, it also rewarded top performers and lessened federal interference in tens of thousands of reasonably well-run schools at the middle level of achievement (Dillon, 2010a).

NCLB and Adequate Yearly Progress

As previously stated, Title I originated as a component of ESEA (1965). At its core, Title I was implemented to address the achievement gap among underserved populations and those in high performing schools through a greater expenditure of funding in low achieving districts (Editorial Projects in Education Research Center, 2004). Similar to its function in ESEA (1965), Title I existed as an integral component in NCLB (2001) because of its funding capacity in districts that served disadvantaged students, underserved populations, and students who speak English as a second language (Editorial Projects in Education Research Center, 2004). NCLB (2001) affected schools with the highest percentage of low income students because these schools received a greater amount of Title I funds from the federal government (Figlio, 2003). In addition, schools that served a high percentage of students (minimum of 40% of student body) from low income homes utilized Title I funds on instructional programs designed to
improve academic achievement school wide (Mississippi Department of Education, 2014).

The states that received Title I funds were held to accountability measures including the establishment of academic standards for students in grades K–12, annual assessments in English and math for students in third through fifth grade, demonstration annual yearly progress (AYP), and the requirement that all students reach a proficient academic level by 2014 (Editorial Projects in Education Research Center, 2004). Title I relied on a results-based accountability measures that ensured schools were in compliance of NCLB (2001) by measuring a school’s adequate yearly progress (AYP) (U. S. Department of Education, 2012). Each state determined what they wanted the students to learn and what was considered to be proficient. If a school’s student achievement measured at or above the designated level of proficiency level in a given year, then the school was designated as meeting Adequate Yearly Progress (AYP). When first implemented in 2002, NCLB (2001) developed a 12-year plan to measure student performance that required all students, including subgroups, to meet a state recognized standard for proficiency on standardized tests in language arts and mathematics (U. S. Department of Education, 2012). However, President Obama replaced the law’s requirement that every American child reach proficiency in reading and math with a new national target: that all students graduated from high school prepared for college and a career (Dillon, 2010b).

Initially to determine if a school met AYP, the passing rate for the lowest performing subgroup of students in the state or the proficiency rate of the school at the 20th percentile of overall performance in the state (whichever is higher) was used (U. S. Department of Education, 2012).
Department of Education, 2012). AYP was not only based upon the achievement of overall averages but also on the performance of subgroups including: (a) low-income students, (b) traditionally underserved students, (c) students with limited English proficiency, (d) and students with disabilities (Offenberg, 2004). If one or more of the subgroups failed to make AYP in a given year, the school did not make overall AYP for that year (Offenberg, 2004). If the school failed to meet AYP for two consecutive years, it was assigned a status of needing improvement (Offenberg, 2004). If a school failed to meet AYP several years in a row, it was subjected to mandates such as restructuring of the school and providing parental option to move the student(s) to another school at the district’s expense (Offenberg, 2004).

During the fall of 2011, President Obama initiated waivers for states that allowed for them to have flexibility in the academic proficiency requirements of NCLB (2001). According to the Department of Education, states must still meet the requirements of NCLB (2001); however, states had flexibility in spending, curriculum, and the mandates of the 2014 timeline (Dillion, 2011).

Accountability Measures

The accountability mandates of NCLB (2001) required the assessment of both teachers’ instructional methods and students’ academic achievement. The effects of NCLB (2001) on student achievement were evident in the changes teachers made to their classroom practices (Bishop, 1995; Hamilton, 2004). Teachers tended to resist changing their teaching style, but the usage of high stakes testing affected what was taught and how it was instructed (Bishop, 1995; Hamilton, 2004).
Therefore, in response to the accountability mandates of NCLB (2001) and its requirements, states implemented various testing programs, in the form of ‘high-stakes tests’. The implementation of high-stakes tests has established real consequences for teachers, students, and the individual districts (Braden & Shroeder, 2004). Consequences that teachers faced after their students did poorly on a state test were the possibility of job loss or a reduction in pay (Braden & Shroeder, 2004). Students faced consequences such as failing a grade or not graduating (Braden & Shroeder, 2004). Individual school districts received reduction in funding for low-test scores, or the personnel was dismissed and replaced by a governmental agency (Braden & Shroeder, 2004).

Standardized testing required a form of accountability, which resulted from the objective that all students learn the predetermined body of knowledge to a particular level of accomplishment (Hess & Brigham, 2000). High-stakes tests were not designed to take children’s various learning styles into account. High stakes standards were designed at high levels, and some students do not meet the outlined standards (Hess & Brigham, 2000). The subgroups of the student population that were most likely to have failed the tests tended to be those from low-income families, Black students, and individuals with disabilities (Hess & Brigham, 2000). The failure of these students was possibly due to the fact that some educators did not hold all students to the same high standards (Hess & Brigham, 2000).

High-stakes test have various negative and positive benefits (Olson, 2002). A negative of high stakes testing was the idea that teachers tended to change the way they taught in a manner that was not necessarily beneficial to the students. In response to changes in their teaching methods, teachers decreased or stopped teaching topics that
were not covered by the test (Olson, 2002). Olson (2002) reported that “one fourth of teachers in states with high-stakes for students and schools reported cutting back on instruction ‘a great deal’ in untested areas, compared with a nine percent of teachers in states with moderate or low stakes” (p. 14). Also, teachers in states with high-stakes tests admitted to teaching more test-taking skills and practicing only with similar problems on the test instead of instruction that included creative ideas and activities incorporating divergent thinking (Olson, 2002).

High stakes tests required educators to decide on what knowledge and skills they felt were important or the areas that held the most value (Hess & Brigham, 2000). The implementation of high stakes tests changed the content to include only tested subjects along with an emphasis on teaching only the material covered on the tests (Hess & Brigham, 2000). Moreover, the practice of teaching to the test defeated the purpose of the test, which was to record academic achievement (Hess & Brigham, 2000). In Kaufold (1998), Robert Linn and Norman Gronlund, authors of *Measurement and Assessment in Teaching*, reported that teaching to the test may have resulted in an inflation of test scores, which would have changed the meaning of the results.

Another downfall of high-stakes testing was the fact that the tests cannot account for the different ways that students think and consequently learn (Olson, 2003). Some students are talented in writing, reading, or taking tests while others learned through techniques such as memorizing or working with others during group projects (James, 2002). Some students learned verbally to apply their knowledge, whereas others had the ability to apply their knowledge to practical problems; but at the same time, they had little or no concrete understanding of the subject (James, 2002). James (2002) stated
The sad fact is that federally mandated standardized testing of this magnitude will, by necessity, focus on the lower level of cognitive domain, reward students strong in linguistic and logical mathematical intelligence, and basically ignore the substantial problems within schools” (p. 12). The format of the state tests consisted mainly of multiple-choice questions that did not take into account a child’s reasoning of a problem; either it was right or it was wrong (James, 2002). The tests did not allow for creativity to answer the questions.

Finally, there was the issue that some students felt pressured to drop out of school due to having their future success of graduating dependent entirely on the passing or failing of high-stakes tests. In turn, the usage of a single test to determine achievement had the tendency to cause students who were low achievers just to give up entirely (Dropout rates fueling debate over testing, 2003). As a result, states that had high-stakes testing reported higher dropout rates, a decline in graduation rates, and an increase in younger people taking the General Education Development Exams (GED) (Viadero, 2003). Haney (2000), a Boston College education professor, conducted a study and found that, in Texas, schools were encouraging students to take the GED so that the lower-achieving students’ state test scores did not affect the schools statewide ratings.

On the other hand a benefit of high-stakes testing was that they allow for accountability. Under the No Child Left Behind Act (2001), each of the states’ high-stakes tests must correlate with their state frameworks (Hess & Brigham, 2000). Correlating the framework with the tests increased the possibility of school districts within a state to teach a similar curriculum (Hess & Brigham, 2000). The tests ensured that teachers were consistently teaching about the same thing at about the same time and,
hopefully, with about the same expectations (Clark & Clark, 2000). If each teacher utilized the state framework as a guide for instruction, there should be little difference between individual districts in the types of material taught in the classroom (Olson, 2002). This decreased the possibility of failure once a child left one school district and attended another one in the same state (Olson, 2002). Using the state frameworks that guided their instruction, teachers ensured that they did what was expected of them; and, in turn, the students were adequately prepared for the state tests if those tests matched their curriculum (Olson, 2002).

Furthermore, high-stakes tests served as a guide for teachers to identify their strengths and weaknesses along with the students (James, 2002). One way high-stakes tests helped teachers by allowing them to receive feedback from the tests every year (James, 2002). After the teachers studied the feedback, they were able to adjust their instruction to compensate for the weak areas and focus less on the strong areas. James (2002) believed that teachers must remember that “tests were tools in the teacher’s little bag” (p. 12). Tests helped teachers to assess how well they were teaching so they could seek alternative ideas or methods to improve their instruction in their weak areas. To a greater extent, the tests helped schools and teachers to develop goals for student performance that coincided with the best teaching methods for instructing and assessing their students (James, 2002). Moreover, standardized tests were “never intended to be the one-and-only yardstick to determine learning; it was a grave mistake to think so” (James, 2002, p. 12).
Poverty and Student Achievement

Research pertaining to the factors that influenced student achievement has demonstrated that socioeconomic status was one of the single strongest predictors (Coleman et al., 1966; Jencks et al., 1972). Regardless of race or ethnicity, poor children were more likely to suffer developmental delays or brain damage (Miranda, 1991). Children who lived in persistently poor families tend to score six to nine points lower on the measurable verbal IQ assessments than children who have never lived in a poor environment (Smith, Brooks-Gunn, & Klebanov, 1997). Cognitive development was affected by the duration of time a child spent in poverty and not affected by the child’s age when they lived in poverty (Pagani, Boulerice, & Tremblay, 1997). However, if a child lived in poverty during adolescence, there was the likelihood that he/she would not obtain a high school diploma or experience early career achievements (Pagani et al., 1997). Teachman, Paasch, Randal, and Carver, (1997) stated:

Children who had spent one to three years of their adolescence in a family below the poverty line were about 60% less likely to graduate from high school than children who had never been poor. Children who had spent four years of their adolescence living in a family below the poverty line was 75% less likely to graduate from high school ….. On average, children who had spent some or all of adolescence living in poverty obtained between 1.0 and 1.75 fewer years of schooling than other children. (p. 388)

Along with the pressures that exist, due to living in an isolate low-income community, students’ abilities to learn were affected by seeing their family struggle, health issues, and hunger (EdSource, 2003). The challenges of living in impoverished
urban areas caused students to experience hunger, poor housing, lack of medical care, and inadequate nutrition (Peterson, 2003). Students who lived in poverty displayed differences in student achievement before they entered school and once they were enrolled (EdSource, 2003).

When comparing the schools located in low income areas with those located in higher income levels, there was a drastic difference in the educational opportunities available for students (Kozol, 1991). Schools in low income areas often had inferior buildings and materials, higher percentages of inexperienced teachers, higher percentages of teachers instructing classes outside of their degree, and teachers who were not certified to teach (Ingersoll, 2001). Furthermore, the main instructional method used by teachers in low income schools tended to concentrate on rote memorization of basic skills instead of the application of higher order thinking skills that required more cognitive processes (Haberman, 1991; Knapp & Woolverton, 2005).

Children residing in more affluent areas had greater access to high quality educational programs than the students from low income neighborhoods (Atweh, Bleicher, & Cooper, 1998; Tate, 1997). Students who lived in poverty displayed differences in student achievement before they enter school and once they were enrolled (EdSource, 2003). When comparing children from welfare dependent homes and children from economically advantaged homes, 60% of the children from welfare dependent homes ranked in the bottom half of their classes (Zill, Moore, Smith, Stief, & Coiro, 1995). Children who persistently lived under the poverty level tended to score six to nine points lower on the measurable verbal IQ assessments than children who had never lived in a poor environment (Smith et al., 1997).
Children who resided in poor (urban) areas had the ability to learn, and in fact, were motivated to do so if educators were able to learn how to take advantage of on the intrinsic cultural strengths that students brought with them (Woods, 1997). Urban schools played a vital role in the education of America’s children (Woods, 1997). Urban schools across the United States struggled to improve student achievement (Wilms, 2003). They faced unique challenges and internal obstacles ranging from superintendents who had less than three years of experience and insufficient finances masked by unplanned temporary solutions (Peterson, 2003; Wilms, 2003). In addition, urban school districts encountered external barriers that might have included gang activity, access to illegal substances, and a collapse of the community structure.

According to Kozol (1991), children who attended preschool or one of the improved elementary schools had the “advantage in achieving entrance to selective high schools; but an even more important factor seemed to be the social class and educational level of their parents” (p. 60). Parent initiative was the key factor needed for a child to attend a selective high school (Kozol, 1991). Since poor parents typically possessed an inadequate education, they lacked the skills needed to obtain critical information to acquire the necessary paperwork and direct their children to the better schools. As a result, “even in poor black neighborhoods, it tended to be children of the less poor and the better educated who were likely to break through the obstacles and win admission” (Kozol, 1991, p. 60). Additionally, parents who had characteristics of diligence, skill, honesty, good health, and reliability improved their child’s life chances, and the children of these types of parents did well even if their parents had a limited income (Mayer, 1997).
Achievement Gap

Standardized testing required a form of accountability, which comes from the objective that all students learn a predetermined body of knowledge to a particular level of accomplishment (Hess & Brigham, 2000). The achievement gap was defined as the difference in academic performance between groups of students (Stone, 1998). Students from low socioeconomic (SES) backgrounds tended to trail behind their peers from high socioeconomic (SES) backgrounds with respect to academic achievement (Stone, 1998). The achievement gap existed between students who live in poverty and their more wealthy peers, but it also existed between traditionally underserved and non-traditionally underserved students (Hess & Brigham, 2000).

Traditionally underserved populations have historically scored lower on standardized testing (Hess & Brigham, 2000). The subgroups of the student population that were most likely to fail to pass the tests tended to be those from low-income families, Black students, and individuals with disabilities (Hess & Brigham, 2000). The lowest performing schools have been those with high percentages of poor and traditionally underserved students (Kannapel & Clements, 2005). For inner-city schools, this was a significant problem because many of the students that attended these schools came from low socioeconomic backgrounds (Stone, 1998). Urban school students scored an average of 20 percentile points lower in reading in comparison with their suburban counterparts, and the gap was greater in math and science (Olson & Jerald, 1998). Depending upon the percentage of traditionally underserved students, high-poverty schools were 22-89 times less likely than low-poverty schools to be high performing (Harris & Herington, 2006).
At the national level, Chall, Jacobs, and Baldwin (1996) examined a blend of National Assessment of Educational Progress (NAEP) reading results, Scholastic Aptitude Test scores over time, and a vast array of research on beginning reading from 1910 to 1996. Chall et al. (1996) concluded that there was a significant difference in achievement among older students from higher SES and those from lower SES. However, Chall et al. (1996) reported that no significant difference in achievement existed among younger children in higher SES and lower SES children. On the 2005 National Assessment of Educational Progress (NAEP) assessment, only 13% of children living in poverty (low SES) scored proficient in comparison to 40% of children not living in poverty (Reardon, 2011). Additionally, 49% of children living in poverty scored below the minimum of basic competency, compared to only 21% of children not living in poverty (Reardon, 2011).

Lopez (1995) conducted a study of more than 6,000 fourth-grade classrooms in Texas and concluded that low SES classrooms had significantly lower improvements in Texas’ Norm-referenced Assessment Program than non-low SES classrooms. Furthermore, Ali and Jerald (2001) reported that an Education Trust study identified only 4,577 schools nationwide that were in the top third of their state in reading or mathematics and had at least 50% low-income or 50% traditionally underserved students compared to other schools at the same grade level.

Rothstein (2004) stated that there was a “persistent gap in academic achievement between Black and White students” (p. 105). Even if traditionally underserved and White, non-Latino students resided in the same area of poverty, the traditionally underserved students tended to score lower on academic achievement tests (Rothstein,
On average, White children scored at the 50th percentile while their traditionally underserved peers typically scored at the 23rd percentile, which was approximately one standard deviation lower (Rothstein, 2004). By the time Black students completed the eighth-grade, they were at least two grade levels behind White students (Haycock, 2001). Furthermore, upon completion of high school, Blacks graduated with the equivalency of the same skills that White students obtained in the eighth-grade (National Center for Education Statistics, 2010).

In the winter of 2002, the National Assessment of Educational Progress (NAEP) completed a study on how students in large city schools systems in Atlanta, Chicago, Houston, Los Angeles, New York City, and Washington, D.C. were performing (as cited in Manzo, 2003). The study concluded that there was a significant difference between White students’ achievement and their Black and Latino peers (Manzo, 2003). More than 90% of fourth-grade White students in all six cities scored on the basic level in writing, while only 71% to 83% of their Black and Latino peers scored at the same level (Manzo, 2003). Furthermore, over one-third of the overall White fourth-grade students (64% in Washington, D.C. and 70% in Atlanta) scored at the proficient level in writing, but “only 7-21 percent of Black and Latino students met that mark” (Manzo, 2003, para. 2).

In the same study, the achievement gap in the fourth-grade reading was even wider. Approximately 91% of the White fourth-graders from Washington, D.C. scored at least at the basic level in reading, while only 28% of Black students and 34% of Latino students met the same level (Manzo, 2003). However, 67% of fourth-grade Whites in Atlanta scored at the proficient level on the reading test, whereas only 8% of the Black students had proficient scores (Manzo, 2003).
Achievement Gap in Mississippi

Children of color make up 50% of Mississippi’s K-12 public school students (Southern Education Foundation, 2009). In 2009, almost two-thirds of the 500,000 students in Mississippi received free or reduced meal prices (Southern Education Foundation, 2009). Approximately one in eleven K-12 school children attended a private school in Mississippi, and 87% of those students who were in private schools were White (Southern Education Foundation, 2009). Mississippi students were behind students in most other states in every grade and in every subject area on the fourth and eighth grade national reading and math exam (Southern Education Foundation, 2009). For example, during 2005, in mathematics fourth and eighth-grade students in Mississippi scored at least one grade behind the average student in the nation (Southern Education Foundation, 2009). The national test scores by race showed that Mississippi students were not in the largest achievement gaps by race; however, the White and Blacks students in Mississippi still performed close to the bottom in national rankings (Southern Education Foundation, 2009).

The Mississippi Department of Education (MDE) reported the findings on the achievement gap in 2003-2004 by analyzing data collected from the Mississippi Curriculum Test (MCT) and Subject Area Testing programs (SATP) for three consecutive years (2001-2002, 2002-2003, and 2003-2004) (Mississippi Department of Education, 2004). The study examined data from the second through eighth-grade reading, language, and math MCT, and data from the biology I, algebra I, English II, and U.S. History SATP (Mississippi Department of Education, 2004). The report presented the percentage of students who scored proficient or above on the MCT and the overall
mean score on the SATP in the following groups: all students, Black students, White students, and economically disadvantaged students (Mississippi Department of Education, 2004).

In every grade and subject of the MCT and SATP, a higher percentage of White students scored proficient or advanced than any of the other three groups (Mississippi Department of Education, 2004). Additionally, the percentage of each group who scored proficient or above increased or remained unchanged each year at every grade level in each area on the MCT and SATP with the exception of sixth-grade math and eighth-grade language (Mississippi Department of Education, 2004). The percentage of economically disadvantaged students who scored proficient or advanced in sixth-grade math dropped by 1% in 2002-2003 but increased by 11% in 2003-2004 (Mississippi Department of Education, 2004). The percentage of White students who scored proficient or advanced in eighth-grade language dropped 2% from the 2002-2003 and 2003-2004 school terms resulting in a 2% decrease in the percentage of overall students scoring proficient or above also (Mississippi Department of Education, 2004). The percentage of economically disadvantaged students, scoring proficient or above in eighth-grade language, decreased by 4% in 2003-2004 (Mississippi Department of Education, 2004).

Studies on the Strategies to Close the Achievement Gap

Determining the exact cause of the achievement gap offers theories related to poverty, high rates of family mobility, peer pressure, low teacher expectations, race, and parents’ educational levels (National Task Force on Traditionally Underserved High Achievement, 1999). Although it is difficult to pinpoint the exact reason for the achievement gap, researchers reported that effective teaching was essential. Haycock
(1998) stated that “the difference between a good and a bad teacher can be a full level of achievement in a single school year” (p. 4). According to Grossen and Carnine (1996), “if the learning of lower-achieving traditionally underserved children is accelerated, equity was served” (para. 4).

During a presentation to The Education Trust 2001, Haycock outlined four elements needed to close the achievement gap. The four elements were: (a) setting clear and public standards, (b) maintaining a challenging curriculum, (c) allowing students access to more instructional time and longer time to complete activities, and (d) quality teachers. The benchmarks outline the knowledge that the students must master for all stakeholders (teachers, administrators, parents, and students) (Haycock, 2001). A rigorous curriculum, aligned with specific standards, was needed to make significant differences in achievement (Haycock, 2001). Research conducted provided evidence to the fact that all students could learn, but they must be provided with sufficient time and quality instruction to achieve (Haycock, 2001). Finally, quality teachers were of utmost importance. Teachers must be knowledgeable in their subject matter and be able to deliver the material to students in an effective manner for learning to occur (Haycock, 2001).

Marzano, Pickering, and Pollock (2001) conducted research on successful schools and reported there are five elements present in good and successful schools. Successful schools had “guaranteed and viable curriculum, challenging goals and effective feedback, parent and community involvement, safe and orderly environment, and collegiality and professionalism” (p. 15). In addition, they found that schools that had strong administrative leadership, high expectations for student achievement, emphasis on basic
skills achievement, and regular observation of student progress were also successful (Marzano et al., 2001). Furthermore, they studied successful classrooms and reported that “effective teachers appear to be effective with students of all achievement levels” (Marzano et al., 2001, p. 1). Marzano et al. (2001) stated that the effect that a teacher has on academic achievement could be found in: (a) utilizing effective classroom management techniques, (b) making intelligent decisions on the most successful instructional strategies to employ, and (c) creating a classroom curriculum to assist student learning.

In fact, Marzano et al. (2001) concluded that the teacher has the greatest impact on improving academic achievement. Woolridge (2003) reported that students taught by teachers with master’s degrees, on average, outperform those students instructed by teachers with a bachelor’s degree. Effective teachers at the secondary level typically possessed an advanced degree in their subject field (Rosenthal, 2007). Goldhaber and Brewer (2006) recommended a reason for increased student achievement in particular content areas was due to “subject-specific training, rather than the teacher ability that leads to these findings” (p. 15). Furthermore, teachers who possessed a degree in the subject in addition to their teaching certification had a greater impact on student achievement (Darling-Hammond, 1999).

In addition to degree type, research on teacher experience has demonstrated a positive relationship with student achievement. Teachers with five years or more of classroom experience have a positive effect on student achievement (“Teacher quality and student achievement research review,” 2005). Gorman (2005) stated that “first-year teachers have much lower performance on average than other teachers; after that, teacher
performance improves markedly, peaking in the teacher’s fourth year” (p. 1). The reason for the improvement in teacher performance may be attributed to the fact that experienced teachers served as mentors to first-year teachers (Rosenthal, 2007).

However, the positive effects of teacher experience and student achievement decreased after a few years in the field (Goldhaber & Brewer, 2006). Factors that affected teacher effectiveness as years passed has been attributed to tenure, burnout, and the fact that experienced teachers left the profession or taught higher level courses (Goldhaber & Anthony, 2004; Gorman, 2005; Teacher Quality, 2005; Walsh, 2001).

High-Performing, High-Poverty Schools

Although it is not easy for a school that served a high percentage of traditionally underserved students to experience success, it does occur. Taylor, Teddlie, Freeman, and Pounders (1998) conducted an investigation of four schools with unstable success and a different make-up of students. The researchers found only one school during the study that utilized appropriate instructional materials and protected instructional time. In addition, the one identified successful school also served a large population of students who lived in poverty (Taylor et al., 1998).

Williams (2003) examined schools in rural America that served a large percentage of poverty and traditionally underserved students and were successful in closing the achievement gap. Williams (2003) found that the key factors that contributed to their success were smaller class sizes, quality teaching, and a “culturally relevant curriculum” (p. 6). A study by Gregory (2003) identified three schools in the Detroit Public School System that was successful despite its tremendous amount of students who lived in poverty and traditionally underserved students. Gregory (2003) stated that the schools
were successful because the teachers and principals at each school were committed to the goal of increasing student achievement. In addition, the school district included all members of the school community in the decision-making process, and the teachers felt empowered to perform their jobs at an effective level (Gregory, 2003). Johnson et al. (2000) also examined research on successful schools and reported that “schools must have a high expectation for their leaders, teachers, and students . . . showing students and their parents that we believe all students can learn at a high level” (p. 10).

Ragland et al. (2002) performed a study of five high-performing and high-poverty schools. Each of the schools studied “embraced the belief that all students can be academically successful” (p. 1). Accordingly, common factors to the five schools allowed for their success. The factors included: (a) regular and effective communication across grade levels, (b) integrating special education into the regular education program, (c) improving instruction based on test-driven data, (d) building on the strengths and talents of the teaching staff, and (e) teamwork among colleagues to find solutions for problems.

Reeves (2003) completed a study of “90/90/90 Schools,” which were schools that had more than 90% poverty, 90% traditionally underserved students, who achieved at least 90% or above on tests. The analysis of the data collected resulted in the identification of five common characteristics of the schools including: (a) concentration on academic achievement, (b) recurrent assessment, (c) stress placed on writing, (d) unmistakable curriculum choices, and (e) outside scoring (Reeves, 2003). The schools employed effective teachers and administrators that were “using strikingly similar techniques without the assistance of externally imposed methods of instruction” (Reeves,
In addition, the study found that textbooks were not necessary to achieve success because the techniques were replicable (Reeves, 2003). The successful schools also used instruction and assessment in a consistent manner by focusing on the standards and how they were applied, observed, and measured (Reeves, 2003).

Finally, Carter (2000) reviewed 21 high-performing, high-poverty schools. By researching successful schools, Carter (2000) found that “the schools profiled hold all students, of all races and income levels, to high standards and expectations----and then make sure that all children succeed” (p. 3). Carter (2000) revealed that “parents were clamoring to send their children to high performing schools” (p. 5). Also, he concluded that “effective principals want parents who were personally invested in the education of their children” (Carter, 2000, p. 14).

Carter (2000) also identified the role of the school principal in high performing schools. The principals in these schools demonstrated characteristics typical of instructional leaders who controlled staffing and the budget (Carter, 2000). The schools had clear expectations, and “each student was held accountable for his or her own success” (Carter, 2000, p. 17). The principals worked diligently to create a safe environment centered on student learning (Jacobson, Johnson, Ylimaki, & Giles, 2005). Jacobson et al. (2005) stated that an effective instructional leader was able to improve school culture by providing the mechanism for the redesign of the organization through the adjustment of school structures and collaboration. It is the role of an effective school leader to create an environment centered on goals for the school which was shared among stakeholders (Newstead, Saxton, & Colby, 2008).
Measurements utilized by effective instructional leaders included the development and implementation of shared goals, a sense of common purpose, and high performance expectations (Marsh, 2002; Newstead et al., 2008; Petrides & Guiney, 2002). Acting as the instructional leader of the school, effective leaders find the time required needed to make improvements to instruction (Newstead et al., 2008). Effective instructional leaders worked tirelessly to recruit high quality teachers and invested the time required to adequately train them to be successful (Newstead et al., 2008). Effective leaders provided the staff intellectual stimulation and individualized support (Leithwood & Reihl, 2005). While providing necessary support, an effective instructional leader modeled appropriate behavior which inspired and motivated teachers to achieve and improve their instruction which increased student achievement (Jacobson et al., 2005).

Effective Instructional Strategies

In a constructivist classroom, learning was student centered, and students learned through their own experiences (Grennon-Brooks & Brooks, 1993). In a constructivist classroom, the teacher acted as the driving force that allowed students to develop into autonomous thinkers (Grennon-Brooks & Brooks, 1993). Constructivist teachers assisted students to develop a concentrated awareness of concepts (Greenon-Brooks & Brooks, 2007). Students in a constructivist classroom did not repeat information presented in a textbook or lecture; instead, they formulated their own questions and sought out answers to those questions (Straits & Wilke, 2007). In addition, constructivist teachers assisted students in using problem solving skills in order to analyze the new information that was presented (Straits & Wilke, 2007). Instructional methods utilized in a constructivist
classroom included scaffolding, tutoring, cooperative learning, cognitive apprenticeship, and metacognition (Royer, 2007).

Research conducted by Marzano et al. (2001) identified domains for teacher improvement that led to student achievement. Based on the work of Marzano et al. (2001), one of the most critical domains identified that improved student achievement was effective classroom strategies and behavior used by the teachers (Heitin, 2011). Marzano et al. (2001) identified nine effective instructional strategies that teachers used in the classroom. The nine strategies included:

- identifying similarities and differences,
- summarizing and note taking,
- homework and practice,
- nonlinguistic representations,
- cooperative learning,
- setting objectives and providing feedback,
- reinforcing effort and providing recognition,
- generating and testing hypotheses, and
- cues, questions, and advance organizers (p. 6-7).

The first strategy identified by Marzano et al. (2001) was the identification of similarities and differences with the use of graphic organizers such as Venn diagrams or a comparison matrix. Cognitively, the brain worked by building connections and making associations (Marzano et al., 2001; Caine & Caine, 1991). Students developed schema from old and new knowledge, which led to a deeper understanding of the content (Haystead & Marzano, 2009). Through the use of analogies and metaphors, students
classified items based upon similarities and differences, which allowed for the students to
develop higher order thinking skills (BouJaoude & Tamin, 1998; Chen, 1999; Haystead
& Marzano, 2009). Students developed a greater comprehension using summarizing and
note taking, which was the second strategy identified by Marzano et al. (2001).
Summarizing allowed students to sift through an abundance of information and identify
what was important to them, and, in turn, students restated the information (Boch &

The third strategy identified was independent practice, usually assigned as
homework. Homework allowed students the opportunity to internalize new ideas or
processes and to practice activities that encompassed new matter and skills (Gagne, 1974;
Hunter, 1984). The positive effects of homework was greatly increased when
assignments were given on a regular basis, targeted recent instruction, elicited teacher
feedback, and did not require a significant amount of time (Marzano, 2004; Walberg,
Paschal, & Weinstein, 1985). Furthermore, any assignment, designed to be completed
independently, has been shown to impact student achievement by 28% (Marzano &
Pickering, 2007).

The fourth strategy of effective instruction was to represent knowledge in a
nonlinguistic manner (Marzano et al., 2001). A nonlinguistic strategy allowed students to
generate knowledge using measures that did not rely on language (Marzano et al., 2001).
On average, student achievement increased by 17 percentile points when teachers used
nonlinguistic strategies such as graphic organizers, drawings, and pictographs (Marzano
& Haystead, 2009). The fifth strategy outlined by Marzano et al. (2001) was cooperative
learning. Marzano (2003) and Wenglinsky (2002) found cooperative learning to be an
effective instructional practice. As a form of collaboration, cooperation was “working
together to accomplish shared goals” (Johnson & Johnson, 1989, p. 2).

Teachers who used cooperative groups divided students into heterogeneous
groups that allowed for maximum learning (Vaughn, 2002). The students cooperatively
worked toward specific objectives, tasks, and activities in the classroom (Johnson &
Johnson, 1989). Cooperative groups promoted academic accountability for the students
on the individual level and as a member of a group (Johnson & Johnson, 1989).
Furthermore, collaborative groups promoted the use of effective social skills among
group members (Johnson & Johnson, 1989).

The sixth strategy was setting goals and providing feedback. Marzano et al.
(2001) defined goal setting as “establishing a direction for learning” (p. 94). By setting
goals that included specific objectives, teachers supplied students with a clear path of
something to work toward (Woolfolk, 2001). The objects identified should include
specific details and performance criteria (Mager, 1975). When utilizing this strategy,
teachers provided timely feedback that was criterion specific (Marzano et al., 2001). In
a classroom setting, KWL charts and the use of contract learning goals were two
methods used to implement this strategy (Marzano et al., 2001).

The seventh strategy identified by Marzano et al. (2001) was recognizing effort
and providing recognition. Through the implementation of this strategy, students
believed that they could be successful by receiving positive feedback for their efforts
(Marzano et al., 2001). Students observed the relationship between effort and
achievement by demonstrating that the effort that was put forth in the completion of a
task had a direct effect on the achievement received (Harrop & Williams, 1992).
Teachers used verbal praise or concrete symbols such as stickers or awards that provided recognition for achievement (Deci, Koestner, & Ryan, 2001).

The eighth strategy was generating and testing hypotheses. By generating and testing a hypothesis, students applied a theoretical understanding of what was being instructed (Kumar, 1991; Marzano et al., 2001). Students applied knowledge when generating a hypothesis, which enhanced learning (Kumar, 1991). Teachers utilizing this strategy incorporated inventions, decision making, problem solving, historical studies, and experimental inquiry in their classrooms (Marzano et al., 2001). The final strategy identified by Marzano et al. (2001) was cues, questioning, and advanced organizers. Cues provided explicit reminders of the task that had to be completed (Lobitz, 1974). High level questioning allowed students to analyze what they already knew and apply it to the new idea that was presented (Lott, 1983). Advanced organizers permitted students to focus on essential information and prepared them for the task at hand (Luiten, Ames, & Ackerson, 1980).

Other effective instructional methods included vocabulary instruction, scaffolding, and peer tutoring. Vocabulary provided essential background knowledge and was linked to academic achievement (Chall, 1987; Marzano, 2004; Stahl, 1999). Background knowledge was more important in the understanding of the reading process than IQ (Marzano, 2004). Research has shown that students who were instructed content specific vocabulary obtained 23 percentile points in comprehension ability (Marzano et al., 2001). Using research-based practices, effective teachers identified terms for direct instruction and evaluated and tracked students’ progress with new terms (Marzano et al., 2001).
Based on the work of Vygotsky, scaffolding provided a mechanism for students to complete tasks that initially they would not be able to accomplish without the support of an adult (Bruner, 1975). As reported by Dickson, Chard, and Simmons (1993), scaffolding is “the systematic sequencing of prompted content, materials, tasks, and teacher and peer support to optimize learning” (p. 12). In a classroom setting, students were provided with additional support when new ideas and topics were introduced, but teachers removed guidance as the students began to demonstrate mastery allowing for students to accept the responsibility of learning (Rosenshine & Meister, 1992). In the educational setting, scaffolds included activities such as direct instruction, examples, cues, prompts, clues, limited solutions, and think-aloud modeling (Hartman, 2002). The scaffolds helped students to develop schema by building on prior knowledge and internalizing new ideas (Olson & Platt, 2000).

Peer tutoring was an effective instructional strategy that allowed students to be taught by their peers of the same age or grade or by students of a different age (Scruggs, Mastropieri, & Berkeley, 2010, 2012; Topping, 2001). Peer tutoring required students to work in pairs with another student of the same age or grade (Scruggs et al., 2010, 2012). Students who participated in peer tutoring were trained and supervised by the classroom teacher (Scruggs et al., 2010, 2012). For peer tutoring to be effective, the following criteria was met: (a) teachers instructed students on how to be a tutoring expert; (b) students were given a purposeful partner assignment; (c) teachers provided adequate materials required for the assignments that will be used during peer tutoring; (d) tutors were provided with structured tutoring procedures that include specific feedback that they
will provide to tutees; (e) the participants participated in role reversal; and (f) teachers actively monitored the process (Scruggs et al., 2010, 2012).

Learning that involved actively engaging students has also shown to be an effective instructional strategy in improving the achievement level of low performing students (Johnson, Johnson, & Holubec, 1992; Kagan, 1994; Slavin, 1990). Marzano (2003) stated that knowledge was constructed when students interacted with the physical world. Using hands-on lessons, students used higher order thinking skills and various learning strategies to create meaning and knowledge (Resnick, 1987). Grant (1985) reported using a kinesthetic approach to teaching helped students to learn new concepts through active, physical movement. Movement in the classroom has revealed to be a measure that improved the attitude and motivation of students (Pirie, 1995; Strean, 2011; Zimmerman, 2002). Teachers utilized various items such as rubber bands, computers, modeling clay, puzzles, drawing materials, games, experiments, and field trips as kinesthetic instructional methods (Hutton, 2013).

Summary

The task of closing the achievement gap and the elimination of the educational discrepancies has been on the front-line of educational issues at the state and federal levels for more than 50 years. Research pertaining to effective measures utilized to reduce the achievement gap that existed among different populations of students has been a vital component of education. The purpose of this study was to determine the effect that specific instructional practices, assessments, and student learning methods had on student academic achievement as measured by school accountability rankings. Schools in high poverty areas can overcome being low performing with the implementation of
effective practices including constructivism, scaffolding, peer tutoring, and vocabulary development (Bruner, 1975; Marzano, 2004; Resnick, 1987). Effective instructional practices provided in a classroom had a direct relationship to the student success on formative and standardized assessments regardless of socioeconomic status (Marzano et al., 2001).
CHAPTER III
METHODOLOGY

Overview

Research pertaining to the factors that influenced educational change and its impact on improving student achievement in high poverty schools is well documented (Carter, 2000; Gregory 2003, Reeves, 2000; Taylor et al., 1998, Williams, 2003). In the 2010-2011 academic school year, the state of Mississippi had 152 school districts, of which, only 78 were classified as successful or high performing (Mississippi Department of Education, 2010b). In addition, more than half of the school districts failed to meet the AYP requirements as outlined by NCLB (2001) (Mississippi Department of Education, 2010b). The purpose of this study was to examine the effect that specific instructional practices, assessments, and student learning methods had on student achievement as measured by the accountability system. The schools included in this study were located in a district that had a minimum of 70% of its student body receive free or reduced lunch, and each school was ranked as successful or high performing according to the results on state mandated exams for the 2010-2011 school year. To identify these components, subject area teachers from each of the identified school were surveyed. This chapter contained a review of the methodology associated with the study and included the following: (a) research design, (b) participants, (c) instrumentation, (d) procedures for data collection, and (e) analysis.

Research Design

This research study was quantitative in its approach through the use of survey methodology. Quantitative data was “based on testing a theory composed of variables,
measured with numbers, and analyzed with statistical procedures, in order to determine whether the predictive generalizations of the theory hold true” (Creswell, 1994, p. 2).

Quantitative research was descriptive, objective, and attempted to study behavior under controlled conditions. During quantitative research protocol, one collects data based on precise measurements using structured and validated collection instruments (e.g., closed-ended items, rating scales, behavioral responses) (Teddlie & Tashakkori, 2003).

This study was inferential by design and focused on the effect of research based instructional methods including Marzano’s (2001) nine instructional methods by the faculty at each of the identified schools. The study incorporated a voluntary, purposeful sample. The survey research consisted of the direct mailing of the survey to faculty at the identified schools. Analysis of data was conducted using Chi-Square and Multivariate Analysis of Variance (MANOVA).

Participants

The schools included in this study met the following criteria: 1) Seventy percent or more of the district’s student body received free or reduced lunch; 2) The school was located to south of the state’s capital; and 3) The school received an accountability rating of successful or high performing for the 2010-2011 school year. The data pertaining to the mentioned criteria was acquired, compiled, and analyzed using the 2010-2011 Children’s First Report, which is located on the MDE Public Report webpage (Mississippi Department of Education, 2010c). Twenty two schools in sixteen school districts were identified as meeting the above criteria. Of the 22 identified schools, seven received high performing rankings, and 15 received successful ratings (Table 3). The participants for the study included secondary subject area teachers from each of the
identified schools. The survey was mailed to each participant along with a self-addressed return envelope.

Table 3

*Identified Schools Accountability Rankings, QDI, and District Poverty Rate*

<table>
<thead>
<tr>
<th>School</th>
<th>Accountability Ranking</th>
<th>QDI</th>
<th>District Poverty Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Successful</td>
<td>153</td>
<td>78.91%</td>
</tr>
<tr>
<td>2</td>
<td>Successful</td>
<td>161</td>
<td>78.91%</td>
</tr>
<tr>
<td>3</td>
<td>Successful</td>
<td>149</td>
<td>98.10%</td>
</tr>
<tr>
<td>4</td>
<td>Successful</td>
<td>154</td>
<td>77.93%</td>
</tr>
<tr>
<td>5</td>
<td>High Performing</td>
<td>185</td>
<td>77.93%</td>
</tr>
<tr>
<td>6</td>
<td>Successful</td>
<td>181</td>
<td>71.67%</td>
</tr>
<tr>
<td>7</td>
<td>Successful</td>
<td>182</td>
<td>73.91%</td>
</tr>
<tr>
<td>8</td>
<td>Successful</td>
<td>170</td>
<td>70.86%</td>
</tr>
<tr>
<td>9</td>
<td>Successful</td>
<td>167</td>
<td>89.83%</td>
</tr>
<tr>
<td>10</td>
<td>Successful</td>
<td>168</td>
<td>73.49%</td>
</tr>
<tr>
<td>11</td>
<td>High Performing</td>
<td>203</td>
<td>76.70%</td>
</tr>
<tr>
<td>12</td>
<td>High Performing</td>
<td>188</td>
<td>76.70%</td>
</tr>
<tr>
<td>13</td>
<td>Successful</td>
<td>173</td>
<td>79.99%</td>
</tr>
<tr>
<td>14</td>
<td>Successful</td>
<td>168</td>
<td>76.34%</td>
</tr>
<tr>
<td>15</td>
<td>Successful</td>
<td>176</td>
<td>83.01%</td>
</tr>
<tr>
<td>16</td>
<td>Successful</td>
<td>161</td>
<td>83.01%</td>
</tr>
</tbody>
</table>
Table 3 (continued).

<table>
<thead>
<tr>
<th>School</th>
<th>Accountability Ranking</th>
<th>QDI</th>
<th>District Poverty Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Successful</td>
<td>193</td>
<td>81.25%</td>
</tr>
<tr>
<td>18</td>
<td>High Performing</td>
<td>203</td>
<td>74.45%</td>
</tr>
<tr>
<td>19</td>
<td>High Performing</td>
<td>195</td>
<td>74.45%</td>
</tr>
<tr>
<td>20</td>
<td>High Performing</td>
<td>195</td>
<td>74.45%</td>
</tr>
<tr>
<td>21</td>
<td>Successful</td>
<td>144</td>
<td>89.00%</td>
</tr>
<tr>
<td>22</td>
<td>High Performing</td>
<td>191</td>
<td>71.30%</td>
</tr>
</tbody>
</table>

Note: The mean QDI for the successful schools was 167, and the mean QDI for the high performing schools was 194.

Instrumentation

This study utilized an established survey that was created by Columbia University with the aid of a grant (Award # 9812142) from the National Science Foundation. SWEPT (Scientific Work Experience Programs for Teachers) (SWEPTs) (Appendix A). SWEPTs was a four-year multi-site student impact study designed to improve the field of science by providing participating teachers with hands-on training to increase their expertise in the field. The survey was tested for content validity through a “rigorous review process with participating SWEPT Program Managers and members of the study’s advisor board” (SWEPT Multi-site Student Outcome Instruments, 2001, para. 1). In addition, eight teachers participated in a pre-test of the SWEPT survey (SWEPT Multi-site Student Outcome Instruments, 2001). The researcher obtained permission to use the instrument from Dubner, who was the SWEPT Project Coordinator at Columbia University (Appendix B). According to the Jay Dubner the purpose of the pre-program
survey was to collect data in regards to the participating teacher’s educational background, professional experiences, and instructional practices. Slight modifications were made on the SWEPT survey including the title prior to distribution to the identified schools (Appendix C).

The modified survey was piloted for reliability. The piloted study was distributed to instructors who were employed in a secondary school with a similar student body population as the schools included in this study. Internal reliability was established by calculating Cronbach alphas for survey questions three and four. The Cronbach alpha for question three was .72 and .82 for question four.

The survey consisted of four statements that outlined instructional practices, learning methods, and assessments. Each statement for the instructional practices, learning methods, and assessments had various statements listed below that included a four-point or five-point Likert-type scale that was used by the respondents to rate how often they utilized each instructional practice, method, or assessment in their classroom. In survey question two, respondents were asked to rate the emphasis they placed on goals and objects (instructional practices) (where 1 = none, 2 = minor, 3 = moderate, and 4 = major). In survey question three, respondents were asked to rate the frequency at which they implored specified teaching methods (instructional practices) (where 1 = never, 2 = 1 to 2 times per month, 3 = 1 to 2 times per week, 4 = almost every class, and 5 = every class). In survey question four, respondents were asked to rate the frequency of the utilization of specified student learning methods (where 1 = never, 2 = 1 to 2 times per month, 3 = 1 to 2 times per week, 4 = almost every class, and 5 = every class). In survey question five, the respondents were asked to rate the extent of utilization of specified
assessments (where 1 = not at all, 2 = slight extent, 3 = moderate extent, and 4 = great extent).

In addition, questions pertaining to teacher certification level, years of experience, and highest degree earned were asked. Respondents were asked to indicate their teaching certification level (where 1 = regular, 2 = provisional, and 3 = emergency). The respondents were asked to indicate their total years of experience in survey question six (where 1 = 0 to 5, 2 = 6 to 10, 3 = 11 to 15, 4 = 16 to 20, 5 = 21 to 25, and 6 = 25 or more). The respondents were asked to indicate their highest degree earned in survey question seven (where 1 = B.S., 2 = M.Ed., 3 = Ed.S, 4 = Ph.D, and 5 = other). The respondents were asked to indicate their type of certification in survey question eight (where 1 = regular certification, 2 = provisional certification, and 3 = emergency certification). Survey question ten implored an open ended statement where the respondents could provide their professional opinion in regard to the reasons for their school’s success. The responses were reviewed for consistent responses and discussed in Chapter IV.

Research Questions

The following proposed questions were the focus of this study:

1. To what degree, and to what extent, do certification level, teaching experience, and highest degree earned of the subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?
2. To what degree, and to what extent, do the instructional practices employed by subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

3. To what degree, and to what extent, do the assessments of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

4. To what degree, and to what extent, do the type of student learning methods of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

Data Collection

All procedural guidelines of the University Institutional Review Board (IRB) were followed to ensure anonymity of the subjects and participation protection. Final IRB approval was obtained for this research (See Appendix D). Permission from each of the identified district’s superintendents was obtained via telephone conversations. Each of the district superintendents emailed a letter granting consent for the study to be conducted at the school (Appendix E). If required by the superintendent, verbal permission via telephone conversations was obtained from the school principal for the distribution of the survey to the subject area teachers. In addition, the researcher obtained
the total number for teachers for each subject area via telephone conversation with the secretary or principal. An envelope addressed as “algebra I teacher,” “biology I teacher,” “English II teacher,” and “U. S. History” teacher was mailed to each school address. In each envelope, a cover letter from the researcher explaining the purpose of the study and need for the survey was included (Appendix F). Directions for completing the study and confidentiality measures were provided on the cover letter. In addition to the cover letter, all participants were mailed the survey and self-addressed return envelope. The self-addressed return envelope was included to encourage a greater rate of participation. Participation for the study was voluntary. At the end of the data collection, 78 of the 283 mailed surveys were returned. Of the 78 surveys returned, 45 were from teachers at the successful schools, and 33 were from the high performing schools. All 22 identified schools were represented by the returned surveys.

Data Analysis

This research consisted of five research questions. To ensure confidentiality of the survey results, each identified school was assigned a specific number prior to the receipt of the survey. Data obtained from the returned surveys was coded and entered into a statistical analysis software program. Analysis of the data began by coding each self-addressed envelope and survey. Analysis of the research questions was completed using either chi-square or MANOVA, and the alpha for statistical analysis was set at 0.01. Three separate chi-squares were used to address each variable outlined in research question one, and MANOVA was used to address questions two through four.
Research Question 1

A separate chi-square analysis was used for each dependent variable to determine if a significant difference existed in the type of teaching certification, years of experience and highest degree level for the faculty at the successful or high performing schools. This question was addressed on survey question six (experience), question seven (degree level), and question eight (teaching certification). For this question, the independent variable included school ranking (successful or high performing), and the dependent variables were experience, degree level, and teaching certification.

Research Question 2

For this question, a MANOVA was used to determine if significant difference(s) existed in the instructional practices utilized by faculty members at the successful schools and faculty members at the high performing schools. This question was addressed on survey questions two and three. The instructional practices analyzed by the survey questions served as the dependent variables. The independent variable was school ranking.

Research Question 3

For this question, a MANOVA was used to determine if significant difference(s) existed in the assessments utilized by faculty members at the successful schools and faculty members at the high performing schools. This question was addressed on survey question five. The assessments analyzed by survey question served as the dependent variables. The independent variable was school ranking.
**Research Question 4**

For this question, a MANOVA was used to determine if significant difference(s) existed in the student learning activities utilized by faculty members at the successful schools and for faculty members at the high performing schools. This question was addressed on survey question four. The student learning activities analyzed by survey question four served as the dependent variables. The independent variable was school ranking.

**Summary**

Chapter III provided information detailing the methodology used in this study. The information that addressed the research questions was obtained using surveys, and the data was analyzed using chi-square and MANOVA. The data obtained was used to analyze the effect that specific instructional practices, assessments, and student learning strategies had on student achievement as measured by school accountability ranking. In the upcoming chapter, findings from the study are presented.
CHAPTER IV
RESULTS

Introduction

The constraints passed by NCLB have placed a tremendous amount of pressure on schools leaders at the district, school, and classroom level. Schools are held accountability for student achievement as measured by scores obtained on standardized measures in the form of high stakes tests. At the classroom level, teachers are held accountable for the achievement of all students and are required to provide instruction that will ensure student success. This quantitative study examined the effect that specific instructional practices, assessments, and student learning methods had on student achievement as measured by school accountability rankings. An analysis of the data is presented in this chapter. A total of 78 surveys were received from the 283 distributed surveys, which constituted a 26.6% response rate for the survey. The responses gathered from the survey have been analyzed using SPSS software. This chapter focused on a presentation of the collected data that will assist the discussion, which will be presented in Chapter V.

Statistical Analysis

Statistical analysis was completed on each of the four research questions. Each research question is presented with a review of all statistical analysis procedures that were completed.

Test of Research Questions

Research Question 1

1. To what degree, and to what extent, do certification level, teaching experience,
and highest degree earned of the subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

To determine whether a difference was present in teaching certification level between teachers at successful schools and teachers at high performing schools, a Pearson chi-square was conducted. For this question, the result was not statistically significant, $X^2 (1, N = 78) = .001, p = .98$. No further tests were analyzed. Respondents were asked to indicate their teaching certification level on survey question eight (where 1 = regular, 2 = provisional, and 3 = emergency). As reported in Table 4, the majority of the respondents indicated that they possessed a regular certification level. A total of 71 specified that they possessed this certification type with 41 (91.1%) from the successful schools and 30 (90.9%) from the high performing schools. Only seven of the respondents indicated that they had a provisional certification with 4 (8.9%) of the teachers at the successful schools and 3 (9.1%) of the teachers at the high performing schools.

Table 4

Type of Certification and School Rankings

<table>
<thead>
<tr>
<th>License Type</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>41</td>
<td>30</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>91.1%</td>
<td>90.9%</td>
<td>91.0%</td>
</tr>
<tr>
<td>Provisional</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8.9%</td>
<td>9.1%</td>
<td>9.0%</td>
</tr>
</tbody>
</table>
To determine whether a difference was present in total years of experience between teachers at successful schools and teachers at high performing schools, a Pearson chi-square was conducted. For this question, the result was not statistically significant, $X^2 (5, N = 78) = 3.96, p = .56$. No further tests were analyzed. Respondents were asked to indicate their years of experience on survey question 6 (where 1 = 0 to 5, 2 = 6 to 10, 3 = 11 to 15, 4 = 16 to 20, 5 = 21 to 25, and 6 = 25 or more). As reported in Table 5, a relative equal percentage of respondents from the successful schools indicated 0-5 years of experience (20%), 6-10 years of experience (22%), and 11-15 (22%) years of experience. Of the 33 respondents from the high performing schools, only two (6%) indicated that they had less than five years of experience. In addition, of the 33 respondents from the high performing schools, almost half (15) had instructed more than six years but less than 15 years. Twenty three percent (9) of the teachers from high performing schools had 6-10 years of experience, and six (18.2%) had 11-15 years of experience. For the fourth group (16-20 years), seven (15.6%) teachers from the successful schools and eight (24.2%) from the high performing dictated this response. The fifth group (21-25 years) had a total of seven teachers that indicated this response of

Table 4 (continued).

<table>
<thead>
<tr>
<th>License Type</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8.9%</td>
<td>9.1%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>33</td>
<td>78%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
which four (8.9%) were teachers from the successful schools and three (15.2%) instructed at high performing schools. The final group indicated on the survey was 25 years or more of experience. Five teachers from each school designated this response (11.1% successful; 15.2% high performing).

Table 5

*Teacher Experience and School Rankings*

<table>
<thead>
<tr>
<th>Years</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>9</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>20.0%</td>
<td>6.1%</td>
<td>14.1%</td>
</tr>
<tr>
<td>6-10</td>
<td>10</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>22.2%</td>
<td>27.3%</td>
<td>24.4%</td>
</tr>
<tr>
<td>11-15</td>
<td>10</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>22.2%</td>
<td>18.2%</td>
<td>20.5%</td>
</tr>
<tr>
<td>16-20</td>
<td>7</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>15.6%</td>
<td>24.2%</td>
<td>39.8%</td>
</tr>
<tr>
<td>21-25</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8.9%</td>
<td>9.09%</td>
<td>24.1%</td>
</tr>
<tr>
<td>25+</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>11.1%</td>
<td>15.2%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>33</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The final variable included in research question one was highest degree earned. To determine whether a difference was present in type of degree earned between teachers at successful schools and teachers at high performing schools, a Pearson chi-square was conducted. For this question, the result was not statistically significant, $X^2 (2, N=78) = 2.18, p = .34$. No further tests were analyzed. Respondents were asked to indicate their highest degree on survey question seven (where 1 = B.S., 2 = M.Ed., 3 = Ed.S, 4 = Ph.D., and 5 = other). As reported in Table 6, the majority (53.8%) of the 78 respondents possessed a degree certification at the Master’s level. At the Bachelor level, 21 (46.7%) of the 45 teachers at the successful school had a Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree whereas 13 (39.4%) of the teachers at the high performing teachers had the same level of education. Of the 45 teachers from successful school that responded, only 22 (48.9%) indicated that they had a Master of Science (M.S.) or Master of Education (M.Ed.) degree. Based on the same degree level, 22 (60.6%) of the 33 respondents from the high performing school indicated the same level. The highest degree indicated by the respondents was a Specialist in Education (Ed.S.). Only two (2.6%) of the total respondents reported that they possessed an Ed.S.

Table 6

*Highest Level Degree Earned and School Rankings*

<table>
<thead>
<tr>
<th>Degree</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Science (BS)/ Bachelor of Arts (BA)</td>
<td>21</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>46.7%</td>
<td>39.4%</td>
<td>43.6%</td>
</tr>
</tbody>
</table>
Table 6 (continued).

<table>
<thead>
<tr>
<th>Degree</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s in Science (MS)/ Master’s in Education (MEd)</td>
<td>22</td>
<td>20</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>48.9%</td>
<td>60.6%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Specialist’s in Education (EdS)</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4.4%</td>
<td>0.0%</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>33</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Research Question 2

2. To what degree, and to what extent, do the instructional practices employed by subject area teachers serving in the high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

A Multivariate Analysis of Variance (MANOVA) was conducted to determine if a significant difference existed in the instructional practices of teachers at the successful schools and teachers from the high performing schools. The statistical tests were evaluated at the significance of .05. There was no statistically significant relationship with a $F(12, 65) = 1.35, p = .211$ indicating no difference in the emphasis of selected instructional practices or the frequency of use in selected instructional practices of teachers at successful school and teachers at the high performing schools. No further tests were necessary. The means and standard deviations for the emphasis and use of
instructional methods are provided in Table 7. In addition, the means and standard deviations for the frequency of use for specified teaching methods are provided in Table 8. Questions two and three on the returned surveys from the each school ranking were compared. Survey question two asked respondents to rate the amount of emphasis they placed on specific goals and objectives (where 1 = none, 2 = minor, 3 = moderate, and 4 = major). The respondents, on average, designated a minor emphasis (X = 2.87) on providing students with an in-depth study of selected topics and on average, a moderate emphasis (X = 3.85) on preparing students for taking the standardized tests as well as moderate emphasis (X = 3.86) on fully covering the course curriculum as prescribed by the school or state. Survey question three asked respondents to rate the frequency of the utilization of specific instructional practices (where 1 = never, 2 = 1 to 2 times per month, 3 = 1 to 2 times per week, 4 = almost every class, and 5 = every class). The respondents, on average, indicated a high frequency of use of technology (X = 4.24) and for checking for understanding (X = 4.28). In addition, the respondents, on average, indicated that they utilized guided practice such as reviewing homework and other assignments one to two times per week (X=3.83).

Table 7

Means and Standard Deviations for Emphasis Placed on Specific Instructional Practices

<table>
<thead>
<tr>
<th>Instructional Practice</th>
<th>Successful</th>
<th>High Performing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X</td>
<td>SD</td>
<td>X</td>
</tr>
<tr>
<td>Teaching facts, rules, or vocabulary</td>
<td>3.36</td>
<td>.78</td>
<td>3.58</td>
</tr>
<tr>
<td>Setting objects &amp; providing feedback</td>
<td>3.44</td>
<td>.70</td>
<td>3.36</td>
</tr>
<tr>
<td>Preparing students for standardized tests</td>
<td>3.89</td>
<td>.38</td>
<td>3.79</td>
</tr>
</tbody>
</table>
Table 7 (continued).

<table>
<thead>
<tr>
<th>Instructional Practice</th>
<th>Successful X</th>
<th>SD</th>
<th>High Performing X</th>
<th>SD</th>
<th>Total X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully covering the course curriculum</td>
<td>3.87</td>
<td>.34</td>
<td>3.85</td>
<td>.51</td>
<td>3.86</td>
<td>.42</td>
</tr>
<tr>
<td>In-Depth study of selected topics</td>
<td>2.96</td>
<td>.93</td>
<td>2.76</td>
<td>.83</td>
<td>2.87</td>
<td>.89</td>
</tr>
</tbody>
</table>

Note: Values are mean scores on a 4-point scale (1 = none, 2 = minor, 3 = moderate, and 4 = major)

Table 8

**Mean and Standard Deviation for Frequency of Use of Specific Instructional Practices**

<table>
<thead>
<tr>
<th>Instructional Practice</th>
<th>Successful X</th>
<th>SD</th>
<th>High Performing X</th>
<th>SD</th>
<th>Total X</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socratic method/lecture</td>
<td>3.42</td>
<td>.92</td>
<td>3.64</td>
<td>.86</td>
<td>3.51</td>
<td>.89</td>
</tr>
<tr>
<td>Curriculum maps/pacing guides</td>
<td>3.64</td>
<td>1.26</td>
<td>3.70</td>
<td>1.33</td>
<td>3.67</td>
<td>1.29</td>
</tr>
<tr>
<td>Technology</td>
<td>4.24</td>
<td>.74</td>
<td>4.24</td>
<td>.71</td>
<td>4.24</td>
<td>.72</td>
</tr>
<tr>
<td>Cooperative Groups</td>
<td>3.07</td>
<td>.84</td>
<td>3.03</td>
<td>.92</td>
<td>3.05</td>
<td>.87</td>
</tr>
<tr>
<td>Guided Practice/Reviewing homework</td>
<td>3.71</td>
<td>1.00</td>
<td>4.00</td>
<td>.87</td>
<td>3.83</td>
<td>.95</td>
</tr>
<tr>
<td>Scaffolding</td>
<td>3.24</td>
<td>1.15</td>
<td>3.24</td>
<td>1.15</td>
<td>3.24</td>
<td>1.14</td>
</tr>
<tr>
<td>Check for understanding</td>
<td>4.02</td>
<td>.97</td>
<td>4.64</td>
<td>.60</td>
<td>4.28</td>
<td>.88</td>
</tr>
</tbody>
</table>

Note: Values are mean scores on a 5-point scale (1 = never, 2 = 1 to 2 times per month, 3 = 1 to 2 times per week, 4 = almost every class, and 5 = every class)
Research Question 3

3. To what degree, and to what extent, do the assessments of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

A Multivariate Analysis of Variance (MANOVA) was conducted to determine if a significant difference existed in the assessments used by teachers at the successful schools and teachers from the high performing schools. The statistical tests were evaluated at the significance of .05. There was no statistically significant relationship with a $F(5, 72) = 1.28, p = .282$ indicating no difference in the extent of certain assessments utilized in the successful schools or high performing schools. No further tests were analyzed. The means and standard deviations for each assessment for the successful schools and high performing schools are provided in Table 9. The respondents were asked to rate the extent of utilization of specified assessments (where 1 = not at all, 2 = slight extent, 3 = moderate extent, and 4 = great extent). The respondents, on average, specified districts assessments ($X = 3.71$) and tests with short answers (i.e., multiple choice and true/false) ($X = 3.15$) as moderate extent. Furthermore, the respondents, on average, indicated student portfolios ($X = 2.14$) and pre-tests ($X = 2.21$) as slight extent.
### Table 9

*Means and Standard Deviations for the Extent of Type of Assessments to Determine Progress*

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Successful X</th>
<th>Successful SD</th>
<th>High Performing X</th>
<th>High Performing SD</th>
<th>Total X</th>
<th>Total SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-tests</td>
<td>2.27</td>
<td>.96</td>
<td>2.12</td>
<td>1.02</td>
<td>2.21</td>
<td>.99</td>
</tr>
<tr>
<td>Short-answer tests</td>
<td>3.27</td>
<td>.99</td>
<td>3.00</td>
<td>.97</td>
<td>3.15</td>
<td>.98</td>
</tr>
<tr>
<td>Open-ended response tests</td>
<td>2.24</td>
<td>.88</td>
<td>2.61</td>
<td>1.03</td>
<td>2.40</td>
<td>.96</td>
</tr>
<tr>
<td>Student products</td>
<td>2.24</td>
<td>.96</td>
<td>2.00</td>
<td>.97</td>
<td>2.14</td>
<td>.96</td>
</tr>
<tr>
<td>District Assessments</td>
<td>3.73</td>
<td>.62</td>
<td>3.67</td>
<td>.65</td>
<td>3.71</td>
<td>.63</td>
</tr>
</tbody>
</table>

Note: Values are mean scores on a 4-point scale (1 = not at all, 2 = slight extent, 3 = moderate extent, and 4 = great extent)

*Research Question 4*

4. To what degree, and to what extent, does the type of student learning methods of subject area teachers serving in high poverty, high performing schools and teachers who taught at the high poverty, successful schools identified by the school accountability model in the southern region of the state of Mississippi impact school performance?

A Multivariate Analysis of Variance (MANOVA) was conducted to determine if a significant difference existed in the student learning methods utilized by the teachers at the successful schools and teachers from the high performing schools. The statistical tests were evaluated at the significance of .05. There was no statistically significant relationship with a $F(6, 71) = .870, p = .521$ indicating no difference in the use of student learning methods utilized in the successful schools or high performing schools. No further tests were analyzed. The means and standard deviations for each learning method for the successful schools and high performing schools are provided in Table 10. The
respondents indicated the frequency of use of the student learning methods using a rating of 1-5 where 1 = never and 5 = every class. The respondents, on average, indicated that they utilized practice on a specific skill such as a specific skill, strategy, or process one to two times per week (X = 3.92) and building vocabulary one to two times per week (X = 3.59). Two of the strategies used only one to two times per month on average.

Table 10

*Means and Standard Deviations for the Frequency of Student Engagement in Selected Activities*

<table>
<thead>
<tr>
<th>Learning Activity</th>
<th>Successful X</th>
<th>Successful SD</th>
<th>High Performing X</th>
<th>High Performing SD</th>
<th>Total X</th>
<th>Total SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-on</td>
<td>2.51</td>
<td>.97</td>
<td>2.42</td>
<td>1.00</td>
<td>2.47</td>
<td>.98</td>
</tr>
<tr>
<td>Practice on a specific skill</td>
<td>4.00</td>
<td>.88</td>
<td>3.82</td>
<td>.98</td>
<td>3.92</td>
<td>.92</td>
</tr>
<tr>
<td>Building vocabulary</td>
<td>3.47</td>
<td>.97</td>
<td>3.76</td>
<td>.94</td>
<td>3.59</td>
<td>.92</td>
</tr>
<tr>
<td>Graphic organizers</td>
<td>2.91</td>
<td>1.04</td>
<td>3.09</td>
<td>.91</td>
<td>2.99</td>
<td>.99</td>
</tr>
<tr>
<td>Written reflections</td>
<td>2.31</td>
<td>1.15</td>
<td>2.55</td>
<td>.97</td>
<td>2.41</td>
<td>1.07</td>
</tr>
<tr>
<td>Peer tutoring</td>
<td>2.87</td>
<td>1.04</td>
<td>3.12</td>
<td>1.08</td>
<td>2.97</td>
<td>1.06</td>
</tr>
</tbody>
</table>

Note: Values are mean scores on a 5-point scale (1 = never, 2 = 1 to 2 times per month, 3 = 1 to 2 times per week, 4 = almost every class, and 5 = every class)

Of the 78 surveys, 62 respondents provided a response to survey question 10, which was open ended. Of the respondents, 30 instructed at successful schools and 32 at high performing schools. Among the responses, common themes were discussed by each
group of teachers and included remediation/tutoring, dedicated/caring teacher/high
expectations, supportive and visible administration, creative scheduling, praise/rewards,
and parent and community involvement. One respondent from a successful school noted:

We prepare students for the SATP by using many different strategies including
giving state test practice problems throughout the class, practice tests designed
very similar to the “real thing,” covering the material in several different ways,
and the involvement of the students in the tutoring program offered by the
district.

Another teacher from a successful school also reported the positive effects of
tutoring which was offered by the district “all year long, after school, and on Saturdays.”
The same teacher explained that the district provided transportation for students who
attended tutoring. Tutoring was also discussed by the respondents from the high
performing schools. One respondent from the high performing school stated that the
school participated in “pull-out tutoring and Saturday workshops.” A teacher from the
same high performing school stated, “Our teaching staff targets low students by tutoring
them in all departments regardless of certification level.” In addition, another teacher
from a high performing school stated that the school offered “extensive tutoring and
review classes for those who fail or those who need an extra boost.”

Knowledgeable and caring teachers were listed as factors for success in both
settings. One respondent from a high performing school wrote, “Teachers have
compassion for students and provide motivation for their success, and teachers are
certified in subject areas and many with multiple certifications.” Another respondent
from a high performing school stated, “We have dedicated teachers who give it all and
are well knowledgeable and experts in their area or on what they teach.” One respondent from a successful school stated, “Teachers constantly motivated students throughout the year.” In addition, a respondent from the same successful school indicated, “We have some of the highest quality teachers I have ever met. Many of our teachers have advanced degrees and spend countless hours and dollars of their own to make our school great.” Two respondents from the same successful school reported the positive effects of teachers stated that they have “hard-working, highly qualified teachers that have high expectations of our students” and “quality, hard-working teachers who possess in-depth subject area knowledge and who teach structured classes with emphasis on state test content.” Finally, respondents stated that they worked with caring personnel. One respondent from a successful school indicated, “We are not above driving students to schools or going to homes and picking them up.” A respondent from a high performing school stated that their school employed “caring teachers who work hard to teach the whole student.”

The respondents from each school setting placed a great emphasis on visible and supportive administration. The respondents discussed the fact that they were provided with materials, professional development, and support by the administration. Several provided explanations in regard to the role of the administrator in setting the tone and environment for all to succeed. One participant from a successful school stated that the administration conducted “daily walk-through” to observe bell-to-bell teaching and to help “manage student behavior in class and create a safe climate.” Another teacher from a successful school stated that they had “adequate access to technology” provided for teachers and students by the administration. One respondent from a high performing
school stated that the administration was “highly visible in the discipline process and incredible involved with the students and their family.” Finally, another respondent from a high performing school stated that the districts make sure that “funds are available to further our children’s education including technology and all the supplies that we need to be productive."

Scheduling was indicated by both populations as a method utilized by their respective schools to ensure student success. Some examples included pre-requisites for each subject area, block scheduling prior to testing, intensive test preparation a month before the test dates, and requiring struggling students to enroll in two periods of the same class. A respondent from a successful school indicated that the pacing guide that was established by the district allotted enough time to finish the curriculum early, which allowed them “four weeks before the state test to review materials and teach test taking strategies.” The respondent also stated the school “blocks the core classes, meaning that students are in two periods of the same subject in a day instead of one.” A respondent from a different successful school stated they used “block scheduling leading up to the test."

The final two themes provided by the open ended question on the survey was praise/rewards and parental/community involvement. The respondents from the successful schools provided examples for rewards including passes to all athletic events, verbal praise, and allowing students the choice for specific teachers for the upcoming school year. One respondent from a successful school listed rewards for both teachers and students, but did not provide a specific example of either. Respondents from both settings listed parental community support, but no specific examples from the successful
school were documented. One respondent from the high performing school stated that the “parents are involved in various committees” and that the parents are “involved in all decisions that affect the student body as a whole.”

Summary

This chapter contained an overview of the examination and evaluation of the quantitative data analysis. The results of chi-square showed no significant difference in the certification level, years of experience, or highest level of degree for the teachers at successful schools and high poverty schools. The results of the MANOVA showed no significant difference in the utilization of specified instructional methods, assessments, or student learning methods by the teachers at successful schools or high performing schools. Certain themes emerged from the results of the quantitative data and the open ended survey questions and will be discussed in Chapter V.
CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The purpose of this quantitative study was to determine the effect that specific researched based instructional methods, assessments, and student learning methods had on student academic achievement as measured by school accountability rankings. This study was conducted at 22 secondary schools in Mississippi that were located in a district with a minimum of its student body receiving free or reduced lunch for 2010-2011. The survey, “Effective Instructional Methods Utilized in Successful and High Performing Secondary Schools in the Southern Region of Mississippi,” was administered and a total of 78 faculty members from successful and high performing secondary schools completed the survey.

Discussion and Conclusions

The analyses of the data were presented in Chapter IV. A discussion of the results is offered here.

Research Question 1

Research question one focused on three demographic variables including certification level, years of experience, and highest level degree earned and the effect that these variables had on student academic achievement as measured by school accountability ratings. The variables were tested for significance using three separate chi-square statistical analyses. This study included 78 teachers of whom 45 instructed at successful schools and 33 instructed at high performing schools. There was no significant difference between the certification level, years of experience, or degree level
and student achievement as measured by school accountability rankings. The type of
degree held by the respondents was not significantly different for successful and high
performing schools. The data indicated that the majority of the teachers at the high
performing schools, on average, had more than five years of experience, but the
difference was not significant enough to say that a teacher’s years of experience has a
direct correlation to student success. According to Marzano (2003), a teacher’s
performance may improve as time elapses. As a teacher gains experience, he or she are
provided with opportunities to learn from their mistakes and obtain guidance from their
more experienced colleagues (Rosenthal, 2007). In addition, although type of degree
held by the respondents was not significantly different for successful and high performing
schools, the majority of the respondents from the high performing schools had an
advanced degree. Prior research on effective teachers and student achievement revealed
that teachers that possessed content specific advanced degrees had a more positive effect
than those with a generalized advanced degree (Rice, 2003).

Research Question 2

Research question two investigated the relationship between specific instructional
methods and student achievement as measured by school accountability rankings.
Research based instructional methods including scaffolding, peer tutoring and Marzano’s
(2001) nine effective instructional methods were analyzed (Dickson et al., 1993;
Hartman, 2002; Marzano, 2001; Olson & Pratt, 2000; Scruggs et al., 2010, 2012,
Topping, 2001). When tested with a Multivariate Analysis of Variance (MANOVA), no
statistically significant relationship was found in the means between the instructional
methods utilized by the respondents from the successful schools and those from high
performing schools. The instructional method least used by both populations was an in-depth study of selected topics. This finding was anticipated due to the accountability mandates of NCLB (2001) that required annual standardized testing and for states to design frameworks that were aligned with the tests; however, these frameworks were not intended for a comprehensive study of topics (Clark & Clark, 2000; Hess & Brigham, 2000; Olson, 2002). Respondents from both successful and high performing schools indicated a frequent use of technology in their classrooms and of measures to check for understanding.

Strategies for checking for understanding that were included on the survey were peer tutoring, cooperative groups, and scaffolding. The respondents from the high performing schools indicated that they incorporated peer tutoring, on average, one to two times per week, and respondents from the successful schools only used this strategy, on average, one to two times per month. According to Frey and Fisher (2007), summative and formative measures can be used to check for understanding. In addition, checking for understanding via questioning techniques such as think-pair-share may aid in the processes involved for students to develop higher order thinking skills (Dillon, 1988). Furthermore, cooperative groups and scaffolding was utilized, on average, one to two times per week by the respondents from populations. Scaffolding and cooperative groups both increased student achievement by allowing students to develop into independent learners (Bruner, 1975; Johnson, Johnson, & Holubec, 1992; Kagan, 1994; Rosenshine & Meister, 1992; Slavin, 1990).
Research Question 3

Research question three investigated the relationship between the utilization of various assessments and student achievement as measured by school accountability rankings. Pre-tests, short-answer tests, student portfolios, open-ended tests, and district assessments were analyzed to determine if a significantly difference existed in the usage of these assessments between successful and high performing schools. When tested with a Multivariate Analysis of Variance (MANOVA), no statistically significant relationship was found in the means between the assessments utilized by the respondents from the successful schools and those from high performing schools. The respondents indicated that the assessment they placed the most emphasis was districts assessments. This finding was anticipated due to accountability mandates (Hess & Petrilli, 2009; Lagana-Riordan & Aguilar, 2009). Respondents also indicated that they also placed moderate emphasis on short-answer tests that included multiple-choice, true/false, and fill-in-the-blank. This finding was anticipated because of the emphasis on standardized tests that are similar in format (James, 2002). The assessments with the lowest rankings were pre-tests, open-ended tests, and student portfolios. Again this finding was anticipated due to the time constraints placed on teachers to cover all of the material that was tested by state mandated measures (Hess & Brigham, 2000; Olson, 2002).

Research Question 4

Research question four examined the relationship between student learning methods and student achievement as measured by school accountability rankings. The student learning methods that were analyzed included hands-on activities, practice, building vocabulary, graphic organizers, written reflections, and peer tutoring. When
tested with a Multivariate Analysis of Variance (MANOVA), no statistically significant relationship was found in the means between the student learning methods utilized by the respondents from the successful schools and those from high performing schools. The least used learning methods indicated by the respondents were hands-on activities, graphic organizers, and peer tutoring. Each method, on average, was utilized only one to two times per month. The learning methods the respondents indicated that they used the most often (one to two times per week), were practice on a specific skill, strategy, or process and building vocabulary. Both of these methods were identified as an effective strategy by Marzano et al. (2001). When assigned on a regular basis and accompanied by teacher feedback, homework could improve achievement by 28% (Marzano, 1998; Walberg, Paschal, & Weinstein, 1985). In addition, vocabulary provided background knowledge and increased student achievement by 23 percentile points (Chall, 1987; Marzano, 2004; Stahl, 1999).

Themes identified in the open-ended question on the survey that were identified in the literature review included supportive and visible administration, curriculum/schedule, praise/rewards, and high expectations. Research pertaining to high performing high poverty schools revealed a strong correlation between high expectations, leadership, and student achievement (Carter, 2000; Gregory, 2003; Johnson et al., 2000; Ragland et al., 2002). Respondents from both school settings indicated that students were allowed opportunities to succeed through creative scheduling, tutoring, and curriculum design. Haycock (2001) indicated the importance of each of these factors on student achievement. Respondents stated that students were required to enroll in pre-requisites prior to being allowed to enroll in the subject area classes. In addition, respondents stated
effective scheduling measurements that allotted for two periods for certain tested subjects were utilized. Respondents also indicated that the schedule was modified weeks prior to testing to allow for review and remediation. Students were also provided with tutoring/remediation after school and on Saturdays.

One prevalent theme indicated by the teachers for the successful schools and not by the teachers from the high performing schools was praise/rewards. Teachers indicated examples of rewards that were utilized for students including homework passes, tickets to athletic events, and field trips. Prior research was consistent with the positive effects of rewards and its relationship on student behavior (Deci et al., 2001; Harrop & Williams, 1992; Marzano et al., 2001). One theme identified consistently by the teachers at the high performing schools was parent and community involvement. The teachers from the high performing school stated that parents and community members were actively involved in decision making at their schools. The respondents stated that the parents and community members worked with them to create a positive culture where all students felt empowered. The statements provided by the respondents on parental involvement were consistent with prior research (Carter, 2000; Haycock, 2001; Marzano et. al., 2001).

Limitations

This study was limited to faculty members at 15 successful and seven high performing secondary schools in the southern region of Mississippi. The findings may not be applicable to faculty members at other secondary schools in another region of the state or other secondary schools with the same accountability ratings. The methodology utilized in this study may also have provided limits including the number of participants responding to the survey, and the issue that the survey was a self-reporting instrument.
In addition, it was assumed that participants answered honestly to all survey questions; however, they may have provided answers that would demonstrate their schools in the best light.

**Recommendations for Policy or Practice**

The following recommendations have been developed as a result of this study:

1. For this study, findings indicated that the teachers at successful and high performing schools utilize technology to aid in their instruction. Principals and school districts should train teachers how to utilize technology and incorporate it into their lessons. Teachers should have adequate access to various technology including computers, Promethean boards, and LCD projectors. If needed, principals should seek outside funding measures such as grants that can be used to purchase products. Furthermore, teachers should be trained on how to use Microsoft Office programs, Google, and other computer-based programs that will aid their instruction. This training can be provided by mentor teachers, principals, or district staff.

2. For this study, respondents indicated that they often utilized specific research-based instructional methods including practice on a specific skill, vocabulary, and checking for understanding; therefore, low performing districts should incorporate similar measures into their classrooms. Teachers should be provided with proper training by universities or mentoring programs, so that they can incorporate the measures into their teaching practice.

3. For this study, the respondents indicated a frequent use of district assessments. Teachers should be provided with training on how to interpret the data resulting
from these assessments, so they may identify areas of strengths and weaknesses. Principals and districts can provide opportunities for the teachers to meet at the school and district level to discuss the results of the assessments.

Recommendations for Further Research

The following recommendations have been developed as a result of this study:

1. The research from this study pertained only to successful and high performing secondary schools in south Mississippi. It is recommended for future researchers to explore instructional methods and assessments in low performing school districts in Mississippi. This research could explore instructional methods that may or may not be being used in the low performing district.

2. Study findings identified a strong involvement of parents and community in the high performing schools. It is recommended for future researchers to explore the strategies that these schools utilized to encourage parental and community support.

3. Study findings identified the implementation of tutoring and remediation at both the successful and high performing schools. It is recommended for future research to explore the criteria these schools used to identify students that participated in the tutoring and remediation program and conduct a longitudinal study to determine if those students achieved higher results than those that were not provided tutoring and remediation.

4. Study findings identified that the successful schools utilized praise and rewards to motivate students. It is recommended for future research to investigate the system that the schools utilize to implement a reward system and to conduct a
longitudinal study to determine if the implementation of the system positively resulted in student achievement.

5. Study findings indicated that the successful schools and high performing schools included in this study utilized scheduling as a means of ensuring student academic success. It is recommended for future research to investigate the effect that scheduling has on student achievement in high poverty areas as well as low poverty areas of Mississippi.

Summary

Mississippi schools have made progress in the educational system with the design of an accountability system that implemented criteria for student achievement and academic growth. This study was designed to determine the effect that specific researched based instructional methods, assessments, and student learning methods had on student academic achievement as measured by school accountability rankings of successful and high performing in Mississippi. Although no statistically significant relationship was identified in any of the variables at the successful and high performing schools, this particular study reinforced that specific instructional strategies, including the use of technology, practice on a specific skill such as homework, and vocabulary were being utilized in successful and high performing schools in Mississippi as methods of ensuring student success. Themes from the responses provided by the teachers from successful and high performing schools revealed that these particular schools were implementing programs such as tutoring, creative scheduling, parental involvement, and rewards to ensure student success at their respective schools.
The teachers in both settings indicated that they utilized similar research based instructional methods including homework, technology, and vocabulary. However, there was no significant difference in the usage of those methods by the teachers in each setting. In 2010-2011, Mississippi schools received accountability rankings based on the number of students which scored at each level of basic, proficient, and advanced. The more students who scored at the advanced level resulted in schools receiving higher QDI rankings. If the instructional methods utilized in each setting did not result in the difference in student achievement at successful and high performing schools, then a reason for the difference in achievement rankings may be attributed to the fact that the high performing schools may have had a larger percentage of its students scoring at the advanced level on the specific subject area tests which was evident in the higher QDI for the high performing school setting.

The study also revealed that the teachers in high poverty, high performing and high poverty, successful schools in south Mississippi believed that the presence of visible and supportive administrator was essential to their achievement. The main role of a school leader included the creation of a school culture or environment focused on teaching and student learning. In the role of an instructional leader, the principal has the ability to transform the entire culture of a school by being a role model that motivated teachers to analyze their teaching methodology and to improve their instruction (Jacobson et al., 2005). Ultimately, the task of identifying specific measurements that will ensure student success of a particular student body is left to the administrator. An effective administrator should be visible in the classroom where instruction and learning occurs. Therefore, it is imperative for an administrator to be actively involved in all
aspects of the instructional process which included aiding teachers with lesson design, delivery, or data driven assessments. With the support of a helpful administrator, teachers could provide effective measurements that ensured success for all students.
APPENDIX A

SWEPT SURVEY

I. YOUR CURRENT TEACHING

1. Please provide information on the courses that you taught during the most recent school term. Do not include classes taught at any other schools. If you taught two or more sections of the same course (e.g., Biology I) to different groups of students, count them as separate courses.

EXAMPLE:

Last spring you taught biology to three sections of 25 9th grade students every day for 50 minutes. You also taught an ecology course to one section of 28 10th grade students every day for 50 minutes, and AP biology to one section of 20 11th grade students three days a week for 90 minutes. You would report your course schedule as follows:

<table>
<thead>
<tr>
<th>Name of the course</th>
<th>Grade level of the majority of students</th>
<th>Approximate number of students</th>
<th>Check if AP or Honors</th>
<th>Minutes of instruction per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Biology I</td>
<td>9th</td>
<td>25</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>b. Biology I</td>
<td>9th</td>
<td>25</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>c. Biology I</td>
<td>10th</td>
<td>25</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>d. Ecology</td>
<td>10th</td>
<td>28</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>e. AP Biology</td>
<td>11th</td>
<td>20</td>
<td>x</td>
<td>270</td>
</tr>
</tbody>
</table>

ENTER YOUR COURSE SCHEDULE BELOW.

<table>
<thead>
<tr>
<th>Name of the course</th>
<th>Grade level of the majority of students</th>
<th>Approximate number of students</th>
<th>Check if AP or Honors</th>
<th>Minutes of instruction per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions 2 through 12 ask you to reflect on your instructional practices in a specified course. This course should meet certain criteria. The following instructions will help you identify this course.

a. In the chart describing your course schedule on the previous page, draw a line through any courses that are AP, Honors level, or accelerated.

b. Draw a line through any courses in which the subject matter is not biology or chemistry, if you are a science teacher, and not algebra or geometry, if you are a mathematics teacher.

c. Of the remaining courses, select the one that occupied the majority of your teaching time. This is your “target” course. Write in the name of the target course to indicate your selection. If more than one course remains, select the one that you think you will most likely teach to the largest number of students during the next school term.

Target course selection

2. In this target course, how much emphasis did you give to each of the following goals or objectives? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Goal</th>
<th>None</th>
<th>Minor</th>
<th>Moderate</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Integrating the course curriculum with other subjects or fields of study</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Teaching facts, rules, or vocabulary</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Showing the importance of the subject in everyday life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Increasing students’ interest in the subject and in pursuing further study</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Encouraging students to explore alternative explanations or methods for solving problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. Preparing students for taking standardized tests in the subject</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. Fully covering the course curriculum as prescribed by the school/district/state</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. In-depth study of selected topics or issues, as opposed to exposure to a broad range of topics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>i. Understanding the theoretical concepts and ideas underlying scientific or mathematical applications</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

3. Approximately how often did you use each of the following teaching methods in this course? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Never</th>
<th>1-2 times a month</th>
<th>1-2 times a week</th>
<th>Almost every class</th>
<th>Every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Lecture or talk to the whole class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Teacher-led whole class discussions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Students responding orally to questions on subject matter covered in class or homework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Student-led whole-group discussions or presentations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Students working together in cooperative groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Reviewing homework or other assignments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
4. Approximately how often did you have students engage in the following learning activities in this course? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>1-2 times a month</th>
<th>1-2 times a week</th>
<th>Almost every class</th>
<th>Every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work on hands-on activities (e.g., doing lab activities or using manipulatives)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Reflect on course material by writing in a notebook or journal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Use calculators or computers for learning, practicing skills, or solving problems</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Work individually on written work or assignments in a workbook or textbook</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Critique/evaluate their own or other students' class work or homework</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Consider a real-world problem relevant to the course and develop a plan to address it</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Use primary sources (e.g., academic or professional journals) to investigate current issues or new developments in mathematics, science, or technology</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h. Listen to guest speakers or go on field trips relevant to the material studied in class</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i. Investigate possible career opportunities in mathematics, science, or technology</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j. Design or implement their own scientific investigation or mathematical theory or proof</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>k. Use “state-of-the-art” equipment or technologies (Specify types)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. On average, approximately what percent of your planning and preparation time for this course did you spend on each of the following activities? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Activity</th>
<th>0%</th>
<th>1-9%</th>
<th>10-19%</th>
<th>20-29%</th>
<th>30-49%</th>
<th>50% or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Revising current lessons/curriculum units</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>b. Creating new lessons/curriculum units</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>c. Contacting community resources, including making arrangements for speakers, tours, etc</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>d. Using the Internet to access materials</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>e. Using the Internet to network with colleagues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>f. Consulting with experts or professional scientists/mathematicians</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>g. Using a reflective teaching journal</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>h. Learning to use science or mathematics kits</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>i. Improving computer and/or software skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>j. Writing grants to secure funding for new programs and/or equipment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>k. Interacting with other teachers at your school to coordinate lessons/activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>l. Responding to e-mail you receive from students</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
6. During a typical week, approximately how much time did you spend outside of regular school hours on planning and preparing for teaching this course?
Number of hours

7. Which textbook (or commercially prepared workbook) constituted the primary resource that you used in this course?
NOTE: If you used NO textbook or workbook in this course, skip to Question 12.
Title:
Author:
Publisher:
Publication date/edition:

8. Approximately what percentage of this textbook/workbook did you, or do, you typically cover in this course? ____________\% 

9. Did/do you use the tests that the publishers included with the textbook/workbook? (Circle only one.)
Rarely or never ................. 1
Sometimes .................... 2
Frequently .................... 3

10. Please give your opinion about each of the following statements related to this textbook/workbook.
(Circle one number on each line.)
This textbook:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Not sure</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Is at a reading level that is appropriate for most of the students taking this course .................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Helps develop problem-solving skills .................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Provides good review questions and problem sets ..</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Explains concepts clearly ..............................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Provides challenging suggestions for projects, further reading, and other assignments .................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Covers the right range of topics........................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Satisfactorily covers topics in depth ..................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>h. Makes interdisciplinary connections between subject areas ..............................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>i. Is considered interesting by most students taking this course ..............................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>j. Other (specify) ..............................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

11. If you disagreed with any of the items in Question 10, above, please briefly describe the problems you see with this textbook/workbook.


12. To what extent did you use each of the following types of assessment to determine student progress and achievement in this course? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Not at all</th>
<th>Slight extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Pre-tests before beginning a new unit ...............................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Short-answer tests (e.g., multiple choice, true/false, fill-in-the-blank) ....</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Tests requiring open-ended responses (e.g., descriptions, justifications, explanations)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Student portfolios ..................................................................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Class participation/group discussion .....................................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. Student presentations/projects ..................................................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. Hands-on performance measurements ..........................................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. Written explanations of thought processes (e.g., journals, essays) ..............</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

II. YOUR ATTITUDES AND BELIEFS ABOUT TEACHING

13. Please indicate how confident you feel about the following aspects of your teaching. If you are a science teacher, answer for how you feel about teaching science. If you are a mathematics teacher, answer for how you feel about teaching mathematics. (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Not at all</th>
<th>Slightly confident</th>
<th>Moderately confident</th>
<th>Very confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Your knowledge about the application of the subject to everyday life ...................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Your ability to advise students about job opportunities in the subject area ..........</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Your ability to advise students about opportunities to receive further training/experience in the subject area</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Your ability to use inquiry-based instructional practices ..................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Your ability to determine the depth, breadth, and pace of coverage of material in your teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. Your ability to develop appropriate and authentic assessment tools ........................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>g. Your ability to supervise research projects of your students ................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>h. Your ability to mentor beginning teachers .....................................................</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>i. Your ability to make presentations at teacher inservices or professional meetings ..</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>j. Your ability to incorporate technology (computers, the Internet, laser discs, etc.) into your teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
14. To what extent do you feel each of the following statements describes the kind of teacher you are?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at all</th>
<th>Slight extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. I am motivated to expand on the instructional techniques that I use</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. I am motivated to change the way I use hands-on materials and manipulatives in my teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. I am motivated to use more technology in my teaching</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. I consider myself a “subject matter expert” in my main teaching field</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. I consider preparing students for the kinds of expectations they will encounter in a work setting as an important part of my job</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>f. I believe I can truly make a difference in the lives of my students in terms of their choices for further education and their careers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

15. What do you consider to be your greatest strengths as a teacher? Please be as specific as you can. Think about both areas of content mastery and instructional strategies when answering this question.

________________________________________________________________________

________________________________________________________________________

16. What areas of your teaching do you think need improvement? Think about both areas of content mastery and instructional strategies when answering this question.

________________________________________________________________________

________________________________________________________________________

III. YOUR BACKGROUND AND EXPERIENCE

17. Including this school year, how many years have you been employed as a teacher? *(Include years spent teaching both full and part time, and in both public and private schools.)*

<table>
<thead>
<tr>
<th>Type of Employment</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. In total</td>
<td></td>
</tr>
<tr>
<td>b. As a math teacher</td>
<td></td>
</tr>
<tr>
<td>c. As a science teacher</td>
<td></td>
</tr>
<tr>
<td>d. In a high school</td>
<td></td>
</tr>
<tr>
<td>e. At this school</td>
<td></td>
</tr>
</tbody>
</table>
18. Do you have a teaching certificate in the state and/or city in which you are currently teaching?
   Yes.............................................. 1
   No.............................................. 2 (Skip to Question 21.)

19. On the line below, please write in the field(s) in which you have a teaching certificate.

20. What type of teaching certificate do you hold? (Circle only one.)
   a. Regular or standard state certificate, or advanced professional certificate........ 1
   b. Provisional or other type of certificate given to persons who are still
      participating in what the state calls an “alternative certification program”........ 2
   c. Probationary certificate (the initial certificate issued after satisfying all
      requirements except the completion of a probationary period)....................... 3
   d. Temporary certificate (requires some additional college coursework and/or
      student teaching before regular certification can be obtained)....................... 4
   e. Emergency certificate or waiver (issued to persons with insufficient teacher
      preparation who must complete a regular certification program in order to
      continue teaching)...................................................................................... 5

21. During the last 12 months, have you participated in any professional development activities that focused
    on the following topics? If yes, how many hours did you spend on the activity?

<table>
<thead>
<tr>
<th>Participated?</th>
<th>Approximate number of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 or less</td>
</tr>
</tbody>
</table>
| a. In-depth study of your main subject area
   (i.e., science or mathematics).......... | Yes  | No   | 1     | 2     | 3     | 4     |
| b. Methods of teaching your main subject area. | Yes  | No   | 1     | 2     | 3     | 4     |
| c. Applications of technology to education.... | Yes  | No   | 1     | 2     | 3     | 4     |
| d. Other related areas (specify)........... | Yes  | No   | 1     | 2     | 3     | 4     |

22. During the last 12 months, have you been involved in any of the following activities related to your
    teaching? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Served as department chair ..........................................................</td>
<td>1</td>
</tr>
<tr>
<td>b. Developed or piloted new curricula ..................................................</td>
<td>1</td>
</tr>
<tr>
<td>c. Held a leadership position in a state or national professional organization</td>
<td>1</td>
</tr>
<tr>
<td>d. Formally mentored beginning teacher(s) ..........................................</td>
<td>1</td>
</tr>
<tr>
<td>e. Supervised student teacher(s).......................................................</td>
<td>1</td>
</tr>
<tr>
<td>f. Conducted inservices or workshops for teachers ................................</td>
<td>1</td>
</tr>
<tr>
<td>g. Made observational visits to other schools ....................................</td>
<td>1</td>
</tr>
</tbody>
</table>
| h. Made presentations to non-teaching groups (e.g., school board, parents,
   community groups).............................................................................. | 1  | 2 |
| i. Conducted individual or collaborative research on a topic of interest to you.| 1  | 2 |
| j. Represented the school or district on an instructional reform project.... | 1  | 2 |
| k. Other (specify)................................................................................| 1  | 2 |
23. Not counting the program that is named on the questionnaire label, have you participated in any professional development activities either in a laboratory, research, or industrial setting in the last 5 years? If so, please describe this experience by providing the following information in the table below.

- The name of the program, and sponsoring agency;
- The type of setting in which you worked (i.e., government, industry, laboratory, or university);
- The date of your participation, and the duration of the program; and
- The type of work that you did.

*Note: If you have not participated in any such activities, go on to Question 24.*

<table>
<thead>
<tr>
<th>Name of program and sponsoring agency</th>
<th>Type of setting</th>
<th>Dates and duration of program</th>
<th>Type of work</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

24. During the last 5 years, have you been employed in a laboratory, research, or industrial setting that was relevant to your work as a science or mathematics teacher? If yes, please describe this work experience in the space below.

Yes................................1
No..................................2

25. Please describe your postsecondary education by completing the chart below.

<table>
<thead>
<tr>
<th>Degree(s) held?</th>
<th>Year</th>
<th>Institution</th>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master's</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctorate</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26. Are you currently working toward an advanced degree? If yes, please indicate the degree you are pursuing, the institution, and the area in which you are specializing.

Yes........................1 No.........................2

Degree: __________________ Institution: __________________ Specialization: __________________

27. Please estimate the number of credit hours, if any, you have earned beyond your highest degree.

Approximate number of credit hours ________
28. In order to get a general sense of your educational background, please place a check next to the titles of courses you have taken for credit as part of your postsecondary education. Do not be concerned about whether the titles match the classes you took, or if you do not have total recall of this information.

### MATHEMATICS COURSES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Abstract Algebra</td>
</tr>
<tr>
<td>B.</td>
<td>Algebra for Teachers</td>
</tr>
<tr>
<td>C.</td>
<td>Analytic Geometry</td>
</tr>
<tr>
<td>D.</td>
<td>Applied Math</td>
</tr>
<tr>
<td>E.</td>
<td>Business Math</td>
</tr>
<tr>
<td>F.</td>
<td>Calculus</td>
</tr>
<tr>
<td>F1.</td>
<td>Number of calculus courses</td>
</tr>
<tr>
<td>G.</td>
<td>Computer Math</td>
</tr>
<tr>
<td>H.</td>
<td>Data Analysis/Statistics</td>
</tr>
<tr>
<td>I.</td>
<td>Data Processing Math</td>
</tr>
<tr>
<td>J.</td>
<td>Differential Equations</td>
</tr>
<tr>
<td>K.</td>
<td>Discrete Math</td>
</tr>
<tr>
<td>L.</td>
<td>Finite Math</td>
</tr>
<tr>
<td>M.</td>
<td>History/Foundations of Math</td>
</tr>
<tr>
<td>N.</td>
<td>Math Appreciation/Math in Society</td>
</tr>
<tr>
<td>O.</td>
<td>Mathematical Modeling</td>
</tr>
<tr>
<td>P.</td>
<td>Number Theory</td>
</tr>
<tr>
<td>Q.</td>
<td>Probability</td>
</tr>
<tr>
<td>R.</td>
<td>Stochastic Processes</td>
</tr>
<tr>
<td>S.</td>
<td>Technical/Vocational Math</td>
</tr>
<tr>
<td>T.</td>
<td>Topology</td>
</tr>
<tr>
<td>U.</td>
<td>Trigonometry</td>
</tr>
</tbody>
</table>

### SCIENCE COURSES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Anatomy</td>
</tr>
<tr>
<td>B.</td>
<td>Astronomy</td>
</tr>
<tr>
<td>C.</td>
<td>Atmospheric Science and Meteorology</td>
</tr>
<tr>
<td>D.</td>
<td>Biochemistry and Biophysics</td>
</tr>
<tr>
<td>E.</td>
<td>Biology</td>
</tr>
<tr>
<td>F.</td>
<td>Biometrics/ Biostatistics</td>
</tr>
<tr>
<td>G.</td>
<td>Biotechnology</td>
</tr>
<tr>
<td>H.</td>
<td>Botany</td>
</tr>
<tr>
<td>I.</td>
<td>Cell/Molecular Biology</td>
</tr>
<tr>
<td>J.</td>
<td>Chemistry (General)</td>
</tr>
<tr>
<td>K.</td>
<td>Ecology</td>
</tr>
<tr>
<td>L.</td>
<td>Environmental Science</td>
</tr>
<tr>
<td>M.</td>
<td>Genetics</td>
</tr>
<tr>
<td>N.</td>
<td>Inorganic Chemistry</td>
</tr>
<tr>
<td>O.</td>
<td>Geology/Earth Science</td>
</tr>
<tr>
<td>P.</td>
<td>Marine Biology/Oceanography</td>
</tr>
<tr>
<td>Q.</td>
<td>Microbiology/Bacteriology</td>
</tr>
<tr>
<td>R.</td>
<td>Neuroscience</td>
</tr>
<tr>
<td>S.</td>
<td>Organic Chemistry</td>
</tr>
<tr>
<td>T.</td>
<td>Physical Science</td>
</tr>
<tr>
<td>U.</td>
<td>Physics</td>
</tr>
<tr>
<td>V.</td>
<td>Physiology</td>
</tr>
<tr>
<td>W.</td>
<td>Psychology</td>
</tr>
<tr>
<td>X.</td>
<td>Radiation Biology</td>
</tr>
<tr>
<td>Y.</td>
<td>Toxicology</td>
</tr>
<tr>
<td>Z.</td>
<td>Virology</td>
</tr>
<tr>
<td>AA.</td>
<td>Zoology</td>
</tr>
</tbody>
</table>

### EDUCATION COURSES

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Computers/Technology in the Classroom</td>
</tr>
<tr>
<td>B.</td>
<td>Curriculum and Curriculum Theory</td>
</tr>
<tr>
<td>C.</td>
<td>Education Administration</td>
</tr>
<tr>
<td>D.</td>
<td>Education/Instruction Media Design</td>
</tr>
<tr>
<td>E.</td>
<td>Educational Assessment, Testing and Measurement</td>
</tr>
<tr>
<td>F.</td>
<td>Educational Psychology</td>
</tr>
<tr>
<td>G.</td>
<td>Educational Statistics</td>
</tr>
<tr>
<td>H.</td>
<td>Evaluation and Research in Education</td>
</tr>
<tr>
<td>I.</td>
<td>Instruction, Methods, and Materials</td>
</tr>
<tr>
<td>J.</td>
<td>Mathematics Education</td>
</tr>
<tr>
<td>K.</td>
<td>School Psychology</td>
</tr>
<tr>
<td>L.</td>
<td>Science Teacher Education</td>
</tr>
<tr>
<td>M.</td>
<td>Social/Historical/Philosophical Foundations of Education</td>
</tr>
<tr>
<td>N.</td>
<td>Teacher Education: Intermediate or Secondary School</td>
</tr>
</tbody>
</table>
IV. TEACHER CHARACTERISTICS

29. What is your gender?
   Male .................... 1
   Female .................. 2

30. Which best describes you?
   American Indian or Alaska Native ............ 1
   Asian or Pacific Islander ..................... 2
   Black, non-Hispanic ........................ 3
   Hispanic ..................................... 4
   White, non-Hispanic ......................... 5

31. In case we need to contact you concerning this questionnaire, please provide the following information:

   Name: ____________________________________________

   School name: ______________________________________

   Mail address: ______________________________________

   E-mail address: _____________________________________

   Fax number: _______________________________________

   Telephone:  
   School: Time: ___________________________ 
   Day: _______________  
   Home: Time: ___________________________ 
   Day: _______________

THANK YOU VERY MUCH FOR COMPLETING THIS SURVEY.
Hi Jeanifer,

This is to confirm that you are authorized to use any of the surveys posted on the SWEPTStudy.org website. The surveys are public domain. The only request we have is that, when citing the surveys, acknowledge that the surveys were developed with National Science Foundation funds award # 9812142.

I wish you the best of luck with the completion of your doctoral degree.

Jay Dubner

Columbia University

SWEPT Study Project Coordinator
APPENDIX C

EFFECTIVE INSTRUCTIONAL METHODS UTILIZED IN SUCCESSFUL AND HIGH PERFORMING SECONDARY SCHOOLS IN THE SOUTHERN REGION OF MISSISSIPPI SURVEY

Directions: This survey is designed to help gain a better understanding of the instructional techniques employed by teachers at successful high schools which are located in districts that receive Title I funds in the southern region of Mississippi. Please indicate your opinion about each of the statements below. The information you provide and your responses are strictly confidential. Please circle or write in the best response for each of the following statements. Thank you for your help in collecting this information.

1. In which of the following Mississippi Subject Areas did you teach during the 2010-2011 school year?
   - Algebra I 1
   - Biology I 2
   - English II 3
   - U.S. History 4
   - Not Applicable 5

2. In this target course, how much emphasis did you give each of the following instructional goals or objects? (Circle only one number on each line.)

   a. Teaching facts, rules, or vocabulary
      1 2 3 4

   b. Setting objectives and providing feedback
      1 2 3 4

   c. Preparing students for taking standardized tests
      1 2 3 4

   d. Fully covering the course curriculum as prescribed by the school/district/state
      1 2 3 4

   e. In-depth study of selected topics or issues, as opposed to exposure to a broad range of topics
      1 2 3 4
3. Approximately how often did you use each of the following teaching methods in this course? (Circle only one number on each line.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Never</th>
<th>1-2 times per month</th>
<th>1-2 times per week</th>
<th>Almost every class</th>
<th>Every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Socratic Method/Lecture</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Curriculum maps/pacing guides</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Technology (PowerPoint, Promethean, etc)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Cooperative Groups</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Guided Practice/Reviewing homework or other assignments</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Scaffolding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>g. Check for understanding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
4. Approximately how often did you have the students engage in the following learning activities in this course? *(Circle one number on each line.)*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>1-2 times per month</th>
<th>1-2 times per week</th>
<th>Almost every class</th>
<th>Every class</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Work on hands-on activities (e.g., lab activities or manipulatives)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>b. Practice (distributed on a specific skill, strategy, or process)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>c. Building vocabulary</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>d. Graphic organizers/visual representations/Venn diagrams/KWL charts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>e. Written reflections/surveys to demonstrate understanding</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>f. Peer tutoring</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
5. To what extent did you use each of the following types of assessments to determine student progress and achievement in this course? (Circle one number on each line.)

<table>
<thead>
<tr>
<th>Type of Assessment</th>
<th>Not at all</th>
<th>Slight extent</th>
<th>Moderate extent</th>
<th>Great extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Pre-tests before beginning a unit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Short-answer tests (e.g., multiple choice, true/false, fill-in-the-blank)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Tests requiring open-ended responses (e.g., descriptions, justifications, explanations)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Student portfolios/book report/lab report/student presentations/student products</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. District assessments (snapshot test, 9 week exams, SATP practice)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

6. Please indicate your total years of teaching experience. (Circle only one).

   a. 0-5 ........................................ 1  
   b. 6-10 ...................................... 2  
   c. 11-15 ..................................... 3  
   d. 16-20 ..................................... 4  
   e. 21-25 ..................................... 5  
   f. 25+ ........................................ 6  

7. Please indicate your highest degree earned. (Circle only one.)

   a. B.S./B.A. ................................... 1  
   b. M.S./M.Ed. .................................. 2  
   c. Ed.S. ....................................... 3  
   d. Ph.D./Ed.D. ................................. 4  
   e. Other (Please Indicate) __________
8. What type of teaching certification do you hold? (Circle only one.)
   a. Regular or standard state certificate or advanced professional certificate...1
   b. Provisional or other type of certificate given to persons who are still
      Participating in what the state calls an “alternate certification program. ... 2
   c. Emergency certificate or waiver (issued to persons with insufficient
      teacher preparation who must complete a regular certification program in
      order to continue teaching.  ..............................................................3

9. On average, what percent of your students receive free or reduced lunch? (Circle
   only one answer.)
   a. 0-25% ................................................................. 1
   b. 26-50% .........................................................2
   c. 51-75% .........................................................3
   d. 76-100% .....................................................4

10. As you are aware, you have been asked to participate in this survey because the
    school you currently teach at has met certain criteria and deemed as being one of
    the successful or high performing high schools in the southern region of
    Mississippi. In your professional opinion, what do you believe are the reasons
    that your school has been able to accomplish this goal while other schools and
    districts in the state, which have similar student demographics, do not achieve
    success? Please be as specific as possible and provide examples. (You may use
    the back of the paper if more space is needed.)

Thank you for completing this survey.
APPENDIX D

IRB APPROVAL

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive 85147 | Hattiesburg, MS 39406-0001
Phone: 601.266.5997 | Fax: 601.266.4377 | www.usm.edu/research/institutional-review-board

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: 14020503
PROJECT TITLE: Indicators of Successful High Schools in Title I Districts in the Southern Region
PROJECT TYPE: New Project
RESEARCHER(S): Jennifer Pearson
COLLEGE/DEPARTMENT: College of Education and Psychology
DEPARTMENT: Educational Leadership and School Counseling
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 02/25/2014 to 02/24/2015

Lawrence A. Huston, Ph.D.
Institutional Review Board
NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.

Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: CH14020503
PROJECT TITLE: Effective Instructional Methods Utilized in Secondary Schools in the Southern Region of Mississippi
PROJECT TYPE: Change to a Previously Approved Project
RESEARCHER(S): Jeanifer Pearson
COLLEGE/DIVISION: College of Education and Psychology
DEPARTMENT: Educational Leadership and School Counseling
FUNDING AGENCY/SPONSOR: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 10/01/2014 to 09/30/2015

Lawrence A. Hosman, Ph.D.
Institutional Review Board
APPENDIX E

DISTRICT APPROVAL FOR STUDY (EXAMPLE)

October 24, 2013

University of Southern Mississippi Institutional Review Board
University of Southern Mississippi

After discussing the proposed study, "Indicators of Successful High Schools in Title I Districts in the Southern Region of Mississippi", presented by Jennifer Pearson, a doctoral student at the University of Southern Mississippi, I have granted permission for the study to be conducted in the Newton Municipal School District.

I understand that the purpose of study is to analyze how high schools in the southern region of the state, which receive Title I funds, are successfully implementing programs or strategies that contribute to their success. Ms. Pearson is particularly interested in understanding the strategies in place that contribute to the schools' ability to obtain accountability statuses of successful, high performing, or star school as deemed by the Mississippi Department of Education (MDE) for the 2010-2011 school year.

I understand that Ms. Pearson will contact the principal at the high school to discuss her study and will send questionnaires to teachers at the school. The questionnaire should only require ten minutes to complete, and the teachers will be asked to return the questionnaires to the school office. Ms. Pearson ensures that all information will be kept confidential and will be stored on a USB memory key, and signed permission forms will be locked in a file cabinet at all times until the completion of the study, when it will be destroyed. In addition, she has also agreed to provide us a copy of the results from the study if requested. Thank you.

Sincerely,
PARTICIPANT INFORMED CONSENT

Department of Educational Leadership and School Counseling

118 College Drive #5027 | Hattiesburg, MS 39406-0001
Phone: 601-266-4579 | Fax: 601-266-5141 | www.usm.edu

Effective Instructional Methods Utilized in Successful and High Performing Secondary Schools in the Southern Region of Mississippi

Jeanifer Pearson
University of Southern Mississippi Department of Educational Leadership and Research
601-266-4579
jeaniferpearson@gmail.com

You are invited to take part in a research study designed to gain an understanding into the instructional techniques employed by teachers at successful and high performing secondary schools which are located in the southern region of the state in districts that receive Title I funds. These high schools are successfully implementing programs or strategies that contribute to their ratings of successful, high performing, or star school as deemed by the Mississippi Department of Education (MDE) for the 2010-2011 school year.

What the study is about: This study is designed to gain a better understanding of teaching methodologies and student assessments that are utilized in high poverty, high performing secondary schools in Mississippi.

What you will be asked to do: As a participant, you will be asked to complete the attached survey and return using the self-addressed envelope.

Risks and Benefits: There are certain risks associated with this particular study although minimal. Although the survey should not require more than 15 minutes of time to complete, some teachers may exhibit anxiety. Teachers may experience fatigue and may also become fidgety or anxious to finish quickly. Teachers may not be as open or honest when completing the open ended question on the survey. Potential benefits of this study include adding documentation to the body of knowledge on measures for improving the
achievement gap. Results from this research may be used to demonstrate how educators in Mississippi are overcoming the odds and not allowing the stigma of being low income to inhibit learning.

**Taking part is voluntary:** Taking part in this study is completely voluntary and will not affect your job status. If you choose to be in the study you can withdraw at any time without consequences of any kind. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

**Your answers will be confidential:** The records of this study will be kept private. The data will be stored in digital form on a USB memory key, which will be kept in a secure location at all times. All returned surveys will be stored in a locked file cabinet at the researcher’s home until time of disposition. Upon the completion of study, all documents, test data, files will be shredded. Any report of this research that is made available to the public will not include your name or any other individual information by which you could be identified.

**If you have questions or want a copy or summary of the study results:** Questions concerning the research, at any time during or after the project, should be directed to researcher(s) name(s) at telephone number(s). This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-5997.

**Statement of Consent:** I have read and understand the information above. By returning the survey to the researcher, I am consenting that my answers within the survey be utilized for the research aforementioned.
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Associates.


