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How Georgia Suburban Middle School Principals Work with Teachers to Enhance Student Achievement in this Era of Standardized Testing

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HOW GEORGIA SUBURBAN MIDDLE SCHOOL PRINCIPALS WORK WITH
TEACHERS TO ENHANCE STUDENT ACHIEVEMENT IN THIS ERA OF
STANDARDIZED TESTING

By

ROBERT C. MINTER

(Under the Direction of Walter S. Polka)

ABSTRACT

The purpose of this study was to examine how Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing. This study became the focus of the researcher's attention because of the increased level of accountability for school systems, schools, and administrators in regard to student achievement. Each school is held accountable for the academic success of students, and the No Child Left Behind Act, which is federal law, requires that each state set high academic standards and implement student testing. However, while conducting a review of literature in the area of standardized testing and student achievement, the researcher felt it was important to examine how principals work with teachers to help students achieve acceptable scores on standardized tests that are consistent with achievement in the classroom. The literature identified the history of standardized testing, the advantages and disadvantages of standardized testing, and defined the current prevalent standards of the No Child Left Behind Act and Criterion-Referenced Competency Test (CRCT).

There was a limited amount of information, however, on the strategies middle school principals use to maintain acceptable test scores and how they work with

teachers to enhance student achievement. Since schools are graded based on standardized test performance, and administrators are expected to close any achievement gaps and to keep their school off the Needs Improvement List, it became clear that a study on how principals work with teachers to enhance student achievement would be beneficial. It is also important that acceptable standards are maintained without standardizing the curriculum. The following research is significant to administrators, teachers, and parents to help prepare students for standardized tests and academic achievement.

The method of data collection included structured interviews with suburban Georgia middle school principals and the development of school portraits for each respective school. The responses from the structured interviews were reported in narrative form. Findings that emerged from the study were staff development and professional learning helped ensure success, less emphasis should be placed on homework, the CRCT just measures basic competency, reading and differentiated instruction plays a critical role in achievement, and teachers needed time to plan so that students could be appropriately placed. Accountability, investment in teacher knowledge and skill, and assessment that drive curriculum will continue to bring successful standardized testing outcomes and greater student achievement when applied at schools and in school systems nationwide.

INDEX WORDS: Standardized Testing, Student Achievement, Criterion-Referenced Competency Test (CRCT), NCLB, Georgia Middle Schools, Middle School Principals

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DOCTOR OF EDUCATION

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DEDICATION

In recognition of their patience, support, and encouragement, I hereby dedicate this dissertation to my grandparents, Mable Phillips Copeland, Charles Copeland, and Christine Bridges Harris: former educators who were inspirational in my development, gave me insight, wisdom, and modeled behavior of which to be proud. Because of your prayers, I have been able to accomplish my dreams and what you envisioned for me.

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CHAPTER 1

INTRODUCTION

Within the last few years, the standards based reform movement has garnered much attention (Orfield & Wald, 2000). President George Bush and his administration have vigorously promoted the use of standardized tests (Steele, 2004). Their political campaign was based on improving the American school system and raising the performance of students in every state. Steele has noted that the phrase "higher standards" has become popular in political campaigns across the country. Politicians, government officials, school boards, and parents are drawn to the pledge of improving the accountability of the public school system, as well as preparing a more globally competitive work force (Steele, 2004).

Much emphasis is placed on test scores, which has a trickle-down effect on teachers, schools, and children. "High-stakes testing" is an important factor in education in this new millennium (Louis, 2000). This new policy of increased reliance on standardized test scores links the score on one set of standardized tests to grade promotion, high school graduation, and, in some cases, teacher and principal salaries and tenure decisions (Louis, 2000). All stakeholders have an investment in the results of these standardized tests. In addition to standards-based testing for students, there is a developing trend towards a more complex conception of teaching and learning for teacher licensing and certification (Porter, Young, & Odden, 2001). Teachers are required to take yearly staff development classes to update their certificate and an International Netcourse Teacher Enhancement Coalition (INTEC) class to enhance computer literacy. As

Hardman and Mulder (2003) have noted, the federal government's role has expanded to monitoring states and schools that fail to meet set criteria. Algozzine (2003) has also pointed out that federal control has increased with new legislation such as the No Child left Behind Act, and there are incentives and penalties for state and local education agencies. Therefore, there is a great need for each and every U.S. classroom to meet standards.

If a student's performance on a standardized test is not congruent with their classroom performance, adjustments need to be made (Kahle, 2000). This is critical because many school systems use test scores to identify curriculum weakness and to target students in need of additional support (Mizelle, 1997). Standardized testing is also used to fulfill the administrative function of providing comparative scores for individual students so that placement decisions can be made.

Therefore, it is important to examine strategies Georgia suburban middle school principals use to improve student test scores when they recognize that a discrepancy exists between actual classroom performance and performance on a standardized test. Since the role of the principal has evolved from manager of a school to chief educational leader, it is beneficial to obtain the opinions of middle school principals. The effective principal is now viewed as integral to a school's academic success and instructional leadership. He or she is also responsible for enacting change and must have a vision of what the school is to become. The principal must also have a plan to help the staff work toward that vision. Principals are held accountable by the superintendent, board of education, and No Child Left Behind. Standardized test scores can be advantageous or

detrimental to all stakeholders and have become factors in the overall grading of schools. Identifying strategies that successful middle school principals use to create student productivity (that corresponds with standardized test scores) would be beneficial to other principals, school systems, and states. Successful middle school principals are defined as principals whose schools have had successful test scores on the Criterion-Referenced Competency Test (CRCT) for three or more consecutive years.

The Standardized Testing Movement

American public schools became heavily criticized after World War II. As the nation moved towards universal secondary education, it was also engaged in a space and arms race with the Soviet Union. The American school system began to be perceived as integral to national defense. It was also expected that colleges prepare the engineers, scientists, and mathematicians needed to compete with the Communists. The concern mounted that schools were not sufficiently preparing students in these areas. Rising enrollments and graduation rates heightened anxieties, as people feared the increases reflected a decline in rigor. When the Russians launched Sputnik in 1956, American egos were stunned because the U.S. had come in second in the race for space. Americans looked for answers; they found one in the schools' failure to educate children to their full potential. The education reform movement began, including the revision of math and science programs.

With the publication of *A Nation at Risk* in 1983, statistics showed that the school system needed major changes. As a result, educational reform has continued to maintain a steady pressure on school systems nationwide.

Accountability is a force that has driven education in the 1990s and a platform of political campaigns; it is a sign of the times. The law now clearly states that schools must produce a quality product so that children can compete in an increasingly competitive world. The call for school reform over the past twenty years has resulted in a greater emphasis on the use of standardized tests. The most common standardized tests used in elementary and secondary schools are the Iowa Test of Basic Skills and the CRCT. In order for tests to be used for comparison purposes the tests need to be standardized, which requires a standard set of instructions, testing conditions, time allowed, and questions asked.

Standardized testing is any test that is used across a variety of schools or other situations. Designers of such tests must specify a discrete, correct answer for each question. This type of test includes both achievement (which measures knowledge already possessed) and aptitude (which attempts to predict future performance or potential). The two types of standardized tests are norm-referenced and criterion-referenced. Norm-referenced testing measures performance relative to all other students taking the same test. The Iowa Test of Basic Skills is a standardized test that measures all students to the same standards. It indicates how well a student did compared to the rest of the testing population. For example, if a student is ranked in the 86th percentile, that means he or she did better than 86% of other students who took the test. This method is the most common type of standardized testing. Criterion-referenced testing measures factual knowledge of a defined body of material. These standardized tests can be divided even further into performance tests or aptitude tests.

Performance tests assess learning that has already occurred in a particular subject area, whereas aptitude tests assess abilities or skills considered important to future success in school.

Critics of standardized testing argue that it does more harm than good. According to Kohn (2000), standardized testing is turning American schools into test prep centers, and that standardized tests are not a good measure of student or teaching quality. In "High-Stakes Testing as Educational Ethnic Cleansing," Kohn noted that few countries use standardized tests for children below high school age or multiple-choice tests for students of any age. Furthermore, non-instructional factors explain most variances among test scores when schools or districts are compared. A study of math results on the 1992 National Assessment of Educational Progress found that the number of parents living at home, parents' educational background, type of community, and poverty rate accounted for 89% of differences in state scores. Norm-referenced tests were never intended to measure quality of learning or teaching; the main objective of these tests is to rank, not to rate. Findings suggest that as a rule, standardized test results are positively correlated with a shallow approach to learning.

Proponents of standardized tests believe the advantage of standardized tests is the fact that they are standardized (Louis, 2000). A main advantage of standardized testing is that it provides assessments that are psychometrically valid and reliable, as well as results that are replicable and can be generalized. Another advantage is aggregation. A well-designed standardized test provides an assessment of an individual's mastery of a domain of knowledge or skill which will provide useful information at some level of aggregation. The mean scores of

classes, schools, or other groups may provide useful information because of the reduction of error accomplished by increasing the sample size.

The No Child Left Behind Act requires that states establish performance goals for all schools, districts, and states to ensure that all students reach 100% proficiency on state assessments by 2014. Adequate Yearly Progress (AYP) refers to the intermediate yearly goals that each state must establish and meet. Scores on the CRCT will be analyzed yearly to determine if a school, district, and the state are reaching the intermediate goals, or in other words, attaining AYP.

The No Child Left Behind Act applies to all schools in the United States. Every school is assessed to determine if it is making AYP as defined by federal law, and AYP must be a part of a state's accountability plan. All schools are subject to being labeled as "failing schools" for not making AYP; however, only Title 1 schools are subject to the federal sanctions detailed in No Child Left Behind (Georgia Department of Education, 2004). Some of the assessments used to calculate AYP in schools use results of the CRCTs, the Georgia High School Graduation Test (GHS GT), and the Georgia Alternative Assessment (GAA) in reading, language arts, and mathematics. In the school year 2007-2008, science will be added to this list. If a group fails to make AYP for two or more consecutive years in the same subject, it is placed on a Needs Improvement List and must offer students the opportunity to transfer to a higher performing school within the district. If a school fails to make AYP for three or more consecutive years, low-performing students in the school are eligible to transfer to a school that has made AYP (Georgia Department of Education, 2004). Schools that do not make AYP are labeled as failing or underperforming

schools. This classification impacts the states, school districts, administrators, teachers, parents, and students. It is important for administrators to have an indication of how students will score on standardized achievement tests based on classroom performance and test scores.

Results of Standardized Testing

There are discrepancies between student classroom performance and standardized test performance in Georgia middle schools. Test scores consistently rank low in relation to other states in the nation. Black middle school students in Georgia are scoring below basic in the core subjects of language arts and math. These results leave students at a disadvantage when they prepare for higher education and success in the workplace. In essence, more Asian and White students are scoring in the proficient and advanced range and more Black and Hispanic students in the basic range. Data gathered from an analysis of 2004 CRCT test scores of seventh and eighth grade students in Georgia show that more students in language arts and math did not meet standards than in any other subject. Over half (50.6%) of all students enrolled in public middle schools in Georgia are minority (Black and Hispanic) students (Georgia Department of Education, 2004). When comparing by race, 33% of these students did not meet standards whereas only 13% of White students did not meet standards. All middle school students in Georgia should reflect success in achieving standards.

The AYP definition requires that performance goals be established for all students and disaggregated by subgroups such as race and ethnicity. With the changing demographics in Georgia and in the influx of Hispanic students, principals in Georgia need strategies that will help them raise the expectations

and results of all students.

Uses and Misuses of Standardized Testing

Emphasis on standardized tests may have an effect on teachers' instructional planning, instructional practices, and curriculum, especially in schools serving students with mostly economically disadvantaged backgrounds (Louis, 2000). According to Louis, these students are usually in the south and southwest and are Hispanic and Black. Students of color are almost always over-represented among students who are not promoted or are in remedial classes on the basis of standardized test scores. Many standardized tests, particularly the CRCT, determine whether students in the eighth grade will be promoted or retained. Yet, Berndt and Miller (1990) stated that the use of standardized tests produces no lasting educational benefits. Furthermore, researchers have found that retaining students in the same grade creates major management problems in the classroom, is extremely expensive for the school system, and dramatically increases the likelihood that the retained student will eventually drop out of school (Maclver & Epstein, 1993). Black males are disproportionately represented among those who are held back. As Maclver and Epstein have noted, schools that serve low-income and minority students are less likely to offer extensive remedial programs, advanced courses, or instruction that promotes active or higher-order learning. National Assessment of Educational Progress (NAEP) data show that on a national level minority eighth-grade students made progress in the 1970s and early 1980s, and that there was some narrowing of a long-standing ethnic achievement gap at this grade level. However, the gap widened again in the 1990s and continues to do so with dire consequences, not

only for minority students but especially for low-income students (Schmidt, 1996). Low-income and minority students disproportionately attend schools that lack strong curricula and well-prepared teachers (Mizelle, 2000; Schmidt, 1996).

A recent study of middle grade student achievement in fourteen southern states documented similar patterns. The data showed a wide gap between the performance of students in the highest and lowest quartiles and showed a wide gap between the performance of White and Black students in reading, mathematics, and science. Students performing in the lowest quartile tend to receive less academic guidance than their high-achieving peers; they also face lower expectations from their teachers. It should be noted that these teachers tend to score lower on various indicators of pedagogical effectiveness and personal efficacy than teachers of students performing at higher levels.

Other measures should be taken to ensure that students receive a quality education in addition to a concentration on standardized test scores. It is important to establish what middle school administrators and teachers have found to be successful in motivating students to learn, achieve in the classroom, and do well on standardized tests.

An important aspect of middle grades reform strategies involves the changing nature of curriculum and instruction. Evidence relates curriculum to student outcomes and achievement. This evidence shows that a demanding curriculum has intellectual and practical benefits for students of all backgrounds, races and ethnicities (Argys, 1996; Bloom, 2001; Gamoran & Hannigan, 2000; Hallinan & Kubitschek, 1999; McPartland & Schneider, 1996; Schmidt, 1983; Sebring, 1987; Walberg and Shanahan, 1983). A substantial amount of research

supports the importance of rigorous curriculum and quality teachers as a means to improving students' academic achievement. A number of studies at the high school level show that students of all backgrounds tend to benefit academically from a more rigorous curriculum (Nybert & McMillin, 1997).

The study of algebra appears to serve as a gatekeeper to the college preparatory track. Students who take algebra by the eighth grade are far more likely to take calculus in high school and pursue higher education than those who do not (Riley, 1997). Gamoran and Hannigan (2000), stated that taking algebra seems to produce almost as much achievement gain for low-achieving students as for their high-achieving peers. Results are especially promising when average students take high-level classes. Conversely, placing students in lower-level mathematics has never been shown to be beneficial (Hoffer, 1992). This suggests that accelerated curriculum could make a difference for many middle grades students. The movie *Stand and Deliver* is the saga of real-life heroes who are determined to conquer a standardized calculus test. The movie chronicles the experiences of a math teacher, James Escalante, who is teaching inner city Hispanic students with difficulties in math. The teacher accelerates their curriculum, is creative with his delivery, and uses real life experiences to help students excel and progress from algebra to calculus. He refuses to write off these inner city students as underachievers and conducts after-school tutorials, summer school classes, and extended practice sessions. Using these techniques, the teacher helps the majority of students score high and demonstrate proficiency on the Advanced Placement Calculus Exam, which is a quality benchmark of a standardized test.

This movie helps to demonstrate that standardized tests narrow the curriculum by encouraging a "teach to the test" approach in the classroom. Education is of best value when students approach topics from a variety of perspectives, using different learning styles, over extended periods of time (Mizelle, 1997). However, many high-stakes tests rely upon multiple-choice questions and ask students to interpret reading passages unrelated to larger themes or units. There are certain curricula that are totally unrelated to test items on the CRCT or the Iowa Test of Basic Skills (Kahle, 2000). Passing the reading comprehension section of a test does not mean students are able to make meaning of literature, or connect reading assignments to other parts of a course such as discussion and writing. Test preparation and teaching to the test are far more likely to dominate teaching in high-poverty schools than in affluent ones, and high-poverty schools hire a larger number of uncertified and inexperienced teachers who tend to focus exclusively on test preparation (Kahle, 2000).

The degree of attention now paid to curriculum standards and accountability in education has increased from past years, and the standards movement has had some influence on the middle grades (Lee, 1998). However, the degree to which standards have impacted day-to-day life in middle grades classrooms and schools is less clear, making it difficult to measure their overall impact (Lee, 1998). Currently, 32 states have clear and specific standards in language arts for the middle grades; 46 states implemented mathematics and science standards; and 26 states have social studies standards (Lee, 1998). To determine whether or not students are meeting these standards, some states have developed criterion-referenced assessments aligned to state standards for

the middle grades. Forty-five states have language arts assessments, 40 have mathematics assessments, 21 have science assessments, and 16 have social studies assessments. Kahle (2000) examined standards-based teaching practices and their effectiveness for urban Black seventh and eighth grade science students. He found that a standards-based curriculum had small but positive effects on achievement and attitudes, especially for boys. He also found that certain professional development activities predicted teachers' use of the standards-based model. However, at this point it cannot be said whether these findings have any relevance beyond the middle grades.

In a longitudinal study of middle schools in Georgia, researchers found that efforts to create a highly supportive, personally engaging, "communitarian" school climate had no positive effect on mathematics achievement or class attendance (Mizelle, 1997). However, schools that created a climate where student engagement in intellectual tasks was emphasized, rather than placing emphasis on personal relationships, did see gains in mathematics achievement (Mizelle, 1997). Phillips (1997) found that eighth-grade student attendance was significantly better at schools with the following traits: teachers expected most students to graduate from high school; greater numbers of students were enrolled in algebra; and students were required to do a greater amount of homework.

It is important to determine if there is a correlation between student classroom productivity and student test scores. Administrators need a battery of information to make decisions about curriculum, whether or not the students' experience in the classroom is an accurate predictor of what they know (Mizelle,

1997). Are teachers' assessments accurate? What strategies are being used to improve test scores when there is incongruence with student achievement in the classroom? This information is valuable for administrators in ensuring that their school makes AYP and that student achievement is enhanced during this era of standardized testing. According to Schmidt (1996), student success can be ensured by using flexible grouping within the class to maximize resources and by placing an increased emphasis on basic skill instruction, drill, and recitation. Other helpful solutions should come about as a result of further research in this area. In addition to using varied learning styles to teach basic reading, writing, and arithmetic, raising standards should be the goal.

Statement of the Problem

All stakeholders in public education—students, parents, teachers, and administrators—have a vested interest in results of standardized tests such as the CRCT. This test affects students and teachers in the public school systems in Georgia by linking the score on one set of tests to grade promotion. There is an emphasis for every classroom in the nation to meet performance standards. If a school does not grade satisfactorily on this test (which uses performance standards to gauge student progression and learning), it receives a grade of failing and is placed on a Needs Improvement List. Therefore, it is important to examine strategies middle school principals use to improve student test scores when they see a discrepancy between student achievement in the classroom and scores on standardized tests. Information regarding teacher evaluations of student achievement and strategies middle school principals use when there is a difference in scores and classroom performance can be useful in identifying

curricular weakness and instructional inconsistencies, targeting students in need of additional support, and ensuring that schools don't end up on the Needs Improvement List.

Research Questions

The unknown elements in this study are what effective strategies are used by middle school administrators to improve test scores and whether students' achievement in the classroom is consistent with their standardized test scores. Is there any correlation between the two, is it favorable or unfavorable, and does it provide administrators with information to enhance students' education?

The overarching question is:

How do Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing?

Specific questions are:

1. What strategies do middle school principals use when they identify there is a discrepancy between classroom performance and standardized test scores?
2. What strategies do middle school principals employ to help teachers develop various teaching strategies to enhance student achievement?
3. What strategies do middle school principals employ to work with teachers in the school's community to help all students to achieve?

Significance of the Study

There has been limited research on the strategies middle school principals use to maintain acceptable standardized test scores and how they work with teachers to enhance student achievement. This research can be used by middle school principals and school administrations to make decisions, enact programs,

and provide solutions to ensure student success in the classroom and on standardized tests. In the era of standardized testing accountability, administrators need information so their schools and districts make AYP according to the No Child Left Behind Act.

This study is of significance to the researcher, who is an administrator at a middle school that is accountable for the academic success of its students. The study is important to policy-makers, administrators, teachers, students and parents to identify strategies that could be used to improve the quality of education in each district, and maintain acceptable standardized test scores. Under the No Child Left Behind Act, the school must meet certain standards. Whether or not these standards are met is determined by how well students do on the standardized CRCT. Schools are graded based on their performance on this standardized test, and administrators are expected to close any achievement gaps and to keep their schools off the Needs Improvement List. This study was also significant to the researcher because standardized testing has not been accepted and perceived positively by educational stakeholders in Georgia. The researcher hopes to use the results of this study to provide helpful solutions for administrators to use with teachers in preparing students for standardized tests and to erase skepticism, negative perceptions, and fear of these tests.

Procedures

Design

The research design for the study was qualitative in nature. The justification for the use of the qualitative procedure is that the researcher interviewed six Georgia suburban middle school principals and examined their

strategies for improving student test scores and working with teachers to enhance student achievement. These suburban middle school principals were a representative sample of schools that have experienced exceptional test scores and increased student achievement. Structured interview questions about how principals work with teachers was used to collect information. The interview also allowed the researcher to develop school portraits, which gave a sound background of each school. This research method ensured that the research questions are answered accurately.

Populations

The population for this research study included six public suburban middle school principals in the state of Georgia whose schools have had outstanding test scores within the past three years, as identified by the Georgia School Council Institute. Any generalizing from the research can be applied only to the state of Georgia.

Data Collection

To acquire interviews with the selected principals for the study, the researcher prepared a letter to the principals requesting their participation and explaining how this research will be used to impact student achievement and standardized testing. The instrument for the study was a structured, qualitative design interview with open-ended questions. The structured interview consisted of five to ten questions or statements developed by the researcher, which require principals to respond according to the strategies they use to enhance student achievement and how they work with teachers to prepare students for standardized tests. The responses given by participants during the interview

were recorded and transcribed by the researcher; the data was coded. One week later, a follow-up letter and a gift certificate were mailed to participants to thank them for their participation in the study.

Data Analysis

In the research study, data analysis consisted of the researcher comparing the responses to the interview questions and reporting the findings in narrative form. This narrative seeks to give insight through the comparison of successful strategies used by principals of suburban middle schools in Georgia who have had student success in the classroom, have made AYP, and have achieved passing standardized test scores. The researcher also presented a school portraiture of each school involved in the study.

Limitations

This study is designed to examine select Georgia suburban middle school principals' strategies used to improve standardized test scores of students whose achievement on these tests was not consistent with classroom performance. The degree of respondents' accuracy and honesty in discussing the survey items may possibly skew the results. In addition, this study involves respondents selected from suburban middle schools that have the best scores in the state and may not reflect strategies used by respondents in urban or rural areas of Georgia, or by respondents in other states.

Delimitations

First, it is assumed that the appropriate methodology and survey instrument were properly designed to answer the research questions. Second, it is assumed that the selected respondents responded accurately and honestly

during the interview. Lastly, it is assumed that the survey instruments were reliable and valid.

Summary

This new millennium reflects a growing trend toward educational reform. There is accountability for states, school systems, schools, and administrators for the academic success of students. In today's educational climate of No Child Left Behind, there must be an annual measure of student participation and achievement in statewide assessments. Standardized testing is the means by which students and schools are evaluated, and standardized testing is here to stay.

The CRCT is a standardized test given in middle schools that is a performance indicator and a means of evaluating students. This standardized test affects students because if they do poorly they can be retained, placed in remedial classes, or tracked. The test also affects teachers because they shorten their curriculum and tend to teach to the test. There is currently no solid body of evidence that examines how Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing. This study is significant because it examines effective strategies used by middle school principals to work with teachers to heighten student achievement, achieve acceptable standardized test scores, and make AYP.

Six suburban middle school principals in Georgia were interviewed by the researcher for the purpose of this study. The interview consisted of five to ten questions or statements which required the selected principals to respond according to the strategies they use and how they work with teachers to enhance

student achievement. The responses from the interview were gathered, analyzed, and reported in narrative form by the researcher.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this study was to examine how Georgia suburban middle school principals work with teachers to enhance student achievement in this era of standardized testing. There is limited research on how principals improve the test scores of students whose achievement on standardized tests is not consistent with classroom achievement. Therefore, current research gives no clear indication of the knowledge level of suburban middle school principals in Georgia on enhancing student achievement and attaining acceptable standardized test scores. Data was collected through school portraits and through individual interviews with six Georgia suburban middle school principals.

Before starting the process of collecting data, I conducted a review of literature focusing on six primary bodies of literature: (1) history of standardized testing, (2) the advantages of standardized testing, (3) the disadvantages of standardized testing, (4) the No Child Left Behind Act, (5) results of standardized testing, and (6) the importance of middle school.

Several initiatives have been used in the past to improve the education system and ailing schools. In 1975, a growing public concern about the adequacy of the country's public schools emerged. Scores on standardized tests were in decline, and the emphasis and concentration of federal funding was not on education but on social inequalities. In 1983, *A Nation at Risk* captured the attention of parents, the press, and policymakers with warnings that our educational system had failed to provide all children with equal opportunities to learn. Efforts grew in the following months and years to make school reform a

priority by mandating more classroom instructional time, increasing funding to pre-K programs, and using standardized tests to monitor student progress. In 1989, President George H. Bush and the nation's governors agreed to establish national K-12 education standards and assessments which launched the standards-based reform movement. In 1994, President Bill Clinton's goal was to provide a more systematic approach to education at the federal, state, and local levels. During the 2000 election season, Al Gore proposed a plan that would have included national content standards, merit pay for teachers, reduced class sizes, and more rigorous teacher requirements. George W. Bush, having made school reform his showpiece as Texas governor, proposed that the federal government hold states accountable for educational improvement. In Texas, the program he initiated called for students in grades three through eight to be tested each year in reading, math, and writing. High school students were tested in 10th grade and held back until they passed the standardized test. George W. Bush won the election, and the No Child Left Behind Act came into existence. In today's educational climate with the No Child Left Behind Act, there is an even greater emphasis on standardized testing and student achievement. With this in mind, this review of literature has been designed to highlight the most important and overall significant areas of study as it pertains to middle school administrators working with teachers in this era of standardized testing.

History of Standardized Testing

Hoffer (1992) found that the earliest evidence of standardized testing based on merit came from China during the Han dynasty (206 BC to 202 AD). The concept of a state ruled by men of ability and virtue was an outgrowth of

Confucian philosophy. In 1909, the Thorndike Handwriting Scale was the first popular standardized achievement test used in public schools. A wide array of tests soon followed. By the 1930s, most schools in the United States and Canada were using some form of standardized testing. However, the results were hardly ever discussed, parents did not receive the scores, and school-wide results were not published for local newspapers (Perrone, 1991). In the 1950s, a student would have graduated from high school taking approximately three standardized tests; presently, students take between 18 to 21 tests. The volume of testing has an annual growth rate of 10 to 20% (Perrone, 1991). Prior to 1965, standardized tests were not used in early grades because these were considered to be years of growth and development. After 1965, however, standardized tests became rampant with no regard for the age of the student. There were many new federal and state funds available for schools, and "standardized tests were seen as the most inexpensive and easy-to-use measures for meeting the requirements" (Perrone, 1991, p. 51). By the 1980s, 16 states required children to take a standardized test before entering kindergarten. Over the past two decades, the purpose of standardized tests has expanded. Today, standardized tests determine what math program students might be accepted into, if they will be placed in a gifted program, if they are available for special services, and their academic level.

There are two types of standardized tests. Norm-referenced tests rank students to demonstrate achievement differences and are useful for placing students in appropriate courses or for pointing students toward special instructional programs. The Iowa Test of Basic Skills is a norm-referenced

standardized test that measures all students to the same standards. It indicates how well a student did compared to the rest of the testing population. The second type of tests are criterion-referenced tests. They are designed to compare groups of students to groups of other students. They can establish performance levels on specific goals. An example would be the CRCT which measures how well students acquire the skills and knowledge described in a preset curriculum. Multiple-choice tests used to obtain a license or a test in fractions are both examples of this type of testing.

In a study of examination systems, many of the functions include quality assessment and control within school systems, and broad social, political, and economic objectives outside them (Eckstein, 1994). Several countries have made significant changes in their examination systems in order to meet new circumstances and objectives. Changes in educational philosophy and teaching objectives and techniques, changing labor market demands, and changing social and political conditions all contribute to national examinations. This table displays national examinations and country profiles:

Table 1: Country Profiles

<i>Country</i>	<i>Governance</i>	<i>Teacher Involvement</i>	<i>Significance</i>
England	University Boards	distant	university admission
France	regional administrations	close	university admission and employment

Country	Governance	Teacher Involvement	Significance
Germany	minister of each province	close	university admission and employment
Japan	ministry	distant	university admission and employment
United States	private, commercial companies	distant	university admission

No Child Left Behind Act

On January 8, 2002, President Bush signed the No Child Left Behind Act of 2001 that reauthorized the Elementary and Secondary Education Act (ESEA). The No Child Left Behind Act significantly raises expectations for states, local school districts, and schools in that all students will meet or exceed state standards in reading and mathematics within twelve years. No Child Left Behind requires that all states establish academic standards and a state testing system that meet federal requirements (U.S. Department of Education, 2003).

Annual Yearly Progress (AYP) is one of the cornerstones of the No Child Left Behind Act. It is an annual measurement of student participation, achievement of statewide assessments, and other academic indicators. Accountability is key to No Child Left Behind. The state of Georgia, each local school district, each individual school, and each principal is held accountable for the academic success of students. The federal law requires that each state sets

high academic standards and implements an extensive student testing program which is aligned with standards and which measures students' achievement based on the standards (Georgia Department of Education, 2005).

AYP requires schools to meet standards in three areas: test participation for both mathematics and reading/English/language arts; academic performance for both mathematics and reading/English/language arts; and a second indicator. AYP, which comprises a major component of Georgia's Single Statewide Accountability System, holds each local school district and each individual school accountable for academic success. Schools or school districts can make AYP by having a 95% participation rate. Each school as a whole, and all student groups with at least 40 members, must have a participation rate of 95% or above on selected state assessments in reading/language arts and mathematics. In defining AYP, each state sets the minimum levels of improvement—based on student performance on state standardized tests—that school districts and schools must achieve within time frames specified by law in order to meet the 100% proficiency goal. These levels of improvement are known as Annual Measurable Objectives to ensure that all student groups, schools, school districts, and the state as a whole reach this goal by the 2013-2014 school year (Georgia Department of Education, 2005).

AYP is set up to make schools accountable and to help all children learn. In order to highlight the relative achievement levels of certain groups of students and to close achievement gaps, No Child Left Behind requires every school, school district, and state to sort or disaggregate test results by racial/ethnic category, disability, limited English proficiency, and socioeconomic status. When

student performance results on tests are analyzed by various student groupings, gaps in student performance become self-evident. Closing these gaps is the mission of No Child Left Behind and becomes the focus of school improvement initiatives at the school and school district levels.

There are several tests that count toward AYP. Georgia uses the CRCT as the AYP assessment tool for the elementary and middle school grades, the Georgia High School Graduation Test (GHS GT) for high school, and the Georgia Alternate Assessment (GAA) for the most severely cognitively impaired students.

Schools and school districts that do not meet AYP in the same subject for two or more consecutive years are placed on Needs Improvement status with escalating consequences for each successive year. School-level consequences include: school choice, supplemental services, school improvement plan, corrective action plan, and implement restructuring plan. Same subject is defined as two years of not making reading, English/language arts or two years of not making mathematics participation in academic performance or participation. A Needs Improvement school is simply a school that has been identified as needing to improve in specific areas. Needs Improvement schools are not "failing" schools. Schools that do not make AYP for two or more consecutive years in the same subject are in need of improvement or are simply under-performing.

A school or district is removed from the Needs Improvement List in a process that is similar to being identified for improvement under No Child Left Behind. It will take two consecutive years of making AYP for a school or district to move off of the Needs Improvement List. If an identified school or district makes

AYP for one year, it does not proceed to the next level of the school improvement process. Rather, it continues to implement the interventions. If the school makes AYP for only one year and then fails to make AYP the next, it must continue implementing No Child Left Behind's school improvement consequences. These are issues that NCLB address in an attempt to make schools more efficient and consistent in implementing standards.

Criterion-Referenced Competency Test

Georgia law initially required the State Board of Education to contract for the development of criterion-referenced tests designed to measure student achievement of the revised Quality Core Curriculum. In 2001, Georgia law was amended to require the CRCT in grades one through eight in the content areas of reading, language arts, and math, and in grades three through eight in the content areas of science and social studies. The law states that no eighth grade student will be promoted to the next grade if the student does not achieve grade-level proficiency on the eighth grade CRCT in reading and mathematics. Under the state's Promotion, Placement, and Retention Policy, these requirements were implemented for eighth grade students in 2006. This policy also specifies that students who do not perform at grade level shall be retested with appropriate sections of the CRCT and allows for an appeal process.

The CRCT program is the designated assessment tool for federal accountability. Elementary and middle schools are accountable for student achievement as measured by the CRCT (Georgia Department of Education, 2005). The CRCT is designed to measure a student's knowledge of concepts and skills set forth in the state-mandated curriculum. The testing program serves a

dual purpose: first, as a diagnosis of individual student and program strengths and weaknesses related to instruction of the curriculum; second, as a measurement of the quality of education in the state. Assessments and reports yield information on academic achievement at the student, class, local school, district, and state levels. The primary purpose of the CRCT is to provide a valid measure of the quality of educational services provided across the state. Georgia law requires the administration of the CRCT annually to students enrolled in grades one through eight. The Georgia Department of Education determines a state testing window within which each school district has the flexibility to select an eight-day testing window. The CRCT is administered in April and May. Students who do not achieve grade-level proficiency in third grade reading or fifth and eighth grade reading and math are given an opportunity for remediation by their district.

Advantages of Standardized Tests

Advocates of standardized testing assert that it achieves more efficiently and fairly many of the purposes that grading and other traditional assessments procedures were designed to do (Robinson and Craver, 1989). Even critics of standardized testing acknowledge that it has filled a vacuum. As Wiggins (1989, p. 28) observed, "Mass assessment resulted from legitimate concern about the failure of schools to set clear, justifiable, and consistent standards to which it would hold its graduates and teachers accountable."

Standardized testing is currently used to fulfill a number of administrative functions: providing comparative scores for individual students so that placement decisions can be made; indicating a student's strengths or weaknesses so that

he or she may make appropriate decisions regarding a future course of study; and using student scores to assess the effectiveness of teachers, schools, and entire districts (Robinson and Craver, 1989).

Massey (1989) stated that one of the main advantages of standardized testing is its ability to provide assessments that are psychometrically valid and reliable, as well as results that are replicable and can be generalized. Another advantage is aggregation; a well-designed standardized test provides an assessment of an individual's mastery of a domain of knowledge or skill which at some level of aggregation will provide useful information. That is, while individual assessments may not be accurate enough for practical purposes, the mean scores of classes, schools, branches of a company, or other groups may well provide useful information because of the reduction of error accomplished by increasing the sample size.

Another advantage of standardized tests is that they are the same. While some people may score lower on certain tests, these differences will be based on a system. In contrast, scores on subjective tests change significantly according to the person grading them. In the case of college admissions, for example, interviews with prospective students have repeatedly shown to predict later college performance no better than chance, while statistical measures such as prior GPA or SAT scores are much more accurate (Massey, 1989).

Disadvantages of Standardized Tests

Standardized tests are widely used in education, placement, and certification. Their validity, however, has been criticized on several grounds. Standardized tests are also widely criticized as culturally inappropriate for many

groups, both in content and in process. Criticism of content usually centers on the differing relevance of the content to people from different cultures. Michael Wilbon, an anchor on ESPN's "Pardon the Interruption," has stated that "standardized tests value the subcultures in which people come from." This being said, standardized tests aren't a true evaluation of the knowledge level of an individual.

A common criticism of standardized testing programs in schools is that they encourage a "teach to the test" approach. The phrase "test-driven curriculum" (Livingston, Castle, & Nations, 1989) captures the essence of the major controversy surrounding standardized testing. This approach occurs when teachers concentrate on the parts of the curriculum they know will be covered on the test and neglect those that will not. A problem occurs when test scores are used on a comparative basis to determine not only the educational fate of individual students, but also the relative quality of teachers, schools, and school districts. Kohn (2000), a critic of standardized testing, has argued that standardized testing does more harm than good, stating that they "are turning American schools into test prep centers, and they are not a good measure of student or teaching quality" (p. 54). In his article "High-Stakes Testing as Educational Ethnic Cleansing," Kohn argued that few countries use standardized tests for children below high school age or multiple choice tests for students of any age. According to Johnston (1992), each year the average elementary student loses four days of instruction to standardized tests, an upper elementary student loses six days, and a junior or senior high school student loses approximately ten days. These numbers do not reflect the days spent preparing

for the tests, which grow as more tests are added and because instructional time is important, standardized testing is inconsistent with the goals of reform.

Standardized tests also encourage tracking, which sorts students on the basis of their scores on standardized measures; sometimes these tracks follow them throughout their schooling. This is a serious issue considering that non-instructional factors explain most variances among test scores when schools or districts are compared. A study of math results on the 1992 National Assessment of Educational Progress found that four such variables accounted for 89% of differences in state scores (National Center for Educational Statistics, 1998). Norm-referenced tests were never intended to measure quality of learning or teaching. The main objective of these tests was to rank. They are now set up to gauge the quality of a given student, school, or district. When tests are constructed in this manner, active skills that can and should be taught in school—such as writing, speaking, acting, drawing, constructing, and repairing—are automatically relegated to second-class status, which is unfair to students.

No test is good enough to serve as the sole or primary basis for important educational decisions. Readiness tests, used to determine if a child is ready for school, are very inaccurate and encourage the use of overly academic, developmentally inappropriate primary schooling (www.fairtest.org). Screening tests for disabilities are often not adequately validated; that is, it is not proven that they accurately measure for disabilities. They also promote a view of children as having deficits to be corrected, rather than having individual differences and strengths on which to build. Although screening tests are supposed to be used to refer children for further diagnosis, they often are used to

place children in special programs.

Tracking hurts slower students and mostly does not help more advanced students. Tracking occurs when students considered to be bright or college material are placed together into high ability classes and follow an academically demanding, college preparatory curriculum. In contrast, students of lower ability who are labeled as not likely to go to college are grouped together in low ability classes and receive general education and vocational coursework. Oakes, a professor in educational equity at UCLA, has examined inequalities in resources and learning opportunities in U.S. schools. She feels that tracking is detrimental, saying that "placement into low track curriculums often becomes a self-fulfilling prophecy, a cycle of low expectations, fewer opportunities, and poor academic performance" (Oakes, Quartz, Going, Guiton, & Lipton, 1993, pg. 461-480). Extensive research illustrates that in every aspect of what comprises a quality education, students in lower tracks typically receive less than those in higher tracks and gifted programs. Among the most consequential effects of homogeneous grouping is that it masks the problem of teaching a group of 20 to 35 people. Not all students, even when grouped according to supposed similarities, will benefit from a single set of academic tasks, materials, and procedures. Oakes states that "effective instruction always requires a variety of teaching strategies, and the use of multiple criteria for success and rewards benefits all students" (p.3). When instruction fails, the problem is too often attributed to the child or a wrong tracking placement.

Test content is a poor basis for determining curriculum content, and teaching methods based on the test are harmful. Hilliard (1988), professor of

urban education at Georgia State University and a proponent of moving beyond standards, has said that what is needed is honest school improvement that acknowledges both high standards and high quality of school input. Hilliard stated, "The standards movement as it is now progressing at the national and state level is half the solution to the problem. To establish the standards of output without having standards of input is a travesty" (pg. 145-147). He feels that quality instruction, not testing, is the key to reform. Darling-Hammond, professor of education at Stanford University, focuses most of her research, teaching, and policy interests on school restructuring and educational equity. She has stated that "the standards-based reform movement has led to increased emphasis on tests, coupled with rewards and sanctions, as the basis for accountability, but these strategies have unintended consequences that undermine access to education for low-achieving students rather than enhancing it" (2000, p. 3). All students should have equal access to education and should be afforded every opportunity to learn. Darling-Hammond's research indicates that states and districts that focus on broader notions of accountability—such as investments in teacher knowledge and skill, organization of schools to support teacher and student learning, and systems of assessment that drive curriculum reform and teaching improvements—are more successful.

According to Haberman (1995), author of *Star Teachers of Children of Poverty*, successful schools share a number of attributes. These attributes include good leadership, a common vision that prioritizes a climate of learning, teachers who use best practices, an effective accountability system, and parent involvement. He bases his research on 1,000 interviews with members of the

teaching profession and draws sobering conclusions after observing 200 failing school districts: working conditions in schools will most likely worsen rather than improve, principals will most likely not experience greater success, and transformers seeking to change the culture of schools will not create learning communities. He states that effective schools in every failing district have created learning communities that function to some degree, and that learning communities build school culture and maintain an environment intended for success. Strategies for changing school culture that have consistently failed in the past have nonexistent learning communities.

Results of Standardized Testing

Futrell has noted that "students from low-income and minority-group backgrounds are more likely to be retained in grade, placed in a lower track, or put in special or remedial education programs when it is not necessary as a result of standardized testing" (Futrell & Rotberg, 2002, p. 38). These students are more likely to be given a watered-down curriculum based heavily on drill and test practices, ensuring that they will fall further behind their peers. On the other hand, children from White and middle- and upper-income backgrounds are more likely to be placed in gifted and college preparatory programs where they are challenged to read, explore, investigate, think, and progress rapidly (Rottenburg & Smith, 1990). Research on accelerating instruction supports the premise that an enriched, accelerated curriculum does more than a low-track, remedial curriculum to enhance the performance of low achievers and students who are at risk of failure (Bloom, Ham, Melton, & O'Brien, 2001).

According to the National Center for Education Statistics (1998), the

performance gaps between rich and poor, and White and minority students remain wide. High stakes standardized testing in Virginia shows discrepancy between White and minority students. On the Virginia Standards of Learning U.S. History test, which is required for graduation, only 13% of Black students and 23% of Latino students passed, compared to 40% of White students; this was on the second administration, after a year of intense preparation for the test. Similar gaps were found on all tests such as the algebra I test. On this test, 76% of White students passed whereas only 36% of Blacks and 49% of Latinos scored high enough to pass.

Texas is a state with a student population that is half Black and Latino. Minority students' scores on national math and reading assessments outranked those of most other states in 1996 and 1998, and scores for all students on the Texas Assessment of Academic Skills improved for the fourth straight year. Experts agree that Texas high schools have not improved so drastically; rather, minority dropout rates are increasing (Orfield and Wald, 2000).

Since 1983, students in Florida's public colleges have been required to pass the College Level Academic Skills Test (CLAST), a standardized test used to measure the achievement of essential academic skills of college students (www.fairtest.org) to the CRCT, it consists of multiple-choice sections comprised of mathematics, English/language arts, and reading. In 1993-94, 65% of White examinees passed the CLAST, versus 30% of Black, 40% of Latino, and 46% of Asian examinees.

The tables below show the results of eighth grade students who met, didn't meet, and exceeded standards in Georgia on the 2004-2005 CRCT. A clear

discrepancy between subgroups is illustrated.

Figure 1: Results of Standardized Testing

All Students

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
didn't meet 17%	didn't meet 20%	didn't meet 31%
met 32%	met 51%	met 49%
exceeded 51%	exceeded 29%	exceeded 20%

Asian

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
didn't meet 10%	didn't meet 11%	didn't meet 10%
met 24%	met 38%	met 41%
exceeded 66%	exceeded 51%	exceeded 49%

Black

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
didn't meet 24%	didn't meet 27%	didn't meet 44%
met 39%	met 56%	met 47%
exceeded 37%	exceeded 17%	exceeded 9%

Latino

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
didn't meet 32%	didn't meet 37%	didn't meet 43%

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
met 35%	met 48%	met 46%
exceeded 33%	exceeded 15%	exceeded 12%

White

<i>Reading</i>	<i>English/Language Arts</i>	<i>Mathematics</i>
didn't meet 11%	didn't meet 14%	didn't meet 21%
met 26%	met 48%	met 50%
exceeded 64%	exceeded 39%	exceeded 29%

Note. The above racial classifications are taken from the U.S. Census Bureau. www.census.gov/.

Taking algebra in eighth grade is the country's gatekeeper to studying calculus in twelfth grade, a course that currently enrolls about 10% of 17-year-old students with only 4% being Latino and 7% being Black. Nearly all students in Japan study algebra in the eighth grade, compared to fewer than 25% of all U.S. eighth graders (Horn & Nunez, 2000). Studying advanced math in high school has an enormous influence on whether or not a student enrolls in a four-year college and earns a bachelor's degree. Horn and Nunez (2000) reported that students whose parents never attended college more than doubled their chances of enrolling in four-year colleges if they took high school math courses beyond algebra. Similarly, a U.S. Department of Education study (Adelman, 1999) found that taking advanced math in high school was more strongly associated with successful completion of college than any other factor, including high school grade point average and socioeconomic status. Murnane & Levy (1996)

concluded that studying advanced math in high school strongly correlates with future success.

In the movie *Stand and Deliver*, students who take accelerated math classes, starting with algebra, reach unthinkable goals and even go to college. This movie is a dynamic saga of real-life heroes who are determined to conquer the Advanced Placement Calculus Exam. Edward James Olmo plays the role of Jaime Escalante, a math teacher at an East Los Angeles high school. He works with Hispanic students who received poor classroom instruction and have low basic skills and negative attitudes about math. The teacher uses several strategies such as providing quality instruction, extended practice, and accelerating the curriculum. As a result, the students have better attitudes about math, score better on standardized tests, and perform better in the classroom. Even the students with the lowest basic skills make gains and become better math students. Because of the teacher's dedication, commitment, and use of accelerated instruction, all of the students pass the Advanced Placement Exam. His teaching strategies challenge the students to overcome their cultural diversity, and as a result they do well on the standardized exam.

In the movie *Lean On Me*, Morgan Freeman plays the role of Joe Clark, a tough principal who emphasizes discipline and motivates underachieving students. When a school in Paterson, New Jersey has lower-than-average basic skills test scores, it faces the possibility of being taken over by the state. The mayor asks the school superintendent for help, who suggests appointing the controversial Joe Clark as the school principal. When he arrives, he shakes things up by reassigning teachers, tightening discipline, and eliminating the use

of excuses. These methods, although unorthodox and controversial, prove to be successful. It isn't long before many people want him removed, but at the same time he gains the respect of some of the teachers and the students. He turned the school around by using his methods of discipline and by changing the mindset of the students and staff into believing that they could be successful and do well on standardized tests. This story was featured in *Time Magazine* and became a national symbol of "tough love" education.

Standardized testing, in the form of Proposition 48 which was mandated by the NCAA, has played a significant role in college athletics. In the 1980s, graduation rates of student-athletes were low, and there was a belief that many athletes were being exploited. Federal legislation was passed requiring institutions to compile and release graduation rates, and legislation established a core curriculum for which a prospective student-athlete would have to post a minimum grade point average and standardized test score. Critics of the legislation argued that penalizing prospective student-athletes for doing poorly in high school would deny them the opportunity to get an education in the first place. This affected many minority Black athletes, and many coaches felt the legislation was insensitive and prevented them from helping at-risk high school students in their communities. John Thompson, former coach at Georgetown University, has said, "Every sensible person wants standards but you don't establish standards at the risk of totally disregarding and misusing an instrument (standardized tests) as it was intended to be used. You can establish standards in a lot of incorrect ways in our society and say this solves the problem" (1990). He complains that poor minority students were at a disadvantage taking the

"mainstream-oriented" SAT and advocates for individual assessments. According to Thompson, "Some urban schools cater to poor kids, low-income kids, Black and White, and to put everybody on the same playing field is just crazy." John Chaney, former coach at Temple University, also feels that standardized tests exclude students who could make it in college. He and Thompson feel a score is not a perfect predictor of academic performance and sometimes excludes students who actually succeed in college. The two coaches, who are members of the Black Coaches Association, threatened to boycott the 1993 basketball season because of this legislation. They didn't boycott the season, but the coaches got the attention of the NCAA and the federal government.

The Importance of Middle School

One purpose of the middle school concept is to enhance the healthy growth of young adolescents as lifelong learners, ethical and democratic citizens, and increasingly competent, self-sufficient young people who are optimistic about the future (National Middle School Association, 2000). Young people undergo more rapid and profound personal changes between the ages of 10 and 15 than at any other time in their lives. Early adolescence is a period of tremendous variability among youth of the same gender and age (National Middle School Association, 2000). Rates of growth are dissimilar in all areas of their development, and changes occur irregularly. During this period of adolescence, students may enter puberty at different times, and there are differences of maturity and learning. It is difficult to group a specific grade or group because of the tremendous rate of variability among students. Braddock (1990) has stated that race, poverty, and ethnicity may play an important role, and it is important to

recognize that social, emotional, and moral development are intertwined. Achieving academic success is highly dependent upon meeting other developmental needs.

Special programs are in place to help immigrant students with the transition to U.S. schools and to help adapt to the culture. According to M. Suarez-Orozco and C. Suarez-Orozco (2001), immigration experts with the Harvard Graduate School of Education, one-fifth of America's youth are children of immigrants. As of 2000, more than 9% of students enrolled in U.S. public schools were defined as Limited English Proficiency (LEP), the National Clearinghouse for English Language Acquisition reports (2001). The U.S. Department of Education defines LEP students as students whose native language is a language other than English and who are from an environment where a language other than English is dominant. Once enrolled in U.S. schools, these students usually qualify for academic help via an English as a Second Language (ESL) program. While the programs vary across school districts, they consistently involve either classroom help from an ESL tutor or completely separate classes of intensive English instruction in place of other subjects. More than 5 million students are LEP and they bring more than 400 different languages into American classrooms every year. Regions that historically have been lower in diversity (like the South, Midwest, and Northwest) have more immigrants moving in.

Cobb county, in the suburban Atlanta area, is a region that is home to more than 600,000 residents. The quickly developing county has experienced an influx of immigrants throughout the past decade. Since 1987, the number of LEP

students in the county has grown from about 100 to 5,000, according to Cobb county school officials (2001). Of Cobb's 100 public schools, 70 have enough LEP students to receive state funds for an official ESL program.

The time students spend in ESL programs varies, but many students find success. Many teachers make adjustments in the classroom to make ESL students comfortable in their new environment, such as labeling items in the classroom and putting up bulletin boards that represent different cultures. In addition to formal ESL help, many schools offer extra help and tutoring before and after school. There are examples of students such as Luciana, an immigrant from Brazil, who spoke little English but became proficient enough in English to exit the program, make the honor roll, and go on to college (Friedman, 2002).

The success of the No Child Left Behind Act rests on the shoulders of middle grades students, teachers, and administrators. Of the 25 million students tested annually, 14 million (57%) represent young adolescents in grades six through eight. What these students learn in the middle grades affects their chances of success in high school and beyond. Unfortunately, middle school is a time when students develop negative attitudes toward school, self-esteem and academics; when self-concept declines; and when they value academic pursuits less (Murdock, 2000). A study by the Edna McConnell Clark Foundation found that during the pre-adolescent years (ages 11 to 15), most young people begin to form long-range goals for themselves (1999) Low-performing students, denied entrance to magnet schools and special programs that flourish at the middle grades level, are put into classrooms that have low expectations and teaching. Expectations that that they won't be as successful academically as gifted

students, and aren't expected to participate in special projects and extracurriculars such as the academic bowl or the science fair. These students fall behind, and dropping out, depression, and drugs may become prominent in a student's life.

Research suggests that certain direct influences can impact student achievement. Numerous researchers have shown that high motivation in middle school students relates to teachers who know, support, challenge, and encourage them to act independently (Anderman, Hodge, & Murdock, 2000). Van de Grift and Houtveen (1999) concluded that the weak relationship between leadership and student achievement was due to the influence of other school factors such as quality of curriculum, amount of instruction time, attentiveness of pupils, opportunities to learn, and capacities of teachers. They found that efficient and effective schools involved more teacher-student interaction and more small group learning. Students in these settings perceived their learning environment and teachers more positively than students in other settings. Research consistently emphasizes the need for stronger instruction and administrative measures. Middle grade students would benefit from taking more rigorous courses with well-prepared teachers to have success in high school, college, and the working world.

Summary

Standardized testing was designed to provide information regarding individual student achievement and ability, but is now being used as the measuring stick for evaluating the success of students, teachers, schools, districts, and states. With important decisions resting on the results of

standardized test scores, it is important to know how well the scores reflect the quality of learning and achievement. It is also important to consider whether student performance on standardized tests reflects accurate interpretations and results in the best teaching practices.

Researchers have shown that there are many advantages and disadvantages associated with standardized testing. The greatest benefit is that it establishes a clear standard of objectives, which is the main tool that drives the No Child Left Behind Act. Perceived disadvantages of standardized testing include cultural insensitivity, tracking, and a teach to the test approach. Both sides have valid arguments about the use of standardized testing and its affect on students, but standardized testing is federal law and is here to stay.

The results of standardized testing, as previously stated in the research, show a discrepancy between White and minority students. Minority students can be tracked, placed in remedial programs without accelerated instruction, and not challenged. Standardized test scores in several states reflect this discrepancy between Black, Hispanic, and White students, with algebra being one of the subjects with a significant gap. All students that demonstrate proficiency in algebra have a better chance of taking advanced math in high school and attending college.

Lastly, according to the review of literature, middle school is important developmentally in the life of adolescents. Student performance on standardized tests can deny entrance to special programs or magnet schools, or place students in a slow, undemanding curriculum. Since achievement in middle school often determines success in high school and college, it is important for students

in middle school to be taught a quality curriculum, challenged, and given opportunities to learn. Teaching should reflect achievement in the classroom as well as on standardized tests. This can be achieved largely through teachers working together, sharing ideas, and developing educational plans for students.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine strategies used by six Georgia suburban middle school principals who have worked successfully with teachers to enhance student achievement in this era of standardized testing. This chapter presents research questions, research design, procedures for data collection, data analysis, and data representation. The chapter focuses on strategies that have been successful in enhancing student achievement and maintaining acceptable standardized test scores as defined by the No Child Left Behind Act. The framework represents how administrators in middle school can enhance student learning and prepare students for standardized testing.

Research Questions

Six Georgia suburban middle school principals were interviewed and tape recorded in an attempt to identify the strategies used by these administrators and the teachers who work with them to enhance student achievement. Research questions guided the study, and the research design was qualitative in nature and focused on one overarching question and three research questions.

The overarching question is:

How do Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing?

Specific research questions are:

1. What strategies do middle school principals use when they identify that there is a discrepancy between classroom performance and standardized test scores?

2. What do middle school principals do to help teachers develop various teaching strategies that enhance student achievement?
3. What do middle school principals do to work with teachers in the school's community to help all students to achieve?

The researcher studied the strategies used by six suburban middle school principals in Georgia whose schools have the following two traits: students have consistently done well on standardized tests, and student performance in the classroom is consistent with performance on standardized tests. I attempted to distinguish if the strategies used by the six Georgia suburban middle schools are similar or different, and I explore why these strategies have been successful in helping students take standardized tests and perform well in the classroom.

Research Design

The research design for the study is qualitative in nature since it is descriptive and exploratory. The method of gathering the data was in-depth interviewing. Marshall and Rossman (1999) indicate that qualitative researchers rely quite extensively on in-depth interviewing, and qualitative in-depth interviews are much more like conversations with predetermined response categories. Interviews are also useful in gathering large amounts of data quickly. I interviewed six Georgia suburban middle school principals to determine how they work with teachers to enhance student achievement in this era of standardized testing. I used structured interview questions to generate responses that allowed me to understand and capture the interviewees' points of view (Patton, 2002). I took the interviewees' responses and illustrated the findings through the use of narrative summaries. I also developed school portraits, which provided

background information on the six schools where the interviewees work. Information presented in the schools' portraits included: demographics, location, AYP status, and standardized test scores.

Prior to participating in the interview, the interviewees received a letter from the researcher to inform them of the purpose of the study and to provide them with an explanation of the interview process. During a structured interview, the researcher will ask each principal the same set of questions in the same order (Fontana & Frey, 1998). According to Marshall & Rossman (1999), "The process of preserving the data and meanings on tape and the combined transcription and preliminary analysis greatly increased the efficiency of data analysis" (p. 149). The interview tapes were transcribed by the researcher to gain a better understanding of the interviewees (Seidman, 1998).

Participant Selection

The participants in the study were six principals representing schools whose scores on the CRCT have been consistently above average when compared to other middle schools in the state of Georgia, as identified by the Georgia School Council and Georgia Department of Education. Each principal in the research study represented one of the following public middle schools: Copeland Middle, Solid Rock Middle, Alpha Middle, Harris Middle, Washington Middle, and Justice Middle. These middle schools encompass grades six through eight. Generalizability from the research study can be applied only to the six suburban Georgia middle school principals.

Any study involving human subjects requires Institutional Review Board (IRB) approval. I submitted an application to the IRB at Georgia Southern

University. The application contained the researcher's assurance statement regarding ethical practices, including confidentiality, in conducting research. The interview questions were also submitted to the IRB for consideration and approval.

Data Collection Methods

The data collection methods included school demographics and structured interviews with the selected principals. The study explored how six Georgia suburban middle school principals who are employed by the Fantasy County and Wallace County School Systems work with teachers to enhance student achievement in this era of standardized testing and accountability.

Permission from the participants was obtained before any data was collected, and the information gathered remained confidential throughout the study. Through the use of qualitative interviews, the researcher can reconstruct events and understand experiences (Rubin & Rubin, 2005). The instrument for the proposed research study was a structured interview developed by me. I interviewed the principals with the use of a tape recorder. The majority of qualitative researchers depend on audiotapes, which will be transcribed verbatim and analyzed at a later date by the researcher (Easton, McComish, & Greenberg, 2000).

The interview consisted of seven open-ended questions that required the six Georgia suburban middle school principals to give precise statements related to how they work with teachers to enhance student achievement in their school and help students prepare for the CRCT. I interviewed each principal at his or her respective school for one hour, and the responses provided by the respondents

were tape recorded and transcribed at a later date. After two weeks, I sent a thank you letter to the interviewees for participating in the interview.

Role of the Researcher

I am currently employed as an assistant principal at Flat Rock Middle School, a suburban middle school in the Fayette County School System. Prior to the appointment as assistant principal, I was an employee of a suburban Dekalb County middle school. While working as an administrator in the middle school setting, I've had an opportunity to see the emphasis placed on standardized testing and student achievement. My role was to schedule the times and dates for the selected participants to be interviewed. I interviewed six Georgia suburban middle school principals to determine how they work with teachers to enhance student achievement in this era of standardized testing and increased accountability. I was responsible for the information given pertaining to the interview questions. Once the interviews were complete, I transcribed the information and presented it in Chapter Four.

Structured Interviews

Structured interview questions were developed by the researcher to assess suburban middle school principals' strategies when working with teachers to enhance student achievement. The interview questions are unchanged throughout the interview process (Glesne & Peshkin, 1992). The data gathering instrument is the researcher, whose listening, observing, and understanding skills are critical (Rubin & Rubin, 2005). During the structured interview, I presented seven interview questions to the principals to assess their strategies of working with teachers to enhance student achievement in this era of standardized testing.

The most important component in collecting qualitative data is listening skills, which is the most difficult to learn (Dilley, 2000). Immersion in the data collecting setting allows the researcher to hear, see, and experience reality through the participants (Marshall & Rossman, 1999).

Validity in qualitative research largely depends on how careful the construction of the instrument is to ensure that it measures what it is meant to measure (Patton, 2002). The intent of this study was to measure the perceptions of six Georgia suburban middle school principals on the how they work with teachers to enhance student achievement.

After the participants signed the informed consent form, I scheduled and conducted a structured, tape-recorded interview with each principal. An informed consent form is received from the participants after he or she has been truthfully informed about the research they agree to participate in (Fontana & Frey, 1998). To provide a neutral environment, interviews were completed at each individual principal's home school. The interview questions were designed to determine possible bias on how they work with teachers to enhance student achievement in this era of standardized testing.

Possible questions for the principals include but are not limited to (see Interview Instrument):

- What are strategies that teachers implement to help students who are deficient in mathematics and language arts?
- What strategies have teachers implemented to challenge students who are above grade level and are meeting standards?
- How do you manage and direct teachers who have students who score

low on the Criterion-Referenced Competency Test?

- What type of training do you provide for teachers to implement new programs or strategies that have proven to be successful?
- How do you work with teachers to prepare minority students for the CRCT who are below grade level?
- How many of the teachers are teaching in their field, and how many years of teaching experience do they average?
- What do you do when you notice a discrepancy between classroom achievement and standardized test achievement?

I analyzed the tape-recorded interviews and transcriptions to determine whether or not the strategies of the participants contained any similarities or differences that can be compared and contrasted. I also transcribed the responses from a tape recorder and illustrate the findings through the use of summaries, and finally I determined which of the strategies, if any, were similar or different, most effective or least effective, or had a direct impact on student achievement and standardized testing.

Data Management

All of the data collected during the research process by the researcher was stored in a secure location. The only individuals who were allowed access to the information were the researcher and dissertation committee chair. The audiotapes and transcription notes were kept in one location. The data was entered into the computer and stored on the hard drive, the floppy disk, and a CD, and a hard copy of the information was also stored in a secure location.

Data Analysis

The process of data analysis is moving from raw interviews to interpretations that are evidence-based and form the foundation for published reports (Rubin & Rubin, 2005). In the proposed research study, descriptive statistics were used by the researcher in comparing and contrasting the responses to the interview questions; the six Georgia suburban middle school principals were also given a report summarizing the findings. The reported information will be shared with the faculty and staff at each school by the principal. The report developed by the researcher also included school portraits of each school represented in the study.

Data Representation

Conclusions were drawn by the researcher to make recommendations for future research in Chapter Five of this document. In Chapter One, the readers are introduced to the context of the study, research purpose, research questions, preview of literature review, limitations of the study, delimitations of the study, significance of the study, and preview of the methodology. In Chapter Two, five bodies of literature related to the researcher's topic are reviewed: (1) History of Standardized Testing, (2) The No Child Left Behind Act, (3) Pros and Cons of Standardized Testing, (4) Importance of Middle School, and (5) Results of Standardized Testing. Chapter Three provides the qualitative and methodological explanation for the research. Data collection that will be illustrated are school demographics and individual interviews of the selected principals. Chapter Four will present the data collected from school demographics and individual interviews. Chapter Five will present the researcher's conclusions about this

research, insights from the data collected, concerns, recommendations for further research, and implications of the study.

Summary

Although research has not determined a direct relationship between administration and student achievement, administration does strongly influence school environmental conditions affecting student growth (Terry, 1999). Classroom experiences represent one area, and classroom teachers strongly motivate students and stimulate their long-term successes. The three research questions and one overarching question were used by the researcher to guide the study. I used the research questions to try to determine how Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing. The design of the research was qualitative because a qualitative study best suits the investigation, allowing the interviewees to respond to the research questions. After receiving approval from IRB at Georgia Southern University, I conducted the interviews.

CHAPTER 4

PRESENTATION OF DATA

Introduction

The purpose of this study was to identify and examine strategies that Georgia middle school principals use to improve students' standardized test scores, and to determine what these principals do when they recognize that a discrepancy exists between actual classroom performance and performance on the test. It is important for principals to have proven strategies to improve and maintain acceptable scores because each school is held accountable for their test results, and student placement is determined by how well students do on the tests. The researcher conducted structured interviews that were tape recorded, kept in a locked safe, and transcribed to analyze the data. The overarching question and three research questions that guided the study were answered by the researcher based on his analysis of the information transcribed from the interviews, and the relationship, if any, to the contemporary literature in the study.

The overarching question was:

How do Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing?

Specific research questions were:

1. What strategies do middle school principals use when they identify that there is a discrepancy between classroom performance and standardized test scores?
2. What do middle school principals do to help teachers to develop various teaching strategies that enhance student achievement?

3. What do middle school principals do to work with teachers in the school's community to help all students to achieve?

Research Design

The research design for the study was qualitative in nature. The researcher used an open-ended interview method to collect information. This method gathers more information from the respondents as opposed to a close-ended survey instrument. The researcher also created portraits of the school research sites and a participant profile of each principal. The researcher interviewed six suburban middle school principals in Georgia at their respective schools on strategies they use to enhance student achievement and maintain acceptable standardized test scores. The six principals located in schools in suburban Atlanta were chosen because they represented a sample of suburban middle schools that have consistently met standards, have good standardized test scores, have made AYP, and have increased student achievement.

Portrait of Researched Schools

The researcher created a portrait of each research site to provide context information. In order to maintain the confidentiality of the schools, school districts, and interviewees, the names of each school and the principals were deleted from the data, and responses were coded. School portraits of each school participating in the study were written to assist the reader in connecting each school to the corresponding principal. Schools were assigned pseudonyms for the purpose of presenting the data.

The six schools within the Fantasy County School System and the Wallace County School System that were involved in the study are Copeland

Middle School, Solid Rock Middle School, Harris Middle School, Justice Middle School, Washington Middle School, and Alpha Middle School. The purpose of the school portraiture was to give the reader an overview of the communities in which each school is located, and to give background knowledge on the educational program of each school. It is through the school portraitures that the reader is able to visualize each school.

Alpha Middle School

Alpha Middle School is a suburban school in the Wallace County, Georgia, School System. The school consists of grades six to eight, and the enrollment of Alpha Middle School is 1,515 with 1,439 regular education students and 76 special education students. The mission of Alpha Middle School, in partnership with parents and the community, is to work collaboratively to establish high standards of learning for all students, to create an environment which engages students in academic rigor, and to prepare all students to be productive citizens of society by providing high quality educational programs and learning experiences in a safe environment.

The student population is 98% Black, 1% White, and 1% multiracial, with 60% of students eligible for the free or reduced lunch and breakfast program. This school has consistently good test scores and has made AYP the past three years. In 2005, 16% of students in the eighth grade exceeded standards in English/language arts, 10% in math, and 39% in reading.

Copeland Middle School

Copeland Middle School is located in a suburban community outside of metro Atlanta in Tyrone, Georgia. Copeland is one of five middle schools in

Fantasy County, and is a National Blue Ribbon School and a Georgia School of Excellence. Copeland serves approximately 975 students in grades six to eight. The mission statement of Copeland Middle School is to make a difference through character building, high standards, individual learning styles, lifelong learning, and diversity, one child at a time.

The student population is 52% White, 39% Black, and 5% Hispanic, with 18% of students eligible for a free or reduced lunch. Copeland has made AYP the past two years. In 2005, 48% of students in the eighth grade exceeded standards in English/language arts, 35% in math, and 67% in reading.

Harris Middle School

Harris Middle School is located in Fantasy, Georgia, which is a suburban city south of Atlanta. Harris Middle School is one of five middle schools in Fantasy County and is a Georgia School of Excellence. Harris Middle School serves approximately 1,011 students in grades six to eight. The mission of Harris Middle School is to empower all students by challenging them to maximize their potential. It is the goal of the faculty and staff to provide a positive learning environment where a variety of academic, social, and self-esteem building opportunities will encourage a productive future for each student.

The student population is 48% White, 36% Black, and 5% Hispanic, with 21% of students eligible for a free or reduced lunch. Harris Middle School has made AYP the past two years. In 2005, 49% of students in the eighth grade exceeded standards in English/language arts, 32% in math, and 67% in reading.

Justice Middle School

Justice Middle School is located in Peach, Georgia, a southern suburb of

Atlanta. The school serves 1,167 students in grades six to eight. The school is known for promoting student achievement and good test scores. The mission of Justice is to provide a wide variety of challenging, student-focused learning opportunities in a safe and nurturing environment that embraces the uniqueness of each student.

The student population is 79% White, 10% Black, and 4% Hispanic, with 8% of students eligible for a free or reduced lunch. The school has made AYP the past three years. In 2005, 55% of students in the eighth grade exceeded standards in English/language arts, 45% in math, and 77% in reading.

Solid Rock Middle School

Solid Rock Middle School is located in Peach, Georgia, a southern suburb of Atlanta. The school serves 1,214 students in grades six to eight. Solid Rock believes that stimulating students to succeed in a dynamic society is important, and the focus of the educational program is to develop individual strengths by making student learning the school's chief priority.

The student population is 83% White, 9% Black, and 3% Hispanic, with 7% of students eligible for a free or reduced lunch. The school has made AYP the past three years. In 2005, 59% of students in the eighth grade exceeded standards in English/language arts, 58% in math, and 80% in reading.

Washington Middle School

Washington Middle School is located in Fantasy, Georgia, which is a suburban city south of Atlanta. The school serves 1,141 students in grades six to eight. Washington Middle School feels that commitment to clear goals and high expectations are vital for attaining a quality education. The school inspires

students to be positive, contributing members of society.

The student population is 82% White, 12% Black, and 2% Hispanic, with 8% of students eligible for a free or reduced lunch. The school has made AYP the past two years and consistently has good test scores. In 2005, 57% of students in the eighth grade exceeded standards in English/language arts, 44% exceeded standards in math, and 76% exceeded standards in reading.

Participant Profile

The principals in the research study were comprised of three men and three women. Two of the men are White and the one is Black; two of the women are White and one is Polynesian. Ted, a White male, has a Specialist degree and is currently working on his Doctorate in school improvement at State University of West Georgia. Ted has been the principal of Justice Middle School for the past five years. During his tenure at the school, they have received numerous awards including the "School of Excellence." He graduated from West Point and has extensive experience in the field of education. Sean, the second White male, is currently in a doctoral program studying educational administration at Georgia Southern University. A former county-level administrator who has been in education for 20 years, he has been principal at Alpha Middle School, a Title One school, for the past three years. He has a very enthusiastic view on education and feels that a student's background should not be a hindrance to their learning. Oatha is a Black male who has been in education for 12 years serving as a teacher, assistant principal, and principal. He received his Masters and Specialist degrees in Education and has served as the principal at Copeland Middle School for the past seven years. During his tenure at Copeland, the school has made

AYP for three consecutive years.

Sharlene, a Polynesian female and a first-year principal at Harris Middle School, has over 10 years of experience in education and has a Specialist degree in Education. She has served as a teacher and assistant principal, and Harris Middle made AYP this year under her leadership. Sandra is a White female who is a veteran principal with 25 years in education serving as a teacher and assistant principal. She has a Specialist degree in Education from Georgia State University and has been at Washington Middle School for eleven years. During her tenure, Washington has made AYP. Len is a White female who has been a principal at Solid Rock Middle School for six years. She has a Specialist degree in Education and has over 24 years in the field of education. She is very passionate about education and is active in involving the community in the education process.

Interview with Principals

In this section responses from each principal's interview are documented. In order for the participants to feel relaxed, they were interviewed at their respective schools. The population for this study consisted of six suburban Georgia middle school principals outside of metro Atlanta. In order to make the interview as comfortable as possible for the participants, the researcher scheduled the interviews around the times that best suited them. With school being out, the majority of the interviews occurred in the morning. Each interview was tape-recorded and transcribed by the researcher. Their responses were organized according to their responses as they related to the interview question. An analysis of their data responses were provided for each interview question

that the researcher asked the participants. To ensure the anonymity of the participants, they were given pseudonyms as indicated previously.

Findings of Principals

Six individual principal's interviews were tape recorded and transcribed from the seven questions that were developed and asked by the researcher.

Interview Question 1: What are strategies that teachers implement to help students who are deficient in language arts and math?

Ted: Well, we look at the level the students are at. We get data, look at scores, their history, and then come up with strategies to help them. We have them take a pretest which provides us with data to do some leveling. At our school, we set up an intervention class for students in which they receive small group instruction that focuses on a student's weakness. Language arts, reading, and math intervention classes are set up based on results from previous CRCT scores. It is also important for teachers to differentiate instruction within the classroom, and modify tests as they determine needs. Other strategies are getting students in the Student Support Team (SST) process. I personally feel that in years to come every child, like exceptional education students, will have an individual education plan.

Sean: We have our students write every week; they are prompted by the teacher. I sincerely believe that writing buys learning. We don't use programs. The best practices and best practice strategies that are used to buy learning are those that include every kid in every content area writing. We teach them the five-step process, prewriting, draft, revision, and the final draft which is done every day and every week. We have great results because our kids scored in the

90th percentile in writing this year. Another strategy is teachers have to provide a template for kids, a graphic organizer to organize their thoughts. Research shows that the disadvantaged kids and kids without much parent support don't get the reading and vocabulary, so we have them use templates that organize their thoughts. Graphic organizers are used for anything that teachers are introducing; it gives kids an idea of what the big picture is. Another strategy that we use is the Age Plus One, where we emphasize to our teachers that you don't talk anymore than their age, minute wise. If they are 12, don't talk anymore than 12 minutes and then maybe one additional minute to go over it. Teachers are encouraged to take a minute to engage them, so they don't talk all the time.

Oatha: We have a reading program set up for those below competency. This is our third year using this program and there has been growth, actually more than a year's worth of growth. I would say about 75 to 80% of growth. We also have a remedial program for language arts and math. In this program, teachers teach at a slower pace because they want to strengthen skills. In this program students aren't necessarily pigeon-holed for their entire academic career and can get out, but this program was created to strengthen areas that a child is weak in, based on data received from the CRCT.

Sharlene: A lot of strategies were already in place when I got the job, and I started in October. I'm still trying to implement some of my ideas and get people to buy in, but we do a lot of daily grammar practice. We have a math remediation class for extra instruction set up like a connection class, and our students practice basic skills on the computer.

Sandra: We have several strategies in place for students in math and reading

that are below grade level. A pretest is given in the fall to determine what the student is struggling in and helps with building a foundation and learning new things. We have what's called the Read 180 program. It is set up where students get a double dose of reading, and in our math program students receive extra help based on the areas that they are deficient in.

Len: First, we identify those kids that are deficient in these areas and make sure each team of teachers knows who these students are. We offer them support and practice materials, teachers take extra time as needed with those students during class time, and before and after school. We use the Read 180 program in which we have seen a gain. With this program they receive a double dose of reading. For students that are deficient in math, they are pulled out of a regular classroom and put into a smaller class. This type of setting allows time to fill in gaps that are missing using the Georgia Performance Standards. We also have a program for students that live in subsidized housing. We go to them and have sessions in the community, in which some kids are bused in. They receive help with homework and work on CRCT prep materials. Another strategy is that we have a class for nine weeks in which students that struggled on the CRCT are identified and put in this class for nine weeks. We also have after school reading and math tutoring.

After analyzing the responses, the researcher found that several strategies have proven to be successful in helping students who are deficient in language arts and math. There was a consensus among principals that if you identify the students who are deficient in language arts and math by looking at previous scores and gathering data, you can better serve them. These students can then

be placed in smaller classes and emphasis and concentration can be placed on their areas of deficiency. Many of the principals used reading programs, math intervention classes, and after school programs. Another principal felt that emphasis on writing and using a graphic organizer was a good strategy. Overall, increased instruction, smaller classes, and emphasis on weak areas were effectively-used strategies.

Interview Question 2: What strategies have teachers implemented to challenge students who are above grade level and meeting standards?

Ted: I really feel like this is an area that we need to focus more on. We do have a gifted program, and we have an honors program for students that don't qualify for gifted classes. We also have an accelerated track for students that excel in math in sixth, seventh, and eighth grades. I encourage teachers to take an effective teaching strategies class; this class teaches middle school teachers how to effectively use differentiated instruction and break students into groups. I really feel that teachers need to become better equipped at working with students that have special needs. Elementary teachers do this all the time.

Sean: We have every kid do a school-wide research project. I feel this is important because it helps kids research things they normally wouldn't be able to do such as read, write, and present. Every kid has to do a research project; it helps kids who are above average to extend to a deeper understanding of what they are doing. They then have to present their PowerPoint, and this has proven to be powerful.

Oatha: Our teachers use differentiated instruction. We do have a gifted program in place. Also, those students that don't qualify for gifted but have shown a

propensity to achieve are placed in gifted classes if they have room, and teachers are open to this.

Sharlene: We do use differentiated instruction. Our teachers assign extra projects, and the interesting part of this is students are given options on what they would like to do. They use rubrics, and teachers are given flexibility with their teaching.

Sandra: Our students have a wide range of abilities, so we try to use a wide range of activities. Teachers extend activities, have students work in pairs and small groups. Not necessarily more work for the students, but an extension of activities.

Len: Well, 30% of our students are identified as gifted, and we have a gifted program in place. Many of our teachers are certified as gifted. We have challenging math classes, and we keep a lot of activities (particularly extra curricular) focused around academics and try to channel kids in this area. We have a science Olympiad program, writing club, book club, math counts team. Our math counts team went to the national competition. But generally I feel that differentiated instruction, varying assignments, and activities help. Extra projects can really help students broaden their knowledge base.

Strategies that teachers implement to challenge students who are above grade level and are meeting standards vary, but the one that stood out was differentiated instruction. Teachers need to be able to artfully and creatively work with students of all levels and challenge them. The gifted program, special projects, and extra curricular programs are strategies used to challenge students who are above grade level and are meeting standards. High levels of

engagement appear to relate positively to higher academic achievement for all populations (Finn, 1999).

Interview Question 3: How do you manage and direct teachers who have students who score low on the Criterion-Referenced Competency Test?

Ted: We use the CRCT to be the primary means for placing students in intervention classes. We also have an intervention program in the summer for our students. Another strategy is that we offer reading at three different levels. You really have to question what standards are. We have had students that have not done well in class, but have met standards on the CRCT. It is a well-kept secret that in social studies if you pass 33% of problems you have met standards, and it differs for each grade level.

Sean: We try to give teachers an opportunity to plan and organize data. It is very important that teachers get extended planning time to look at data of students and develop plans to work with those students. They don't have time before or after school, and the planning time is too short. We expect teachers to teach the Georgia Performance Standards and plan effectively in 60 minutes; in this short planning time, it isn't going to happen. So we totally organize the school where teachers get an additional two hours a day, and we rotate each schedule. Every week it rotates, so teachers have an opportunity to look at data of students that are deficient in certain areas.

Oatha: The Georgia Performance Standards has been implemented and this has caused a teacher paradigm shift. We have to change the mindset of the teacher, talk with the teacher, provide county level support, and find out what are the causes their students score so low. But I really try to look at situations individually

because different circumstances do apply. Staff development classes are always a means of providing help to the teacher.

Sharlene: Ninety percent of students that fail are transient; they didn't go to a Fantasy County elementary school. Starting this fall, we will be starting a Fantasy County 101 class that teaches students what the school expects from them and county expectations as far as behavior, homework, etc. Overall, just put students in the area that they need the most work in. We have more math connections classes with at least five sections. So I think a focus on math is very important, and a lot of students will get that if teachers follow the Georgia Performance Standards.

Sandra: First we identify the students from a pretest and look at previous years' test scores, and teachers make a list of the struggling students. We really try to do proactive things such as get to know the kids, look at test scores, and look for outside factors.

Len: It is good to compare students to see if there are any factors that might have affected scores. You might want to compare classes and see if that could have changed the outcome. I like to go into the classroom, do a walk through. Be visible by doing regular observations that give me an idea of what is going on in that teacher's classroom. I might have a struggling teacher partner up with a mentor, possibly on the same grade level. Give the mentor guidance on how to work with the teacher. We have an excellent county level curriculum department that is very supportive. We can seek help from them for the teacher. You always want to support, not get rid of, the teacher. Staff development is also helpful.

There are several solutions to managing and directing teachers who have

students who score low on the CRCT. Solutions include looking at each situation individually and comparing factors that might have affected score, providing teachers extra planning time, and providing system support. Flowers, Mertens, and Mulhall (2000) stated that there is an overall positive effect when teachers meet often throughout the school year, openly discuss their goals, and plan curricula for a small group of students. It was also suggested that standardized testing standards are lower than classroom standards and vary by grade level, which isn't talked about much.

Interview Question 4: What type of training do you provide for teachers to implement new programs or strategies that have proven to be successful?

Ted: We use the effective teaching strategies program. We encourage teachers to talk, try new, innovative things, and do an assessment of what has been tried. Action research is key; I also like to focus professional development on individual teacher needs. I am a firm believer in professional learning communities and county staff development classes. We also do book studies.

Sean: Again, we organize the school for extended planning which rotates between content areas once a month. This gives [teachers] a chance to do staff development, professional learning, because you want them to focus on additional strategies. Teachers get 10 hours a week to do that. Having the teachers do staff development and professional learning is also important.

Oatha: As a part of Georgia Professional Learning Standards, the unpacking of standards in math and language arts creates a professional learning setting for teachers, and generally the county has been good at providing support.

Sharlene: There is an effective teaching strategies class at the county that

teachers are encouraged to take. Classes such as Love and Logic along with book studies have proven to be helpful. Books that the faculty have read and shared are *Why Do Black Kids Sit Together in the Cafeteria?* and *Framework for Poverty* by Ruby King. These books help teachers work with students from different cultural backgrounds and were part of a training on how you deal with quick cultural change. In our school's improvement plan (that everyone had a hand in writing), we wrote differentiated instruction and use of effective teaching as strategies.

Sandra: Money was spent to purchase materials; we bought the COACH series. This gives teachers tools they need to help them be successful. We pay for them to go to staff development classes in which they can take classes on helping underachieving and gifted students. A lot of our teachers use hands-on manipulatives and we pair experienced teachers with inexperienced teachers.

Len: We use school-based staff development training. There is a concentration on learning focus and implementation of the Georgia Performance Standards. Teachers have received the book *Framework for Understanding Poverty* by Ruby King (1996) which helps them have a better understanding of working with students from all income levels and diverse backgrounds. We also establish professional learning communities, plan and write units together. We also have tried having a day we call "no conference day," which is a day that no conferences are held, which frees up the teachers' time. They have no interruptions so they can get together and plan, look at test scores, the achievement gap, and work to integrate the curriculum.

Based on principals' responses on the types of training provided for teachers

to implement new programs or strategies, they are very similar. Many of the schools use staff development, book studies, and learning communities as ways of sharing information, better understanding children, and trying new and innovative strategies. It was generally agreed upon by all of the principals that you need to provide time for the teachers to plan, write units, and analyze data without interruptions. Hoy and Sabo (1997) found that student achievement increased in middle grades school where teachers and administrators had a strong network of professional and emotional support.

Interview Question 5: How do you work with teachers to prepare minority students for the CRCT, who are below grade level?

Ted: Well, I don't necessarily focus on minorities, but we try to focus on every student that is deficient. The socio-economic level of students and our ESL students are a concern. We break down data every time a report card comes out and see who is where. It's good to identify the core skills and look at developing these skills. Students do an on-line assessment in which they can work on their individual skill level. This program downloads individual student scores into the program and looks at an individual education program for each student based on educational needs. We meet with teachers from our feeder school so we can make a more accurate assessment of what that child needs. We also have a diversity training at the county office in which race and gender have been addressed, and now they will do that with socio-economic status.

Sean: We don't differentiate between minority and other groups. If they failed an assessment, you go back and fix it. I have a firm belief that all kids can learn, we can't assume, and must treat each child the same. You can't assume because

they come from the wrong side of the tracks, or their parents aren't involved in their education. We have to hold these kids to the same standard, but we have to help get them there. Our school is 68% free and reduced lunch, and we scored in the 90th percentile in writing and in the 85th percentile in language arts. It comes down to analyzing the kid, what is the issue, and work on that deficient area and content strand that they don't understand. The kids will respond, and we think that our kids have done that.

Oatha: We address the students as a whole, look at data, break down data into subgroups for analysis. For example, Hispanic and African-American, and work with students that have displayed a weakness in a particular area. Our after school program has also been successful in helping students with homework and providing individualized instruction.

Sharlene: I think that teachers need to understand the type of students we are dealing with today. Look at what we can do at school, and not just focus on homework. I think that it is important for teachers to go through sensitivity training, cultural diversity training, and technology training.

Sandra: To be honest, we try to do the same for everyone below grade level, and we also provide extra training to teachers in the area of diversity. Our minority population is small but growing, and we do have a few ESL students. Our feeder elementary school does a good job in letting us know the areas that these students are weak in so that they can receive enhancement in those areas.

Len: Our school leadership team looked at the achievement gap in hopes of reducing it next year. We identify where gaps are and then put students in the appropriate programs.

Principals had several solutions for working with teachers to prepare minority students who are below grade level for the CRCT. Many principals don't look only at minority students but address any student who is functioning below grade level. Again, principals analyze data, some break it down into subgroups of Hispanic and Black, and then place students into the appropriate programs for help. Another solution was diversity, sensitivity, and technology training for teachers. Researchers and other professionals have shown a link between the quality of teachers and the outcomes demonstrated by students (Darling-Hammond, 1999).

Interview Question 6: How many of the teachers are teaching in their field, and how many years of teaching experience do they average?

Ted: One hundred percent of our teachers are teaching in their field, and they average about 10 to 12 years in experience. I also think that it is important to look at minority hiring because we like to have a good mix. Second career teachers are also a good option because they can apply what they have learned in other areas. I like to look outside of Georgia and Fantasy County so you will have a good mix of people.

Sean: Most of our teachers are teaching in their content area, which is about 90%. I want to get teachers that understand the content and have a good mixture of veterans as well as new teachers. We are a Title 1 school, and it is difficult to keep teachers because of the level of work at Title 1 schools and the level of energy at a Title 1 school. Studies show that teachers stay on an average of three years.

Oatha: One hundred percent of our teachers are teaching in their field, and they

average about 17 years of teaching experience. We do have a mixture of young and old teachers which is good.

Sharlene: One hundred percent of the teachers are in their field. Everyone is highly qualified in their area, and we don't have anyone on a provisional certificate. Fifteen to 17 years of average teaching experience. I like to hire teachers that have been trained in cultural diversity, differentiated instruction, and are familiar with the No Child Left Behind Act and its importance.

Sandra: Our teachers are 100% qualified, and everyone teaching a subject has a concentration in that area. We have five-person teams in which everyone teaches reading. Our teachers average 15 to 20 years of teaching experience.

Len: Our teachers are 100% highly qualified; they average about 15 years teaching experience. We have a seasoned staff. Several staff members have doctorate degrees, and all work in their area of concentration. Also, each one of our teachers can teach reading.

When asked "How many of the teachers at your school are teaching in their field, and how many years of teaching experience do they average?" the answer was standard. Almost all of the principals stated that 100% of their teachers were highly qualified and working in their area of concentration. They averaged from 15 to 20 years of teaching experience. Goldhaber and Brewer (1996) studied twelfth grade students with teachers who had probationary certification, emergency certification, private school certification or no certification in their subject area. They compared these students to students whose teachers had standard certification in their subject area. Results showed that in mathematics, teachers who had a standard certification had a significant positive impact on

student test scores relative to teachers who had either private school certification or no certification in their subject area. Most of the teachers can also teach reading, which two of the principals felt was important. It was concluded that it is beneficial to have a good mixture of veteran and new teachers, teachers that had worked in other areas, and teachers that teach in their area of expertise.

Interview Question 7: What do you do when you notice a discrepancy between student classroom achievement and standardized test achievement?

Ted: Sometimes we question standards, our assessments, the standardized test, and the conditions under which they were given. It can be a combination of things. We get information from teachers to see where students are at. After report cards go out, we have an at-risk meeting with each team and talk about each kid that has failed a class and why. What interventions have they tried? What can they do differently? A complete analysis of each kid. Should we give zeros, or should the lowest grade be a 50 or 60? Are we assessing kids on “well, he didn't do any homework so he failed”? Do grades reflect what they should? It needs to be a paradigm shift for teachers and their philosophy of grading. The Georgia Performance Standards are application-based, and this will help us do a better assessment of classroom achievement and CRCT results.

Sean: We make the percentage of what counts towards grading 60-30-10. Sixty percent of those things that needed or had to be mastered or required kids to get that mastery counted 60% of their grade. Examples would be a benchmark assessment, unit assessment, or a research paper. The 30% category included anything that was working toward that mastery or activities that students were

doing to understand the skill to be mastered; an example would be quizzes. The 10% category for grading is homework, which teachers won't give up on. They required it, and it's a losing battle if you try to take it away from them. Prior to us putting this in place, 71% of the students were making A's and B's in classes but were failing the CRCT. 60-30-10 helped us in that every unit assessment the teachers gave them had to demonstrate mastery. Turning in homework or a notebook used to count 50%, so it was skewed and wasn't addressing the standard that needed to be learned which contributed to the high failure rate. So with the 60-30-10 method we are addressing standards, not just receiving credit for something that was done in their notebook.

Oatha: First, I sit down with the teacher and look at the student's grades. I see where teachers are and if they are in step with the team. It is also good to get in class and see what is going on. I generally ask the teacher, are you differentiating instruction? I look at lesson plans, look at the student's 9-week performance, or have the teacher meet with the team or fellow counterparts. Communication and collaboration are the key.

Sharlene: I pull the teachers in and ask them how are you measuring competency and not just the work being done? What are your expectations? Assessment is very important; there has to be a balance between homework and class work. Homework doesn't need to be graded as heavily because you really don't know who did it. You should look at how a student has mastered a skill or content.

Sandra: First, you look at whether their classroom instruction and objectives are in line with what we are looking for with standardized testing. I look at lesson

plans to see if the teacher is teaching the objectives the child will be tested on. I want to work with the teacher. Also, take a year or two to see if there is a pattern, look at a class of children.

Len: If test achievement is high and classroom achievement is low, it wouldn't be alarming because the CRCT just measures basic competency, and our school offers more than just basic. If classroom achievement is high and test achievement is low, it is a teacher concern. I want to see what is going on with the teacher: is there teaching going on? I conference with the teacher, look at the data, call in resources, set the teacher up with a mentor because I want to do all I can to support and help develop the teacher.

When principals notice a discrepancy between student classroom achievement and standardized test achievement, many principals look at classroom instruction and how competency is being measured. Is it in line with what standardized tests measure? Most principals feel that for grading purposes, homework shouldn't be weighted as heavily. Instead, more emphasis needs to be placed on mastery of content. Communicating, collaborating, and supporting the teachers can influence the outcome of standardized test scores.

Response to Research Questions

One overarching question and three research questions guided this study. The overarching question sought to find out how Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing. The first research question asked what strategies do middle school principals use when they identify there is a discrepancy between classroom performance and standardized test scores. The second research

question asked what middle school principals use to help teachers develop various teaching strategies that enhance student achievement. The third research question asked what do middle school principals do to work with teachers in the school's community to help all students to achieve. The overarching question and three research questions were answered with an analysis of the findings by the researcher for each specific question.

The overarching question was:

- How do Georgia middle school administrators work with teachers to enhance student achievement in this era of standardized testing? *In response to the overarching question, administrators encourage teachers to take staff development classes which teach effective teaching strategies, how to differentiate instruction, and how to implement the new Georgia Performance Standards content. Principals also establish professional learning communities and book study groups at their schools, which help teachers, understand how to work with students from all income levels and diverse backgrounds. Finally, administrators work with teachers by giving them more time to plan, analyze, and interpret data. This allows teachers to better address a student's area of deficiency.*

Specific research questions are as follows:

- What strategies do middle school principals use when they identify there is a discrepancy between classroom performance and standardized test scores? *Overall, principals felt that it was important to see how teachers are assessing and grading the students. More emphasis should be placed on mastery of content and less emphasis should be placed on homework.*

There needs to be a paradigm shift for teachers and their philosophy of grading. Several of the principals felt that it's important to look at classroom instruction and whether the teacher's objectives are in line with what is on the standardized test. Another strategy is to go into the class and observe the teacher, look at lesson plans, have the teacher meet and collaborate with colleagues, and conference with the teacher.

- *What do middle school principals do to help teachers develop various teaching strategies that enhance student achievement? To address this issue, it was discovered that principals establish professional learning settings for teachers in which teachers can pair up and work together, share ideas, and try new teaching strategies. One principal stated that he likes to focus professional development on individual teacher needs, and another principal said she purchased educational materials like the COACH series to help teachers modify their style of teaching. County level support is also used as a strategy where a specialist might come in to work with teachers on new strategies and methods that have proven to be successful.*
- *What do middle school principals do to work with teachers in the community school's to help all students to achieve? I discovered that middle school principals who have programs for students at their school who live in subsidized housing is an effective strategy. Teachers from the school assist with homework and use CRCT prep materials with students in an effort increase competency. Funding is provided to transport students from their homes to local churches and recreation centers in the*

community, and this small setting allows time to fill in the gaps and work on areas of deficiency. I also found that after school programs used at these selected middle schools that provide extended help in language arts and math have proven to be successful in helping students in the community to achieve. Middle school administrators allow their schools to vertical team with feeder schools in the community to ensure success. The elementary school that feeds into the middle school works with the middle school by aligning their curriculum, allowing students to visit the middle school, and teachers from the elementary school meeting with a committee from the middle school to develop an academic plan and appropriately place the student. All of the principals felt that working closely with the administration and teachers from each feeder school in the community helped all students to achieve. Lastly, reaching out to students in the community by making learning accessible and going to them, after school programs at local schools, and working closely with neighboring feeder schools in the community are strategies principals use to help all students to achieve.

Table 2
Schedule of Interviews

Name	Day	Time
Len	06/06/06	9:00 a.m. - 10:00 a.m.
Sandra	06/06/06	1:00 p.m. - 2:00 p.m.
Oatha	06/06/06	3:00 p.m. - 4:00 p.m.
Sharlene	06/07/06	9:00 a.m. - 10:00 a.m.

<i>Name</i>	<i>Day</i>	<i>Time</i>
Ted	06/07/06	11:00 a.m. - 12:00 a.m.
Sean	06/16/06	9:30 a.m. - 10:30 a.m.

Summary

After receiving clearance from the IRB at Georgia Southern University to conduct the research, the researcher started to collect data on how middle school principals work with teachers to enhance student achievement in this era of standardized testing. The data from this research supports this conclusion. All of the participants were located at schools in suburban Atlanta, Georgia. The demographic profile for the study represented a wide range of diversity, experience, and educational background. The sample of six principals was appropriate for the study because it was a representative sample from the total population of suburban middle school principals in Georgia and ensured that the researcher would be able to complete the study in a timely fashion. The interviews were scheduled at a time that best suited the participants. The researcher ensured that the participants would remain comfortable by interviewing them at their school in a familiar environment. The six Georgia middle school principals were each asked seven interview questions. The researcher's role in the study was to schedule the interviews, interview the participants, and tape record and analyze their responses to the interview questions. The analysis of the interview questions was referenced to the literature to show a positive correlation. The study was guided by one overarching question and three research questions that the researcher answered

using the data that were collected and analyzed.

CHAPTER 5

SUMMARY, FINDINGS, RECOMMENDATIONS, IMPLICATIONS, AND CONCLUSIONS

Summary

This chapter is a summary of the study, analysis of the research findings, discussion of research findings, conclusions based on the findings, implications, and recommendations based on the analysis of the data in study. There are seven findings that emerged from the study: (1) Principals identified that staff development and professional learning communities were instrumental for teachers to change their style and method of teaching to ensure achievement in the classroom and on standardized tests. (2) Principals indicated that the way teachers measured competency and assessed students' performance by placing more emphasis on mastery of standards instead of homework was a determining factor on standardized test performance. (3) The CRCT just measures basic competency. Georgia Performance Standards (GPS), which are taught in the classroom, require much more than just basic competency. (4) Principals related that reading programs for students who were deficient in that area helped build a solid foundation of learning, and students who participated in these programs made significant gains within the year. (5) Principals indicated that differentiated instruction played an important role in student achievement and standardized testing. (6) Principals related that it is important for teachers to have enough time to look at data, scores, and the history of students who are deficient so they can plan and place those students in programs and classes that provide additional help. (7) Principals indicated that reaching out to students in the community

through after school programs, transporting students from their homes to local churches or community centers for extended help, and working closely with feeder schools helped students to achieve and be better prepared for standardized tests.

The purpose of this study was to discover how middle school principals work with teachers to enhance student achievement in this era of standardized testing. The study was warranted because the results of standardized testing and student performance in the classroom have serious consequences. Each school is graded based on these results, and the results are available for public viewing. Administrators are evaluated based on how well their schools perform, and student placement is determined by testing scores. Strategies, methods, and programs used by middle school principals to help students achieve is well documented in the related literature.

The population of the study consisted of six suburban Georgia middle school principals. Each of the participants were asked seven interview questions, and the completion rate for the tape-recorded interviews was 100%. Data was collected by the researcher in June 2006 at the participants' respective schools so they would feel comfortable. Visiting each school and personally interviewing the participants enabled the researcher to view the body language, facial expressions, and other gestures made by the participants. The structured interview allowed the researcher to capture richer qualitative data as opposed to capturing random information. That is, the researcher observed body language, facial expressions, and enthusiasm of the participant when discussing the topic. Because the researcher entered the setting and collected observational and

other qualitative data, qualitative researchers rely on themselves as the main collectors of data. The tape-recorded interviews were kept in a secure location and transcribed by the researcher. The data that was transcribed from the tapes was coded to protect the identity of the participants and their respective schools. After the tapes were transcribed the researcher destroyed them. The data was analyzed by the researcher before reporting the findings.

There are several findings from the study that correlate with the literature. This information is important to state officials, politicians, school boards, administrators, teachers, parents, and community stakeholders. The researcher will communicate the findings to these individuals through publications, books, articles, collegiums, staff development programs, and conferences.

Findings

As I interviewed the participants, I discovered that they all felt that additional training for teachers was needed. They felt that staff development classes, professional learning communities, and book study groups would help teachers in implementing new programs or strategies that have proven to be successful (**Finding 1**). Len, the principal at Solid Rock Middle School, stated, "I feel that school-based staff development training helps our teachers have a better understanding of working with students from all income levels and diverse backgrounds" (Chapter Four, p. 75). A direct correlation exists with the overarching research question that highlighted how middle school principals work with teachers to enhance student achievement. By providing professional development that expands and updates content knowledge, middle schools can meet both teachers' and students' needs. Professional development should be

easily accessible for teachers through distance learning opportunities, county office personnel, or through collaborative partnerships with universities.

Successful schools share a number of attributes, one being the manner in which teachers and staff pursue their professional development. "You can't teach what you don't know" is a phrase often applied to teachers who teach content in which they do not possess expertise. Haberman (1995) maintained that the goal of lifelong learning for students is hollow rhetoric unless the school is also a learning community in which teachers demonstrate engagement in meaningful learning activities. In a school learning community, teachers pursue two realms of knowledge: professional development and learning for the sake of learning. When guiding student learning and development, teachers apply the same principles that guide their own learning and development. Students will model the behavior of teachers they respect and who have strong interests and love to learn.

Principals felt that the best way for teachers to measure competency and assess student performance was to place more emphasis on mastery of content instead of on turning in homework. They all felt this was a determining factor on the results of standardized tests (**Finding 2**). This is consistent with the literature and research question number seven which examined what principals do when they notice a discrepancy between student classroom achievement and standardized test achievement. Sharlene, principal at Fantasy Middle School, stated that teachers should not place too much emphasis on homework, but "look at how a student has mastered a skill or content" (Chapter Four, p. 81). There must be a balance between homework and class work. Homework is a

measurement tool that teachers have been using for years, and it's hard for them to stop using that method as a main source of assessment. As Hilliard stated, "We need to connect standards with instruction so that the standards themselves are content-valid, and then we need to connect the assessment instrument to the standards. If that happens, then maybe we can make some moves forward" (1988, p. 15).

Principals reiterated that the CRCT just measures basic competency and that the Georgia Performance Standards (which are taught in each classroom in Georgia) requires students to know more than just basic competency (**Finding 3**). Most principals believe that if test achievement is high and classroom achievement is low, it wouldn't be alarming; but if classroom achievement is high and test achievement is low, it's a teacher concern. It may be a situation where sound teaching is not taking place, and a principal would need to observe the teacher, conference with the teacher, look at lesson plans, or assign the teacher a mentor. Oatha, principal at Copeland Middle School, stated that communication and collaboration are critical in helping and supporting a teacher" (Chapter Four, p. 80).

Principals felt that reading programs for students who were deficient in that area helped to build a solid foundation of learning, and students who participated in these programs made significant gains within the year (**Finding 4**). This is consistent with the literature and the first research question which examines strategies that teachers implement to help students who are deficient in language arts and math. All of the principals agreed on the importance of reading and how it forms the basis for success in other subjects. According to the

National Center for Education Statistics (1998), data comparing students' experiences in the top-third performing schools with those in the bottom-third performing schools indicated that practices associated with the highest levels of reading included reading diverse materials such as literature, magazines, and information books. Students had opportunities to write book reports and to respond to written text with their own writing. At Alpha Middle School, all students were required to do a school-wide research project. This project allowed students to research topics they normally wouldn't be able to do. It benefits students who never have an opportunity to do research, and it also allows students who are above average to develop a deeper understanding of a subject. The principal at Alpha Middle, Sean, stated that students had to think, write, and present, and it proved to be powerful. MacIver and Epstein (1993) found that students who edit, revise, and resubmit their written compositions tend to score higher in reading achievement. These findings suggest that both the content of literacy programs in the middle grades as well as the skills and learning processes used by students will result in higher achievement.

Principals stressed the importance of differentiating instruction for students by varying assignments, activities, and extra projects to broaden students' knowledge base. Students need varied learning activities linked to challenging academic content and opportunities to use new skills and concepts (**Finding 5**). Ted, principal at Justice Middle School, strongly believes that middle school teachers need to know how to effectively use differentiated instruction and break students into groups. He also noted that "teachers need to become better equipped at working with students that have special needs. Elementary teachers

do this all the time" (Chapter Four, p. 70). Sharlene, principal at Fantasy Middle School, feels that students should be given options on what they would like to do. Using different rubrics has been successful at her school. Student skill levels vary greatly in middle school, yet most students are homogeneously grouped. Studies show that the use of problem-solving activities results in higher proficiency scores and reduces students' fears of asking questions in math classes. In a sample of sixth grade math students, the use of manipulatives tended to have a positive effect on achievement scores. Teachers need to be better equipped to reach and challenge each and every student, while not making them feel inadequate or unchallenged. Teachers should serve as diagnosticians, tailoring an individualized teaching plan to every student.

Principals felt that it was important for teachers to have enough time to look at data, scores, and the history of students who are deficient so they can place those students in programs or classes that provide additional help (**Finding 6**). This was consistent with the literature and question three, which asks the participant how he or she manages and directs teachers who have students who score low on the CRCT. If educators don't know a child's history, they don't know how to assess the child. All of the principals wanted their teachers to look at data from previous years which could include scores or grades; a pretest may also be given. It is important to find the level the student is at, then devise effective strategies to assist the student. Ted predicted that schools will eventually move to individual education or academic plans for every student that are similar to existing plans for exceptional education students (Chapter Four, p. 68). When a student's level has been accurately diagnosed, schools can modify tests, offer

support and practice materials, and take extra time as needed during class time or before and after school.

Principals also felt that it was important to extend learning in the community and work closely with local feeder schools in the community to promote achievement (**Finding 7**). Allowing teachers to go out and have sessions in the community helps with filling in the gaps that may be missing in a student's educational development. Len, whose school is a "National Blue Ribbon School" and has consistently made AYP says that teachers going into the community to assist helps prepare students for the CRCT and helps with homework (Chapter Four, p. 71). It was also discovered that there was a positive correlation with student achievement and student attendance in the after school program. All of the principals used vertical teaming at their respective schools where the feeder school worked closely with their school by scheduling visits, aligning their curriculum, and meeting as a committee to determine placement and developing an academic plan that meets that students educational needs. In the literature, Goldhaber and Brewer (2000) found that schools that offered extensive transition programs had significantly lower failure and dropout rates than those that did not offer such programs.

Recommendations

This study helps to expand research on the topic of student achievement and standardized testing, which is currently very limited. The findings suggest that the following recommendations be shared with other educational leaders, county level personnel, and state education officials. The intent of sharing the findings will be to facilitate an improved knowledge and level of implementation of

successful strategies in Georgia. Based on the findings and conclusions of this study, the following recommendations are made. In order to lower the number of failing schools and to increase student achievement, school systems need to continue to invest more time and resources into developing programs that focus on content and mastery, such as the Georgia Performance Standards. This program, which is proving to be effective in raising achievement, is evidence that students need help in the areas they are deficient in. The researcher believes that the State Department of Education, along with school systems statewide, needs to further analyze successful strategies identified by principals in raising student achievement and as defined by the literature. Action research should also be implemented in which new, innovative strategies are tried and assessments of the new strategies are carried out. School systems need the support of the state, which must continue to implement and fund programs that research shows to be successful.

Effective teaching programs need to be further developed so principals have a database of strategies and programs that are consistent in helping teachers modify their style and method of teaching to ensure student congruence between classroom performance and standardized test scores. The way that teachers grade and measure competency can be further explored to ensure what's measured is what's taught. School systems should consider establishing a mandatory grading scale to implement consistency with what is mastered. Research shows that helping teachers focus on mastery and standards is a successful strategy in solving the discrepancy between classroom performance and standardized test scores. There also needs to be consistency in the amount

of time teachers have to collaborate, look at data, and plan for students who are deficient or students who are above grade level. All students—regardless of race, ethnicity, or gender—must have their educational needs met whether they are underprivileged or gifted. All administrators need to recognize that teacher planning time should be used constructively to diagnose and assess student needs. Also, local schools in the community should work closely with their feeder schools to prepare students for transition and developing an individualized educational plan.

Further research to assess both quantitative and qualitative aspects could be conducted with teachers and students to gather their perspectives on strategies that would help raise student achievement and improve standardized test performance. Teachers' perspectives on successful strategies would be useful and would help validate the strategies that have proven to be effective in raising the performance of minority students, students who are deficient in language arts and math, and students who are in jeopardy of failing. Students' perspectives on what they feel motivates them to learn and to feel good about learning also gives insight to enhance student achievement. Additional research is needed that supports the various perspectives of teachers and students as related to achievement and standardized testing. This study should be replicated in another state or multiple states, with findings compared to those found in this study pertaining to Georgia.

Implications

Based on the review of available literature and the research findings of this study, the following implications can be drawn. Student achievement and

performance on standardized test scores determine whether schools make AYP, whether school systems are funded, and whether students pass or fail. Principals need to understand, recognize, and implement effective strategies that are proven to enhance student achievement and maintain acceptable standardized test scores. As a result of the No Child Left Behind Act, scores on the CRCT (given in grades one through eight), will be analyzed yearly to determine if a school, district, and state are reaching the intermediate goals. It is important that states comply by 2014 and that students are on grade level. For Georgia to be in the top tier of states with good standardized tests scores, politicians, educational leaders, and county level officials need to continue to examine what has been successful and implement it in school districts. This may require creativity and an ability to “think outside of the box.” Schools cannot continue to use traditional strategies that don't meet the needs of the struggling student or of the student who exceeds standards.

The short-term implication of the findings is that successful strategies exist for principals to use when working with teachers to enhance student achievement. Principals have seen improvements in deficiency levels when student learning programs, smaller classes, and training for teachers are implemented. There has also been a steady increase each year in the number of schools that are no longer “failing” and have moved off the Needs Improvement List. Long-term implications are that strategies must continue to be developed and used by principals and teachers. The future of the country rests in the hands of the youth, and schools play a critical role in their development. We need academic professionals who continue to research, develop, and implement

strategies that work with youth. Just as technology in the world changes daily, so do the mindsets of the nation's youth. Educational leaders must continue to look for new and improved methods of working with teachers to enhance achievement one child at a time.

Conclusions

Middle school principals have used successful strategies to work with teachers to enhance student achievement in this era of standardized testing. The knowledge level of middle school principals and ways that they implement these strategies were measured by a structured interview and reported in this study. Data were collected and analysis was conducted to determine the perceptions of these principals concerning student achievement. Based on the findings of this study, the following conclusions were drawn. Teachers need training and professional development to better diagnose and aid students whose classroom performance is substandard; teachers can use previous scores to correctly place these students and prepare them for future standardized tests. Many teachers have learned only basic educational methods and haven't been introduced to the current techniques and strategies being used throughout the nation. The ability of students to master content and become familiar with performance standards have shown to increase scores on standardized tests. With Georgia moving from the Quality Core Curriculum objectives to the Georgia Performance Standards, there is more of a focus on language arts and mathematics. Teachers who recognize a deficiency in these areas recommend the students for extended reading and math remediation classes, and these students are put into a smaller class setting which allows time to enhance their learning.

There may be a discrepancy in scores on a standardized test and classroom achievement because the CRCT measures only basic competency, whereas the Georgia Performance Standards measures much more than just basic competency. Principals recognize this difference and are alerted if classroom achievement is high and test achievement is low. They are prepared to work with teachers and to evaluate teachers' lesson plans and individual classes. It was also concluded that reading played a large part in student success in all subjects, and that reading helped build a foundation when learning new things. Research shows that when students received extra reading, students experienced gains and growth within the year.

Student instruction also needs to be differentiated, and teachers should actively engage students by using a wide range of activities and extending these activities to broaden students' knowledge base. Working in small groups and varying assignments was also a strategy teachers found to improve achievement. All students at all levels must receive support because the CRCT doesn't exclude any subgroups or students with a disability. In order for students to receive the necessary support, teachers need time during school to focus on additional strategies. With this time, teachers can develop student support teams, invite the student or parent in for a discussion, and develop a plan to provide reinforcement. Research shows that teachers must be treated as professionals and given extended planning time because they are the most familiar with the student and his or her achievement level.

The research shows that states must continue to use these strategies as a means of addressing student needs during this era of standards-based reform.

This increased emphasis on tests, along with sanctions and rewards, forms the basis for accountability. This relates to findings by Darling-Hammond (2004) that show successful testing outcomes have been secured in states and districts that have focused on broader notions of accountability, including: investments in teacher knowledge and skill; organization of schools to support teacher and student learning; and systems of assessment that drive curriculum reform and teaching improvements.

Educational leaders have an obligation to pursue every means necessary to improve the educational system in Georgia and nationwide, and the No Child Left Behind Act will hold educators accountable to do so. Ongoing research efforts are needed to identify effective practices to enhance student achievement. A systematic agenda to test assumptions supported by research findings needs to be developed and supported by federal, state, and local governments. Principals and teachers should continue to ask questions about teaching and learning and seek answers from their student achievement data. It is well documented that successful schools use data to initiate and continue improvement in classroom practices and to raise student achievement. Teacher study groups should use data and professional research literature to develop recommendations for change in their schools. Each administrator and educator is accountable for the culture of their school. Middle school students cannot wait for the perfect remedy or study. The best evidence currently available should be used in preparing them for high school and the world beyond. Scientific and action research will determine superior teaching, classroom achievement, and consistency on standardized testing. Improving the quality of the nation's

schools in order to meet the demands, challenges, and opportunities of the future will require internal motivation, a collaborative culture, and the continuous cycle of using data to improve education and practice. Data from the Criterion Referenced Competency Test shows that the gap in performance is decreasing, and improvement for minority students is rising. We have to serve all students equally with high expectations. Effective teaching occurs when students are brought up to proficiency with rigorous standards without regard to socio-economic status, race, or ethnicity. When you can't predict success based on these factors, effective teaching and learning has taken place.

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APPENDIX A
INTERVIEW INSTRUMENT

- What are strategies that teachers implement to help students who are deficient in language arts and math?
- What strategies have teachers implemented to challenge students who are above grade level and meeting standards?
- How do you manage and direct teachers who have students who score low on the Criterion-Referenced Competency Test (CRCT)?
- What type of training do you provide for teachers to implement new programs or strategies that have proven to be successful?
- How do you work with teachers to prepare minority students for the CRCT, who are below grade level?
- How many of the teachers are teaching in their field, and how many years of teaching experience do they average?
- What do you do when you notice a discrepancy between student classroom achievement and standardized test achievement?

APPENDIX B
LETTER TO PRINCIPALS

March 3, 2006

Dear Middle School Principal:

My name is Robert C. Minter, and I am an assistant principal at Flat Rock Middle School in the Fayette County School System. I'm also a Doctoral student enrolled at Georgia Southern University. As part of the requirements to finish the Ed.D. degree, I am studying how Georgia middle school principals work with teachers to enhance student achievement in this era of standardized testing.

This letter is to request your assistance in gathering data through the form of a structured interview. I will ask you questions regarding strategies on how you work with teachers to enhance student achievement and make AYP as a result of the No Child Left Behind Act. If you agree to participate in the study, I will tape record and transcribe the information after the interview, and this data will be compared with other schools to see similar strategies or methods that are being used. Once all principals have completed the interview, the data gathered from the study will be included in my dissertation.

If you have any questions about this research project, please call me at (404) 218-7828 or (770) 969-2830 ext. 225. You may also email me at Rbrt1906@aol.com or minter.robert@fcboe.org.

Your participation is greatly appreciated and will improve the quality of my findings. This information will be valuable to middle school administrators, teachers, and school systems.

Respectfully,

Robert C. Minter, Ed.S
Assistant Principal, Flat Rock Middle School