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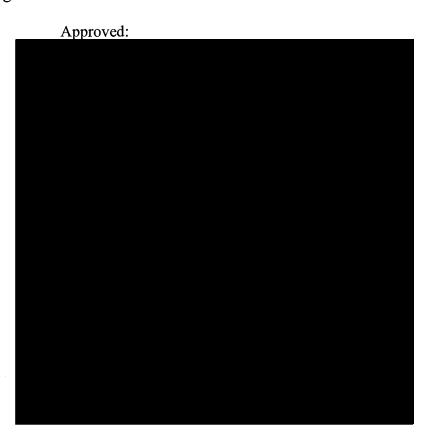
The University of Southern Mississippi

THE EFFECT OF THE MIDDLE SCHOOL CONCEPT ON STUDENT ACHIEVEMENT IN COASTAL MISSISSIPPI MIDDLE LEVEL SCHOOLS

by

Mary Lee Davis

A Dissertation Submitted to the Graduate Studies Office of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Education



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ABSTRACT

THE EFFECT OF THE MIDDLE SCHOOL CONCEPT ON STUDENT ACHIEVEMENT IN COASTAL MISSISSIPPI MIDDLE LEVEL SCHOOLS

by Mary Lee Davis

May 2008

In this study, the researcher examined the effect of the implementation of the middle school concept on student achievement in coastal Mississippi middle level schools with a grade configuration of 6-8. The study was conducted in the fall semester of the 2006-2007 school year; archival data were collected from the Mississippi Department of Education's Web site. There were 15 schools identified as housing grades 6-8; of those 15, participants included 12 coastal Mississippi middle level schools. There was a total of 9 schools identified as implementing the middle school concept, and 6 schools were identified as not implementing the concept; consequently, in an effort to keep all things as equal as possible, this study compared 6 schools identified as implementing the concept and 6 schools as not implementing the concept.

Student achievement data were collected from the Mississippi Curriculum Test administered in 2005 to determine if there was a significant difference between sixth grade academic achievement, seventh grade academic achievement, and eighth grade academic achievement in coastal Mississippi middle level schools (schools with a configuration of grades 6 through 8) where the middle school concept is implemented and those schools where the concept is not implemented.

After testing each of the three hypotheses, it was determined that there was no significant difference in sixth grade academic achievement and eighth grade academic achievement; however, there was a significant difference in student achievement in seventh grade academic achievement in the area of language.

This study was a mixed-method causal comparative study, a qualitative component, which also included interview questions and participants' responses. The participants were two administrators and two teachers from schools where the middle school concept was implemented. The findings of this study indicated that implementation of the middle school concept had a strong impact on student achievement relative to the qualitative component utilized in interviewing selected administrators and teachers. Both administrators and teachers have a strong commitment to meeting the needs of each student and building upon active parental involvement in their schools.

ACKNOWLEDGMENTS

I am eternally grateful to my committee chair, Dr. Ronald Styron, my statistician, Dr. J. T. Johnson, and other committee members, Dr. Portia Hull and Dr. Gaylynn Parker. I salute each of you for your unfailing, constant support, encouragement, advice, guidance, and assistance throughout this process.

A special thanks is extended to the superintendent, assistant superintendent, administrators, and teachers who permitted me to include them in this study. I am truly appreciative to each of them for their willingness to assist me in this endeavor. I extend a heartfelt thanks to my typist for putting everything in its proper form.

I owe a debt of gratitude to my parents, Howard and the late Millie McQuarter Bell; to my siblings, Valery, Charles, Patricia, Felisha, and Catherine; other relatives; friends; and co-workers for their love, inspiration, and support. To my mainstay, my constant supporter, my husband Ulysses, I could not have made it without him. He has been right beside me through it all! Thanks for sacrificing with me to achieve this goal.

Finally, in memory of my mother, I dedicate this degree to you for instilling in us the importance of getting an education and striving to attain our goals and aspirations.

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CHAPTER I

INTRODUCTION

The middle school evolved many years ago as a result of the ineffectiveness of junior high schools in meeting the unique social, emotional, physical, and intellectual needs of adolescents. The alarm was sounded for secondary school programs to be shortened and enriched, thus, the junior high school was established. However, in reality, the junior high school was a mini version of the high school; therefore, it lacked the crucial element of focusing upon the unique learning needs of its students (Lounsbury & Vars, 2003).

Alexander (1968), the "father of the American middle school," defined a middle school as "a school having at least three grades and not more than five grades, and including at least grades six and seven" (p. 1). Across the history of the middle school movement there has been a variety of grade configurations. A more recent national study found that 76% of middle level schools had made the transition to 5-8 or 6-8 configurations and that 45% of those middle level schools made the transition during the 1990s (Valentine, Clark, Irvin, Keefe, & Melton, 1993). In the 2000s, the 6-8 grade configuration is considered the most likely to meet the needs of young adolescents (McEwin, Dickinson, & Jenkins, 1996).

The middle school concept involves having a common group of students who are instructed by a team of teachers. The teachers and students form a "family" unit for building cohesiveness and a sense of belonging. This system allows for flexibility of scheduling and grouping of students and for "extras" such as interdisciplinary units that are not possible under a traditional junior high setting. The middle school concept also encourages parental involvement; moreover, the middle school concept is a school

designed to meet the special needs of students in sixth, seventh, and eighth grade. Most children of this age are entering puberty, a period of rapid growth which marks the end of childhood and the start of physical maturity. Middle schools try to help students understand the physical, social, mental, and emotional changes associated with adolescence (Northwestern State University, 2003).

Similarly, the middle school concept as defined by Hot Springs Middle School (2003) is a way of organizing time, a way that staff works together, and a way of dealing with young adolescents' needs. It lists several advantages of this concept, such as one group of four teachers for each grade—language arts (English), math, science, and social studies—, time for those four teachers to communicate daily, a schedule that allows time to focus on special needs of this age group, freedom to meet with classes, and provides an opportunity to relate subjects to each other.

In 1989, the Carnegie Foundation issued *Turning Points*, its acclaimed report calling for smaller, more cohesive learning communities, cooperative learning between students of varying abilities, more teacher education geared specifically to preadolescents, better connections between communities and schools, and more. It called for replacing the traditional "junior high" concept with the "middle school" philosophy and its recognition that, developmentally and emotionally, these individuals are not just smaller high school students. Thus, many campuses switched mostly to grades 6 through 8 and embraced team approaches to teaching (Flannery, 2007).

Likewise, major founders and organizations have listed key characteristics of middle level schools. For example, in the 1920s, as the junior high school was gaining acceptance, major statements identifying important characteristics of this new institution were put forth by two of the major founders, Leonard Koos (1920) and Thomas Briggs

(1920). Briggs stated that in its essence the junior high school is a device of democracy whereby nurture may cooperate with nature to secure the best results possible for each individual adolescent as well as for society at large. In the 1940s and 1950s, as efforts were being made to bring about the renaissance of the junior high school, the most influential statement was developed by Gruhn and Douglass (1947), who proposed and described six major functions: integration, exploration, guidance, differentiation, socialization, and articulation. Currently, these functions remain as a foundational framework for defining an effective middle level school.

Later, during the 1960s, under the leadership of Alexander, credited as father of the American middle school, a middle school of grades 5-8 or grades 6-8 was advanced as an alternative to the 7-9 junior high school, which was not what Koos (1920) and Briggs (1920) envisioned; consequently, the middle school idea became the focus of a reform movement, especially among those who earlier sought to reform the junior high school. The National Middle School Association (NMSA) published a position paper entitled *This We Believe* which identified a consensus definition of key characteristics.

This document listed the 10 "essential elements of a 'true' middle school" (NMSA, 1982, p. 10): (a) educators knowledgeable about and committed to young adolescents; (b) a balanced curriculum based on student needs, (c) a range of organizational arrangements, (d) varied instructional strategies, (e) a full exploratory program, (f) comprehensive advising and counseling, (g) continuous progress for students, (h) evaluation procedures compatible with the nature of young adolescents, (i) cooperative planning, and (j) positive school climate.

Meanwhile, in 1989, *Turning Points: Preparing American Youth for the 21st Century*, a landmark report, was released by the Council on Adolescent Development of

the Carnegie Corporation of New York; this report presented the following eight major recommendations needed to improve the education of young adolescents (Carnegie Council, 1989): (a) create small communities for learning, (b) teach a core academic program, (c) ensure success for all students, (d) empower teachers and administrators to make decisions about the experiences of middle grade students, (e) staff middle grade schools with teachers who are expert at teaching, (f) improve academic performance through fostering the health and the fitness of young adolescents, (g) re-engage families in the education of young adolescents, and (h) connect schools with communities.

Finally, the most recent definition of the key components or characteristics of a good middle level school appeared in November 1995 when *This We Believe:*Developmentally Responsive Middle Level Schools was released by the National Middle School Association.

Alexander proposed a school designed to meet the specific needs of adolescents; a main focus of these schools was to provide developmentally appropriate education to students (Hodge, 2006). Thus, the educational programs were designed to build the bridge between elementary and high school (Mitchell, 2007b).

The traditional grades, 8-4 (8 depicts grades 1-8 and 4 depicts grades 9-12), and 6-3-3 (6 indicates grades 1-6; 3 indicates grades 7-9; and 3 indicates grades 10-12), did not adequately meet the needs of middle school because they neglected students in the middle grades; therefore, the middle school grade configuration most commonly used is grades 6 through 8. Implementing the middle school concept, a program designed around the unique developmental needs of early adolescents should not only bridge the gap between elementary and high school but should also bring continuity to the educational process. It will adequately serve the physical, social, emotional, cognitive, and moral development

of young adolescents. As a result, junior high schools began to decrease and middle schools began to flourish (Mitchell, 2007b).

According to Lounsbury and Vars (2003), the junior high school replaced the traditional 8-4 pattern with the 6-3-3 plan (stated above) and, more recently, the 5-3-4 (5 represents grades 1-5; 3 represents grades 6-8; and 4 represents grades 9-12) arrangement with the middle school in the center becoming the most common pattern of school organization. The middle school entered the educational arena, overtook, and passed the 7-9 junior high school to become the dominant form of school organization, in little more than 20 years.

Statement of the Problem

The problem examined in this study was student achievement at middle level schools and the programs and practices that may positively influence it.

Significance of the Study

The significance or purpose of this study was to determine what, if any, difference exists in student achievement in coastal Mississippi middle level schools based on whether the middle school concept was implemented. The middle school concept is a concept designed around the unique developmental needs of early adolescents.

Incorporating a qualitative dimension, this study included a case study approach, the interview, to gather pertinent information from administrators and teachers on their perception of the middle school concept and its impact on closing the achievement gap.

This research study on the effect of the middle school concept and student achievement in coastal Mississippi middle level schools was conducted for several reasons. First, it will add to the existing body of knowledge in the field of educating young adolescents. Secondly, it will assist school districts and school leaders in deciding

how to stimulate and further guide the development of knowledge. Thirdly, it will assist school leaders in deciding how to organize and structure middle level schools in a manner that will best meet the unique needs of adolescents. And, finally, it will provide insightful strategies which may impact student achievement.

Research Questions

The following research questions were examined using qualitative research methodology:

- 1. What impact, if any, does implementation of the middle school concept have on student achievement?
- 2. What impact, if any, does middle level certification have on student achievement?
- 3. Does the length of years of implementation of the middle school concept have an effect on student achievement?

Hypotheses

- H1: There will be a statistically significant difference in academic achievement (students' scores on the Mississippi Curriculum Test) of sixth grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.
- H2: There will be a statistically significant difference in academic achievement (students' scores on the MCT) of seventh grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.
- H3: There will be a statistically significant difference in academic achievement (students' scores on the MCT) of eighth grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.

Definition of Terms

The following terms were used repeatedly in this study:

Academic achievement - students' scores on the Mississippi Curriculum Test (MCT).

Adequate Yearly Progress (AYP) - a component of No Child Left Behind (NCLB) legislation that requires public schools and districts to monitor performance (each group of students meets or exceeds state-wide annual objective) or student participation (95% of students enrolled in each group participate in the assessments on which AYP is based and school progress assessments on which AYP is based) and school progress over time beginning the third year.

Advisory programs - programs which consist of small groups of students assigned to an adult for the purpose of developing trusting relationships and discussing young adolescent issues and concerns.

Exploratory programs - programs in which young adolescents spend a part of the school day in elective course offerings, as well as enrolling in self-selected classes according to their interests, curiosities, or hobbies.

Grade-level configuration - an organizational pattern of grade levels contained within a building having at least three grades and not more than five grades, and at least grades 6 and 7. The configuration used for this study was grades 6 through 8, which is also considered the most likely to meet the needs of young adolescents.

Team - a group of teachers who have the same group of students every day and whose classrooms are clustered together in the same wing. The core consists of two to five teachers.

Teaming - an instructional practice in which two or more teachers combine their abilities, energies, interests, enthusiasm, and knowledge of pupils to teach the core academic disciplines to a group of students with a constant, unvarying membership.

Middle level school - schools with a configuration of grades 6 through 8.

Middle school concept - a concept designed around the unique developmental needs of early adolescents (11-14 year olds); it is a bridge between elementary and high school and advocates meeting the specific needs of all children.

Mississippi Curriculum Test (MCT) - a performance-based assessment system used by all public schools in the state of Mississippi. Students in grades 2 through 8 are ranked in one of the four categories (advanced, proficient, minimal, or basic) in reading, language, and math.

No Child Left Behind (NCLB) - the reauthorization of the former Elementary and Secondary Education Act of 1965; all schools must be proficient by the year 2014.

Delimitations

The following delimitations were identified for this study:

- 1. Only coastal Mississippi middle level schools with a grade configuration of six through eight were used.
- 2. Only a percentage of students scoring in the proficient and advanced categories combined on the Mississippi Curriculum Test was measured.

Assumptions

The following assumptions were used for the purpose of this study:

- 1. Data obtained from the Mississippi Department of Education Web site and other Internet sources or sites were the most current and correct.
 - 2. Each participant responded honestly to all interview questions.

3. Schools which implement the middle school concept were correctly identified.

Justification

The purpose of this study was to identify those schools that implement the middle school concept and determine what, if any, effect the middle school concept in coastal Mississippi middle level schools had on student achievement. The researcher examined a percentage of students scoring in the proficient and advanced categories combined on the Mississippi Curriculum Test during the 2005-2006 school year.

Information examined during the interview process led to links that can be added to the existing body of knowledge and enhance students' performance in schools across the state of Mississippi. Additionally, the researcher incorporated a qualitative dimension, a case study, to gather pertinent information for this segment of the study. This section of the study consisted of interviewing selected administrators and teachers.

The middle school concept is an effective middle school program which is designed around the unique developmental needs of early adolescents (11-14 year olds). Because the intellectual, social, physical, and emotional needs of this age group are different from either elementary or high school students, a customized educational program is necessary (Mitchell, 2007c).

Three major elements make up the middle school curriculum: (a) basic skills—the team classes, (b) exploratory classes, and (c) electives. "Basic Skills" consists of language arts, science, mathematics, and social studies. The "Exploratory Classes" components consist of computer keyboarding, computer hardware and components, information skills, and foreign cultures. Physical education, band, choir, orchestra, art, and home economics are the electives (Mitchell, 2007c).

Some positive aspects of the team approach include mobility; movement or travel is easier for students to get back and forth to class on time; team teachers have the same planning period and are able to plan for curriculum integration, interdisciplinary units, and field trips. Communication and support among teachers is greater; parent conferences and other meetings are made easier due to common planning time (Mitchell, 2007c).

According to Thompson and Homestead (2004), during the 30-year history of the middle school movement, educators have been on a quest to establish an appropriate and effective education for young adolescents. Four components of the middle school organization take precedence over the test: grade configuration, interdisciplinary teaming, scheduling, and specialized programs. Moreover, interdisciplinary teaming and 5-8 or 6-8 grade level structures have been the most successful organizational changes brought to middle level schools over the past 30 years.

Similarly, Mizell (1999) asserted that the middle school movement began over 30 years ago as a reaction to junior high schools that did not adequately take into account the development of young adolescents between the ages of 11 and 14. As the movement grew, more and more local systems converted from schools with configurations of grades 7 through 9, or 7 and 8, and adopted schools serving only grades 6 through 8.

CHAPTER II

LITERATURE REVIEW

The review of the literature includes the major themes that were reviewed in this study. The first theme relates to the unique characteristics of the young adolescent. The second theme refers to theories relative to how the adolescent child learns during particular stages and development of life. Thirdly, the researcher discusses the middle school movement as a transitional period from the traditional junior high to a bridge between elementary and high school. Fourth, the implications of student achievement are addressed; and, finally, the research concludes with the advantages and disadvantages of implementing the middle school concept and its effect on student achievement.

Unique Characteristics of the Young Adolescent

Mizell (1999) stated that adolescents are unique; they enter middle school beginning to emerge from childhood, and they leave the eighth grade on the threshold of young adulthood. Developmentally, children move through these years at significantly different rates; they are challenged by the spurts of rapid physical, cognitive, psychological, emotional, and social development.

Eleven to 14 year olds are enduring puberty, a time referred to by educators as early adolescence. Early adolescence involves the most profound physical, emotional, and mental changes that children will ever experience; yet they must undergo another substantial change, transitioning from the elementary school to the secondary school. This in itself can be devastating to many. Recent research has demonstrated that the negative results of the two changes occurring together will include lowered achievement, lowered grade point average (GPA), diminished student leadership behaviors, poor self-concept, and over-reliance on the peer group (Mitchell, 2007a).

Theories of Development

The middle school concept suggests an alternative means of organizing time, a way for staff to work together, and a way of dealing with the needs of young adolescents. Thus, the middle school was established as a school "between" the elementary and high school. The middle school years are indeed critical years in the developmental stages of adolescents; they are also called the transition years because they occur between the stages of adolescence and young adult. An awareness of adolescents' unique characteristics, needs, and stages of development will allow educators to plan and implement the program and practices necessary for exemplary schools.

Much research has been done in the field of education and educating the young adolescent. This research is framed in part based on the work of several theorists, individuals, events, and legislation. The middle school concept has risen to a level of urgency; educators are attempting to find a practice that is consistent in raising the level of student achievement in the middle level schools.

The work of noted theorists such as Piaget, Bruner, Vygostsky, and Landa is essential to this study. There is a common thread among these theories which is relative to children's cognitive development in one phase or another. Piaget, the French psychologist famous for his theories on the stages of cognitive development, believed that children begin to think abstractly (a must-have skill for algebra) some time between 12 and adulthood. By eighth grade, some are there and some are not (Flannery, 2007).

Piaget's third and fourth stages of development refer to his work on genetics; he was primarily interested in how knowledge developed in humans. The third stage is the concrete operational stage from the age of 8-11 in which children learn in a logical manner but depend upon concrete references. In this stage, the child begins to problem

solve and create logical structures that explain his or her physical experiences. The fourth stage of development is the formal operational stage from the age of 11-15 in which the child gains the ability to use higher order thinking skills and combine and classify information (Kearsley, 2006).

Bruner's theory of instruction should address four major aspects: a child's predisposition towards learning, the way a body of knowledge is structured in a way that can be grasped by the learner, the most effective sequential order of presenting materials, and the nature and pacing of rewards and punishments. This constructivist theory indicates that learning is an active process in which the child or learner constructs new ideas or concepts based upon his or her current and past knowledge; thus, learning is a continuous process whereby students build continually upon what they have already learned (Kearsley, 2006).

Vygotsky's social development theory asserts that social interaction plays a fundamental role in the development of cognition. Kearsley (2006) stated

Every function in the child's cultural development appears twice: first, on the social level, and later on the individual level; first between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to formation of concepts.

All the higher functions originate as actual relationships between individuals. (p. 12)

Another aspect of Vygotsky's theory relates to a child's Zone of Proximal Development (ZPD), which is a developmental level reached when children are fully engaged in social interaction. In this stage, children can problem-solve with guidance as well as independently. The child has reached an area in which maturation or development

is currently taking place and suggests the appropriate target for instruction. Consequently, all instruction should focus on tasks and goals that are relevant to the child.

Landa's Algo-Heuristic Theory is concerned with identifying mental processes, both conscious and unconscious, that support expert learning, thinking, and performance in any area. This theory has to do with solving problems using a system of knowledge and operations or processes and instructions. Problems are solved using the Algorithmic Approach, which is a step-by-step process, or in a heuristic manner, whereby instructions are not given to a certain degree. Indeed, there is a common thread that is consistent throughout each theory; they each relate to some aspect of how learning occurs within a child whether through developmental, social, mental, or physical stages (Kearsley, 2006).

The Educational Movement

The educational movement was greatly impacted by the launching of Sputnik in 1957. The launch was significant because it expedited the allotment of money and resources into sciences and education to assist the United States in being competitive with the Russians. As a result, several educational reforms came about in the public education system. First, Congress allocated huge amounts of money to scholarships and stipends to help students pursue a science or engineering degree. Second, students finished their studies and obtained government jobs. Third, students grew into taxpayers and voters; thus, more funds would be allotted in the fields of science and education. Fourth, in addition to science fields, the Foundation for Arts and Humanities was formed. Again, Sputnik's launch had a direct impact on many students pursuing a higher degree (Sputnik, 2006).

As "Father of the Middle School," Alexander's contribution to curriculum and development and middle level education led to the birth of the middle school. His

tremendous concern for adolescents and teachers played a significant role in establishing the middle school; the main focus was that schools in the middle provide developmentally appropriate education to students. An effective curriculum would produce a process by which teachers could adapt the most efficient strategies in meeting the needs of their students. The major components of the middle school included a comprehensive curriculum plan, a home-based advisory class, team planning and team teaching, a variety of instructional plans, numerous exploratory courses, health and physical education programs aimed at adolescents, and planning and evaluation systems for teachers (Krouscas, 2004).

The federal government's role changed significantly in education with the passage of the Elementary and Secondary Education Act (ESEA) of 1965. The federal government has provided monies for students and agencies to assist in improving the quality of education in the United States (Page, 2001).

No Child Left Behind

No Child Left Behind (NCLB) is the current incarnation of President Lyndon Johnson's Great Society education law, the Elementary and Secondary Act of 1965. It is the biggest federal education program, dedicated from the start to closing the achievement gaps, mostly through the Title I program for low-income children (Jehlen, 2007).

This law is due to expire this year; however, that will not be the end of it. The National Education Association (NEA) is working to help the legislation achieve its original worthy objectives: closing the achievement gaps in student achievement, raising overall student performance, and giving every child a qualified teacher. It shifts the focus from a punitive one-size-fits-all testing system to an approach that includes more common sense and valid ways of gauging school quality and student achievement. Rather

than measuring accountability in terms of test scores and sanctions, the NEA's plan calls for giving schools credit for progress in student achievement over time and supporting educators who help students learn and succeed (Weaver, 2007).

Moreover, Weaver (2007) asserts, according to the Harvard Civil Rights Project, "NCLB has not helped the nation and states significantly narrow the achievement gap," and "NCLB has shortchanged those schools" (p. 7) that serve predominantly disadvantaged minority students; consequently, NEA's plan to rectify this inequality is to embrace proven programs, like smaller classes, and advocates for additional targeted resources to help low-income and minority students achieve their basic right to a quality education. Additionally, NEA's principles include emphasizing factors crucial to ensuring a great public school for every child—elements such as parental, family, and community involvement and engagement; adequate, equitable, and sustainable school funding; and a qualified, caring, diverse, and stable workforce (Weaver, 2007).

With the passage of NCLB, signed into legislation by President George W. Bush in 2002, a sense of urgency for all students to excel emerged. This legislation requires that schools implement programs that have proven through valid research to help students succeed academically. School leaders are expected to base their decisions about which instructional strategies to implement on the results of scientifically controlled studies. While substantial research regarding the middle school concept, its components, and the rationale for supporting them exists, research on the relationship of student achievement is limited (National Middle School Association, 1977a).

The underlying principle of NCLB is that every student, regardless of race, ethnicity, or socioeconomic status, must have the opportunity to learn in a safe, supportive, standards-based environment. It is the responsibility of the state, not the

federal government, to set academic standards for what every child should master. Students' progress must be regularly addressed against those standards at each school level. All students must show Adequate Yearly Progress (AYP), as measured by the goals. Thus, education leaders must consider whether the programs and practices that they implemented have actually been effective in raising student achievement (George, 2002). *Collaboration or Collision*

According to Hess and Rotherham (2007), American schools have spent the last 5 years under the spotlight of NCLB the statute's relentless push to close the achievement gap and pursue universal proficiency in reading and math has focused unprecedented attention on basic instruction. However, this push has also raised concerns about the slighting of high-achieving students and about inattention to advanced instruction and the dictates of national "competitiveness." This competitiveness lies between the balance of efforts to boost the performance of elite students, especially in math, science, and engineering, to those to promote educational equity. Champions of particular federal initiatives tend to argue that the two notions are complementary, but history shows that the ascendance of one tends to distract from attention paid to the other. For example, the great investment of energy in high achievers in math, science, and language by the National Defense Education Act (NDEA) of 1958 largely dissipated when the Johnson Administration and the Washington education community turned their attention to the Elementary and Second Education Act (ESEA) and the equity agenda of the Great Society. This piece of legislation was enacted as a hurried response to the Soviet Union's 1957 launch of Sputnik I. However, in 1983, A Nation at Risk challenged states to raise achievement across the board and reinvigorated programs for high-achieving students. The conclusion reflected that the overwhelming emphasis of federal policy will remain

gap-closing and focusing on students in the lowest-performing schools; meanwhile, members of the business and political communities will continue to be concerned that schools are failing to prepare America for the competitive challenges its citizens will face. Schools exist to serve both of these agendas and many others (Hess & Rotherham, 2007).

Furthermore, after more than 4 years, the *NCLB* Act stands accused of not doing very much, very fast, for the children, the kind of struggling and often neglected students that the law is intended to help the most. On the one hand, based on a tracking system used in some states, individual student growth confirmed that the scores of the lowest-achieving students are moving up. Yet, on the other hand, schools deemed "in need of improvement" see no alternatives for meeting the strict timetables and performance levels of *NCLB* other than to limit the curriculum to the subjects tested and to drill students on test-taking skills (Lewis, 2006).

The Historical Development of the Middle School Movement

The 8-year elementary and 4-year high school pattern dominated much of the 19th century. This 8-4 pattern provided large numbers of students with opportunities for basic skills and vocational training and a smaller number to attend college. In contrast, this organization did not adequately address the educational and developmental needs of young adolescents, and educators spent the next 100 years trying to develop a successful school "in the middle." The National Education Association and other educational committees advocated restructuring the predominant 8-4 organization to better serve the needs of young adolescents, thereby forming the first 3-year junior high schools, incorporating grades 7-9, established in Columbus, Ohio, in 1909. As the junior high school matured, another need surfaced, that of meeting the unique social, personal, and

academic needs of the young adolescent. The junior high school was the first middle level school and was part of the ongoing development of middle-level education (Manning, 2000).

During the 1950s and 1960s, a debate arose over whether the junior high school actually served the needs and interests of young adolescents; this debate resulted in junior high school reform and the emergence of the middle school. The Bay City Michigan school system established the first middle school in 1950 (Manning, 2000).

Alexander and Williams (1968) proposed that the middle school build its programs on the positive contributions of the junior high school, that is, a core curriculum, guidance programs, exploratory education, and vocational and home arts. Simultaneously, the middle school would eliminate high school practices such as competitive sports and subject matter orientation (Allen, 1992) and add team teaching and interdisciplinary learning.

The typical junior high school tends to be subject-centered; what is taught is more important than who is taught. The reality is that many of today's middle schools are not true middle schools but are instead junior high schools for 11-year-old children. In the "real" middle school, students are taught within teaching teams, which emulate the elementary school in that they limit the number of peers groups with which students must associate. The core courses (math, English, science, and social studies) are organized so as to support the total academic program, to individualize learning for the student, and to keep students' daily work loads reasonable. The teaching teams also have similar rules, consequences, assignment style requirements, and teaching and testing methods which are designed to minimize the confusion that can be experienced by a 12 year old who is accustomed to one teacher (Mitchell, 2007c).

Middle school children are actually drawn to structure that is constant and reasonably predictable, which is why they seek peer associations. The middle school must be structured with constancy and stability in mind. The middle school can bridge the gap between the elementary and high schools or between childhood and the adult world. It should be a bridge between parents and their early-adolescent children. Moreover, middle school students who have attended a "real" middle school frequented by involved, supportive parents will enter high school much better prepared to succeed (Mitchell, 2007b).

Implications of Student Achievement

In their sequel to the Carnegie Corporation's influential 1989 report *Turning*Points: Preparing American Youth for the 21st Century, Jackson and Davis (2000)

portrayed middle grades reform as an extraordinary adventure. Current research shows that the best practices for improving achievement for all middle grades students include: providing an accelerated and rich core curriculum consisting of topics in math, science, writing, and extensive reading of all types of materials; setting high academic expectations and creating a supportive climate of encouragement and extra time and help for students who need it; engaging students in challenging, hands-on assignments that require them to practice new skills that incorporate their interest and relate to life experiences; providing families with information about school and their children's progress; grouping students to help them connect what they are learning across the curriculum and linking them to a caring adult; coordinating curriculum, sharing data among schools that send and receive students; and assigning highly qualified teachers to every classroom.

Moreover, while overall student achievement seems to have risen somewhat, the middle grades are not necessarily responsible for that gain; it may be attributed to what is happening in the lower grades. Lee and Smith (1993) found that smaller learning communities in both high schools and middle schools have positive effects on achievement. Additionally, Lee and Smith (1993) found that elements of restructuring were positively associated with academic achievement and engagement; academic achievement was defined as a composite score that combined reading and math; meanwhile, engagement was defined by measuring two variables—the involvement of students in their academic work and the incidence of at-risk behaviors. Specifically, there were modest increases in academic achievement, increases in student engagement, and greater equity of student outcomes. According to Mizell, "until more schools adopt a vision that captures the interaction between students' personal and intellectual development, educators will not have the consensus of conviction and action necessary to improve student learning" (National Educational Research Policy and Priorities Board, 2000, p. 14).

In a study conducted by Roney, Brown, and Anfara (2004), the only components to register significant differences were flexible scheduling and involving families and communities. Further investigation is needed to explain the difference between high-performing school and low-performing school student achievement and re-evaluate minority and low-income students' experiences in urban middle schools. The recommendations from *Turning Points* and *This We Believe* have the potential to enhance the middle school learning environment and, ultimately, student achievement if, and only if, the purpose for implementing them is clearly understood.

Much of the research conducted on middle school focuses on one of the six programmatic components of a successful middle school for young adolescents. For example, a multitude of studies exist on the effects of interdisciplinary teaming.

Additionally, there is a significant body of research on advisory programs, student grouping, and developmentally appropriate approaches to teaching, learning, and assessment. In order to answer questions related to the middle school concept and its effects on student achievement and socio-emotional development, middle grades practitioners, researchers, and policymakers must move beyond this focus on individual components and look at research that addresses the reform as an integrated model, including the impact on student learning and achievement (Anfara & Lipka, 2003).

A study conducted by an Illinois middle school examining the impact of school reform on student achievement was published in *Phi Delta Kappan* (Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997b); this study evaluated the effect of the *Turning Points* recommendations on student academic achievement, socio-emotional development, and behavior. Using student achievement scores, Felner et al. (1997b) found that students in highly implemented schools outperformed students in partial and low implemented schools in all subject areas.

The Center for Prevention Research and Development (CPRD) at the University of Illinois conducted several studies examining the impact of middle school components on student achievement using Self-Study data. CPRD examined several middle school components including impact of teaming combined with common planning time, team size, length of time teaming, teaching certification, student latchkey status, and levels of structural/organizational implementation. The research suggests that the implementation of middle reform elements positively impacts student learning and achievement. Specific

findings include: Achievement scores are higher for students in schools that are teaming with high common planning time (Mertens & Flowers, 2006; Mertens, Flowers, & Mulhall, 1998). Team size and length of time teaming also affect student achievement scores (Flowers, Mertens, & Mulhall, 1999). Teachers with middle grades certification engage more frequently in "best practices," which impacts achievement (Mertens, Flowers, & Mulhall, 2002), and students home alone after school for 3 days or more report lower levels of self-esteem and academic efficacy and higher levels of behavior problems (Mertens, Flowers, & Mulhall, 2005).

In the same manner, several other studies have been conducted examining some aspect of middle school practices on student achievement. To mention a few: Backes, Ralston, and Ingwalson (1999) examined the impact of middle school practices on student achievement in six schools in North Dakota. The findings indicated that achievement scores were generally higher in the schools implementing the Turning Points recommendations. Again, Lee and Smith (2000) examined the impact of school size on student achievement and found that students in small schools performed better on standardized achievement tests and teachers reported a more positive attitude about responsibility for student learning. Sweetland and Hoy (2000) studied the relationship between school characteristics and educational outcomes and found that teacher empowerment (decision making) was linked to student achievement (reading and math). Finally, McLaughlin and Drori (2000) conducted a study of school-level correlates of academic achievement in 20 states that combined teacher data from the National Center for Education Statistics' Schools and Staffing Survey (SASS) and student achievement data from state assessment and the National Assessment of Education Progress (NAEP). The findings from this study indicated that smaller class sizes had a significant impact on

student achievement. Likewise, they found relatively strong correlations between positive school climate and student achievement. The results of these middle grades studies previously mentioned show promising implications; they provide middle grades practitioners, scholars, advocates, and policymakers with a firm foundation that links the middle school concept to improved student academic and socio-emotional development (Mertens & Anfara, 2006).

Lounsbury (1996) concluded with findings identified by the *This We Believe* report that the middle school concept cannot be communicated adequately in a list of characteristics; therefore, the middle school ideal is an entity, as much as a philosophy of education as a composite of educational programs.

Educators today are almost entirely engaged in academic achievement discourse (Armstrong, 2006). The topics of this discourse—test scores, benchmarks, data, accountability, and AYP—are the bulldozers, backhoes, cement mixers, and asphalt pavers that are constructing the curriculum superhighway. A more appropriate focus of educators' dialogue would be *human development discourse*, which recognizes that human beings travel through different stages of life, each with its own requirements for optimal growth.

The developmental needs of early adolescence consist primarily of social, emotional, and metacognitive growth; the curriculum needs to reflect young adolescents' greater sensitivity to emotional and social issues. For example, at Benjamin Franklin Middle School in Ridgewood, New Jersey, students read about the Warsaw ghetto and then discuss how they can combat injustices that they see in their own lives (Curtis, 2001).

Just before puberty, children's brains experience a surge in the growth of gray matter in the frontal, parietal, and temporal lobes, which may be related to what Piaget called *formal operational thinking*—the ability to "think about thinking." This new capacity represents an incredible resource, enabling young teens to begin to reflect at a more abstract level—not only to gain perspective on their own emotional responses, but also to engage intellectually with such universal issues as justice and individual rights. The components of the superhighway's infrastructure-tougher requirements—more homework and harder tests—leave teachers little chance to engage students' emotions, social needs, and metacognitive thinking in any substantial way (Armstrong, 2007).

The emphasis on linking the middle level concept to heightened student academic performance is not new; long before the attacks appeared in *Education Week* in 1998, Williamson, Johnston, and Kanthak (1995) commented, "Middle schools must accept the challenge of addressing student achievement. Student achievement must be given the highest priority in the mission of the middle level school" (p. 6). In their manifesto for middle grades reform, Lipsitz, Mizell, Jackson, and Austin (1997) wrote, "We speak with one voice, grounded in our collective experience and buttressed by compelling research data that demonstrate—that sustainable middle level school reform is achievable" (p. 535).

According to Russell (1997), the assumption is that "according to middle level theory, if the middle level philosophy is implemented, the outcomes of enhanced personal development, group citizenship, and achievement will be attained" (p. 170). But attempts to ascertain the relationship between middle level reform (specifically *Turning Points* recommendations) and student achievement have yielded ambiguous and conflicting results. An insufficient number of studies, a lack of longitudinal studies, weak research

designs, difficulties with comparing studies with conflicting designs, and problems with the effects of extraneous variables (like socioeconomic status) on outcomes are noted (Van Zandt & Totten, 1995)

The inconclusive nature of the findings related to the effects of middle school practices on student achievement has been documented (Brown, Roney, & Anfara, 2003; National Middle School Association, 2002; Roney, Anfara, & Brown, 2002; Van Zandt & Totten, 1995). Reviewing the literature on many different educational topics will reveal research that supports, negates, or shows difference in the relationship between the variables being studied.

A promising body of research demonstrates positive effects for restructuring middle schools. Notably, Felner, Jackson, Kasak, Mulhall, Brand, and Flowers (1997a) concluded that "broad-range enhancements and adjustments are not obtained until implementation is quite mature, comprehensive, and conducted with a high degree of fidelity" (p. 67).

Lee and Smith's (1993) findings indicated that the elements of restructuring were positively associated with academic achievement and engagement with schooling of eighth graders. Students who attended schools that encouraged team teaching evidenced higher achievement. Additionally, less grouping by ability and less rigid departmental structure appeared to promote social equity in achievement among students.

Anfara and Lipka (2003) concluded that if student achievement must be given the highest priority then the instruments used to measure this achievement should be given the same high priority in "our research of practice and our practice of research" (p. 15). Student academic achievement, as defined and measured by standardized testing, may be the current emphasis, but it cannot be gained at the expense of bypassing the needed

debates regarding how to more broadly and holistically define and assess student achievement. Moreover, the middle school concept is all about the development of the whole child; therefore, there must be a reaffirmation to commit to the desired results of improved academic performance and socio-emotional growth.

Advantages of the Middle School Concept

Some advantages of the middle school concept include but are not limited to having a group of four teachers for each grade, common planning time to collaborate, and flexible scheduling time to meet with parents, classes, or others. After the 30-year history of middle schools, however, teachers have taken it upon themselves to build advising into their teaching. They serve in many roles and capacities—as advocates as well as role models and advisors. Schools should make a conscious effort to ensure that every child has a meaningful relationship with at least one adult. It is imperative that schools create opportunities during which students and teachers get to know, respect, and develop compassion toward each other. These opportunities may include an interdisciplinary unit, service learning, extracurricular activities, and social activities (Thompson & Homestead, 2004).

Russell (1997) stated, "middle level programming likely plays a role in the enhancement of student achievement, although the primary predictor remains students' entering achievement levels" (p. 185). She examined the relationship between student achievement and the implementation of the middle school concept (as delineated in Alexander & George, 1981) in 10 middle and junior high schools in a large urban school district. She recognized five levels of implementation and analyzed student achievement scores; her findings indicated that "middle level programming has the potential to enhance student achievement at least to a limited degree" (p. 170). Three middle level

program concepts were related positively with two or more student achievement scores; they included appropriate curriculum and learning skills, developmentally appropriate teaching strategies, and interdisciplinary teaming. Mathematics was the area that most frequently showed a positive, statistically significant relationship with the various middle level program concepts, while language arts, on the other hand, had no positive relationship with any of the middle level program concepts.

A paper which appeared in This We Believe: Developmentally Responsive Middle Level Schools (1995) stated that developmentally responsive middle schools must take into account all that is known about young adolescents and the cultural context in which they live. The document presented and described six conditions or characteristics that developmentally responsive middle levels schools should exhibit. First, educators committed to young adolescents have importance because the middle school and the junior high before it both have been handicapped by the fact that teachers, with few exceptions, were prepared for elementary or high school education. Secondly, a shared vision highlights the importance of educators possessing a vision that is "idealistic and uplifting" and reflects "the very best we can imagine about all the elements of schooling, including student achievement, student-teacher relationships, and community participation" (p. 14). Thirdly, high expectations for all calls for teachers, parents, and students themselves to have high expectations. Fourth, an adult advocate for every student reaffirms the long recognized need for each individual at this time of extensive and often traumatic development to have an understanding as an advocate and guide. Fifth, family and community partnerships echo the currently widespread call for increased family and community participation in the education of youth, and, finally, a positive school climate recognizes that the school itself is a teacher. The nature of its environment, both in physical facilities and human relationships, is an important educational condition and establishes the context in which learning takes place (NMSA, 1995).

When teachers are engaged in teaming for several years and have the necessary time to plan, they report higher levels of team and classroom practices. Therefore, the sustained impact of teaming and higher classroom practices can produce higher student achievement. This is not a short-term process, particularly for high poverty schools. Research such as this provides evidence that middle grades programs and practices can positively affect student achievement as measured by standardized test scores (Mertens & Flowers, 2003c).

Further, said Flowers and her colleagues, interdisciplinary teaming seems to have the most positive effect when teachers meet often throughout the school year, when they openly discuss their goals, and when they plan curricula for a relatively small group of students. Common planning time, in particular, appears to be a key factor—and many researchers have reported this finding as well (e.g., Erb & Stevenson, 1999; Steffes & Valentine, 1996; Warren & Muth, 1995; McQuaide, 1994; Shaw, 1993; Hart, Pate, Mizelle, & Reeves, 1992; Mills & Ohlhausen, 1992). However, it appears that very few middle grades schools provide teachers with any planning time at all, much less time in common (e.g., Felner et al., 1997a; Strahan, Bowles, Richardson, & Hanawald, 1997; Epstein & MacIver, 1990).

As Beane (2001) said, "research reviews . . . indicate that students in schools that have team organization tend to evidence higher academic achievement than those in schools that use a traditional departmentalized organization" (p. 1162). This means that there seems to be an *association* between teaming and achievement; it does not suggest that teaming will lead to an increase in achievement in any given school.

The Southern Regional Education Board supports a comprehensive improvement framework designed to improve student achievement in the middle grades and to transition them to the larger educational system. The framework demands strengthened curricula, a modified school organization and practices, increased demands on students with essential support provided, improved teacher quality, and the inclusion of parents and community in the learning process. Some evidence supports SREB's framework, but the research link to the concepts driving SREB's strategies remains inadequate.

A study investigating the effects of the middle school concept on student achievement as identified by principals and the Academic Excellence Indicator System (AEIS) reported that in selected middle schools in Texas, relationships were found between the Texas Assessment of Middle Level Schools (TAMLS) criteria of developmental responsiveness and teacher preparation and professional development with student achievement, between school size, and student ethnicity. With regard to the relationship between the level of implementation of the middle school concept, taken in its totality, results are inconclusive (Brundrett, 1956).

The National Forum to Accelerate Middle-Grades Reform (2002), a group of educators who believe that young adolescents are capable of learning and achieving at high levels and who are dedicated to improving schools for middle-grades students, identified three interlocking priorities that are critical to the sense of purpose that permeates all aspects of successful schools—academically excellent, developmentally responsive; and socially equitable, democratic, and fair (Lipsitz & West, 2006). The priorities and their criteria are complementary and interdependent. For example, an academically excellent school is one in which all students are learning to use their minds well in challenging classrooms where the curriculum, instruction, and assessments are

responsive to children's developmental needs. The truly highly performing school sits at the intersection of academic excellence, developmental responsiveness, and social equity (Lipsitz & West, 2006).

The literature portrays that the combined effect of teacher certification and teaming implementation has a very positive impact on the levels of team and classroom practices. The Center for Prevention Research and Development's (CPRD) prior research has documented the positive association between higher levels of implementation, higher levels of team and classroom practices, and increases in student achievement scores (Flowers et al., 1999; Mertens & Flowers, 2003a, 2003b). For example, between 1995 and 1997, Michigan middle grades schools identified as teaming in all middle grade levels with high levels of common planning time had the largest gains over time in their standardized student achievement scores (Mertens et al., 1998). Schools identified as not teaming had the lowest gains.

Because of anonymity used with the Self-Study data in this research, it was not possible to directly link the Self-Study teacher survey data to student achievement; however, when the findings are combined, a clearer picture is present on the effect of teacher certification on student achievement outcome. Teachers with middle grades certification (i.e., specialized preservice education) in schools that are teaming with high levels of common planning time report higher levels of team and classroom practice and, therefore, have the potential for greater gains in student learning as evidenced by the student achievement results. Based on these findings, when teachers have the proper certification/licensure and are provided with the necessary resources (teaming and common planning time), they are able to engage in the types of best practices that improve student learning and achievement (Mertens, Flowers, & Mulhall, 2005).

Developing an effective transition program can be an effective tool in moving adolescents into middle school. When adolescents move into middle school, the anxiety is complicated further by other normative changes, such as puberty, social and emotional development, the growing importance of peer relationships, and the development of higher order cognitive skills. Students who experience the stresses of numerous changes often have lower grades and decreased academic motivation; schools can prepare students for the transitions by becoming aware of students' needs and by taking a proactive role in addressing those needs (Cauley & Jovanovich, 2006).

Eccles and Wigfield (1997) also noted that during early adolescence the importance of peer-related activities, peer acceptance, and physical appearances increases. The importance of social acceptance also relates to an increase in peer conformity; perhaps most distressing is the decline in many students' intrinsic motivation and academic self-concept, interest in school, and grades.

Similarly, Diemert's (1992) research found that one strength of transition programs was that students generally felt that their procedural concerns were satisfactorily addressed. In contrast, a weakness of most programs was that students felt that their social concerns were not receiving enough attention. Moreover, her research found that teachers who engage themselves with students and also teach students the skills to be autonomous were more successful with this age group.

Effective transition programs typically are defined as ones that improve student attendance, achievement, and retention. Research suggests that effective transition programs have five or more diversified activities (MacIver, 1990). First, the most common activities are bringing the incoming students to visit the new school, hosting meetings with administrators, and having counselors from both levels nearby. Second, the

most effective transition programs are comprehensive and target activities to students, parents, and teachers (Smith, 1997; Rice, 2001).

Third, Bottoms (2002) noted that an effective transition system involved continuous planning among teams of teachers and school leaders; as the transition plan is developed, it needs to be implemented with the most receptive teachers. Fourth, effective transition programs attend to those students who are likely to have the greatest difficulty with systemic transitions: girls, students with behavior problems, low achievers, and minority or low socioeconomic status (SES) students (Anderson et al., 2000). Finally, Newman, Lohman, Newman, Myers, and Smith (2000) found that the low performers had a more narrow range of support people; typically, they did not have parents who provided the monitoring and encouragement needed. Assuring that every student has an adult in the new school committed to his or her success can often make the difference in whether a student succeeds or not.

Mizelle and Mullins (1997) discussed the Delta Project, in which middle school students stay together through sixth, seventh, and eighth grades and experience curriculum with more hands-on, life-related learning activities, integrated instruction, and cooperative learning. Students in the project made a more successful transition to high school than other students in the same school who had a more traditional middle school experience.

Disadvantages of the Middle School Concept

A vast body of literature focuses on individual components of *Turning Points* recommendations, such as teaming and advisory programs and their effect on student achievement. The example provided here focuses on the interdisciplinary teaming of teachers (i.e., Alspaugh & Harting, 1998; Arhar, Johnston, & Markle, 1989; Ashton &

Webb, 1986; Cotton, 1982; Rosenholtz, 1989) and its effect on student achievement. This example helps to demonstrate the ambiguous and inconclusive nature of this research.

Looking at the effects of interdisciplinary teaming, Arhar et al. (1989) found that the teaming of teachers increased student engagement in academic tasks, helped to clarify learning goals, and led ultimately to higher student outcomes. A study conducted by Alspaugh and Harting (1998) on the effects of interdisciplinary teaming versus departmentalization on student achievement in middle schools found no overall statistically significant differences for reading, mathematics, science, and social studies in grades 6 through 8 in departmentalized versus teamed schools. Teaming merits further investigation as a strategy for mediating student achievement loss associated with the transition to middle school. Cotton (1982) concluded that neither interdisciplinary team organization nor the traditional departmental organization promoted greater student achievement.

The inconclusive nature of the findings related to the effects of middle school practices on student achievement is evident. As Russell (1997) wrote, "this model's impact on the education of early adolescents has not been evaluated thoroughly; consequently, the relationship of middle level education to student achievement, in particular, remains unclear" (p. 169).

It is clear that block and flexible scheduling as common practices have been difficult to implement in middle schools. Schools often cite the following barriers: special needs classes, exploratory classes, lunch rotation, special courses, the "cross teaming" of students, and legislative policies mandating instructional time in subject areas.

Compounding these scheduling obstacles in recent years is the pressure to "cover" standards in preparation for standardized tests (Thompson & Homestead, 2004).

Pessimism about the future of middle level education is justified when one bears in mind the current educational reform efforts that run directly counter to the unique characteristics, needs, and concerns of young adolescents. Middle school teachers are influencing the lives of young adolescents daily, providing models and teaching lessons of life, as well as preparing them academically. While many parents are aware of this, the general public somehow seems oblivious to this important aspect of teaching at the middle level as the media and the politicians focus on test scores (Thompson & Homestead, 2004).

The dominant approach to educational reform is top-down dictation from bureaucrats at federal, state, and district levels, leaving teachers no choice but to submit to high-stakes tests that they know many students will fail. Schools have resorted to various ways of minimizing the negative consequences of low test scores, including the "encouragement" of students who do not do well on tests to be absent on the test day. Unreasonable requirements that schools post arbitrary gains every year make the pressure even worse, leading some teachers and principals to unethically give students help on the tests. Some current educational reforms that seem designed to thwart healthy development of middle level youth have been examined; they appear to be driven by forces that pose threats to the entire society as well as to the middle schools (Thompson & Homestead, 2004).

It is difficult to implement the middle school envisioned in *This We Believe*(National Middle School Association, 1995, 2003) in the current hostile environment, and some of the most dedicated and creative teachers are abandoning the field; others are holding on until retirement. As the obsession with standardized tests runs its course,

America and her policymakers will come to realize the obvious limitations of current

reform efforts and recognize that the full education needed by today's young adolescents requires much, much more than that which is assessed by tests.

Most middle schools are not able to demonstrate that they are more successful than other middle level schools in causing *all* students, in every quartile, to learn at higher levels, identify and develop their God-given talents, and apply both their learning and their talents to strengthen their school communities. Instead, the schools are scrambling to satisfy demands for what is often a higher, single numerical score that represents aggregate student performance. These demands will not subside, nor should they so long as middle schools are unable to provide more compelling evidence that student performance at all levels is increasing significantly. If middle schools do not go beyond the state test to weave demonstration and assessment methods into a coherent strategy to provide evidence of the school's benefit to students, middle schools will continue to be on the defensive and will fail to get the support they need to meet the education challenges that seem to increase each year (Mizell, 2000).

Disquiet in the middle school community is due largely to the visibility that demanding state accountability and assessment systems have been given to middle school students' performance on standardized tests; there are serious questions about the students' achievement levels and the capacities of middle schools to challenge these students academically. With a leadership deficit, many middle schools are virtually ignored by their school systems while others are little more than middle schools in name only. Morever, there are too many middle school teachers who not only lack the necessary subject matter knowledge necessary to engage students in higher levels of learning, but

who demonstrate little interest in their own professional development to acquire the content knowledge and pedagogical skills they need (Mizell, 2000).

CHAPTER III

METHODOLOGY

The purpose of this study was to determine what, if any, effect the implementation of the middle school concept has had on student achievement in coastal Mississippi middle level schools and to explore a case study in which the researcher interviewed administrators and teachers to determine their implementation of the middle school concept and their perception relative to student achievement (Appendix A). This chapter includes descriptions of the research design, participants in the study, how they were selected, instrumentation used, statistical tests used, procedures for collecting and analyzing data, and limitations of the study. The intent of this research was to study coastal Mississippi middle level schools that have a configuration of grades 6 through 8.

Research Design

This study consisted of a mixed-method causal comparative approach, a combination of both qualitative and quantitative. The independent variable was the effect of the middle school concept in coastal Mississippi middle level schools and the dependent variable was student achievement. The qualitative dimension was a case study on administrators' and teachers' implementation of the middle school concept and their perception of the middle school concept on student achievement. This information was ascertained through the interviewing process. The variables and data were collected once approval had been sought and granted through the Institutional Review Board (IRB) (Appendix B).

Participants

The participants for this study consisted of coastal Mississippi middle level schools with a grade configuration of 6 through 8 and implemented the middle school

concept. A list of schools was obtained through the Mississippi Department of Education's Web site. There are 12 coastal Mississippi middle level school districts which were included in this study; of these selected schools, the researcher interviewed two administrators and two teachers who have knowledge of implementing the middle school concept and its effect on student achievement.

Instrumentation

The instrumentation used in this study was the Mississippi Curriculum Test (MCT), which is a performance-based test administered each year to students in grades 2 through 8 in the areas of reading, language, and mathematics which are aligned with the state curriculum. The tests determine whether students are performing at a minimal, basic, proficient, or advanced level. These tests are part of the state accountability plan. The four proficiency levels are: Minimal, Basic, Proficient, and Advanced.

A classification of Minimal indicates that a student performed below basic and does not demonstrate mastery of the content and skills required for success in the next grade. These students require more instruction and remediation. Students scoring at the Basic level demonstrate partial mastery of the content and skills required for success in the next grade; these students may require remediation. Those students scoring at the Proficient level demonstrate solid academic performance and mastery of the content and skills required for success in the next grade. Those students at the Advanced level consistently perform beyond what is required to be successful in the next grade.

The combined percentage of students scoring in the Proficient and Advanced categories during the 2005-2006 school year on the MCT at each coastal Mississippi middle level school was obtained from the Mississippi Department of Education's Web

site and was used to measure academic achievement of students in each grade in each subject area.

Procedures

Permission to conduct the study was requested from The University of Southern Mississippi's Institutional Review Board (IRB). The following archival data were obtained from the Mississippi Department of Education's Web site:

- 1. A list of all coastal Mississippi middle level schools housing grades 6 through 8.
- 2. Mississippi Curriculum Test scores for the 2005-2006 school year for students scoring in the Proficient and Advanced categories in grades 6, 7, and 8 in the subjects of reading, language, and mathematics.
- 3. A list of all coastal Mississippi level schools which do and which do not implement the middle school concept was identified through a preliminary telephone call.

Each administrator and teacher were contacted via telephone and asked to participate in the study once each school had been identified as implementing the middle school concept. A letter was sent to each administrator and teacher giving more details about the study being conducted. Once approval had been granted to proceed with the study, administrators and teachers were contacted to schedule interviews.

Each participant was asked eight questions during the one-on-one, structured interview (Appendix A). A tape recorder was utilized to record each interview; participants' responses were transcribed immediately following the interview, and the researcher coded participants' responses by assigning numbers to each participant.

Limitations

The following limitations were imposed for this study:

- 1. The study did not consider whether all administrators and teachers held middle level school certification.
 - 2. The study did not interview only administrators.
 - 3. The study did not interview only teachers.
 - 4. The study measured only Proficient and Advanced levels.
- 5. The study was limited by the genuineness of administrators' and teachers' responses to interview questions.
 - 6. The study was limited to the researcher's opinions and beliefs.
- 7. This study did not take into account planning time, teaming issues, and variations.

Data Analysis

For this study, the independent variable was whether the middle school concept had been implemented, and the dependent variable was student achievement. Three MANCOVAs (multiple analyses of covariance) were conducted using the 15.0 version of the Statistical Package for Social Sciences (SPSS). Each hypothesis was tested at the .05 level of significance to determine whether a significantly statistical difference exists in sixth, seventh, and eighth grade academic achievement with coastal Mississippi middle level schools that implement the middle school concept and those that do not.

The researcher coded each participant's responses from the interview; numbers were assigned to participants' responses. After transcribing responses, similar words and phrases were grouped and assigned a code. The researcher sought the assistance of a review panel which consisted of one administrator and two teachers with experience in

coastal Mississippi middle level schools. The information was obtained from the Mississippi State Department of Education's Web site. The review panel's function was to determine if words and phrases were assigned accurately from the researcher's coding.

CHAPTER IV

RESULTS

Introduction

The purpose of this study was to determine if there is a difference in student achievement between coastal Mississippi middle level schools that implement the middle school concept and those that do not. Additionally, this chapter reports responses to interview questions provided by participants. There are 15 coastal Mississippi middle levels schools that house grades 6-8. Of those 15, data were collected for 12. There were 9 schools that implemented the concept and 6 schools that did not. In an effort to keep all things equal, 6 schools were denoted by the letter "Y" (meaning yes) as implementing the middle school concept, and 6 schools were denoted by the letter "N" (meaning no) as not implementing the middle school concept. Table 1 reports the descriptive data of the three tests measuring academic achievement for those schools where the middle school concept is not implemented.

Three independent samples *t* tests were performed to determine whether or not a significantly statistical difference existed in sixth grade academic achievement, seventh grade academic achievement, and eighth grade academic achievement between those schools that implement the middle school concept and those that do not. Table 1 reports the descriptive data (number, mean, percent proficient, and percent advanced) of three tests measuring academic achievement. Examination of these data reflects that the mean for sixth grade reading were higher in 5 schools where the middle school concept was implemented as 539.1, 549.1, 549.7, 439.0, and 566.1. Thus, the highest mean was 566.1 and the lowest was 539.0; the highest percent proficient was 70.8; the lowest percent

Table 1 Descriptive Statistics - Sixth Grade Academic Achievement

		n	Mean	% Proficient	% Advanced
Reading					
0	Y	340	539.1	55.0	20.3
		221	549.1	57.9	23.5
		113	545.8	70.8	18.6
		226	549.7	60.6	23.0
		165	539.0	61.2	17.6
		378	566.1	54.8	37.3
	TMA		548.1		
	N	346	537.3	59.5	17.3
		119	544.5	66.4	18.5
		194	555.1	63.4	24.7
		168	524.9	65.5	7.7
		166	535.2	62.0	13.9
		225	529.2	54.7	18.2
	TMA		537.7	Ž	
Languag	<u>ze</u>				
	Y	340	537.6	45.9	17.4
	-	221	555.7	47.5	25.3
		112	541.1	48.2	14.3
		225	560.1	46.2	28.9
		165	540.0	46.1	16.4
		379	564.1	53.0	28.5
	TMA	317	549.8	33.0	20.5
	N	347	542.5	52.2	15.3
	11	119	541.7	45.4	16.0
		194	562.5	50.0	30.4
		168	531.2	44.0	13.1
		166	535.8	52.4	9.0
		225	537.1	43.6	16.9
	TMA	223	541.8	43.0	10.9
Math					
1414411	Y	339	550.0	28.6	39.8
		221	574.4	27.1	53.8
		112	580.7	27.7	60.7
		224	583.0	22.3	63.4
		165	543.0	35.8	24.8
		378	585.2	26.7	61.4
	TMA	•	570.2		
	N	347	564.7	32.0	42.1
		119	572.8	23.5	56.3
		194	578.9	26.8	57.7
		167	555.3	33.5	35.3
		166	556.1	37.3	32.5
		225	560.4	27.1	46.2
	TMA	-	564.7		

Y = indicates yes, the middle school concept was implemented.
N = indicates no, the middle school concept was not implemented.
TMA = indicates total mean average of schools.

proficient was 55.0; and the highest percent advanced was 37.3 and the lowest percent advanced was 17.6; while in those schools where the middle school concept was not implemented, the highest mean reported was 555.1 and the lowest was 524.9. The highest percent proficient was 66.4 and the lowest was 54.7. The highest percent advanced was 24.7 and the lowest was 7.7. Consequently, the highest possible mean from the 12 schools was 566.1 and the lowest was 524.9 in the area of reading.

Examination of these data reflects that the highest mean for sixth grade language was 564.1 and the lowest was 537.6 in those schools where the middle school concept was implemented; the highest percent proficient was 53.0 and the lowest was 45.9. The highest percent advanced was 28.9 and the lowest was 14.3. In those schools where the middle school concept was not implemented, the highest mean was 562.5 and the lowest was 531.2. The highest percent proficient was 52.4 and the lowest was 43.6; the highest percent advanced was 30.4 and the lowest was 9.0. Thus, the highest possible mean from the 12 schools was 564.1 and the lowest was 531.2.

Examination of these data reflects that the highest mean for sixth grade math was 585.2 and the lowest was 543.0 in those schools where the middle school concept was implemented; the highest percent proficient was 35.8 and the lowest was 22.3. The highest percent advanced was 63.4 and the lowest was 24.8. In those schools where the middle school concept was not implemented, the highest mean was 578.9 and the lowest mean was 555.3. The highest percent proficient was 37.3 and the lowest was 23.5; the highest percent advanced was 57.7 and the lowest was 32.5. Therefore, the highest possible mean from the 12 schools was 585.2 and the lowest was 543.0. Comparison of

the two groups (implementation and nonimplementation) reflects that total mean averages were higher in those schools where the middle school concept was implemented.

Table 2 reports descriptive data of the three tests measuring the academic achievement of seventh grade. Examination of these data reflects that the highest mean for seventh grade reading in those schools where the middle school concept was implemented was 579.9 and the lowest mean was 543.5; the highest percent proficient was 54.8 and the lowest percent proficient was 44.6. The highest percent advanced was 35.7 and the lowest percent advanced was 15.8. Meanwhile, in those schools where the middle school concept was not implemented, the highest mean was 571.0 and the lowest mean was 550.0; the highest percent proficient was 47.8 and the lowest percent proficient was 35.1. The highest percent advanced was 35.2 and the lowest percent advanced was 11.2. Thus, the highest possible mean from the 12 schools was 574.9 and the lowest was 550.0

Examination of these data in the area of language reflects that the highest mean was 581.9 and the lowest was 558.7; the highest percent proficient was 56.6 and the lowest was 51.2; the highest percent advanced was 25.6 and the lowest was 13.6 in those schools where the middle school concept is implemented. However, in those schools where the middle school concept is not implemented, the highest mean was 575.4 and the lowest was 432.3; the highest percent proficient was 51.7 and the lowest was 37.2. The highest percent advanced was 25.7 and the lowest was 4.3. Morever, the highest possible mean from the 12 schools was 581.9 and the lowest was 532.3.

Examination of these data in the area of math reflects that the highest mean was 597.6 and the lowest was 550.0; the highest percent proficient was 38.0 and the lowest

Table 2 Descriptive Statistics - Seventh Grade Academic Achievement

		n	Mean	% Proficient	% Advanced
Reading	-				
	Y	366	559.1	44.6	27.8
		242	574.9	48.3	35.5
		105	565.8	45.7	29.5
		221	558.4	54.8	22.6
		139	543.5	46.0	15.8
		370	573.2	44.6	35.7
	TNAA	370	562.5	44.0	33.1
	TMA		302.3		
	N	370	550.0	47.8	19.7
		108	552.9	47.2	21.3
		230	571.0	45.7	35.2
		188	527.3	35.1	11.2
		162	550.1	45.1	21.0
		221	545.4	46.2	17.2
	TMA	<i>44</i> l	549.5	10.2	17.2
Languag	ge . Y	363	558.7	51.2	14.9
	I				
		242	581.9	56.6	25.6
		105	565.3	51.4	19.0
		220	559.7	54.5	13.6
		139	562.6	52.5	13.7
		370	571.5	51.9	18.9
	TMA		566.6		
	N	368	547.6	50.0	8.7
	.,	108	553.9	42.6	15.7
		230	575.4	51.7	25.7
			532.3	37.2	4.3
		188			
		162	550.9	50.0	10.5
		221	548.2	53.4	6.3
	TMA		551.4		
Math					
	Y	339	555.0	28.6	39.8
		242	594.0	38.0	42.1
		105	589.4	32.4	38.1
		218	597.6	28.9	50.9
		140	577.8	30.7	26.4
		370	596.7	28.9	44.9
	TMA	3,0	585.1	20.5	,
	N	370	574.2	37.6	28.1
		. 107	575.9	27.1	36.4
		230	599.2	33.5	45.7
		188	557.6	26.1	16.0
		162	584.7	35.8	35.8
		221	575.2	35.3	26.7
	TMA		577.3		

Y = indicates yes, the middle school concept was implemented.
N = indicates no, the middle school concept was not implemented.
TMA = indicates total mean average of schools.

percent proficient was 28.6; the highest percent advanced was 50.9 and the lowest was 26.4 in those schools where the middle school concept is implemented. In those schools where the middle school concept is not implemented, the highest mean was 599.2 and the lowest is 557.6; the highest percent proficient was 37.6 and the lowest was 26.1. The highest percent advanced was 35.8 and the lowest was 16.0. Consequently, the highest possible mean from the 12 schools was 599.2 and the lowest was 555.0. Comparison of the two groups (implementation and nonimplementation) reflects that total mean averages were higher in those schools where the middle school concept was implemented.

Examination of these data reflects the descriptive data of the three tests measuring academic achievement in grade 8 is reported in Table 3 in the area of reading; the highest mean reported in those schools where the middle school concept is implemented was 589.6 and the lowest was 561.6; the highest percent proficient was 53.6 and the lowest was 43.6. The highest percent advanced was 27.2 and the lowest was 12.1. Meanwhile, in those schools where the middle school concept was not implemented, the highest mean was 584.5 and the lowest was 555.8; the highest percent proficient was s56.5 and the lowest was 42.7. The highest percent advanced was 24.6 and the lowest was 12.3. The highest possible mean from the 12 schools was 589.6 and the lowest was 555.8.

In the area of language, examination of these data reflects the highest mean in those schools where the middle school concept is implemented was 580.2 and the lowest was 561.7; the highest percent proficient was 49.8 and the lowest was 36.9. The highest percent advanced was 20.0 and the lowest was 9.4. In those schools where the middle school concept was not implemented, the highest mean was the same (580.2) and the lowest was 560.8; the highest percent proficient was 49.8 and the lowest was 38.3. The

Table 3

Descriptive Statistics - Eighth Grade Academic Achievement

		n	Mean	% Proficient	% Advanced
Reading					
	Y	295	570.6	47.8	16.3
	•	235	586.6	47.2	27.2
		129	575.7	47.3	20.9
		209	576.1	53.6	18.7
		149	561.6	43.6	12.1
		440	589.6		
	TNA	440		53.0	26.1
	TMA		576.7		
	N	339	563.7	48.4	15.0
		131	577.8	56.5	19.1
		244	584.5	49.6	24.6
		171	555.8	42.7	12.3
		177	571.2	47.5	17.5
		200	564.1	52.0	13.0
	TMA	200	569.5	22.0	15.0
·					
Languag	ge Y	295	565.4	36.9	15.3
		235	578.8	45.1	20.0
		129	580.2	42.6	19.4
		209	568.5	42.0 46.4	12.9
				38.3	
		149	561.7 574.0		9.4 16.0
	TMA	438	574.0 571.4	49.8	16.9
	TMA		3/1.4		
	N	340	560.8	46.6	11.2
		131	577.2	45.8	18.3
		129	580.2	42.6	19.4
		209	568.5	46.4	12.9
		149	561.7	38.3	9.4
		438	574.0	49.8	16.9
	TMA	-20	565.7		
Math					
iviaiN	Y	295	595.8	33.2	30.2
	•	235	606.6	35.3	38.7
		129	609.3	34.9	37.2
		207	621.5	30.9	52.7
		149	593.3	43.6	21.5
		439	616.4	34.9	46.7
	TMA	437	607.2	34.7	40.7
	1 1417 7				
	N	338	589.1	33.4	27.8
		131	602.9	38.2	34.3
		243	612.3	31.7	43.6
		171	583.2	34.5	19.3
		177	611.1	37.3	40.1
		199	593.9	36.7	29.1
	TMA		598.8		

Y = indicates yes, the middle school concept was implemented.

N = indicates no, the middle school concept was not implemented.

TMA = indicates total mean averages of schools.

highest percent advanced was 19.4 and the lowest was 9.4. Thus, the highest possible mean from the 12 schools was 580.2 and the lowest was 560.8, as reported in Table 3.

Examination of these data in the area of math reflects in those schools where the middle school concept was implemented as 621.5 and the lowest was 593.3; the highest percent proficient was 43.6 and the lowest was 30.9. The highest percent advanced was 52.7 and the lowest was 21.5. In those schools where the middle school concept was not implemented, the highest mean was 612.3 and the lowest was 583.2; the highest percent proficient was 38.2 and the lowest was 31.7. The highest percent advanced was 40.1 and the lowest was 19.3. Thus, the highest possible mean from the 12 schools was 621.3 and the lowest was 583.2, as reported in Table 3. Comparison of the two groups (implementation and nonimplementation) reflects that total mean averages were higher in those schools where the middle school concept was implemented.

Statistical

Tests of Hypotheses

Three hypotheses were tested in this study. Each hypothesis was evaluated at the .05 significance level. The results of the hypotheses are listed below.

H1: There is a statistically significant difference in the academic achievement (students' scores on the MCT) of sixth grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.

The independent sample *t* test was conducted to determine the effect of implementation of the middle school concept on the dependent variable of sixth grade academic achievement in the area of reading, language, and math. No significant difference was found between the two groups (middle school implementation and

nonimplementation), t = 1.732, df = 10; sig. (2-tailed) = .114 for reading. In language, t = 1.227, df = 10; sig. (2-tailed) = .214. In the mathematics, t = .687, df = 10; sig. (2-tailed) = .508. Hypothesis 1 is rejected for all three subjects.

H2: There is a statistically significant difference in the academic achievement (students' scores on the MCT) of seventh grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.

A second set of independent sample t tests was conducted to determine the effect of implementation of the middle school concept on the dependent variable of seventh grade academic achievement in the area of reading, language, and math. No significant difference was found between the two groups (middle school concept implementation and nonimplementation), t = 1.756, df = 10; sig. (2-tailed) = .110 for reading. In language, t = 2.264, df = 10; sig. (2-tailed) = .047. In the mathematics, t = .887; df = 10; sig. (2-tailed) = .396. There was no significant difference found between the two groups (middle school concept implementation and nonimplementation) except on language. In those schools where the middle school concept was implemented, the mean was highest in seventh grade language.

H3: There is a statistically significant difference in the academic achievement (students' scores on the MCT) of eighth grade students in coastal Mississippi middle level schools that implement the middle school concept and those that do not.

A third set of independent sample *t* tests was conducted to determine the effect of the middle school concept on the dependent variable of eighth grade academic achievement in the area of reading, language, and math. No significant difference was found between the two groups (middle school concept implementation and

nonimplementation), t = 1.198, df = 10, sig. (2-tailed) = .258 for reading. In the language, t = 1.041; df = 10; sig. (2-tailed) = .322. In the mathematics, t = 1.262, df = 10; sig. (2-tailed) = .236.

Research Questions

Responses

1. What impact, if any, does implementation of the middle school concept have on student achievement?

Implementation of the middle school concept had a significant impact on student achievement in both schools where participants were interviewed.

2. What impact, if any, does middle level certification have on student achievement?

Middle level certification had an impact on student achievement.

3. Does the length of years of implementation of the middle school concept have an effect on student achievement?

The length of years of implementation of the middle school concept does have an effect on student achievement.

Reported in this section is the summary of the participants' responses to each interview question. The participants were chosen based on location (coastal Mississippi middle level schools) and as implementing the middle school concept. Participants' full responses are given in Appendix C. Table 4 provides descriptive information for each of the participants.

Participants 1.1 and 1.2 were from the same school, and participants 1.3 and 1.4 were from the same school. The participants were from schools where the middle school

Descriptive Information for Each of the Participants

Participant #	A/T	Yrs. Exp.	Enrollment	Yrs. at School	Yrs. Implemented	Ethnicity
1.1	A	25	1202	5	15	Caucasian
1.2	T	10	1202	2	15	African- American
1.3	Α	22	418	5	12	Caucasian
1.4	T	4	418	1	12	Caucasian

A = Administrator

T = Teacher

Table 4

concept has been implemented for 15 and 12 years, respectively. As indicated in Table 4, the number of years of experience ranged from 4 years to 25 years; the number of years at each school site varies from 1 to 5 years. The enrollment was 1,202 and 418 from the two schools.

Responses to Interview Questions

In this section, the participants' responses are shared. Full responses are given in Appendix C.

How would you describe your school?

Each participant described his or her school as a student mixture from low, middle, upper, to high income families. Participant 1.1 stated, "We think of ourselves as 'world famous." Participants 1.1 and 1.3 said, "We promote excellence and expect it"; "the kids meet your expectations." "From my experience, students want and need consistency and organization. In many instances, children will rise to and exceed our expectations."

Explain the procedures you followed to become a middle level school administrator/teacher.

Three of the participants enrolled and pursued the educational track (1.1, 1.2, and 1.4); however, participant 1.3 entered the educational track through the alternate route. Participant 1.1 taught, became lead teacher and assistant principal, and has obtained a doctorate in educational leadership and supervision. Participant 1.2, lead teacher, began her teaching career as a special education teacher and pursued her master and specialist degrees. Participant 1.3 has taught for 15 years, became assistant principal, and is in his fifth year as principal. Participant 1.4 stated, "The

first thing I did was actually graduate high school." He entered the educational track by attending junior college first. These participants are well rounded, have varied educational backgrounds, and followed different procedures to become middle level administrators and teachers.

What is your perception of the middle school concept?

Each of the participants responded positively about their perception of the middle school concept; they each elaborated on its effectiveness in meeting children's needs academically, emotionally, socially, and developmentally. Participant 1.2 declared, "It's not what it seems to be. What you read on paper is not necessarily what you see in person. It's very fast-paced, very exhausting, but very rewarding." Moreover, participant 1.4 asserted, "The school district's policy of 'destination graduation' is the big idea or theme. It's directing the kids in a positive manner; it reminds students of the importance of graduating."

Describe how the implementation of the middle school concept has impacted student achievement.

Each participant's response was very favorable of the implementation of the middle school concept and its impact on student achievement. Participant 1.1 stressed that incorporating the team concept within each grade level and coplanning within departments and disciplines led to their school meeting AYP and Level 5. Participant 1.2 stressed both academics and extracurricular activities; meanwhile, participant 1.3 reported, "Not every middle school has a true concept." Additionally, he stated, "Academically, the middle school concept has flourished and allowing students to become involved in activities can foster

school spirit and school spirit drives academics." Participant 1.4 sees the concept as a way to promote students' success.

How is cohesiveness developed in your school?

The reverberating responses to this question was a resounding message of togetherness and unity. It was all about the students—doing what is best to meet students' needs—and each participant mentioned the staff as well. Morever, participants 1.1 and 1.3 reflected on having active PTOs. Participant 1.1 stated, "I feel parental involvement is a must for students to excel," and participant 1.3 uttered how involved his PTO was. It is imperative for teachers to meet together, collaborate, and plan lessons accordingly.

How do you ensure that the middle school concept is being implemented?

Participants' responses included classroom observations, monitoring lesson plans, discipline records, test data, and participant 1.3 said, "We follow the guidelines and policies that the school district provides to us."

Describe a typical middle school day.

Again, the participants concurred, "There is nothing typical about a middle school day!" Their responses ranged from morning announcements, block schedules, breakfast-to-go, lunch, recess to end-of-the-day dismissal. Participants 1.2 and 1.3 also addressed how busy a typical day can be; they each stressed the importance of academics. Participant 1.4 spoke of PE being more structured, organized, and actually teaching the children various skills rather than the children having "managed or supervised recess."

Are there any other facts that you would like to include as part of your interview?

Sentiments echoed by each participant reflected a warm, positive, and nurturing environment for children. Participant 1.1 expressed how proud she was of her children, the school, and the accomplishments they have received and achieved. Additionally, participant 1.2 agreed by offering accolades for children, teachers, and administrators. Participant 1.3 stated, "There is a kind of 'homey' feeling to the whole concept." He stressed the importance of having good, parental support and the disadvantage of the lack of support. Participant 1.4 commented on the Coast, how much he loves his job, and working with students and co-workers, as well as the character and resolve of the people on the Coast.

From each of the participants' responses, the common thread reflects that the implementation of the middle school concept is a good concept to have in place, when implemented in its entirety; it has positive implications and has impacted student achievement. Offering varied subjects and programs played an integral part in the success of children and the many awards and recognitions received. Expectations, consistency, organization, and following routine procedures establish a framework for learning and promoting excellence as stated by each participant.

With such a varied background, the participants have knowledge of what programs work and which ones do not; they also bring a wealth of experiences to their new school. Participants 1.1 and 1.3 have the most experience in education and working with the middle school concept. In light of the differences in the years of experience, each of them has developed a strong commitment to the middle school concept and its components; there is a strong focus on meeting the needs of children and providing every opportunity to ensure success for all children.

Cohesiveness is developed through departmental meetings, team planning, cross disciplines interactions, and a strong PTO. Each participant spoke very favorably of the importance of working together for the betterment of the children and also for the adults. Participant 1.3 spoke of the middle school concept being more beneficial in a 7-8 grade setting rather than a 6-8 grade setting due to the developmental stage of the age groups, whereas each of the other participants thought the concept worked well within their respective schools. Getting the children involved, promoting inclusion, and exposure to many programs all help to foster learning. Each of the participants responded favorably to the need for good, wholesome parental support. Participant 1.3 said, "Parental involvement is the key. Without good parental involvement, your work is cut out for you, both academically and behaviorally."

Moreover, the five themes found to be consistent among the participants were meeting students' needs, promoting academics, collaborative planning, setting and establishing routine, procedures, high expectations, and parental involvement. From the shared participants' responses, the frequency of each theme occurrence was consistent; responses from six of the eight interview questions related to the previously listed themes occurred four times per response. Overwhelmingly, both administrators and teachers concurred that these themes are essential to increased student achievement in their schools.

CHAPTER V

SUMMARY

This study was conducted to determine if there were differences in middle level schools in student achievement where the middle school concept is implemented and those that do not implement the middle school concept. Additionally, interview questions and an overview of participants' responses were discussed. The ultimate goal of this study was to provide administrators and school districts with evidence and a rationale to support decisions made regarding programs and practices that may be effective in increasing student achievement in middle level schools.

Discussion

This study was conducted during the fall semester of the 2006-2007 school year; test data were collected from the 2005-2006 Mississippi Curriculum Test (MCT). Of the 15 coastal Mississippi middle level schools housing grades 6-8, 12 were included in the study. Data collected represent 6 schools where the middle school concept is implemented and 6 schools where it is not implemented. There were 9 coastal Mississippi middle level schools identified as implementing the middle school concept; consequently, to keep both categories as equal as possible, the researcher used 6 of the 9 schools which implemented the middle school concept. Thus, a comparison was made between these two groups. Comparison of the nine tests show that the means are higher, but not significantly higher. There were six schools included that implemented the middle school concept and six schools that did not; therefore, the study was limited by power. The pattern was there; more schools were not examined. The trend was to find significance if samples were larger.

Three hypotheses were tested to determine if there were any statistically significant differences in sixth, seventh, and eighth grade student achievement in coastal Mississippi middle level schools that implement the middle school concept and those that do not. As reported in Chapter IV, there was one statistically significant difference in student achievement in seventh grade language.

In comparing the means of sixth grade MCT scores in reading, language, and math in schools where the middle school concept was implemented, the mean was higher than in those schools that did not implement the concept. Of the three subjects, math was the highest. In comparing the means of seventh grade MCT scores in reading, language, and math, math showed the greatest gain. In comparing the means of eighth grade reading, language, and math in schools where the middle school concept was implemented, again, math was the highest. It was noted that in the area of eighth grade language, there was a tie between the highest mean reported in schools where the middle school concept was implemented as well as in those schools where the concept is not implemented. Moreover, the highest mean was reported in the area of math, which reflected a steady increase from grades 6 through 8. This constant increase may possibly be attributed to building a strong foundation in math in elementary school, where one skill builds upon the next and is constantly reinforced with continuous practice and drills. Although the means for academic achievement in schools where the middle school concept was consistently higher than those in nonimplemented schools, there was a statistically significant difference found only in language for seventh grade.

According to Lee and Smith (1993), overall student achievement has risen, but the middle grades may not necessarily be responsible for that gain. Moreover, they stated that

the gain may be attributed to what is happening in the lower grades. Additionally, Anfara and Lipka (2003) stated that a body of research exists on components of a successful middle school, such as advisory programs, student grouping, and developmentally appropriate approaches to teaching, learning, and assessment; in order to answer questions about the middle school concept and its effects on student achievement and socioemotional development, the focus must move from individual components and look at research that addresses the reform as an integrated model, including the impact on student learning and achievement. Similarly, a study conducted by Felner and associates (1997b), using student academic achievement scores, found that students in highly implemented schools outperformed students in partial and low implemented schools in all subject areas.

These studies are consistent with information gathered in the interview process; each participant addressed meeting students' needs, promoting academics, and collaborative planning as being an integral part of the students' success. The Center for Prevention Research and Development (CPRD) suggests that the implementation of middle reform elements positively impacts student learning and achievement.

Meanwhile, during each interview, the participants spoke very highly of their school, staff, students, and parents. They each were excited about their schools' accomplishments and the many programs offered to children. The middle school concept is alive and well in each school. The thought highlighted most was that everyone working together for the betterment of children, setting and establishing routine, procedures, and high expectations followed up with consistency tend to yield greater results. Thus, it is all about meeting the needs of each student.

One advantage to middle level grades may relate to children becoming familiar with the routine and procedures and rising to meet the level of expectation set forth from year to year and building upon those expectations. Each administrator and teacher was committed to his or her school and the success of all children.

Implications for Policy and Practice

As noted in the NCLB legislation, all students must show AYP by 2014. If schools do not, they can face multiple sanctions, such as restructuring and being taken over by the state. Moreover, schools can face sanctions ranging from designation as a school in need of improvement to restructuring (George, 2002).

As stated from the participants' responses, parental support is an integral part in the success of middle school students. According to Mitchell (2007), middle school students who have attended a "real" middle school frequented by involved, supportive parents will enter high school much better prepared to succeed. Participant 1.2 stated that the middle school concept involves much more than what is said and what is on paper. The concept has to move to the application phase. Meeting regularly with parents, teachers planning collaboratively are steps to ensuring success for children. From the existing body of literature, several studies have been conducted and the findings related pertinent strategies that may be worth exploring in Mississippi schools. To mention a few, Mertens and Flowers (2006) and Mertens et al. (1998) found that achievement scores were higher for students in schools that are teaming with high common planning time. Flowers et al. (1999) also found that team size and length of time teaming also affect student achievement scores. Another study conducted by Mertens et al. (2002),

found that teachers with middle grade certification engaged more frequently in "best practices" impacted student achievement.

Lastly, McLaughlin and Drori (2000) conducted a study of school-level correlates of academic achievement in 20 states that combined teacher data from the National Center for Education Statistics' Schools and Staffing Survey and student achievement data from state assessment and the National Assessment of Education Progress. The results indicated that smaller class sizes had a significant impact on student achievement as well as a strong correlation between positive school climate and student achievement. Thus, these results of middle grade studies show promising implications for educators; they provide middle grade practitioners, scholars, advocates, and policy makers with a firm foundation that links the middle school concept to improved student achievement and socioemotional development (Mertens & Anfara, 2006). Another study by Anfara and Lipka (2003) concluded that if student achievement must be given the highest priority, then the instruments used to measure this achievement should be given the same high priority.

Teachers with middle grades certification in schools that are teaming with high levels of common planning time report higher levels of team and classroom practice; therefore, they have the potential for greater gains in student learning as evidenced by student achievement results. Moreover, when teachers have proper certification/licensure and are provided with the necessary resources, they are able to engage in the types of best practices and improve student learning and achievement (Mertens et al., 2005).

As a result of this study, educational leaders should utilize programs that are aligned with the Mississippi Curriculum Test and ensure that skills are being taught in

various methods to reach all students. Another way to improve student achievement might include visiting other schools that have consistently performed well and have maintained increased student achievement status. It is imperative that every educational leader employ every possible strategy to enhance student achievement. He or she must find a program that works and work the program.

Professional development sessions should encompass training the entire faculty on implementing strategies, techniques, and tips to ensure that everyone is focused and working toward achieving the same goal which is improving and increasing student achievement. In order for coastal Mississippi middle level schools to excel, a strong commitment must be established, enforced, and promoted from the educational leaders down to the students. Lastly, as discussed in this study, education leaders must ensure that the curriculum is relevant, rigorous, challenging, integrative, and exploratory. Allowing students the opportunity to work in cooperative groups, peer tutoring, to participate in before- and after-school tutoring sessions are techniques that may lead to improved student achievement. Employing the most qualified staff, particularly persons who are middle school level certified, who are willing to practice the middle school concept, who value working with this age group and have a willingness to form a cohesive team may lead to increased student achievement in each school.

Conclusion

This study was conducted to examine the effect of the implementation of the middle school concept on student achievement in coastal Mississippi middle level schools in schools where the middle school concept is implemented and those schools where the middle school concept is not implemented. The findings show that there was

no significant difference in sixth grade academic achievement and eighth grade academic achievement. However, there was a significant difference in student achievement in seventh grade academic achievement in the area of language. This finding may be attributed to several factors such as strategies utilized by teachers to reinforce skills in the areas of reading, language, and math, providing additional drills/practices relative to testing bench marks aligned with the curriculum, conducting sample MCT practice tests, increasing parental involvement, and providing incentives to teachers and students who perform well.

Information gathered from the qualitative component, interviews, of this study reveal both administrators and teachers will have to work collaboratively toward achieving the maximum goals of its students which is to improve student achievement at each school. As stated within this study, wholly implementation of the middle school concept can and will yield increased student achievement. Moreover, educational leaders must be knowledgeable of which strategies, programs, and practices are most effective and build upon those. On the other hand, those strategies, programs, and practices that have proven to be ineffective should be discarded. As each of the participants responded during the interviews, putting the needs of students first is primary and meeting those needs is the key to the success of all students. The instructional leader must monitor instruction and delivery of its content, monitor the assessment of skills on a weekly basis, and be readily available to provide insight and assistance when needed.

Additionally, the thoughts expressed so candidly from the participants were the need to be consistent in setting and establishing routine procedures, and setting high expectations for all students. A resounding affirmation of the impact of having a good,

strong parental involvement is also a positive link to promoting student achievement. One of the administrators stated, "If parents are not functioning at the level they should, your work is cut out for you—both academically and behaviorally. Parents are the key." Thus, good, strong parental involvement includes but is not limited to inviting parents to visit their child's classroom, parents volunteering in the classroom and school, attending regularly scheduled meetings and conferences, assisting with homework, and attending extracurricular activities and functions. Moreover, making education a priority in the home, establishing high expectations, and monitoring children's behavior and activity will show children the importance of having involved parents whose focus is on education.

Limitations

This study was limited by the following:

- 1. Participants were from the same school (each administrator and teacher were from the same school).
- 2. This study did not interview administrators and teachers from schools where the middle school concept was not implemented.
- 3. This study did not examine students' scores in the basic and minimal categories.
 - 4. This study did not include middle level schools throughout the state.
- 5. This study did not control for socioeconomic and other demographic information.
- 6. This study did not investigate planning time, teaming issues, and variations.

Reflections

As a veteran teacher and former administrator in middle level school and in junior high school, this researcher can attest to the fact that young adolescents need and deserve caring, knowledgeable, and skilled teachers who want to teach them and have been professionally prepared to do so. Not only does excellence relate to students' performance and achievement, it must permeate from the top down. Students are only as good as their teachers; teachers are only as good as their instructional leaders and administrators; administrators are only as good as the superintendent and instructional leaders. In other words, if "success for all" and "failure is not an option" is the message from the school board, community at large, and each integral person previously mentioned, students will rise to the expectation and, in most cases, excel beyond those expectations.

Conducting this research afforded the researcher the opportunity to examine pertinent data retrieved from the Mississippi State Department of Education archives and to meet and interview four outstanding administrators and teachers. Moreover, this researcher gained a deeper appreciation for those educators who are genuinely concerned about educating children and meeting the needs of the "whole" child. One administrator categorized her school as "world famous." This statement speaks volumes of the pride and worth of this school system. This researcher strongly believes that at the middle school level it takes a very special, unique individual who enjoys teaching and working with this particular age group. It requires someone who is willing to go above and beyond academics, go the extra mile, and strive to address the needs of every child to ensure success and improve student achievement. For example, if a child is ill or becomes ill, you seek the assistance of the school nurse; if a problem arises and the student prefers to

discuss the issue with someone other than this researcher, he or she can be referred to a peer teacher, counselor, school resource officer, or someone from the administrative team. As stated from the lead teacher, she employed a similar method in which the school partners with outside counselors who are brought in if students prefer to discuss issues with someone other than the staff. From this study and interviews, this researcher was extremely impressed with the positive atmosphere displayed and the tenacity exhibited in putting children first. It is all about the children. This researcher has and always will do everything within her might and power to make every effort to ensure success for all of her students. As a result, this researcher walked away from this study with a renewed commitment to strive to reach every child and provide every opportunity for students to excel. The motivation and enthusiasm displayed were infectious.

Collecting, analyzing, and interpreting data from this study were challenging and interesting, but there was no comparison to actually conversing with teachers and administrators. During the one-on-one interviews, this researcher observed the emotions and strong sense of will and determination for excellence expressed from each participant. A sense of urgency and passion reverberated throughout the responses which reflected putting the needs of children first and doing whatever is necessary to meet those needs.

One of the administrators spoke of having an all new staff, the need to involve the staff, and have "family" outings such as cookouts, providing incentives and give-aways for teachers. He, as well as the other participants, acknowledged the need for forming and building a cohesive team, a committed group of instructional/educational leaders, teachers, parents, students, and community; yes, even the staff has an integral role in

students' achieving and reaching their maximum potential. As a result of this study, this researcher will persevere in becoming proactive in contacting parents with "good" news such as their child's improvement in grades, attitudes, and behavior. If given the opportunity to serve in an administrative capacity, this researcher will work diligently with teachers, parents, and students in determining which programs or practices should be implemented to yield the greatest results in student achievement and will share the knowledge gained to assist fellow administrators as well as teachers. This researcher is confident that when children and teachers are shown how much they are cared for, powerful results which can impact teaching and learning will be seen; consequently, student achievement will increase. This researcher strongly believes a total commitment in meeting students' needs and building active parental involvement will enhance student achievement. Educating the "whole" child includes providing an atmosphere conducive to learning. If students experience the classroom as a caring, supportive room where they feel a sense of belonging, where they are respected, valued, and feel safe, they tend to participate more fully in the learning process. This researcher will endeavor to do more in the area of meeting students' affective needs as well as academic needs. Once the affective needs are addressed and resolved, then learning is more apt to occur; thus, student achievement will improve.

On a personal note, as the mother of a deceased child, her only child, this researcher has always taken an interest in assisting children and encouraging them to be all they can be. Even before this researcher became a mother, but much more since the death of her child, she exerts an enormous amount of time and energy working with her nieces, nephews, great-nieces, great-nephews, step-grandchildren, students, Sunday

school class teenagers, and any group of children she is privileged to work with by instilling within them the desire to always do their best, strive to excel, and to reach their highest potential. This researcher sets and establishes high expectations. Frankly, she can sleep well knowing that she's done her best presenting the content, utilizing various methods of teaching and assessing students, and making every effort to maximize their greatest potential.

Recommendations for Future Study

This mixed-method causal comparative study was conducted using archival data from coastal Mississippi middle level schools and interviewing only four participants from those schools identified as implementing the middle school concept.

The following recommendations are made for future research based upon the findings of this study:

- 1. It is recommended that a survey be conducted to determine the perceptions of administrators, teachers, students, and parents on the effectiveness of the middle school concept on student achievement.
- 2. It is recommended that a qualitative study be conducted interviewing only teachers from Mississippi middle level schools.
- 3. It is recommended that a qualitative study be conducted interviewing only administrators from Mississippi middle level schools.
 - 4. It is recommended that a larger sample size be included.
- 5. It is recommended that planning time and teaming issues/variations be examined.

Each of the recommendations for future study is suggested as a means to provide further insight into the possibility of implementing the best practices and procedures to increase student learning and achievement. Conducting a survey of administrators, teachers, parents, and students encompasses a larger population and may yield a wide array of suggestions and responses that may lead to strategies needed to improve and increase student achievement. Moreover, a qualitative study should be conducted with teachers only in Mississippi middle level schools to gather and compile specific strategies that have been proven to be successful in increasing student achievement and which may warrant further investigation in meeting training and implementation needs. A qualitative study should be conducted with administrators from Mississippi middle level schools to determine which procedures and strategies are appropriate and which method of implementation should be established in an effort to maximize the greatest yield and promote optimum educational practices. Examining a larger sample size will lead to greater significance. Finally, planning time, teaming issues, and variations may also lead to increased student achievement.

APPENDIX A

INTERVIEW PROTOCOL

Informed Consent

I, Mary L. Davis, am a doctoral student attending The University of Southern Mississippi. As part of my research study, I will be interviewing two (2) administrators and two (2) teachers from coastal middle level schools who have knowledge of the implementation of the middle school concept and its effect on student achievement.

The interview process, which will be audio taped will take approximately 30 minutes of the participants' time. The process will consist of a structured, one-on-one interview with each participant; each participant will be asked eight questions with the opportunity to provide any additional pertinent information if needed. Moreover, all participants will remain anonymous. All tapes will be destroyed after each interview has been transcribed.

Participation in this research study is completely voluntary. There are no foreseeable harms or risks with this research study, and participants may withdraw from this study at any time without any penalty or prejudice.

Questions concerning the research should be directed to researcher: Mary Davis at: 6644 Columbus Circle, Ocean Springs, MS 39564, or (228) 875-8846. Once consent has been granted by the Institutional Review Board (IRB), any questions or concerns should be directed to the Chair of the IRB, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 30406-001, (601) 266-6620. If there are additional questions, you may contact my faculty supervisor, Dr. Gaylynn Parker, Interim Chair, The University of Southern MS, 118 College Drive, Box 5027, Hattiesburg, MS 39406, (601) 266-6093.

Please mark an X in the blank space to indicate if you would or would not like to participate. Please sign your name and date below.

____ I would like to participate.

____ I would not like to participate.

Participant's Name

Date______

Researcher's Name

Date

INTERVIEW PROTOCOL

This document will be used in each interview.

Project: The Effect of the Middle School Concept on Student Achievement in Coastal Mississippi Middle Levels Schools

Date:	Interviewee N	lumber:	Time of Interview:
Years of Experien	ce:	Enrollment:	
Years of Middle S	School Concer	t Implementation	n:

- Give oral presentation and provide participant with a copy of short consent form.
- II. Turn on tape recorder.
- III. Begin interview.

Questions:

- A. How would you describe your school?
- B. Explain the procedures you followed to become a middle level school administrator. Teacher.
- C. What is your perception of the middle school concept?
- D. Describe how implementation of the middle school concept has impacted student achievement.
- E. How is cohesiveness developed in your school?
- F. How do you ensure that the middle school concept is implemented?
- G. Describe a typical middle school day.
- H. Are there any other facts that you would like to include as part of your interview?

I appreciate your time in participating in this interview. All responses will be kept in strictest confidence.

Interview Questions

- 1. How would you describe your school?
- 2. Explain the procedures you followed to become a middle school level administrator. Teacher.
- 3. What is your perception of the middle school concept?
- 4. Describe how implementation of the middle school concept has impacted student achievement.
- 5. How is cohesiveness developed in your school?
- 6. How do you ensure that the middle school concept is being implemented?
- 7. Describe a typical middle school day.
- 8. Are there any other facts that you would like to include as part of your interview?

APPENDIX B

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE APPROVAL



The University of Southern Mississippi

118 College Drive #5147 Hattlesburg, MS 39406-0001

Tel: 601.266.6820

eview Board Fax: 601.266.5509 www.usm.edu/irb

Institutional Review Board

HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE NOTICE OF COMMITTEE ACTION

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

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

PROTOCOL NUMBER: 27072601

PROJECT TITLE: The Effect of the Middle School Concept on Student

Achievement in Coastal Mississippi Middle Level Schools

PROPOSED PROJECT DATES: 08/25/07 to 12/14/07

PROJECT TYPE: Dissertation or Thesis
PRINCIPAL INVESTIGATORS: Mary Lee Davis

COLLEGE/DIVISION: College of Education & Psychology DEPARTMENT: Educational Leadership & Research

FUNDING AGENCY: N/A

HSPRC COMMITTEE ACTION: Expedited Review Approval

PERIOD OF APPROVAL: 10/01/07 to 09/30/08

Tawience a. Homan		10-5-07	
Lawrence A. Hosman, Ph.D.	•	Date	•
HSPRC Chair			

APPENDIX C

RESPONSES TO INTERVIEW QUESTIONS

In this section, the participants' responses are listed below the questions or statements.

How would you describe your school?

- 1.1 We would like to think of ourselves as "world famous." We're top in the state and the nation. We are SACS accredited, Level 5 Superior. There are 1202 children currently enrolled. We have a mixture of students from low, middle, upper middle, and high income families. We promote excellence and expect it!
- 1.2 In terms of the school itself, middle age group 6-8 graders—highly populated, and very teen-agey. So I would say we have an upper middle class to high middle class to higher lower income children and just good kids. Right now the enrollment is at 1202, and we're usually at 1400.
- 1.3 I would describe our school as being a good school with at-risk population, predominately socio-economically deprived, 70% free/reduced lunch. We have a mixture: we have some affluent class, some middle class, and too many children fall probably close to the poverty level. But it is a good school- the kids meet your expectations.
- 1.4 I would say that it's very, you know, well organized; one thing about it-it's very diverse, because you get kids from all different backgrounds. You have all types of livelihood here. That's why I enjoy it because I like working with different types of people. That's the thing I've seen that's different from other schools that I've been to. Mainly, you get different types of people and cultures. This is my first

year here, and I love it, the kids, staff and administration.

Explain the procedures you followed to become a middle level school administrator/ teacher.

- 1.1 I achieved my AAA in Educational Leadership and Supervision; I became a lead teacher here at the middle school and then an assistant principal. Then I pursued my Doctorate in Educational Leadership and Supervision.
- 1.2 I went back to school; I had a degree in Special education-my master level. I went back to school for a specialist level in educational leadership at USM, so I took all the necessary classes, the core classes, then I took my Comps, or was it Comps first? I can't remember; there were so many tests. After that, I took the qualifying comps and then I took the SLLA. I then interviewed for lead teacher and was very blessed to get the position.
- 1.3 I was an alternate route teacher; I taught 15 years. I received my master degree in educational administration during my 4th year of teaching, and I taught one more year after that. I was later able to obtain a position at the 7th/8th grade school over in a neighboring county. When I came to this school district, they had the middle school concept in place. I was assistant principal there for two years. This is my fifth year as a middle school principal. The middle school concept was in effect when I came here; it has probably been in effect for about twelve years.
- 1.4 The first thing I did was actually to graduate high school, then eventually I went to college, you know, the junior college route first. I worked all throughout my college years which took me a little bit longer than I wanted, but it gave me a

chance to grow up and get older. I went to USM through the teaching route, did my student teaching and basically became a teacher.

What is your perception of the middle school concept?

- 1.1 The middle school concept allows for the promotion and enhancement of age appropriate learning ensuring students' success academically, socially, and emotionally.
- 1.2 My perception of the middle school concept, Wow! It's not what it seems to be. What you read on paper is not necessarily what you see in person. It's very fast paced, very exhausting, but very rewarding. Of course, I wouldn't tell them that, but it is very rewarding.
- 1.3 I think the middle school concept is a good concept; I don't think it is —this is a non-research opinion. I don't think 6th grade students are developed enough to be with 7th and 8th grade students. I feel like the appropriate level of 7th and 8th grade students kind of meet the developmental stage of this age group. The 6th graders are still very defiant; typically, they're-you kind of have to lead them around because they're so elementary. The 7th and 8th graders are not, they need to be in a league of their own, separate from the 9th grade. The 9th graders are way too mature for the 7th and 8th graders. So, I think from that stand point that they're in line with their developmental stage. Yes, I believe the middle school concept is a good concept. I just don't think it's appropriate for this age level. Again, this is a non-research based opinion; it's based on experience. The middle school concept would be more effective in a 7th/8th grade school. The 5th/6h grade students are more alike as oppose to the 7th/8th graders It's like you have those cut

offs right there.

1.4 I would say it's directing the kids in a positive manner. The school district's policy "destination graduation," is the big idea or theme. I really think that theme reminds students of the importance of graduating. Without a high school education, you know, to get a job is a little tougher. The concept of middle school is to inform students and encourage them to do their best at all time.

Describe how the implementation of the middle school concept has impacted student achievement.

- 1.1 The middle school incorporates the team concept within each grade level and allows co-planning within the departments and across the different disciplines resulting in our having met AYP and Level 5.
- 1.2 The concept we take here is we do a lot of hands on not a lot of one-on-one; however, we do work in small groups. The teachers are wonderful; the after school tutoring and before school tutoring are intervention strategies used to help the children with homework or whatever they need. We just have an open door policy whatever the kids want and basically need as far as academics, we provide. So the concept kind of grew out of the need itself. We have-we're very fortunate to have football, basketball, soccer and other sports; in this area, we're very fortunate to be able to afford the extracurricular activities that some schools don't have. We have band, music, and the arts; I don't think there is anything these babies don't have. We have a planning period, one off period where each grade level is off at the same time so we have grade levels once a month. We also have department to get together to build their lesson plans. We have a cross interaction-I guess you would call it with our SPED teachers to get with their

and modify them as needed for our children.

- 1.3 I think it's been good; I think if you look at the true middle school concept-not every middle school has a true concept, but if you look at it from that stand point, I think it's very typical. It addresses the needs of this age, the activities that they do, it almost kind of tones down the-when you take away the 9th grade, it focuses on the varsity syndrome that the junior high school has. The junior high schools have a very varsity syndrome; varsity is more of a push toward the high school. So I think it kind of tones that down to a point. I would say it's a great thing; you have to find a balance. From an academic stand point, I think the middle school concept has flourished; school spirit can drive academics. It allows for more involvement and participation. People who are excited about coming to school and have school spirit, they do better, they feel better-whether teachers or students. The more school spirit you can drive, the more things kids can do, it makes it better. You have to maintain a level of competition.
- 1.4 For students to achieve, we have to have a good, positive concept and the principal has done a great job with this. With me being new, I didn't know what thy did before, but it seems like the behavior here is fairly good compared to what it could be if there was no program, concept, or incentive in place. I think the concept definitely promotes success for students. The district has provided us with the tools we need to move the children as best we can to reach their goal.

How is cohesiveness developed in your school?

1.1 The team concept promotes cohesive instructions through grade level meetings; team meetings are held regularly both departmental and with inclusion teachers. We

also have a very active PTO. I feel parental involvement is a must for students to excel.

- 1.2 I think with the background of the teachers here, they're going to do whatever it takes to make it work. I don't think I've ever been in a situation where one teacher is not helping out the next. The sixth grade teachers get together with the seventh grade teachers toward the end of the school year to identify students' weaknesses so those teachers can begin to build for next year. It is really all about the children and doing what is best in meeting their needs.
- 1.3 Well, we've done lots of things such as having a cookout this summer; I cooked for the staff yesterday, and we ate together. People who either play together, pray together, stay together, and when you do a lot of things together, you can build a team. We have a lot of new staff members this year, so for me, more than any other years, I needed to push more of us doing things together. We had a pool cookout during the summer before school started to meet and greet the new staff. We do lots of give-aways and incentives for teachers. For example, we're going on a field trip; the district has paid for the teachers t-shirts in the past but will not pay for them this year, so I bought t-shirts for the teachers. When my teachers show up at the field trip with all the other schools, they will be the only ones who have t-shirts. Of course, the other principals don't know that yet! I will have a team that shows up and will be dressed alike; being alike is ok. It's really good in its place. We're doing a number of of things this year to include everybody. We're like family. Families fight and stuff, but you can get over it-get passed it. We have a very active PTO this year; as a matter of fact, we have a meeting this afternoon. Yes, the PTO is active and the parents are very involved. It is really a good thing. It has gotten a lot better since Katrina; Katrina

basically left everyone to fend for themselves, but it has gotten better the last couple of years.

1.4 Well, this my fist time of actually being on a team; I am a PE teacher, so I was kind of by myself. Since I've been here all of the elective teachers formed a team. We're called Team Odyssey. It's really good for us to be able discuss kids' academics, behavior issues, and what goes on from day to day. If students or teachers have concerns, we can discuss them and try to resolve them as quickly as possible. Today, I've had conversations with two teachers about my players' grades and behavior. It seems like everybody works together for the benefit of the kids. We have a unique grading program where we can actually view grades online. That's awesome to me! Back in the day when my dad was teaching, they didn't have anything like that; you really had no clue of what the kids were really doing. If one of my players is not doing what he should be doing in terms of grades being up to par, he is put on probation. We have a policy that states if they have one "f", they are put on probation, and we can do an average grade, but if they have two "fs", they can't play, and they're put on probation for two weeks. If they can't bring their grades up in the two-week period, they're gone; they are no longer on the team. That's a great thing! After the first reports were given, we had about 20 kids on probation; two weeks later, we had only one. So it really stresses the importance of making good grades, and it really got their attention!

How do you ensure that the middle school concept is being implemented?

1.1 Firstly, through observations and secondly, documentation of meeting minutes.

Our academic achievement, discipline records, and test data are all ways that we can

ensure that this concept is indeed being implemented. Lesson plans are viewed constantly, and teachers get together to plan accordingly, as well as with the inclusion teachers. All meeting minutes are read and discussed and teachers have to document and validate those minutes.

1.2 We have an SAT process in place; SAT is the student assistance team. Any child that we feel is having difficulty in academic or behavior, are brought to the team to see where we can implement new interventional strategies to help that child with their raising their grades or conforming their behavior to what's needed. If that doesn't work, we do our three- tier process that is now mandatory by the state, which we've had in place for a long time. We also do our pull-out TA time; it is similar to accelerated reading, but we pull them out for instructions, one-on-one instructions in the areas of math or reading, or any area that they're having difficulty. It's like a resource class, but it's for our general education children who we're trying to keep out of special education. So that process alone is our check and balance system for our teachers, the children, and myself. We have parents' meetings, our SAT meetings are mandatory once a month. Parents are invited-they have to be invited, so we inform them of their child's grades and whatever they need to know, and we give that information at that time. We definitely have in place our Connect Ed, where we do call outs to parents informing them of upcoming events, such as exams. Actually, we did that last week. Each grade level contacted parents and told them when report cards would be coming home. Just in case children don't get home with the information, the parents are notified ahead of time. This has really been a great investment!

1.3 Well, we follow the guidetines and policies that the school district provides to us.

We don't deviate from them. Whatever program we have established, we follow those programs. We have bi-weekly lesson plans; they plan for a two-week block on block scheduling here, and I do lesson plans reviews every two weeks. Teacher post lesson plans over the internet, so I monitor those and observe classroom practices and settings.

- 1.4 You know, they're very consistent with doing things here like coming over the intercom in the morning, having that welcome given by the principal is a good way to start each morning. It creates and establishes a routine. I think having organization and routine procedures in place sets the tone and helps with maximizes learning, behavior, and everything we encounter during the course of a school day. It's like practicing for a game or reviewing test skills, organization, consistency, and routine can make or break your plan. For example, this week, I remember at one school there was total inconsistency. You didn't know whether you would get morning announcements or not, when you would get them; they were given throughout the day, which interrupts the learning process. I love the consistency here, and I believe the kids do too. You know if you're going to expect something, then you expect the unexpected.

 Describe a typical middle school day.
 - 1.1 We have a 4-block day; it's a rotating 7th period schedule. Each of the blocks is 100 minutes, and we have an inclusion setting throughout our school. Again, regular education teachers work collaboratively with the inclusion teachers to meet students' needs. Each day begins with announcements; we stress academics, academics, academics. There is a recess time which is staggered, to allow each grade level different times and location for recess. On the other hand, if this privilege is abused,

only those student, not the entire school, will forfeit recess.

1.2 There is nothing typical about a middle school day! We have odd days on 1st, 3rd, 5th, and 7th period classes, and on the opposite days, we have even 2nd, 4th, 5th, and 6th period classes. Fifth period meets daily; during 5th period, TA class meets-which is whatever course or subjects they're in, they have to meet every day. For example, if they're weak in math, they will get the extra help. We have a typical day in terms of routines time for lunch, class/instructional time, recess, and announcements. Announcements are given in the mornings and afternoon unless there is an extreme emergency. We try our best not to interrupt classes during the day because we definitely push academics here. Of course, we have little arguments; we try to settle those. We also have counselors to come in from outside, which gives our children that extra person to express their issues with, someone different to talk to. So, a typical day in all actuality is a non-typical day anywhere else. Whatever can happen, will happen. So that's a typical day! But it always keeps you on your toes. Also if any student abuses the recess privilege, it is taken away from students on an individual basis. The entire school doesn't forfeit recess because of a few who misbehaves. At this age, recess is a reward; children look forward to being outside, playing sports or games, and just being with friends. Everything I've learned has led me to this point and time. You know how to handle them-when to fuss and when to baby! And they're still at that in-between stage where they're too young for some things and too old for others. You have to remind them of what stage they're in. They're good! They really are! I can go home and sleep well at night because I know I've done what I thought was best for children.

1.3 A typical day is very busy for us; the kids are very chattery- some days more than others- it's like a full moon sometimes, but the kids show up on campus, or they get dropped off here, or they come on the bus. We have 6 buses since we're kind of a small school, which is good. The kids are dropped off in front, and they wait by the gate. When the gate opens at 7:30, they cruise on to the cafeteria and sit there until they're separated as to who is eating breakfast and who isn't. The one who are eating breakfast, get in line, get their breakfast, and take it to their classroom and eat. It's called breakfast-to-go. Those who are not eating remain in the cafeteria until the bell rings to move to class. It cuts down on a lot of standing around in the mornings and waiting for things to happen because usually things do happen when you're standing around waiting. They have time to plan stuff and so forth, so we take away that planning phase from the middle school minds. So, they get 95 minutes blocks of instruction. They have three minutes transition time between classes. We don't have lockers anymore; we didn't assign lockers here since they were damaged during Katrina, so they carry their book bags with them. So, the windows open for movement and it shuts real quickly. Here at our school, we have, typically, very few fights and stuff. We're typically not a violent school; occasionally we have a hit here and there. Breaks are an earned rewards that can be revoked if needed. The kids go to lunch in three phases-8th, 7th, then 6th. Each lunch phase is about twenty-three minutes a pop, and I do duty in there. The kids have assigned tables to sit with their teachers. When they finish eating, they put their trays up and return to class with their teacher. At the end of the day, they leave campus in all directions-the bus, the car, or they walk. We have two phases there; if

they're car riders and bus riders, they leave first; then walkers leave last. That way there's not much traffic.

1.4 We have different activities in PE; it's a lot more structured. In most schools, PE is basically managed recess or supervised recess, but here it is much more organized and structured. We're trying to teach them fundamental basis skills to promote healthy work framework from Mississippi's mandated curriculum. It's more geared toward helping them make healthy choices; having lifestyle activities they can do. We're trying to teach them how to take their pulse; we give them pedometers to teach them how to count their steps per day. We also play intramural/team sports, and we're teaching them how to dance in rhythm. We try to expose them to things they've never seen before. We expose them to more than basketball, football and softball, but we try to give them a well-rounded program. I try to create an interest in area where they have not been exposed.

Are there any other facts that you would like to include as part of your interview?

- 1.1 We are very proud of our children and our school; we are proud to attain a Level 5. We have won many state awards, for example, we received exemplary and inclusion awards three times. We have also won numerous physical fitness and band awards. We strive for and promote excellence; we also integrate our academics in arts. It's all about doing what is best for the children and pushing them to their greatest potential.
- 1.2 We're very blessed here; we have a great group of children. There are a lot of them; we have an enrollment of 1202. The teachers are fabulous! I could not have worked with a better group of teachers who are here for the kids. And the

administration is amazing! They can go up against any of your best teams in the state; it's all about the children first. They're going to back you if you've done everything you needed to do, such as contact parents and have your parents meeting, talk to the children and document everything-the administration will back you. So you always know there is somebody there for you. So definitely, if there is a good place to work, it's the middle school. And if you want to keep on your toes with the latest music, the latest styles-these are your babies! These are my babies, and I will do anything for them. They know if I have to take them down, I'll take them down. But they all know that the teachers and administration love them. So, I say again, I'm very blessed! At first, I was a little leery about middle school-thinking that's a lot of children! I did 5 years as a pre-school special needs teacher. I taught 1 ½ years in junior high and 1 ½ years in high school, and now I'm here. Then I thought I'm getting burned out-so I need to do something different. This is my something different. I guess I'll do this for a couple of years and then do something else. 1.3 Well, I think the middle school concept is a good, comfortable feeling here. From my standpoint, the kids are not much bigger than I am, although some of the 8th and 9th graders are bigger. There is a kind of "homey" feeling to the whole concept. It's like what I said before, the 7th/8th grade is really the best fit for instruction from my standpoint. They're very much alike. It's amazing the two months they spend away from school and come back looking differently. They're more mature. When a sixth grader leaves and returns as a seventh grader, it's like they have figured it out, so they don't need to do that anymore. But at other times, it's reversed. It all depends on when their hormones kick in. Sometimes it hits them early and they get through

the phase. By the time they get to eighth grade, they pan off and are more mature. I can't say enough about parental support; if you've got good parents-you have good support and encouragement. If you have poor parents who are not functioning at the level they should, your work is cut out for you-both academically and behaviorally. Parents are the \$\frac{1}{2}\$ key.

1.4 I'm really having a great school year; I love the Coast, and I love working here with a great group of people and children. From what I've seen of how the people bounced back from the devastating storm, Katrina, it shows a lot about the character of the people on the Coast.

APPENDIX D

LETTERS OF SUPPORT

Grean Springs School Mistrict

2300 Government Street (39564)
Post Office Box 7002 (39566-7002)
Ocean Springs, Mississippi
Phone (228) 875-7706

Edna Waller, Ph.D.
Assistant Superintendent
Elementary Instruction

Scherrine Davenport, Ph.D.
Assistant Superintendent
Secondary Instruction

September 4, 2007

Robert E. Hirsch, M.Ed.

Superintendent

Deborah F. Fromin, ED.S Assistant Superintendent

Personnel

To Ms. Mary Davis:

Ms. Davis, please consider this correspondence as my formal letter of consent on behalf of the Ocean Springs School District concerning your interest in interviewing Dr. Margaret Pepper and Ms. Lynn Bezue of the Ocean Springs Middle School as part and portion of your applied dissertation.

Sincerely,

Robert E. Hirsch

Superintendent, Ocean Springs School District

Academics - Arts - Athletics



PASCAGOULA SCHOOL DISTRICT

ADMINISTRATIVE OFFICES
1006 Communy Avenue • P.O. Box 250
Pascagoula, Mississippi 39568-0250
Office 228-938-6491
Fax 228-938-6528
Website http://psd.k12.ms.us

September 6, 2007

Dear Mrs. Mary Davis:

This letter will serve as my consent for you to interview an administrator and a teacher in the Pascagoula School District as part of your requirements for your research study for the Dissertation.

Sincerely,

Andy Parker, Ph.D. Assistant Superintendent Curriculum and Instruction

REFERENCES

- Alexander, W. M. (1968). A survey of organizational patterns of reorganized middle schools. Washington, DC: United States Department of Health, Education, and Welfare.
- Alexander, W. M., & George, P. S. (1981). *The exemplary middle school*. New York: Holt, Rinehart, and Winston.
- Alexander, W. M., & Williams, E. (1968). *The emergent middle school*. New York: Holt, Rinehart and Winston.
- Allen, H. (1992). Middle grade education: A one hundred year perspective. *Education Report*, 32(2), 1-4.
- Alspaugh, J. W., & Harting, R. D. (1998). Interdisciplinary team teaching versus departmentalization in middle schools. *Research in Middle Level Quarterly*, 21(4), 31-42.
- Anderson, L.W., Jacobs, J., Schramm, S., & Splittgerber, F. (2000). School transitions:

 Beginning of the end of a new beginning. *International Journal of Educational Research*, 33, 325-329.
- Anfara, V. A., Jr., & Lipka, R. P. (2003). Relating the middle school concept to student achievement. *Middle School Journal*, 31(1), 15-32.
- Arhar, J. M., Johnston, J. H., & Markle, G. C. (1989). The effects of teaming on students.

 Middle School Journal, 20(3), 24-27.
- Armstrong, T. (2006). The best schools: How human development research should inform educational practice. Alexandria, VA: ASCD.

- Armstrong, T. (2007). The curriculum superhighway. *Educational Leadership*, 64(8), 16-20.
- Ashton, P. T., & Webb, R. B. (1986). Making a difference: Teachers' sense of efficacy and student achievement. New York: Longman.
- Backes, J., Ralston, A., & Ingwalson, G. (1999). Middle level reform: The impact on student achievement. *Research in Middle Level Education Quarterly*, 22(3), 43-57.
- Beane, J. (2001). Introduction: Reform and reinvention. In T. Dickinson (Ed.), Reinventing the middle school. New York: Roundedge.
- Bottoms, G. (2002). Improving schools are trying new approaches to raise achievement of struggling students. In *Opening doors to the future: Preparing low-achieving middle grades students to succeed in high school* (pp. 41-56). Atlanta, GA:

 Southern Regional Education Board.
- Briggs, T. (1920). The junior high school. Boston: Houghton Mifflin.
- Brown, K. M., Roney, K., & Anfara, V. A. (2003). Organizational health directly influences student performance at the middle school. *Middle School Journal*, 34(5), 5-15.
- Brundrett, R. C. (1956). The effects of the middle school concept on student achievement as identified by principals and the Academic Excellence Indicator System.

 Retrieved June 2007 from http://txspace.tamu.edu/handle
- Carnegie Council on Adolescent Development. (1989). Turning Points: Preparing

 American youth for the 21st century. Washington, DC: Carnegie Council of New York.

- Cauley, K. M., & Jovanovich, D. (2006). Developing an effective transition program for students entering middle school or junior high school. *The Clearing House*, 80(1), 15-25.
- Cotton, K. (1982). Effects of interdisciplinary team teaching, research synthesis.

 Portland, OR: Northwest Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 230533).
- Curtis, D. (2001, Spring). We're here to raise kids. *Edutopia*, 8-9. Available: www.edutopia.org/EdutopiaPDF/Spring01.pdf.
- Diemert, A. E. (1992). A needs assessment of fifth grade students in a middle school.

 Curry School of Education, University of Virginia. Acton, MA: Author. (ERIC Document No. ED 362332).
- Eccles, J. S., & Wigfield, A. (1997). Young adolescent development. In J. L. Irvin (Ed.),

 What current research says to the middle level practitioner (pp. 15–29).

 Columbus, OH: National Middle School Association.
- Epstein, J. L., & MacIver, D. J. (1990). Education in the middle grades: National practices and trends. Columbus, OH: National Middle School Association.
- Erb, T. O., & Stevenson, C. (1999). From faith to facts: *Turning Points* in action—what difference does teaming make? *Middle School Journal*, 30(3), 47-50.

- Felner, R., Jackson, A., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997a). The impact of school reform for the middle years: A longitudinal study of a network engaged in *Turning Points*-based comprehensive school transformation. In R. Takanishi & D. Hamburg (Eds.), *Preparing adolescents for the 21st century:*Challenges facing Europe and the United States (Johann Jacob Foundation Conference Series, Vol. 4, pp. 38-69). New York: Cambridge University.
- Felner, R., Jackson, A., Kasak, D., Mulhall, P., Brand, S., & Flowers, N. (1997b). The impact of school reform for the middle years: A longitudinal study of a network engaged in *Turning Points*-based comprehensive school transformation. *Phi Delta Kappan*, 78(3).
- Flannery, M. E. (2007). Advancing the middle ground. Neotoday, 25(5), 24-29.
- Flowers, N., Mertens, S. B., & Mulhall, P. F. (1999). The impact of teaming: Five research-based outcomes of teaming. *Middle School Ground*, 31(21), 57-60.
- George, P. (2002). No child left behind: Implications agenda: Happy collaboration or a collision course? *Phi Delta Kappan*, 88(5), 345-352.
- Gruhn, W., & Douglass, H. (1947). *The modern junior high school*. New York: The Ronald Press.
- Hart, L., Pate, P., Mizelle, N., & Reeves, J. (1992). Interdisciplinary team development in the middle school: A study of the Delta Project. *Research in Middle Level Education Quarterly*, *16*(1), 79-98.
- Hess, F. M., & Rotherham, A. J. (2007). NCLB and the competitiveness agenda: Happy collaboration or a collision course? *Phi Delta Kappan*, 88I(5), 345-352.

- Hodge, J. (2006). Kappa Delta Pi. Retrieved July 2006 from http://www.kdp.org/about/laureates.laureates/williamalexander.php
- Hot Springs Middle School. (2003). Common questions about the middle school.

 Retrieved 2006 from http://www.hssd.k12.sd.us/hsms/questions.htm
- http://www.education.indiana.edu/p540webcourse/develop.html. Cognitive development theories: Piaget, Bruner, Vygotsky. Retrieved July 2006 from http://www.funderstanding.com.piaget.cfm
- Jackson, A. W., & Davis, G. A. (2000). Turning Points 2000: Educating adolescents in the 21st century. New York and Westerville, OH: Teachers College Press and National Middle School Association.
- Jehlen, A. (2007). NCLB: The sequel. Neatoday, 25(5), 30-31.
- Kearsley, G. (2006). Explorations in learning and instruction: The theory into practice database. Retrieved June 2006 from http://www.tip.psychology.org
- Koos, L. (1920). The junior high school. New York: Harcourt, Brace, and Howe.
- Krouscas, J. (2004). The history of middle schools. Middle School Info Center. Retrieved July 2006 from http://www.vmna.org/VMCENT/history.html
- Lee, V., & Smith, J. (1993). Effects of school restructuring on the achievement and engagement of middle-grades students. *Sociology of Education*, 66(3), 164-187.
- Lee, V., & Smith, J. (2000). School size in Chicago elementary schools: Effects on teachers' attitudes and students' achievement. *American Educational Research Journal*, 37(1), 3-31.
- Lewis, A. C. (2006). How well has NCLB worked? How do we get the revisions we want? *Phi Delta Kappan*, 88(5), 353-358.

- Lipsitz, J., Mizell, M. H., Jackson, A., & Austin, L. M. (1997). Speaking with one voice:

 A manifesto for middle-grades reform. *Phi Delta Kappan*, 78, 533-540.
- Lipsitz, J., & West, T. (2006). What makes a good school? Identifying excellent middle schools. *Phi Delta Kappan*, 88(1), 57-66.
- Lounsbury, J. H. (1996). Ten characteristics of middle level schools. Retrieved June 2007 from http://ceep/crc.uiuc.edu/eecearchive/digests
- Lounsbury, J. H., & Vars, G. F. (2003). The future of middle level education: Optimistic and pessimistic views. *Middle School Journal*, 35(2), 1-10.
- MacIver, D. J. (1990). Meeting the needs of young adolescents: Advisory groups, interdisciplinary teaching teams, and school transition programs. *Phi Delta Kappan*, 71(6), 458-464.
- Manning, M. L. (2000). A brief history of the middle school. Clearing House, 73(4), 192.
- McEwin, C. K., Dickinson, T. S., & Jenkins, D. M. (1996). *America's middle school:*Practices and progress—a 25-year perspective. Columbus, OH: National Middle School Association.
- McLaughlin, D., & Drori, G. (2000). School-level correlates of academic achievement:

 Student assessment scores in SASS public schools. (NCES 2000-2003). U.S.

 Department of Education National Center for Education Statistics, Washington,

 DC: U.S. Government Printing Office.
- McQuaide, J. (1994). Implementation of team planning time. Research in Middle Level Education Quarterly, 17(2), 27-45.

- Mertens, S. B., & Anfara, V. A., Jr. (2006). Research summary: Student achievement and the middle school concept. Retrieved June 2006 from http://www.nmsa.org/IResearchSummaries/StudentAchievement
- Mertens, S. B., & Flowers, N. (2003a). *Middle Start CSR: Show me the evidence of effectiveness*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Mertens, S. B., & Flowers, N. (2003b). Middle school practices improve student achievement in high poverty schools. *Middle School Journal*, 35(1), 33-43.
- Mertens, S. B., & Flowers, N. (2003c). Rethinking student achievement: Middle school practices improve achievement in high poverty schools. *Middle School Journal*, 35(1), 33-43.
- Mertens, S. B., & Flowers, N. (2006). Middle start's impact on comprehensive middle school reform. *Middle Grades Research Journal*, 1(1), 1-26.
- Mertens, S. B., Flowers, N., & Mulhall, P. F. (1998, August). The Middle Start Initiative,

 Phase I: A longitudinal analysis of Michigan middle-level schools. Champaign,

 IL: University of Illinois, Center for Prevention Research and Development.
- Mertens, S. B., Flowers, N., & Mulhall, P. (2002). The relationship between middle-grade teacher certification and teaching practices. In V. A. Anfara, Jr. & S. L. Stacki (Eds.), Middle school curriculum, instruction, and assessment (pp. 109-113).
 Greenwich, CT: Information Age Publishing.
- Mertens, S. B., Flowers, N., & Mulhall, P. F. (2005). Research on middle school renewal:

 How does middle grade teacher certification affect teacher practices and student
 learning? *Middle School Journal*, 36(5), 56-60.

- Mills, R., & Ohlhausen, M. (1992). Negotiating a workshop in middle school language arts: A case study of two team teachers. *Research in Middle Level Education*Quarterly, 16(1), 99-114.
- Mitchell, M. G. (2007a). Middle school materials: The purpose of middle school.

 Retrieved June 2007 from http://www.angelfire.com/mo/drmtch/Number2.html
- Mitchell, M. G. (2007b). Middle school as bridge-on the involvement of middle level parents: Middle school—what kind of bridge? Retrieved June 2007 from http://www.angelfire.com/mo/drmtch/Number8.html
- Mitchell, M. G. (2007c). The middle school concept. Retrieved June 2007 from .

 http://www.angelfire.com/mo/drmtch/Number9.html
- Mizell, M. H. (1999). Thirty and counting. Retrieved July 2006 from http://www/middleweb.com/HMsouth.html
- Mizell, M. H. (2000). Middle school reform: Where are we now in the middle school reform? Retrieved July 2006 from http://www.middleweb.HMSndMidS.html
- Mizelle, N. B., & Mullins, E. (1997). Transition into and out of middle school. In J. L. Irvin (Ed.), What current research says to the middle level practitioner (pp. 303-313). Columbus, OH: National Middle School Association.
- National Educational Research Policy and Priorities Board. (2000, July). National conference on curriculum, instruction, and assessment in the middle grades:

 Linking research and practice. Washington, DC. Available:

 http://www.ed.gov/offices/OERI/NERPPB/Plan.html [November 20, 2002].

- National Middle School Association. (1977a). Academic achievement: Do middle result in higher achievement than junior high schools? NMSA Research Summary #12.

 Retrieved June 2006 from http://www.nmsa.org/research/ressume12.htm
- National Middle School Association. (1982). *This we believe*. Columbus, OH: Author. ED226513.
- National Middle School Association. (1995). *This we believe: Developmentally responsive middle level schools*. Columbus, OH: NMSA.
- National Middle School Association. (2002). National Middle School

 Association/National Council for the Association of Teacher

 Education—approved middle level teacher preparation standards.

 Http://www.nmsa.org
- National Middle School Association. (2003). *This we believe: Successful schools for young adolescents*. Westerville, OH: Author.
- Newman, B. M., Lohman, B. J., Newman, P. R., Myers, M. C., & Smith, V. L. (2000). Experience of urban youth navigating the transition to ninth grade. *Youth and Society*, 31(4), 387-416.
- Northwestern State University. (2003). Middle school concept. Retrieved June 2007 from http://www.nsula.edu/msol/concept.asp
- Page, R. (2001). Back to school, moving forward: What No Child Left Behind means for parents, schools and communities. (ERIC Document Reproduction Service No. ED458009).

- Rice, J. K. (2001). Explaining the negative impact of the transition from middle to high school on student performance in mathematics and science. *Educational Administration Quarterly*, 37(3), 372-400.
- Roney, K., Anfara, V. A., & Brown, K. M. (2002, April). Revealing what's in the black box: The middle school movement and high student achievement. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Roney, K., Brown, K. M., & Anfara, V. A., Jr. (2004). Middle-level reform in high-and-low performing middle schools: A question of implementation? *The Clearing House*, 77(4), 153-159.
- Rosenholtz, S. J. (1989). *Teachers' workplace: The social organization of schools*. New York: Longman.
- Russell, J. F. (1997). Relationships between the implementation of middle-level program concepts and student achievement. *Journal of Curriculum and Supervision*, 12(2), 152-185.
- Shaw, C. (1993). A content analysis of teacher talk during middle school team meetings.

 *Research in the Middle Level Education Quarterly, 17(1), 27-45.
- Smith, J. B. (1997). Effects of eighth-grade transition programs on high school retention and experiences. *Journal of Educational Research*, 90(3), 144-152.
- South Regional Educational Board, U.S. Department of Education. Academic achievement in the middle grades: What does research tell us? ED 478 009.
- Sputnik and its effect on America. Retrieved July 2006 from http://www.piedmontcommunities.us/servlet/go_ProcServ/dbpage

- Steffes, B., & Valentine, J. (1996). The relationship between organizational characteristics and expected benefits in interdisciplinary teams. *Research in Middle Level Education Quarterly*, 19(4), 83-102.
- Strahan, D., Bowles, N., Richardson, V., & Hanawald, S. (1997). Research on teaming: Insights from selected studies. In T. Dickson & T. Erb (Eds.), We get more than we give: Teaming in middle schools (pp. 703-729). Columbus, OH: National Middle School Association.
- Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes:

 Toward an organization model of student achievement in middle schools.

 Educational Administration Quarterly, 36(5), 703-729.
- Thompson, K. F., & Homestead, E. R. (2004). Middle school organization through the 1970s, 1980s, and 1990s. *Middle School Journal*, *35*(3).
- Valentine, J. W., Clark, D., Irvin, I., Keefe, J., & Melton, G. (1993). Leadership in middle level education: Volume I, a national survey of middle level leaders and schools.Reston, VA: National Association of Secondary School Principals.
- Van Zandt, L. M., & Totten, S. (1995). The current status of middle level education research: A critical review. *Research in Middle Level Education Quarterly*, 18(3), 1-25.
- Warren, L. L., & Muth, K. D. (1995). The impact of common planning time on middle grade students and teachers. *Research in Middle Level Education*, 18(3), 41-58.
- Weaver, R. (2007). The promise of a fresh start. *Neotoday*, 25(5), 7.
- Williamson, R. D., Johnston, J. H., & Kanthak, L. M. (1995). The agenda: The achievement agenda for middle level schools. *Schools in the Middle*, 5(2), 6-9.