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The purpose of this case study was to examine an urban middle school demonstrating increased student academic achievement gains and success in helping adolescent students prepare for high school. The research also set out to identify key programs, practices, and instructional strategies that teachers in the study site identified as having a positive impact on student academic, social development, and high school preparedness. Furthermore, this study sought to uncover themes emerging from the examination the programs, practices and instructional strategies identified at the case study school associated with raising student achievement. The focus of the study was narrowed to three key factors associated with student academic success including school-wide programs school-wide practices, and instructional practices.

The school selected for this case study was an excellent exemplar of a successful urban middle school dedicated to increasing student achievement for several reasons. Being a part of the relatively large urban district, the school is located in a primarily low socioeconomic neighborhood. The school demonstrates high success in increasing student achievement as can be seen in a three-year trend in academics as measured by the North Carolina Standardized Testing and Reporting Program. has met or exceeded the criteria set for this study defining it as a high performing school for the last three academic years, having made steady academic performance improvement over the past several years as measured by the California Standardized Testing and Reporting Program.

The inquiry method employed for this study was the case study approach. Documents were reviewed, observational field notes of site visits were taken, and structured, open-ended interview questions were utilized to uncover factors positively affecting student achievement. A total of nine teachers, one administrator and one curriculum facilitator participated in the interview process. To ensure effective triangulation of the research data, a quantitative survey was used to support the principals' and teachers' interview responses. A total of 12 teachers at the case study school completed the questionnaire surveys.

Data analysis uncovered three major themes associated with increasing student achievement, including a culture of support for students, the setting of high academic expectations for students, and the establishment of school-wide systems and structures. Use of Bolman and Deal's four frames paradigm provided the theoretical support for the analysis, interpretation of the data gathered at the case study school, and identification of implications for further study.

TEACHER PERCEPTIONS OF FACTORS INFLUENCING MIDDLE SCHOOL
STUDENT ACHIEVEMENT

by

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Committee Chair

I dedicate this dissertation work to my loving husband. Without his support, tenacious encouragement and interest in my completion of this degree, this work may have never come to an end. Thank you, Lorne for your steadiness. You are the rock that helps me stand and also the blanket of comfort that provides such a safe place for my soul.

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APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of
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CHAPTER I

INTRODUCTION

Advocates of middle school education assert that young adolescents tend to be more successful at schools that are developmentally appropriate, socially equitable, and academically excellent (National Forum to Accelerate Middle-Grades Reform, 2002). Critics of middle level education, however, often seek evidence of student success in the form of student achievement data. The No Child Left Behind Act of 2001 provided clarity this accountability issue by stating that student academic success will be assessed through annual student achievement tests for grades three through eight (No Child Left Behind Act of, 2002). Therefore, student achievement scores will officially serve as the defining measure of success and failure for schools. The challenge for middle grades educators is to understand how curricular coordination and integration, as well as classroom instructional practices, are linked to student achievement. Educators should also understand that there are differences in academic achievement among students of various socio-economic backgrounds, genders, and so forth. Furthermore, diverse teaching and learning strategies are often required to positively affect the achievement of students in schools. This study explores several factors including programs and practices that could potentially affect student achievement. One of the research questions is, what instructional strategies are implemented, in this middle school, to target increased student achievement? If so, what evidence supports their link to increased student achievement?

Another challenge for middle school educators is helping students prepare for high school. This is not a new concern for middle level educators; in fact, one of the fundamental functions of the initial middle level education movement was to articulate young adolescents' transition into high school (McEwin, 1998; Vars, 1998). Research conducted by the Carnegie Council on Adolescent Development suggests that roughly one quarter of the adolescent population is at risk of academic failure during the first year of high school in addition to other behavior problems (Carnegie Council on Adolescent Development, 1989, p. 8). Failure for most students is defined by not being promoted to the next grade, behavior problems, and issues associated with absenteeism and the lack of social development. Students who repeat a grade often become discouraged and ultimately drop out of school (Carnegie Council on Adolescent Development, 1989; Massachusetts Advocacy Center, 1988; National Commission on Children, 1991). One of the biggest problems associated with school failure is the lack of employment and /or lack of opportunities that are likely to follow. Academic achievement is measured in a variety of ways and there are numerous instructional strategies associated with increasing student achievement and helping students prepare for high school to prevent the hopelessness often associated with failure. This research study examines the current research on factors associated with middle school student achievement as well as teacher perceptions of those factors with the goal of providing additional resources to school based educators working with young adolescents.

My personal interest in this topic resulted from my work as a ninth-grade administrator in addition to my experiences as a middle school (grades 6-8) principal.

Providing appropriate support programs to help students transition academically and socially from middle school to high school has been important to me for a long time. As an assistant principal, I was able to assist in the design and implementation of a ninth-grade academy and was also able to work closely with the staff on their continued efforts to construct meaningful experiences for incoming and current ninth-grade students. Unfortunately, I also witnessed the daily struggles of ninth-grade students who entered high school ill prepared for academic and social expectations.

During my tenure as principal at a K-8 school, I was involved in extensive efforts to build the middle school portion of the program, specifically programs designed to help students prepare for the upcoming social and academic demands/requirements of high school. Because the literature of K-8 schools with regard to success with adolescent education and preparation for high school transition is limited, I am very interested in whether the opportunities innately built into the programming and structural components of K-8 schools help students excel academically. My experiences with middle and high school students also constantly remind me of the responsibilities middle school educators have in the preparation of students for high school and beyond. The middle grades provide educators a critical window of opportunity to intervene and support student success in high school.

Statement of the Problem

Calls for accountability and improved test scores, heightened by the provisions of the *No Child Left Behind Act of 2001*, have led middle level educators to seek ways to increase student achievement and accountability (Trimble, 2004). Various approaches to

increasing middle school students' achievement have emerged to address the issue of increased accountability (Trimble, 2004). Based on the National Forum to Accelerate Middle-Grades Reform (2008), successful middle-grades schools that work for young adolescents come in many different shapes (6-8 and K-8 settings) and are inclusive of three essential elements: academic excellence, responsiveness to the unique needs of young adolescents, and social equity for all students (Anfara & Lipka, 2003). Middle grades help place students on the path to success in high school and beyond for post-secondary opportunities and have a critical impact on the postsecondary success of students. However, questions continue to be raised by educators and the public regarding the academic effectiveness of middle schools with regard to their effectiveness in preparing students for the challenges and expectations in high school (Balfanz, 2009).

The issue of effectiveness has been exacerbated by the results of educational studies such as the TIMSS (Third Mathematics and Science Study) (Anfara & Lipka, 2003). Using the findings of this study as leverage, educational researchers questioned the "less than rigorous curriculum" that supposedly exists in many middle schools and characterized middle schools as "the wasteland of our primary and secondary landscape" (Tucker & Coddling, as cited in Bradley, 1998, p. 153), "a crack in the middle" (Killion & Hirsh, 1998, p. 44), and "muddle in the middle" (Bradley, 1998, p. 17). 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 support of middle grades education, 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. 534). However, considering the lack of measurable improvement in middle grades achievement thus far they continue, “We have not seen the widespread dramatic improvement in academic outcomes we had hoped for” (p. 535).

Concerns with improving middle schools as a gateway to success in high school and beyond are exacerbated by the insufficient numbers of studies, lack of longitudinal studies, weak research designs, difficulties with comparing studies with conflicting designs, and problems with effects of extraneous variables (such as socioeconomic status) on outcomes (Anfara & Lipka, 2003; Van Zandt & Totten, 1995). There is an assumption 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” (Russell, 1997, p. 170). However, the attempts to reveal a relationship between middle level reform as noted in the *Turning Points 2000* recommendations and student achievement have resulted in ambiguous and conflicting results (Anfara & Lipka, 2003).

The lack of increased student achievement and high school readiness remains a problem in many school districts as evidenced by the high numbers of ninth-grade failures and dropout rates. In fact, the transition to high school has neither been more treacherous nor the consequences more personally disastrous for so many. It appears that educators continue to have difficulties articulating middle school practices that are linked with student success. The inconclusive nature of the findings related to the effects of middle school practices on student achievement has been documented by several

researchers (National Middle School Association, 2002; Roney, Anfara, & Brown, 2002; Van Zandt & Totten, 1995).

As expectations for a more highly educated American citizenry rise, what happens in the middle grades matters more now than ever before. It is in the middle grades where many students begin to lose ground in key subject areas such as mathematics. For example, in California student achievement in mathematics in any given year is lower in middle grades than in the elementary grades (Kirst & Haertel, 2010). Data published by the California Department of Education (CDE) also reveal that two-thirds of fourth graders in California were proficient or advanced in mathematics in 2009 compared with only 43% of seventh graders (Kirst & Haertel, 2010). These data are significant considering the fact that California educates one out of every eight students in grades 6-8 in the United States. According to the National Assessment of Education Progress (NAEP), these data are consistent with what can be seen nationally, as most states see a dip in middle grades proficiency levels as compared with elementary levels (Kirst & Haertel, 2010). Within the international literature on the effects of school transitions there also appears to be substantial agreement regarding the decline in achievement between elementary and middle school resulting in what has been termed, in previous literature, the middle school dip (Barone, Aguirre-Deandris, & Trickett, 1991; Carvel, 2000; Collins & Harrison, 1998; Galton, Gray, & Ruddrick, 1999; Mizelle, 1995).

Middle grades can be viewed as the last best chance to identify students at risk of academic failure and get them back on track in time for them to succeed in high school. Recent data analyses in California (Balfanz, 2009; Kurtlaender, Reardon, & Jackson,

2008; Zau & Betts, 2008) show that many students at greatest risk of high school failure could be identified early (during middle grades and late elementary years) by their grades, attendance, behavior, and test scores. A policy and practice brief by Balfanz (2009) examining students in Philadelphia schools found that in high-poverty environments a student's middle grades experience strongly impacts the odds of graduating from high school. The brief also suggested that the more risk indicators a student has (including poor grades, attendance concerns, and behavior issues) the fewer opportunities are provided by the school for interventions and correction, and the more likely that student will not graduate from high school or enter a college or postsecondary program (Balfanz, 2009).

Middle schools stand at a crucial intersection in American public education systems. They are charged with the responsibility of building on the basic literacy and math skills that students learn in elementary school and with helping students master those skills if they have fallen behind. They must be prepared to nurture the physical, social, and intellectual growth that students undergo in their early adolescent years. Moreover, they are expected to provide students with the habits of mind and behavior they will need to make healthy transitions to high school and young adulthood. Yet, too many middle schools are failing. In particular, schools that serve high poverty student populations face significant obstacles that can keep them from providing adequate opportunities for teaching and learning.

A student's experiences in the ninth grade often determine their high school success. Sadly, more students fail ninth grade more than any other high school grade.

Students promoted to the tenth grade but who are off track (i.e. failed grades, a lack of course credits, or poor attendance) may have already missed the opportunity to get on a graduation track. Students held back in ninth grade create what is known as the *ninth grade bulge* and those who drop out by tenth grade contribute to what has been known as the *tenth grade dip* (Wheelock & Miao, 2005). Nationally, educators and policymakers are struggling to find solutions to assist the increasing numbers of students who do not advance beyond the ninth grade (Wheelock & Miao, 2005). Estimates put the national student attrition rates before tenth grade between 11 and 33 percent (Dedmond, 2008; Education Week, 2007). Sadly, only about 70% of ninth graders make it to graduation four years later (Education Week, 2007; Gossage, 2007). As a result, states and schools are placing increased emphasis on middle school reform efforts and helping students make the transition from the middle grades to high school and beyond. Special efforts are also being made to assist students in completing the ninth grade successfully. Under the *No Child Left Behind Act*, accountability for decreased student achievement at the high school level and failure to graduate is very pronounced; however, the existence of this strain is often the result of culminating years of students' poor academic training in middle school (Snipes & Horwitz, 2008).

The transition from middle school to high school represents a significant event in the lives of adolescents, one that necessitates support from—and collaboration among—teachers, parents, counselors, and administrators at both educational levels; however, this experience continues to be problematic for many students. The ninth grade year can be a pivotal year for many students as they find themselves struggling to navigate large and

often impersonal high schools. Increasing the numbers of students held back in the ninth grade has not proven effective, as many of these repeaters (estimates as high as 80%) later drop out of school (Allensworth & Easton, 2007; Balfanz & Letger, 2004; Haney et al., 2004; Kemple, Herlihy, & Smith, 2005). However, intervening with these students before they enter high school may lead to increased success in high school and subsequent graduation (Herlihy, 2007a; Williams & Richman, 2007; Quint, 2006; Smith, 1997; Williams & Richman, 2007).

Statement of Purpose

Middle school educators know what kinds of educational experiences young adolescents need. However, middle schools have not been able to fulfill its announced intention to increase student achievement, social development, and high school preparedness (George, 1999). The purpose of this case study was to examine an urban middle school with demonstrated increased academic achievement gains and success in helping adolescents students prepare for high school. The research study also set out to identify key programs, practices, and instructional strategies teachers in the study site identified as having a positive impact on student academic performance, social development, and high school preparedness.

Importance of the Study

The middle grades have attracted a lot of attention recently because progress in reading is stagnant and progress in math is much too slow. Research suggests that the high school dropout problem takes root as early as sixth grade. Although some states have made progress in early grades achievement, when students reach middle school,

they begin to lose momentum and often reach the ninth grade unprepared. Too many students begin to disengage from their studies in middle school and often miss valuable opportunities to stay on the path to success in high school and beyond. State assessment results show that students' progress in the middle grades is not sufficient for states to meet the federal *No Child Left Behind Act* requirements (Thomas & Collins, 2009). The National Assessment of Educational Progress (NAEP), known also as The Nation's Report Card, shows that achievement in eighth-grade reading is stagnant and progress in math is much too slow (Collins & Thomas, 2008). Some students appear bored and disengaged in school, which often results in their losing interest and falling behind at a time when they should be preparing for the rigor of the high school curriculum. The result can be additional roadblocks for these students, particularly those already struggling in math and reading. These students are known to stop coming to school regularly and often get into disciplinary trouble in the middle grades. Unfortunately, these students are also the ones who eventually drop out of school.

A 2007 edition of Education Week reported that nationally more than one-third of the students lost from the high school pipeline fail to make the transition to ninth grade. The report indicated that approximately one-third of students eventually drop out of school and evidence also infers that the seeds of high school failure are sown in grades 5-8, suggesting the need for a more intentional focus on instructional practices and strategies in middle grades that are linked to increasing academic achievement and preparedness for high school (National Center for Education Statistics, 2002). A high

percentage of the students noted in this report were minorities and from lower socioeconomic backgrounds.

Students in ninth grade also comprise the highest percentage of the overall high school population because students in disproportionate numbers are failing to be promoted out of ninth grade. Promotion rates between ninth grade and tenth grade are much lower than rates between other grades (Wheelock & Miao, 2005). Researchers at John Hopkins University found that up to 40% of ninth-grade students in cities with the highest dropout rates repeat the ninth grade, but only 10-15% of those repeaters go on to graduate (Balfanz & Letgers, 2004). Ninth-grade attrition is far more pronounced in urban, high poverty schools: 40% of dropouts in low-income high schools left after ninth grade, compared to 27% in low poverty districts (EPE Research, 2006). This attribution can be correlated to middle school achievement data which is often predictive of what a student will do in high school. The large numbers of students not proficient in reading and math as measured on the NAEP supports this theory. For example, the gap between eighth graders from low income families and all other eighth graders at the basic level between 2003 and 2007 was 23 points in reading and 24 points in math.

The middle school years bring many chances to ensure that youth are properly prepared for this transition. Middle school students are particularly open at this stage in their development to the influence of non-parental adults, such as teachers and staff at youth programs, who can capitalize on “teaching moments.” Thus, if we seek to better prepare young people for success, middle school presents a critical opportunity. Ensuring

that students have strong academic behaviors, attitudes, life skills, and adaptive strategies as they enter ninth grade will provide an invaluable foundation for their futures.

Middle school proponents and critics have recognized that too many middle schools have failed to find their academic way (Bradley & Manzo, 2000). According to Anfara & Brown (2001), middle schools are at a crossroads. We must step back and evaluate where we have and are focusing our energies. We need to strive for higher levels of implementation of middle level reform so that middle schools are more than just a name above the school door. The standards and accountability movement, specifically the *No Child Left Behind Act* of 2001, is placing unprecedented demands on middle schools and many do not have acceptable levels of student achievement (Bradley & Manzo, 2000). The accountability movement is now forcing administrators and teachers to re-evaluate where they are channeling their energies to improve student achievement, and ultimately have students better prepared for high school (Bradley & Manzo, 2000).

When trying to establish a connection between the middle school concept and improved student performance, socioeconomic status was found to be the most significant correlate to student achievement (Hough & Sills-Briegel, 1997). Many schools, for example, serving large numbers of economically disadvantaged students provided a much less supportive learning environment and therefore showed lower student achievement (Stephens & Jenkins, 1994). The Southern Regional Education Board (SREB) and reformers noted in *Turning Points* (2000) promote an approach to middle grades reform that draws on best practices designed to improve student achievement.

These reform models call for a rigorous academic curriculum for all students, schools that are small and flexible in structure, schools that make high demands on students and provide the support students need to achieve, classrooms that build higher-order thinking skills, and parents who are actively engaged in their children's education (Cooney, 2000). The data from this study might serve as an impetus for school administrators to move forward with key middle school practices perceived by middle school teachers as improving student achievement and overall success in middle grades and retreat from practices that do not seem to enhance learning. As principals learn of the possible correlation between levels of implementation of middle school key practices and student achievement, they will have some knowledge on which to base decisions about the organizational structure of the school (Isaacs, 2001).

Research Questions

This case study examined one middle school in detail by focusing on the perspectives of the teachers to tease out those factors that contribute to the academic success of its adolescent students. Middle school has been identified both in the human development and research literature as a time of great physical, emotional, and social change for young adolescents. Considering the unique challenges faced by students of middle school age, this research limited its focus to this time frame so as to capture the subtle setting of the middle school. The positive associations found in this study between school-related variables and student academic success may serve as a road map guiding other middle schools to increase student achievement and help students become better

prepared for high school. The study was guided by the following three research questions:

1. What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?
2. What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?
3. What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school preparedness? What evidence supports their link to increased student achievement?

Limitations

This study is limited in its generalizability because it only involved one urban middle school. The methodology of a case study was chosen for this reason because the focus was an in-depth study of a culture or an aspect of a culture (Gall, Gall, & Borg, 2005). The findings resulting from the participant pool and the number of participants surveyed and interviewed also limits the generalizability of the study's findings and conclusions to only those schools that are uniquely similar. Although only five days were spent at the case study school, the predominant themes and perspectives were evident throughout the study. Additional days at the research site could have enhanced this qualitative perspective. The review of the literature reflected a need for additional research on effective instructional strategies with urban middle school students and the

relationship between student achievement and school variables or factors. The purpose of this study was to describe strategies and methods from the perspective of middle school teachers for educators to explore and institute in their own educational settings to benefit urban middle school students. The level of truthfulness with which participants conveyed their perceptions may also reduce confidence placed in the study's findings.

Definitions

Per the North Carolina Department of Public Instruction, the term *dropout* refers to a student who leaves school before graduation. North Carolina counts students who leave school before graduation in two main ways, an Annual Dropout Rate and a Cohort Graduation Rate. For the annual dropout rate calculation, a dropout is defined as a student who was enrolled in school at some in the previous school year, was not enrolled on day 20 of the current school year, and has not graduated from high school or completed a state or district-approved educational program. Students who leave high school to enroll in a General Education Program (GED) are considered to have dropped out of school under the policy of the State Board of Education. The Cohort Graduation Rate illustrates what percentages of ninth graders have graduated from high school four years later (www.ncpublicschools.org). A school at a level between elementary and high school is referred to as a *middle grades school*, typically including grades five through eight.

Per North Carolina Department of Instruction, *socioeconomic status (SES)* is measured by the percentage of schools' free or reduced lunch percentages through a federal subsidy. This is a widely used and accepted measure of a school's poverty level. The definitions of SES emphasize that, as a construct, it is (a) conditional, (b) imposed on

people, (c) used for comparisons, and (d) based on economics, opportunity, and means of influence. Santrock (2004) defines SES as “the grouping of people with similar occupational, educational, and economic characteristics” (p. 583). Woolfolk (2007) calls SES “the relative standing in society based on income, power, background and prestige” (p. 165). Santrock (2004) adds that an important qualification is “the ability to control resources and participate in society’s rewards” (p. 583). In most discussions, there are three levels of SES: low, moderate, and high. Because most problems associated with low SES are related to poverty, sometimes poverty level is used as a similar concept to low SES. Race may also be considered a factor because Blacks and Latinos are disproportionately represented in the low SES.

School transitions refer to the transitions of students from elementary school to middle school and from middle school to high school. As each transition occurs, the student generally undergoes many different changes. These changes can be anything from an increase in the size of the school, to the change in friends with which one associates.

The *Achievement gap* in education refers to the disparity in academic performance between groups of students. The achievement gap shows up in grades, standardized-test scores, course selections, dropout rates and other success measures. This is important because traditionally low-income and minority children have not performed as well as their peers on the tests.

In this study, the word *program* represents an organized system of projects and/or activities organized over a period of time for the purpose of supporting academics, and

the word *practice* refers to a customary action or way of doing something and the act or process of doing something.

Organization of the Remainder of the Study

Chapter II provides a review of salient literature on adolescent education including an examination of the middle school concept, the middle grades paradox, and the correlation between middle grades education and students' success in high school. Variables associated with adolescent failure rates and dropout rates will also be discussed in the context of middle school achievements.

Chapter III presents the theoretical foundation for the study's methodology and research design. The study's sample, conceptual model, instrumentation used, data collection processes, and data analysis are presented.

Chapter IV presents the findings of the study, discussing answers for each of the guiding research questions, followed by the identification of the major themes deduced from the findings.

Chapter V summarizes the findings, makes conclusions, and discusses the implications of the study for further study. The study concludes with references and appendices.

Schools have a responsibility to provide instructional strategies and interventions that allow for all students to be successful in school. Therefore it was important in this study to determine what strategies were most effective for helping adolescent students be academically successful. The intent of this research study was to identify and discuss factors teachers at one successful urban middle school perceived as contributing to the

academic success of their students. The positive associations found in this study between school-related variables and student academic success may assist other middle schools with increasing student achievement and helping their students become better prepared for high school.

Chapter II includes a review of the literature starting with the history of middle grades education and the adolescent developmental period to practices associated with middle school reform. With a more informed view of the developmental needs of adolescents emerged a wave of middle grades reform efforts followed by various research studies, policy briefs, and recommendations associated with the need for more developmentally responsive educational practices for educating young adolescents. Practices specific to middle grades education prior to these reform efforts did not appear specific to the needs of the students' developmental needs. Several studies suggested the middle grades were typically arranged like small high schools or in some cases extended elementary grades, again indicating a need for more attention to the developmentally needs of this age group. However, the middle school paradox suggests best practices identified for students in middle grades are the same as best practices for other grades. The review of the literature reiterated the need for specific research on effective teaching strategies and practices for middle grades students. The search for a relationship between middle school student achievement and instructional strategies and school variables guided the literature review. Specifically, how do school practices and programs promote student achievement? And, what instructional strategies are associated with increased student achievement?

CHAPTER II

REVIEW OF THE LITERATURE

Middle schools currently represent the most common approach to the education of young adolescents—students between the ages of 10 and 14. Advocates of middle school education contend that young adolescents are more successful at schools that are developmentally appropriate, socially equitable, and academically excellent (National Forum to Accelerate Middle-Grades Reform, 2002). Issues facing middle schools are related to the implementation of the middle school concept as well as counter-movements opposed to the philosophy (Gross, 2002). Hough (1997) addressed how middle schools are commonly conceptualized.

Middle school components are most often conceptualized as *teams of teachers* meeting during a *common planning time* to (among other things) develop *integrated curricula* and teach within the structure of a *flexible schedule* that allows for more in-depth study and experiential learning. *Advisory* programs are provided in an effort to establish positive relationships between young adolescents and adults, ensuring that students are known well by at least one adult. Students are encouraged to participate in *intramural* activities to build self-esteem and promote healthy lifestyles. *Exploratory* classes or enrichment experiences are provided to allow students a chance to experiment with novel subject matter and interest areas without fear of being penalized by a letter grade. All of the above are accomplished within *small heterogeneous* learning

communities that emphasize *cooperative* teaching strategies that capitalize on the social dimension of teaching and learning (Hough, 1997, p. 285).

Critics of middle level education, however, often seek evidence of student success only in the form of student achievement data. The recent enactment of the *No Child Left Behind Act of 2001* clarified this accountability issue by stating that student academic success will be assessed through annual student achievement tests for grades three through eight (*No Child Left Behind Act of 2001, 2002*). Therefore, student achievement scores have officially served as the defining measure of success and failure for schools. The challenge for middle grades educators is to understand how curricular coordination and integration and classroom instructional practices are linked to student achievement. Educators must also understand and tend to the differences in academic achievement among students of various socio-economic backgrounds (i.e. genders, socioeconomic status) using diverse teaching and learning strategies to positively impact the achievement of each subgroup of students in schools.

To understand the journey leading up to today's programs and practices, this literature review was organized into two main sections: (a) the history of the middle grades education, coupled with a description of the adolescent developmental period, and (b) programs and practices associated with the middle school reform efforts. Section one includes a brief history of the emergence of middle schools and concludes with current-day calls for developmentally responsive educational practices for educating adolescents. Section two, middle school reform, including the programs and practices section associated with middle school reform, includes recommended practices for middle grades

broadly defined in the following subsections: (a) curriculum and assessment, (b) instructional practice, (c) interdisciplinary teaming, (d) effective leadership, (e) family and community involvement, (f) teacher quality, (g) academic climate, (h) student engagement, (i) school size, and (j) middle to high school transitions (includes ninth-grade dropouts and K-8 transitions).

Early Adolescent Education

The early adolescent developmental period is one in which individuals experience many changes including the biological changes associated with puberty, important changes in relations with family and peers, and the social and educational changes related to the transition from elementary to middle school (Wigfield, Byrnes, Eccles, 2002).

Early adolescence is often described as a period of life between the ages of 10 and 15 years, in which young people experience rapid physical, cognitive, and social transformation (Susman & Rogel, 2004). Historically, early adolescence has been viewed as a period of stress and upheaval for children and those with close contact. The stereotypical image of young teens with awkward bodies and “raging hormones” is often the pervasive view among parents and educators working in middle schools. The stress and difficulties commonly associated with this transition from childhood to early adolescence has been discussed in the research and led to the discussion of strategies to assist those working with young adolescents as well as support for educators and policy makers directly associated with middle grades reform efforts (Akos , 2002, 2004; Furrer & Skinner, 2003; Wentzel, 2002).

As a more informed view of the development of early adolescence emerged through the years, educators and researchers began to recognize this period of development as being unique from late childhood and late adolescence or adulthood. This recognition of early adolescence as a distinct period of development has influenced beliefs regarding the nature of this developmental period as well as appropriate methods for educating this age group (Kleen, Urda, & Medrich, 1998; Wiles, Bondi, & Wiles, 2006). As a result of this new understanding, the middle school movement emerged with an emphasis on the creation of developmentally-appropriate schools designed to ease the transition into adolescence while taking advantage of new strengths (*Turning Points*, 2000). A wave of middle grades reform efforts followed resulting in recommendations noted in *Turning Points, 2000*, policy briefs, and longitudinal research studies by the National Middle School Association.

As the emphasis on developmentally-appropriate education became more prevalent in middle grades education, discrepancies were noted in the cognitive development of adolescents and the type of schooling they received (Eccles, & Midley, 1989; Kellough & Kellough, 2008). For example, the instructional methods of various topics in schools and the resources housed in many middle grades schools are not always aligned with the cognitive levels of early adolescent students (Kellough & Kellough, 2008; Kleen, Urda, & Medrich, 1998). In some cases, middle grades schools tend to be organized more like high schools than elementary schools. For instance, most middle schools typically have several periods a day in academic classes with time that is structured inflexibly; that is, when the bell rings the class ends regardless of how much

time may have been needed by those students. Student work tends to also be less cognitively demanding than the work students did in the last year of elementary school. Instruction also tends to focus on basic skills, taught in a whole group, lecture-style format with drill and practice as the primary instructional technique; students appear to have fewer opportunities for decision making in the classroom than in elementary classrooms (Becker, 1990a; Eccles & Midgley, 1989; Midgley & Feldlaufer, 1987; Kellough & Kellough, 2008). Teachers need to consider the developmental needs and differences among the adolescents when planning learning experiences. To address the diverse needs of all students, teachers should provide various educational approaches that are appropriate for the students' varied cognitive abilities (Manning & Butcher, 2005). It is also important for young adolescents to have teachers who understand how they think (Stevenson, 2002).

The development of reasoning abilities in early adolescents is very evident; however, the system of schooling observed in middle grades education does not appear to be well suited or attentive to those skills (Eccles & Midgley, 1989; National Middle School Association, 2003; Wiles, Bondi, & Wiles, 2006). It appears that as students move into early adolescence they become more able and desire opportunities to make mental connections in school, while the curriculum simultaneously becomes more fragmented (Kellough & Kellough, 2008). For instance, as students develop the ability to engage in longer, more involved instructional activities, the school day in middle grades become more divided into shorter class periods, which can inhibit explorations and problem-solving activities. During early adolescence, students exhibit a wide range of intellectual

development. They tend to be very curious and display an array of interests, although few are sustained (Kellough & Kellough, 2008; Scales, 2003). As students desire additional responsibility for their learning through decision making—such as how to demonstrate knowledge, where to sit, and what to work on—they are often denied these opportunities. And it seems that as they continue to develop more capabilities for sustained, self-directed learning, they are more often placed in classrooms where there are less cooperative and engaging learning techniques but more whole-group activities such as lectures.

The developmental disconnect between early adolescents and the schools serving them have caused educators and researchers to take steps to correct them and make middle grades schools more developmentally appropriate. Curriculum and instructional methods are the main areas schools appear to be incorporating cognitive developmental research (Kleen, Urdan, & Medrich, 1998; Kellough & Kellough, 2008). Attempts are specifically under way to make learning activities more meaningful and experiential (Kleen, Urdan, & Medrich, 1998). For example, in math, more middle grades teachers are incorporating manipulatives to teach and practice concepts. Some schools have also changed their daily schedules to incorporate longer blocks of time for each subject and incorporated some flexibility in scheduling based on the needs of students. The longer periods afford teachers and students the opportunity to participate in more engaging, complex, and authentic tasks that would not normally be feasible using shorter non-fluid periods of time. Using longer, more experiential tasks dovetail well with the current

theories associated with the ways in which students process information and develop more elaborate cognitive structures (Kleen, Urda, & Medrich, 1998).

Adolescents deserve educational experiences and to be in schools organized appropriately to address their unique needs. Practitioners, parents, and others working with young adolescents need to be aware of the varying developmental characteristics indicative of adolescents. These changes can provide insights into the challenges facing young adolescents and possibly elucidate reasons for the shifts seen in their ability and behavior. Educators influential in the development of the middle school (e.g. John Lounsbury, Donald Eichhorn, William Alexander, and Gordon Vars) were convinced that the developmental needs of young adolescents should influence the educational environment and organizational structure of the middle school (Arnett, 2001). This call and desire to be “developmentally appropriate” is what has set the middle school apart from its predecessor, the junior high school.

The Emergence of Middle Grades Education

In the 1960s, four out of five American students attended a junior high school with a seventh- to ninth-grade configuration (Alexander, McEwin, & Kenneth, 1989). However, despite the popularity and innovativeness of junior high schools, they quickly became the target of criticism for their apparent similarities to senior high school curricula, grading systems, large size, schedules, and impersonal climate. Many educators also began to have concerns about having ninth-grade educational programs in the same school buildings with seventh- and eighth-grade students. The ninth-grade program and curriculum were constrained by Carnegie unit requirements for high school graduation

and college entrance. These requirements often affected scheduling and staffing decisions, and subsequently influenced the educational programs offered to seventh and eighth graders in junior high schools as well.

Fifty years following the establishment of the first junior high schools, educators began to call for more developmentally-responsive schools for adolescents that had a different grade organization and were set up to provide a more gradual and appropriate transition between the elementary and high school years (Alexander, McEwin, & Kenneth, 1989). In 1965, William Alexander and Emmett Williams recommended the development of fifth- to eighth-grade middle schools with interdisciplinary teaming, small learning communities, a teacher advisory program, and special learning centers where students could catch up on needed skills or branch out into further exploration (Alexander, McEwin, & Kenneth, 1989). By 1970, a small group of educators founded the Midwest Middle School Association, later known as the National Middle School Association (NMSA) to acknowledge the national scope of the growing middle school movement (Dickinson, 2001). The writings of key educators in this movement displayed increasingly widespread agreement on practices they believed were developmentally appropriate for young adolescents, including interdisciplinary team teaching, discovery and inquiry methods, teacher-adviser plans, flexible scheduling, exploratory courses, and ungraded programs (Dickinson, 2001). Although the number of middle schools grew quickly during the 1960s and 1970s, according to the writings of William Alexander, most of these new schools displayed “limited progress toward the objectives of the middle school movement” (Alexander, McEwin, & Kenneth, 1989, p. 19). In fact, John

Lounsbury (1991) noted that the first comparative studies of the new middle schools and the old junior high schools revealed that the schools “were surprisingly alike in actual practice” (p. 68). One reason for the lack of progress in implementing a set of distinct practices was that many middle schools were established for reasons of expediency. For example, in some cases the new grade arrangements helped some districts reduce overcrowding in elementary schools, poor utilization of buildings, and racial segregation. Little empirical research was conducted on the consequences of implementing or ignoring the lists of recommended practices; therefore, there was little scientific evidence to persuade educators to change their programs and practices (Lounsbury, 1991).

As practitioners, researchers, and scholars began speaking in unison about the continuing shortcomings of middle grades education in the United States, middle grades reform began receiving unprecedented national attention. At the end of the 1980s, states and foundations began to recognize that the middle grades might be central to helping more students succeed and stay in school. California was one of the first states to produce a taskforce report calling for middle grades reform. California’s 1987 report, *Caught in the Middle*, was followed by a long line of reports from Florida, Maryland, Louisiana, and at least 15 other states. At about the same time, foundations such as The Lilly Endowment, The Carnegie Corporation of New York, The Edna McConnell Clark Foundation, and The W. K. Kellogg Foundation began advocating and funding middle grades reform initiatives. These efforts helped solidify the consensus on the kinds of supportive structures and responsive practices needed by students in the middle grades (e.g., the eight principles outlined in 1989 by the Carnegie Council on Adolescent

Development in *Turning Points*). At this time, research in the middle grades by a wide variety of researchers began to show that schools serving early adolescents, especially middle schools, were increasingly implementing educational programs that were based on a variety of recommended practices for the middle grades. These recommendations were listed in the introduction and will be defined and discussed in the next section.

Middle Grades Education Reform

Middle school reform efforts began in the early part of the twentieth century with a number of trends combined to produce dramatic expansion and redesign of school districts throughout the United States (Clark & Clark, 1996; Hechinger, 1993; Lewis, 1993; Lounsbury, 1992; McKay, 1995). At the core of middle grades reform was the emerging field of psychology, as psychologists declared adolescence a distinct phase of life deserving of an educational model of its own (Lounsbury, 1992). During this time, advances in recordkeeping made tracking student progress easier, thus exposing issues with high dropout rates followed by an increased emphasis in the need for a smoother transition from elementary to high school, resulting in the junior high movement (Lounsbury, 1992). The first junior high schools appeared around 1910 and continued to grow until this intermediate level gradually became common in most parts of the country (Lounsbury, 1992).

In the 1960s, critics argued that junior high schools simply adopted the teaching methodology and structures of high school and lacked a clear vision of their own (Lounsbury, 1992). The new intermediate model claimed to build a bridge between elementary and high school, however few of them did, as the curriculum did not build up

the early grades or prepare students for the demands of high school (Lounsbury, 1992). The most influential criticism of junior high settings was that this model simply ignored the emotional and societal pressures typical of early adolescent (Beane, 2001). Theories and contributions of psychologists who endorsed the original design of junior high models were not evident in the teaching methods, climate, size, structure, community relations, or attention to developmental needs (NMSA, 2000). The desire and call for a more developmental responsive setting for middle grades has been the driving force of the contemporary generation of middle grades reformers from 1970s to the present resulting in the invention and ascent of the “middle school.”

In 1973, the National Middle Schools Association (NMSA) was founded. The association’s 1982 manifesto *This We Believe* (1995) outlines the essential features of a “developmentally responsive middle-level school”: Educators committed to young adolescents, a shared vision, high expectations for all, an adult advocate for every student, family and community partnerships, and a positive school climate.

Several organizations configured as rivals to NMSA, with their sources of policy debate and research in middle grades education including the Carnegie Corporation’s *Turning Points* reports (1989, 2000), joined forces with *This We Believe* as the most widely cited position statements in middle grades reform. Additional publications included the Edna McConnell Clark Foundation’s *Program for Student Achievement* (Brown, 2002; Wheelock, 1995, 1999); the Southern Regional Education Board’s (SREB) reports examining student performance, curriculum and instruction, and teaching

in the middle grades; and the National Association of Secondary School Principals' *An Agenda for Excellence at the Middle Level* (1985).

These documents acknowledge the need for responsiveness to the emotional and social needs of early adolescents in educational settings, as well as the need for another agenda for reform in middle grades education. In *Turning Points 2000* a challenge is offered to the priorities listed in *This We Believe*: "Let us be clear. The main purpose of middle grades education is to promote young adolescents' intellectual development" (p. 10). A statement from SREB's *Making Middle Grades Matter: A Planning Guide for School Improvement* (2000) addresses previous programs: "These programs have been unsuccessful for the most part because they did not focus clearly on raising student achievement and strengthening the academic core curriculum and classroom practices" (p. 1).

Perhaps the challenges set forth will help chart middle school reform efforts. The National Forum to Accelerate Middle Grades Reform, an umbrella group created in 1997, is dedicated to participating in these efforts. The Forum composed of NMSA representatives, Carnegie, and other organizations associated with middle grades education state that it will help schools become "academically excellent" and "developmentally responsive," as well as "socially equitable," and objectives all can agree upon.

Middle Grades Achievement

SREB and other reformers promote an approach to middle grades reform that draws on best practices designed to improve student achievement. These reform models

call for smaller schools, rigorous academic curriculum, schools that supports students need to achieve, instructional practices that build on higher-order thinking skills, and parents who are actively engaged in their children’s education. While there is a strong sense that these models can yield positive achievement outcomes for middle grades students, the evidence regarding some elements is surprisingly weak. A considerable amount of research documents the importance of developmental responsiveness in the middle grades, but there is little research regarding articulating and assessing strategies supporting academic excellence (Beane & Brodhagen, 2001; Cuban, 1992; Jackson & Davis, 2000; Klein, Urban, & Medrich, 1998). This lack of attention may be due to the paradox encountered when examining teaching practices in the middle grades (SREB, 2000).

Middle Grades Paradox

Middle school is described by researchers as unique, portraying it as specially tailored to the affective and intellectual needs of early adolescents (Jackson & Davis, 2000). However, many observers make recommendations as seen in *Turning Points 2000* that tend to echo the recommendations of education reformers of other grade levels. For example, *Turning Points 2000* states that middle grades schools ought to “create small and caring communities for learning” (p. 123), but this suggestion is no different from what high school reformers advocate for in their schools. The National Staff Development Council (1999) advises middle school administration to “gather evidence to demonstrate the impact of staff development on student achievement” (p. 11), but such advice is useful for school leaders at any level. Reformers insist middle grades are

special, yet they make many of the same recommendations as reformers in every other part of the research and practitioner community. Middle grades reformers' findings and recommendation undermine their own premises. Instead of creating and then strengthening a distinct approach to middle grades education, reformers have identified and called for practices that are not distinct.

The strategies for improved academic achievement, reviewed for the purpose of this study, are organized around the following themes: curriculum and assessment, instructional practices, interdisciplinary teaming, effective leadership, family and community involvement, teacher quality, academic climate, student engagement, school size, and middle to high school transitions. Evidence relating to these strategies is not limited to the middle grades, but represents research support that is available for these particular reform strategies.

Middle Grades Reform: Programs and Practices

Organizations associated with middle grades education have released reports, vision statements, and policy positions regarding key characteristics of successful schools serving young adolescents. The Association for Supervision and Curriculum Development published *The Middle School We Need* (1975), NASSP published *An Agenda for Excellence in Middle Level Education* (1985), and Carnegie Corporation of New York produced *Turning Points: Preparing American Youth for the 21st Century* (Carnegie Council on Adolescent Development, 1989). Revisions have been made to reflect the current reality for adolescents to include *Breaking Ranks in the Middle* (NASSP, 2006), *Turning Points 2000* (Jackson & Davis, 2000), and the National Forum's

Schools to Watch criteria (2007). The collection of ideas encompassed in all reports and frameworks reflect consistent ideas about what constitutes effective adolescent education including: Curriculum and Assessment, Instructional Practices, Interdisciplinary Teams, Effective Leadership, Family and Community Partnerships, Teacher Quality, Academic Quality, Student Engagement, School Size, and Middle School to High School Transitions (including ninth-grade dropouts). Each recommendation is discussed separately below.

Curriculum and Assessment

Attending to the learning needs of young adolescent students does not involve practices devoid of rigor and real learning. Instead, the middle school curriculum should be relevant, challenging, integrative, and exploratory in a climate of high expectations (NMSA, 2005). Curriculum is at the core of what young adolescents are expected to learn. Instruction should also include multiple teaching approaches and assessments to benchmark teaching and learning. Curriculum should be relevant and linked with the interests and needs of the students, as well as the larger societal issues (Beane, 1993, 1997; Pate, Homestead, & McGinnis, 1997). Relevant curriculum coupled with rigorous standards outlining what students should know and be able to do enable students to actively pursue information they have about themselves, content, and the world (NMSA, 2005).

A challenging curriculum targets state and national standards by actively engaging young adolescents in substantive issues, and allows students to assume control of their own learning (Bransford, Brown, & Cocking, 1999). Curriculum standards are

typically grounded in the academic disciplines (e.g. language arts, mathematics, social studies, and science), though research on how people learn provides evidence that people learn best when their learning is grounded in big ideas or concepts, contrary to a “traditional” focus on learning isolated facts, figures, and names (Bransford, Brown, & Cocking, 1999). Federal (*No Child Left Behind Act of 2001*) and state legislation typically lay the foundation for what is included in curriculum, while the standards are typically grounded in the academic disciplines.

Various approaches to curriculum that are viewed as having significant power for student learning include integrated or interdisciplinary and exploratory curriculum (Caskey, 2002; Daniels & Bizar, 1996; Pate, 2001; Stevenson & Carr, 1993; Vars, 1997; Zemelman, Daniels, & Hyde, 1998). Integrated curriculum provides a linkage across subjects and connects school learning to the real world while providing opportunities for students to have a voice in what is learned and how it is learned (Pate, 1997). This method calls for creating links between various academic subjects and is believed to have many benefits for teachers and students including helping students realize the interconnectedness of the core academic disciplines (Mac Iver & Epstein, 1990). This linkage has particular value for young adolescents, given their need for authentic learning experiences and participation in decisions (Pate, 1997). This curriculum is an approach to all curriculum instruction rather than a classification of content (NMSA, 2005). This is particularly effective for young adolescents, considering their need for authentic learning experiences and participation in decisions. Exploratory curriculum allows students “to explore new arenas of interest, both as specific courses and as methodology within

courses” (Bergman, 1992, p. 179). Coordinating instruction across disciplines enables schools to better take advantage of early adolescents’ increasing ability to understand the connections among the various subjects they study in school. Exploratory curriculum responds to the developmental needs of young adolescents by providing an extension of the curriculum students typically encounter, and allows students to try out various areas of interest (Compton & Hawn, 1993; George & Lawrence, 1982).

Assessment should provide “ongoing, useful feedbacks, to both students and teachers, on what students have learned” (Jackson & Davis, 2000, p. 54). Ongoing, authentic, and appropriate assessments provide teachers with evidence of students’ progress towards mastering curricular goals and/or objectives (NMSA, 2005). Strategies employed should tend to the learning characteristics of the students and not include comparisons with other students (NMSA, 2005). That feedback will serve to guide instruction to ensure it addresses gaps in learning revealed by assessment results (Sterbinsky & Ross, 2005). It is helpful to the learning process to have students actively involved in assessing their own progress, working “with their teachers to make critical decisions at all stages of the learning enterprise, especially goal-setting, establishing evaluation criteria, demonstrating, learning, self-evaluation, peer evaluation and reporting” (Vars, 2001, p. 79). Teachers need to use a range of classroom assessments (Stiggins, 2001; Wiggins & McTighe, 1998) as well as a variety of assessment methods, “ranging from informal to formal, in the same way a court of law accepts evidence ranging from circumstantial to concrete” (Jackson & Davis, 2000, p. 55). Such assessments should be targeted to the nature of the learning to be demonstrated including

open-ended, complex, and authentic performance tasks and projects to assess conceptual knowledge that educators want students to remember long after the course has ended (Wiggins & McTighe, 1998).

Instructional Practices

Instruction should include connections directly related to curriculum, including what students are learning, how students will demonstrate knowledge, and knowledge about students as individuals and how they learn best (Bransford, 1999; Jackson & Davis, 2000; Tomlinson & Eidson, 2003; Wiggins & McTighe, 1999; Zemelman, Daniels, & Hyde, 1998). Instruction should build on what students already know (Bransford et al., 1999). It should prepare students specifically for demonstrating the knowledge and skills they have gained (Wiggins & McTighe, 1998). Instruction should also respond to the developmental needs and characteristics of young adolescents, who are best served by instruction that considers their cultural, experiential, and personal backgrounds (NMSA, 2003). Variety is critical to successful instruction for young adolescents, given their varied learning styles, strengths, and differences (Andrews, 2005; Jackson & Davis, 2000; Tomlinson, 2003, 2005).

Very few research studies on student achievement related to particular instructional practices in middle grades have been conducted (Allington & Johnston, 2000; Sosniak & Stodolsky, 1993). It is also not always clear whether the existing research will further explore middle grades teaching models or test the effectiveness of broader approaches applied at this level. For example, a study conducted by Weglinsky (2000) compared NAEP scores of eighth graders to classroom practices and backgrounds

of their teachers to identify classroom practices associated with high student achievement. In this study, an emphasis on higher-order thinking skills and engagement in hands-on learning proved important. In a similar study, Marks (2000) found that “authentic” instruction predicates middle grades student engagement and indirectly, student achievement. Epstein and MacIver (1992) found that rich instruction at the middle school level led to increased achievement and improved overall student attitudes. In a sample study using sixth graders, the use of mathematical manipulatives tended to have a positive effect on achievement scores (Walsh, 2000).

Together the studies seem like a loose assortment of findings rather than a practice for middle grades. Jackson and Davis (2000) support this notion:

Even after extensive review of the literature, interview with practitioners, and ten years’ worth of formal and informal observations, we could not identify a single existing model that pulls together everything we believe to be important in making decisions about instruction [in the middle grades]. (p. 68)

Without a model, Jackson and Davis (2000, pp. 68-85) suggest middle grades combine parts of three existing instructional approaches to address “how people learn” in general, rather than how adolescents learn in particular. The approaches include the incorporation of core principles of authentic instruction for which students are encouraged to actively construct knowledge and participate in disciplined inquiry and pursue value beyond the school; incorporate a conceptual tool that helps teachers reflect on their goals and methods (Wiggins & McTighe, 1998); and the use of differentiated instruction by which teachers act as diagnosticians tailoring individual teaching plans to every student (Tomlinson, 1999). These approaches reflect pedagogical information on how people

learn in general and reiterate a key aspect of teaching including instruction, curriculum, or assessment (Jackson & Davis, 2000).

Interdisciplinary Teaming

This We Believe (NMSA, 2003), *Turning Points 2000* (Jackson & Davis, 2000), and the *National Forum* (1998) all discuss the benefits of small communities for learning as the foundation for positive relationships between and among students and teachers. Those relationships, and students' accompanying sense of belonging, strengthen students' capacity for learning and support teachers' efforts to target curriculum, instruction, and assessment appropriately given individual student's needs and interests (Goodenow, 1993; Tomlinson, 2003; Watson, Battistich, & Solomon, 1997). Organizational structures, particularly teams of teachers and students, are critical to establishing and maintaining positive relationships within learning communities (Dickinson & Erb, 1997; George & Lounsbury, 2000). Teaming has been found to improve school climate, increase parental contacts, improve job satisfaction, and have a positive effect on student achievement (Flowers, Mertens, & Mulhall, 1999). Advisory programs along with teaming have been known to contribute to the creation of positive relationships between teachers and students. The positive results of advisory programs (e.g., reducing dropout rates, contributing to a positive school climate, improving student self-concept) are highlighted in the research (Connors, 1991; Mac Iver & Epstein, 1990). Reasons for establishing advisories include promoting opportunities for social development; assisting students with academic problems; facilitating positive involvement among teachers, administrators, and students; providing an adult advocate for every student; and

promoting a positive school climate (Clark & Clark, 1994; Galassi, Gullede, & Cox, 1998).

Another related issue involves the structure of middle grades schools. Advocates of middle school reform promote strategies that are designed to take advantage of development during early adolescence, including interdisciplinary teaming and block scheduling; however, many middle level schools fail to implement these programs (Mac Iver & Epstein, 1990). Urda, Midgley, and Wood (1995) have identified a number of possible impediments to middle school reform, including teacher and administrator perceptions, teacher certification programs, the size of some middle level schools, and state mandates emphasizing testing of discrete pieces of information rather than integrative and critical thinking skills. The creation of middle level schools that are developmentally appropriate for early adolescents and a better understanding of the factors impeding middle school reform are needed. Research evidence points to the value of a systems approach for improving schools, an approach that intentionally and carefully considers the interactions between and among the characteristics of exemplary schools for young adolescents (Anfara, Andrews, Hough, Mertens, Mizelle, & White, 2003; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Lee & Smith, 2000; Lee, Smith, Perry, & Smylie, 1999; Mertens & Flowers, 2003; Sweetland & Hoy, 2000).

Effective Leadership

Courageous and collaborative leadership “develops people, sets direction, and redesigns organizations” (Leithwood, Seashore-Louis, Anderson, & Wahlstrom, 2004, p. 8). Middle school leaders are inclusive of administrators, teachers, students, parents and

families, community members, and other stakeholders. In their development of others, courageous collaborative leaders enable others working with young adolescents to do their jobs effectively, offer intellectual support and stimulation to improve work, and provide models of practice and support (Clark & Clark, 2004; Sergiovanni, 1992; Williamson & Johnston, 1991). In setting direction for the organization, courageous, collaborative leaders develop shared goals, monitor organizational performance, and promote effective communication (Leithwood, 2004; Sergiovanni, 1992). In redesigning the organization, courageous and collaborative leaders create a productive school culture serving to modify organizational structures to facilitate teaching and learning, and build collaborative processes (Leithwood, 2004).

Family and Community Involvement

The role of the family and community is a leading factor in the successful education and development of young adolescents (Jackson & Davis, 2000; Muir, Anfara, Andrews, Caskey, Mertens, & Hough, 2006). To capitalize on this essential role, schools need to initiate partnerships with families and communities to facilitate consistent communication and provide multiple avenues for involvement (Epstein, 1995). Effective partnerships with families and communities all assist with the facilitation of support for young adolescents within and outside of the school building walls (Jackson & Davis, 2000; National Forum, 1998). Such partnerships foster a sense of belonging in school that has been associated with positive outcomes for young adolescents including academic achievement (Goodenow, 1993) and academic motivation (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Goodenow, 1993). A sense of family connectedness can

mediate young adolescents' high-risk behaviors (Bray, Adams, Getz, & Baer, 2001; Resnick, 1997). Schools can encourage multiple types of family involvement—parenting, communicating, learning at home, decision making, and collaborating with the community (Epstein, 1995). Community-connectedness also promotes constructive outcomes for young adolescents including better grades, peer relationships, and leadership and conflict resolution skills (Noam, 2003). Community-based afterschool programs, extracurricular activities, and apprenticeships (Nesin & Brazee, 2005) can enhance adolescents' sense of belonging to the community in which they live.

Parental involvement tends to decline in schools after the elementary grades and again between the middle grades and high school (Brough & Irvin, 2001; Eccles & Harold, 1993; Epstein 1995; NSDC, 1999; Sanders & Epstein, 1998). Educators and middle grades reformers continue to call for more parental involvement and contact in schools. However, according to research the actual effects of parental involvement appear “contradictory and inconclusive” (Brough & Irvin, 2001). Most of the studies on parental involvement in schools have focused on the elementary grades or parental behaviors of parents at home (Balli, 1998; Brough, 1997; Rutherford & Billing, 1995; Trivette et. al 1995). For example, Desimone (1999) discovered a relationship between parental rules and increases in reading achievement. Students reporting the existence of parental rules had an increase in reading achievement, while those not reporting the existence of parental rules had a decrease in reading achievement. Students' academic work and attitudes about school were also found to improve when family members provided assistance with homework and at-home discussions regarding school activities was seen

as a strong predictor of achievement (Sui-Ch & Wilms, 1996). In general there has been very little attention given to research in middle grades regarding parental involvement and its effect on student achievement.

Teacher Quality

The strong connection between teacher quality and student achievement is well documented in the literature (Darling-Hammond, 1997, 2000; McCabe, 2004; Rice, 2003). Middle grades advocates (e.g., NMSA, NASSP, National Forum) call for teachers specifically prepared for teaching in the middle grades and committed to enhancing their knowledge and practice through ongoing professional development. Teacher preparation programs should include an intense focus on young adolescent development, academic content, and pedagogical knowledge and skills as well as extensive experiences/ internships in middle grades schools (McEwin & Dickinson, 1995; McEwin, Dickinson, Erb, & Scales, 1995; National Association of State Directors of Teacher Education and Certification, 1994; NMSA, 1997). Attempts to combine knowledge about early adolescent cognitive development with educational practices are evident in the research; however, questions regarding curriculum still remain (Kleen, Urdan, & Medrich, 1998).

The increased cognitive development of adolescents allows them to think more abstractly, reason more systematically, and remain engaged in subjects of interest for an extended period of time. The benefits of having the learner more engaged in constructing knowledge, or co-constructing it with peers or teachers is evident, but what's not clear is the extent to which these practices are being applied in middle-level schools, how they have affected achievement, and which modes of delivery are best able to tap into and

facilitate the cognitive development experienced in early adolescence. For example, what mixture of direct instruction and cooperative group work is most effective for students at this level of development? What are effective strategies for ensuring that students at various points in their cognitive development who are in the same classroom are all doing work that matches their capabilities?

Most educators believe teacher quality as determined by their content knowledge and effective instructional practices can have a positive impact on student achievement. However, there are only a few studies that link teacher quality and student achievement, but not specifically in the middle grades. Sanders and Rivers (1998) found greater achievement gains among students who had effective teachers than those in classes with less effective teachers. The findings were similar in a study conducted in Dallas where reading and mathematics scores for students were found to be dependent on teacher quality (Jordan, Mendr, & Weerasinghe, 1997). Boston schools (1998) also discovered in a study with tenth graders that their scores were directly impacted as a result of effective or ineffective teachers. These studies, however, do include or describe the qualities of an effective teacher.

Additional research looking specifically at subject area training considers the impact of teacher quality on achievement and also includes descriptors for effective teachers. For example, Goldhaber and Brewer (1996) examine the effect of teacher degree-level on education performance using data from National Educational Longitudinal Study of 1988 (NELS). Results from this study suggested that some teacher characteristics have a strong effect on student achievement. Goldhaber and Brewer

(2000) later discovered in a study of 12th graders that teachers with a standard certification had a statistically significant positive impact on student test scores relative to teachers who either held a private school certification or no certification in their subject area. Measures of teacher preparation and certification are one of the strongest correlates of student achievement in reading and math, controlling for student poverty and language barriers.

Academic Climate

In an effort to increase the rigor and expectations for students in schools, most states have implemented standards-based accountability systems. Included in these systems are set content and curriculum standards, performance measurement of students and schools, reporting of school results, and the enforcement of sanctions and rewards at the student and school level. Some research suggests performance standards and accountability systems have a positive effect on student achievement at many grade levels (Bishop, 2000; Borko & Elliot, 1998; Frederiksen, 1994; Grissmer, Flanagan, Kawata, & Williamson, 2000; Nave, Miech, & Mosteller, 2000; Stecher, Barron, Kaganoff, & Goodwind, 1998; Winfield, 1990). Considering the amount of attention given to curriculum and accountability in all parts of K-12 education, it seems that the standards movement has had an influence on the middle grades. However, the degree by which it has impacted the daily life of middle grades classrooms and schools is not so clear (Lee, 1998). The variations seen locally and in each state make it difficult to measure the overall impact of standards.

The implementation of standards is popular and supported among middle grades reformers. *Turning Points 2000* calls for “a curriculum grounded in rigorous, public academic standards, relevant to the concerns of adolescents and based on how students learn best” (pp. 31-32). The Council of Chief State School Officers (McClure, 1998) urges policymakers, “every middle grades should provide a core academic program and expect every student to complete it successfully” (p. 13). The NMSA also calls for curricular standards using the phrase “high expectations” (1995, 2001). The educational jargon linked to standards-based reform, the association argues, can often lead to abstract learning objectives. The need is for more concrete goals in the development of personal and social development, such as “to become intellectually engaged and to behave in keeping with responsible citizenship” (NMSA, 1995, pp. 15-16).

The implementation or effects of these standards on middle grades context has resulted in very little scholarly research. Researchers exploring the use of standards at this level may have neglected to consider whether or not grade level has some bearing on their findings. For example, Kahle et. al (2000) examined standard-based teaching practices and their effectiveness for African-American science students. The findings suggested that a standards-based curriculum had small but positive effects on achievement and attitudes, particularly for boys; Kahle et. al (2000) also found that certain professional development activities predicted teachers’ use of a standard-based model. However, it is difficult to ascertain whether the findings have relevance beyond the middle grades, as this approach could be effective for all boys of all ages, ethnicities, or effective for only urban students, and so forth. The research offers very little

information on how standards have entered the middle grades curriculum as well as any impact they had on middle grades achievement.

Student Engagement

Middle grades students are more likely than elementary students to question the reason or value of something they are expected to learn. However, by connecting the learning to the world outside of school, students can often find meaning and motivation to do well in school. Teachers often speak of their dealings with student apathy and disengagement, particularly in middle grades. Compared to elementary and high school students, middle grades students are more likely to report feeling bored at school, concerned about their ability to succeed, and unclear about the value of their learning (Anderman and Maehr, 1994; Carnegie Council on Adolescent Development, 1995; Eccles & Midgley, 1989; Larson & Richards, 1991; Marks, 2000).

Lower levels of engagement, where engagement refers to the students' intrinsic motivation to participate, often corresponds to lower levels of achievement, as the opposite tends to hold as well; high levels of engagement appear to relate positively to higher academic achievement for all populations (Blyth, Finn & Rock, 1997; Bruce & Singg, 1996). Middle school scholars define engagement as a student's formation of close and supportive attachments. This definition suggests a different meaning and set of practices of students and educators working with those students.

School Size

Researchers have begun to explore achievement effects of school size in middle grades. In *Turning Points 2000*, Jackson and Davis (2000) note: "A growing body of

research documents the advantages of small schools for all students including young adolescents” (p. 124). In a study of sixth and eighth graders in Chicago, researchers found that smaller school size has a positive effect on teachers’ attitudes (Lee & Loeb, 2000). Researchers also indicate an indirect benefit of smaller school size in that middle grades schools with fewer than 750 students tend to have more effective instructional strategies, more parental involvement, common time for teachers, and additional features correlated to higher achievement in students (Flowers, Mertens & Mulhall 2000). However, it is possible, as noted previously by McEwin (1996), that the overall effectiveness of middle grades schools has far more to do with the nature of their programs, teachers, leadership, organizational plans, and practices. Or as suggested by Renchler (2000), perhaps school size matters less than the number of students in each grade level. Middle grades school size may have some influence on a student’s achievement, however it is unclear just how much of a difference it makes relative to other factors.

Middle to High School Transitions

Central to the new agenda of “middle schooling” are a range of educational issues vowing to provide more responsive and engaging curriculum and pedagogy for students to help them function in a changing world (Pendergast, 2005). Middle schooling is seen to be characterized by a set of effective school practices involving an integrated curriculum, teacher team work and collaboration, authentic outcomes-based curriculum and assessment, and the development of students’ higher order thinking and problem solving skills (Carrington, 2006). Also revolving around the reform is the provision of a

seamless transition from primary schooling (traditionally student centered) to secondary schooling (traditionally subject or discipline-centered) leading to more effective student learning, positive experiences in adolescence and a desire and capacity for lifelong learning (Carrington, 2006; Pendergast, 2005). Of interest in this research are the transitional experiences of students (from eighth to ninth grade), and how the opportunities/experiences provided at a K-8 school assisted them with successfully transitioning from eighth to ninth grade.

The growing body of literature concerning student transitions from middle to high school has been largely based on practitioners' views on childhood development and the developmental needs of children. As an educator, it is very disturbing to know that an analysis of student data from many school districts consistently reveals ninth graders as having the lowest grade point average, greatest number of discipline referrals, and the highest dropout rate of any grade level (Walsh, 2000). If today's trends persist, 75% of entering high school students will not finish the post-secondary education needed to thrive in our global world (Dedmond, 2008). Efforts to restructure the academic and social experiences of primary and secondary education to better prepare students for graduation requirements is part of what Mac Iver and Epstein (1993) have called "the longest-running debate in middle level educational research" (p. 523). While much discussion exists on what causes the problem of ninth-grade failure rates ultimately affecting a student's ability to graduate, the dilemma continues and a significant number of eighth-grade students continue to unsuccessfully transition to ninth grade each year. Therefore, more attention is needed on the examination of what experiences have helped

students successfully transition to ninth grade to enable educators to replicate and perhaps expand upon in districts.

Transitions Defined

The transition from middle to high school can be described as a process of moving from the known to the unknown (Green, 1997). Some students may experience three major school transitions: from home to kindergarten, from elementary to middle school, and from middle school to high school; while for a smaller number attending K-8 schools there may only be two. The assumption that transitioning to a new school is an inherently difficult and stressful time has permeated the policy and practices of schools for some time. Alspaugh and Harting (1995) establish that there is a consistent student achievement loss associated with the transitions from self-contained elementary schools to intermediate level schools. For instance, the study revealed a noticeable change (often decline) in the achievement levels (as measured by district and state assessment tools) of some students the year immediately following a change in school locations. Students, particularly impoverished students, involved in a pyramid transition of multiple elementary schools into a single middle school experienced a greater achievement loss than did the students in a linear transition of a single elementary school to a middle school, or at best a K-8 setting.

High School Transitions and Challenges

Ninth grade is clearly the “make or break” year in terms of secondary school success or failure, as it is frequently coupled with numerous challenges (Reinhard, 1997). Students who fail their classes are likely to begin questioning their ability to make

graduation requirements, lose interest in school, and consequently drop out of high school (Wagner, 1989). The ramifications of dropping out for subsequent employment opportunities and earning potential underscore the importance of this issue. Youth who fail to complete high school have twice the unemployment rate of graduates, in addition to diminished opportunities for post-secondary school or continued training.

Legters and Kerr (2001) surmise that the large bureaucratic nature of most high schools offers little support for incoming students, especially those with weak social and academic preparation. High school teachers teach a number of classes each day and a large numbers of students. Students have less contact time with each teacher due to the organizational structure of the high school, and this experience can lead students to believe teachers are not always available when needed. Transitions to high school can be made more difficult for some students when they are faced not only with an unfamiliar environment but also a less intimate and larger one. Based on these observations of student challenges, transitions to high school can be problematic for some students due to a range of social, peer, curricular, academic, physical, geographic, and organizational challenges.

K-8 Schools and High School Transitions

The connection between student achievement (specifically in reading) and overall success has long been documented. In a study of educational practices, Epstein and MacIver (1990) determined grade configuration does make a difference in the education of young adolescents because middle schools (grades 6-8 and 5-8) implement more of the recommended middle level practices shown to be successful. Offenburg (2001) found

eighth- and ninth-grade student achievement to be higher for students attending K-8 schools than for those attending middle schools serving similar communities. Students who attended K-8 schools on average scored higher on the Stanford-9 Achievement Test, and attended selective high schools and high school programs at a higher rate, even after controlled for poverty levels and minority status.

The research on K-8 schools suggests that the K-8 configuration has a positive effect on students' academic achievement and overall engagement in school. The K-8 grade configuration is attractive to some educators because it appears to accomplish several desirable ends simultaneously. Obviously, it removes children from 6-8 schools that have failed—for whatever reasons—to apply the middle school concept with a high degree of fidelity. Second, because most K-8 schools are smaller than many middle schools, they may provide young adolescents with the personalization they could not get in poorly administered large middle schools. However, whether K-8 students will also be the beneficiary of an appropriate and rigorous curriculum is a different issue, and to date there is inadequate research to answer this critical question.

The data clearly suggest that K-8 schools may be a viable solution to help middle school students perform academically and develop as engaged, motivated students and ultimately successfully prepare for the transition to high school (Erb, 2006; Offenber, 2001). School grade configuration has been of interest to educators and boards of education for some time. Because of the interest shown by these policy makers, changes have occurred regarding school grade level configurations in the United States (Erb 2006). Although there are some common school grade level configurations, school

systems across the country continue to evaluate school grade level configurations to determine the most appropriate grade level configuration for their system. The results of this study will shed additional light on how one particular K-8 school helped students prepare for high school.

There is a sizeable body of research that has focused on student transitions (Akos, 2002; Alspaugh, 1998; Cotterell, 1982; Dockett & Perry, 2000, 2001, 2003; Hertzog & Morgan, 1998; Johnstone, 2001c; Yates, 1999). However, upon closer review of this literature, there appear to be limited studies that have considered students' transitional experiences into high school as they lived through this period, as well as discussions of which experiences in middle school best prepared them for this transition. Ultimately, the goal of extending the current understandings about student transitions to high school and findings relative to this topic is to provide additional knowledge and understanding about how to help students successfully transition to high school to help them become ultimate graduates.

Ninth-grade Dropouts

The definition of the term "dropout" is controversial. What makes a student a dropout and how to measure dropout rates varies from state to state and at the federal level. The lack of a standard definition and formula makes assessing school performance difficult and comparing schools and school systems almost impossible. In North Carolina, a dropout is defined as a student who leaves school prior to graduation or completing a program of studies without transferring to another elementary or secondary school (North Carolina Department of Instruction, 2008). The dropout problem is a

complex issue with many individual, family, social, economic, and school policy variables that are evident during middle school (Rumberger, 1995).

One of the most alarming and informing statistics about urban schools is the large number of students who leave school without graduating. Recent data reports have indicated that dropout rates in large cities sometimes exceed 50% (Education Week, June 2007). The sheer size of many of these urban school systems means that a 50% dropout rate represents a loss of thousands of students from each grade cohort of students. Entering adulthood without a high school diploma carries severe economic and occupational disadvantages. In 2000, high school dropouts aged 25 and older experienced a 6.4% unemployment rate compared to 3.5% for those with high school degrees, and 1.7% for those with 4-year college degrees. Medium annual income for male dropouts in 1999 was \$25,035 compared to \$33,184 for high school graduates and \$52,985 for those with 4-year degrees (U.S. Department of Education, 2002).

Although dropping out itself represents a crisis point in students' educational careers, urban teenagers who leave school without graduating have often experienced earlier crisis points in high school, notably severe academic difficulty during the freshman year. The difficulty associated with the transition to high school is well documented in large cities. Approximately one third of first-time freshmen in the Philadelphia public schools fail to accumulate enough credits for promotion (Neild & Balfanz, 2006). More than 40% of Chicago freshmen fail a major subject during the first semester (Roderick & Camburn, 1996). The long-term consequences of dropping out and

its association with academic difficulty during the freshman year warrant additional investigation.

Middle Grades Achievement and Research

Based on the current literature on student achievement in the middle grades, middle school achievement seems to have more in common with successful strategies applied at other grade levels than not. This assumption is summarized by Louis (2000) in reminders of what has been documented in the literature previously about student achievement in the middle grades. For example, Carnegie Corporation's (1996) report notes, "These are commendable recommendations although it is hard to see why they are applicable only to students in the middle grades" (p. 111). The following year, How and Hannum (1997) found that similar school climates can measure both high schools and middle schools. As Mizell maintains, "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).

Middle grades reform proposals including *This We Believe* and *Turning Points* offer recommendations similar to those of elementary, secondary, and adult educators. They maintain there is nothing fundamentally different or distinct about educating these students. They also agree, as would most middle grades educators, that typical middle grades students bear distinct developmental differences from a second or eleventh grader, and the expectation is that teachers should be responsive to the differing needs of these students as they would students of varying needs in elementary schools, urban schools, or

any other setting. Early adolescents have the same educational needs and capacities seen in everyone else, and like other students, they should be challenged intellectually, supported emotionally, respected, and held to high standards.

Conclusion

Calls for accountability and improved test scores heightened by the provisions of *No Child Left Behind* have led middle level educators to seek ways to increase student achievement with new vigor (No Child Left Behind, 2002). There is, however, no concise, quick fix answer or series of specific activities that will result in increased student achievement. The process is complex for several reasons. In the larger context, societal attitudes and political pressures influence sustainability (Oakes, Quartz, Ryan, & Lipton, 2000). Within schools, multiple factors interact to influence the process of learning (i.e., a combination of different learners, past experiences, processes, and stakeholders).

The research on adolescents repeatedly tells us that achievement gains are associated with greater implementation of academic and caring processes focused on student learning. The conditions and structures aligned with these processes consist of quality instruction in the classroom in schools with holistic approaches focused on learning and supported by the schools' capacities for change. Additional factors that promote achievement include school leadership, parental involvement, and community support. No Child Left Behind (NCLB) presents challenges to schools but also provides opportunities through increased funding. In a document entitled "Opportunities and Accountability to Leave No Child Behind in the Middle Grades," Brown (2002)

describes 18 funding areas in NCLB to improve achievement. State initiatives that enable schools and districts to access these funds may well enable schools and districts to implement the classroom and school practices that raise achievement.

In reforming schools, however, teachers have placed policy recommendations into idiosyncratic practice. They have, for example, combined signature practices into various models of middle schooling that have gained ongoing criticisms. The two versions of *Turning Points* have combined the difficulties of the reform agenda for middle schools and also received critiques of this policy. The seven recommendations in the 2000 document were represented as interconnected parts of a system that together form a whole. However, because assumptions in the original Carnegie report were not very explicit, reforming schools have struggled with trial and error experimentations and have engaged in a piecemeal implementation. For example, the 1989 report did not (a) outline how recommendations interact, (b) articulate the perceived necessity of holistic implementation of all recommendations, and (c) allow for the piecemeal nature of the education systems internationally (Davis, 2001). A lack of exemplary middle schools from which other schools could model their reform process also made it difficult to establish schools and appropriate teacher training consistent with the Carnegie recommendations.

Following the publication and implementation of many of the middle school recommendations regarding practices, it was later acknowledged that successful reform hinges on implementation of all recommendations (Dickinson, 2001; Jackson & Davis, 2000). Dickinson (2001) notes a misconception that “some is better than none by . . . the

original middle school concept if a totally integrated ecology” (p. 4). With respect to the available body of research efforts on specific signature practices, summarized in the revised *Turning Points 2000* report, collection of such data did not provide insight into whether practices worked together and how they worked together. This work has been characterized as wasteful. “The interaction between those recommended practices and the impact those practices together have on achieving the Turning Points vision have not, by and large, been investigated in any great depth” (Davis, 2001, pp. 218-219).

Davis (2001) conceded that implementation of all *Turning Points 2000* recommendations at once would be difficult, if not impossible. However, there was an alternative to holistic versus piecemeal implementation. Specifically, a gradual evolutionary approach to reform would introduce parts of the recommendations and process in stages, in order to avoid unnecessary disruption and dislocation arising from the reform process itself. Williamson and Johnson (1998) argue that the strongest advocates of middle schooling have inflicted the most damage on its sustainability. In their view, an unintended outcome of embracing “true” middle school orthodoxy has been the reimplementation of program characteristics which then becomes its primary function. Insistence on across-the-board implementation of assorted signature teaching practices in teaching middle school may have resulted in overlooking important recommendations of responsiveness to local needs of students and their community. Williamson and Johnson (1998) suggest that if the primary aim of middle schools is to meet the developmental needs of young adolescents, then alternative organizational patterns within the same school should be explored. A flexible mosaic of options or

modules within a middle school setting might accommodate learning needs ranging from highly structured teacher-directed settings to highly independent, student-integrated settings.

A prodigious amount of literature exists on middle level schools and practices; however, far less research exists that documents improved student achievement and school variables or relationships between student achievement data and middle school factors. However, regional studies of whole-school reform initiatives that looked at multiple school sites and achievement first appeared in 1997 (Center for Prevention Research and Development, 1998; DePascale, 1997; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Mac Iver, Mac Iver, Balfanz, Blank, & Ruby, 2000; Mac Iver, Young, Balfanz, Shaw, Garriott, & Cohen, 2001; Mertens, Flowers, & Mulhall, 1998; National Forum To Accelerate Middle Grades Reform, 2002). Other types of studies included case studies of high-performing middle schools (Miles & Darling-Hammond, 1998; Trimble, 2002) and school-wide factors—such as climate—as they related to math achievement and attendance (Phillips, 1997).

Research shows that the alignment of curriculum and instruction to the developmental needs of middle school students (ages 10-14) is imperative to their success in school. This is a more daunting task than one might imagine considering the fact that these students are going through one of the most rapid development periods of their lives (Van Hoose, Strahan, & L'Esperance, 2001). Therefore, it is important for middle school educators to be not only well versed in human development but they must know how to respond accordingly to their students in the continually shifting and changing years of

young adolescent development. However, research shows that roughly one out of five middle level teachers receive any specialized young adolescent training making most middle grades educators poorly trained in this area (Scales, 1996). Additional training at the University level is expensive and not always an option for most teachers, therefore it may be helpful to have access to strategies proven successful in the research and educational practice for increasing student achievement in the middle grades. This study uses a research methodology that incorporates the perspective of teachers with regard to the instructional programs and practices that impacted student achievement the most in a particular middle school setting with demonstrated success. This chapter reviewed the current literature on adolescent education and middle school reform efforts. It offered an overview in relation to the central purpose of this case study. This study used a qualitative research approach to reflect the perceptions of teachers working with middle school students in an urban school district. Chapter III will describe the research design for this study.

CHAPTER III

METHODOLOGY

Chapter III focuses on the purpose of this study and offers an overview of the design of the study. The purpose of this case study was to examine an urban middle school with demonstrated increased academic achievement gains and success in helping adolescents students prepare for high school. The research study also set out to identify key programs, practices, and instructional strategies teachers in the study site identified as having a positive impact on student academic performance, social development, and high school preparedness.

Purpose

The purpose of this study was to examine an urban middle school with demonstrated increased academic achievement gains and success in helping adolescent students prepare for high school. Three distinct ideas, including school-wide programs, school-wide practices, and specific instructional strategies implemented by teachers and administrators to improve the academic performance of all students were examined. The research study also set out to identify key programs, practices, and instructional strategies teachers in the study site identified as having a positive impact on student academic performance, social development, and high school preparedness, providing the promise of student academic performance improvement to similar schools that have yet to experience growth with young adolescent students.

Qualitative Research Design

The research design was a case study approach to qualitative inquiry focused on an in-depth description of an academically high-performing urban middle school program. A high-performing urban school for this study was defined as having obtained the status of Expected Growth in math and reading for three consecutive years. Each year, schools in North Carolina receive several designations based on their performance on the state's ABC's tests. These designations are awarded based on the percentage of students performing at grade level and on whether students have learned as much as they are expected to learn in one year. Finally, a qualifying Title I school having more than 60% of the student population receiving free and reduced lunch, this school was selected to extrapolate the study's findings to other similar schools that have not as yet begun to close a persistent achievement gap. The study school also set out to identify programs, practices and instructional strategies that hold the promise of improving student achievement.

To address the research questions, the researcher selected a qualitative approach because this method seeks to understand a particular social situation, event, or interaction (Creswell, 1994; Maxwell, 2004). Qualitative research can heighten understanding of complex educational situations and lead researchers to identify emerging themes, questions, biases, and patterns for future research opportunities (Gall, Gall, & Borg, 2003; Lincoln & Guba, 1985). Patton (1990) stresses that qualitative research provides a deep and detailed picture of a situation as it is occurring and evolving.

Given the nature of this study, a qualitative approach offers certain advantages over a quantitative design. Qualitative research attempts to explain how events occur (Merriam, 1998; Silverman, 2004). Unlike the quantitative tradition that employs formulas and statistical calculations to draw broad conclusions, qualitative studies are highly descriptive in nature; they are reported in a multitude of words rather than numbers (Creswell, 1994). Therefore, qualitative designs are optimal for investigating human behavior (in their natural setting) and events as they occur. Consequently, since the perceptions of teachers and administrators and key instructional methods/programs were the focus of this study, a qualitative design was advantageous (Strauss & Corbin, 1998). Because of the aforementioned research methodology, this study proceeded without preconceived notions about the study's results. Instead, the researcher leveraged the flexibility and openness to discovery of the qualitative research tradition for maximum benefit (Glense & Peshkin, 1992; Patton, 1990).

More specifically, the researcher employed a qualitative case study research design to describe individuals' conceptualizations of the world around them (Creswell, 1994; Gall, Gall, & Borg, 2003; Seidman, 1998). The qualitative researcher is more interested in studying a person's view of reality rather than the actual, objective nature of the reality. In this case, the researcher attempted to discover more about the participants' perceptions of effective programs and strategies that positively impacted student achievement within an urban middle school (Bogdan & Biklen, 2002). This type of qualitative research is interview driven.

In addition, given the qualitative nature of the study, the research study did not utilize independent and dependent variables (as used in quantitative studies) per se. When determining which type of research to utilize, it was important to understand that variable-oriented research excels at looking at probabilistic relationships between variables while case-oriented research excels at forming general explanations of phenomena based upon a (usually) limited number of cases (Miles & Huberman, 1994; Patton, 1990). Both approaches have unique strengths and weaknesses; therefore, it is not a matter of selecting the “best” orientation, but rather a matter of selecting the most appropriate approach based upon one’s research objectives (Lincoln & Gruba, 1985). That said, in this study, the researcher focused on a specific case, a middle school setting, in order to understand the interplay of the variables outlined later in the study’s conceptual framework: school leadership, school programs, school personnel, school culture, school-wide professional development, and school-wide instructional practices.

Bolman and Deal’s (1997) four-frame organizational theory provided the conceptual framework for the examination of the school’s programs, practices, and instructional strategies associated with increasing student achievement. A standardized observation form was used for the examination and comprehensive recording data on the structural, political, human resources, and symbolic frames during the school observation visits.

Research Questions

The research questions were developed by the researcher in conjunction with the dissertation committee members that met over the course of one year. During this time

the researcher gathered and examined research on factors shown to be positively associated with increased academic achievement of adolescent students. The focus of the study was narrowed to three key factors associated with student academic success, including school-wide programs, school-wide practices and instructional practices. The study was guided by the following research questions:

1. What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?
2. What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?
3. What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school preparedness? What evidence supports their link to increased student achievement?

Conceptual Framework

Improving organizations requires understanding them. Understanding complex organizations, such as schools, requires the use of a good theory. They explain, predict, and serve as frameworks for making sense of the world around us, organizing diverse forms and sources of information, and taking informed action. Bolman and Deal's (1997) organizational theory was selected to describe and analyze the data because the theory offers four lenses through which organizational behavior can be understood and analyzed. They suggest the frames of structure, human resources, political, and symbolic as being

broad enough to account for most influence on persons in an organization. According to Bolman and Deal (1997), “Frames are both windows on the world and lenses that bring the world into focus . . . Frames help us order experience and decide what to do” (p.12). An individual’s frame of reference to a particular event or process, while pre-configured by past experience, is also subject to modification by a person in a leader role, to a certain extent (Bolman & Deal, 1997).

Bolman and Deal’s (1997) four frames organizational theory provided the conceptual framework for the examination of the case study school’s programs, practices, and instructional practices associated with closing the achievement gap. Research variables repeatedly identified in the literature as potentially have a significant impact on student achievement assisted the researcher in creating a conceptual model that connected the research variables with one of the four frames from the organizational theory to help describe and analyze the data collected in the study. The six research variables included personnel practices, professional development training, and school-wide programs. A standardized observation form was used for the examination and comprehensive recording of data on the structural, political, human resources and symbolic frames during the school observation visits. The four frames outlined in this model which include structural, human resource, political and symbolic are aligned with transformational leadership theories.

When beginning any interaction with an organization, it’s important to understand the structure and the environment in which that organization operates. Bolman and Deal define this as the structural frame which makes use of an analytical leadership style that

concentrates on structure, strategy, and implementation. The Structural Frame (Bolman & Deal, 2003) is focused on the organization, expectations and purpose of an enterprise. This frame considers how work is allocated and roles and responsibilities are defined. Among other items, it encompasses rules, regulations, organizational charts, goals and standards. When describing the case study from a structural point of view, several structural changes occurred that may have contributed to the increased students' achievement. For example, the principal and teachers talked about the changes in the master schedule that allowed for more regular teacher collaboration, time for additional student tutoring and the innovative strategies that allowed teachers to work on teacher teams.

The second of Bolman and Deal's frames is the Human Resource Frame (2003). Rather than analyzing the relationship between the leader and subordinate based on only individual qualities, Bolman and Deal (2003) broaden the context to include multiple variables. The leader-subordinate relationship is seen as dynamic, with both contributing to the success of the organization. An organization's human resource philosophy is one of mutual benefits. Effective leaders value staff members by recognizing their needs as important in gaining commitment and loyalty (Bolman & Deal, 2003). Leaders have a responsibility to be rigorous and selective in their hiring practices, establish both intrinsic and extrinsic rewards, maintain open-communication, empower employees and foster a climate of respect for diversity. Employees have a responsibility to be partners in the relationship, contributing their talents and ideas to the success of the organization. Application of the human resource lens surfaces several observations. For example, when

first appointed the principal made human resource agenda a high priority and visible commitment. During his interview he indicated the importance of a humanistic approach in working with the staff and community. The principal was adamant about providing direct support for his staff and frequently reiterated in his comments that staff tend to perform better when they are valued and supported. There is clear and wide spread involvement of the staff in school matters and related decisions further reinforcing the human resource approach. Additional support for the human resource approach was evident in district wide and school supported in-service and curriculum development efforts. These opportunities enabled teachers to strengthen their teaching methods and to address weak areas of the curriculum to equip them to help students increase achievement.

The Political Frame, as defined by Bolman and Deal (2003), is “the realistic process of making decisions and allocating resources in a context of scarcity and divergent interests” (p. 181). The authors view organizational politics as both positive and negative. Effective leaders leverage political power and balance the competing needs of the organization with the interests of the employees and customers. They describe these leaders as able to “mobilize strength, courage, and willingness to fight as hard and long as necessary to fulfill their mission” (Bolman & Deal, 2006, p. 2). This approach emphasizes dealing with interest groups (and their varying agendas), building power bases, coalition-building, negotiating conflicts over limited resources, and creating compromises. The political approach is appropriate when resources are scarce or diminishing as well as when goals or values are in conflict. Bolman and Deal define a

political framework as one that uses coalition building and persuasion to link parties together within the organization (2003). This framework defines an escalation path for managing interactions with other parts of the organization starting with persuasion, then negotiation, coercion, if needed, and, finally, compromise. Thankfully, I did not see any evidence of coercion, but several instances of persuasion and compromise. In the interviews, the principal spoke of several instances in which he had to utilize a “back door” approach to secure needed curriculum support and resources for his teachers. Examples included calling on district personnel for whom he had personal relationship to assist his teachers and sharing the success of the school with the district personnel to gain their support for maintaining the school’s magnet program and funding for instructional needs.

The Symbolic Frame acknowledges the significance of culture. Culture as defined by Schein (1992) is “a pattern of shared basic assumptions that a group learned as it solved its problems of external adaptation and integration, that has worked well enough to be considered valid and therefore taught to new members as the correct way to perceive, think and feel in relation to those problems” (as cited in Bolman & Deal, 2003, p. 243). The lens of Bolman and Deal’s Symbolic Frame (2003) allows a leader to consider the importance and cultural meaning of the organization’s activities and events. It explains organizational history, rituals and ceremonies and the role these play in defining the organization. According to Bolman and Deal (1997) the culture of an organization and its symbols are difficult to comprehend. Persons in organizations tend to go about their daily experience very often unaware of how the culture and its related

symbols, stories, rituals, and beliefs influence their behavior. They simply take these for granted and do what seems natural. However, when taken from a broader and more distant point of view, the culture of a school and its community can be quite revealing. For example, when the school board suggested the case study school change its magnet program to a traditional schedule, the community and staff came together to provide evidence of how the extended year calendar supported the increased student achievement it had received over the life of the magnet program. Other examples include the ongoing support that is given to all employees with the attention to celebrations and prompt attention to staff needs. While collecting data, I noticed the monthly birthday celebrations that were provided to all staff. Unfortunately, there were also a few unfortunate incidents related to death and illness that occurred. In each instance, the entire staff pulled together as an expectation to provide the staff member and their family what was needed to help them endure the unexpected crisis.

Bolman and Deal would argue that no one frame can fully explain or impact desired changes without consideration of the other frames. When taken as a whole, the comprehensive framework offers the possibility of a rich analysis of the events that, for example, contributed to the success of the case study school. Although identified as a separate entity in the framework, these perspectives are also highly related and interact with one another, as further seen in the findings portion of the study. The conceptual model (see Figure 1) developed to guide the investigation of the school-wide factors associated with the improved student achievement and closing the achievement gap also

included the six research variables found in the literature that are associated as well with having a significant impact on student achievement.

4 Frames Organizational Theory

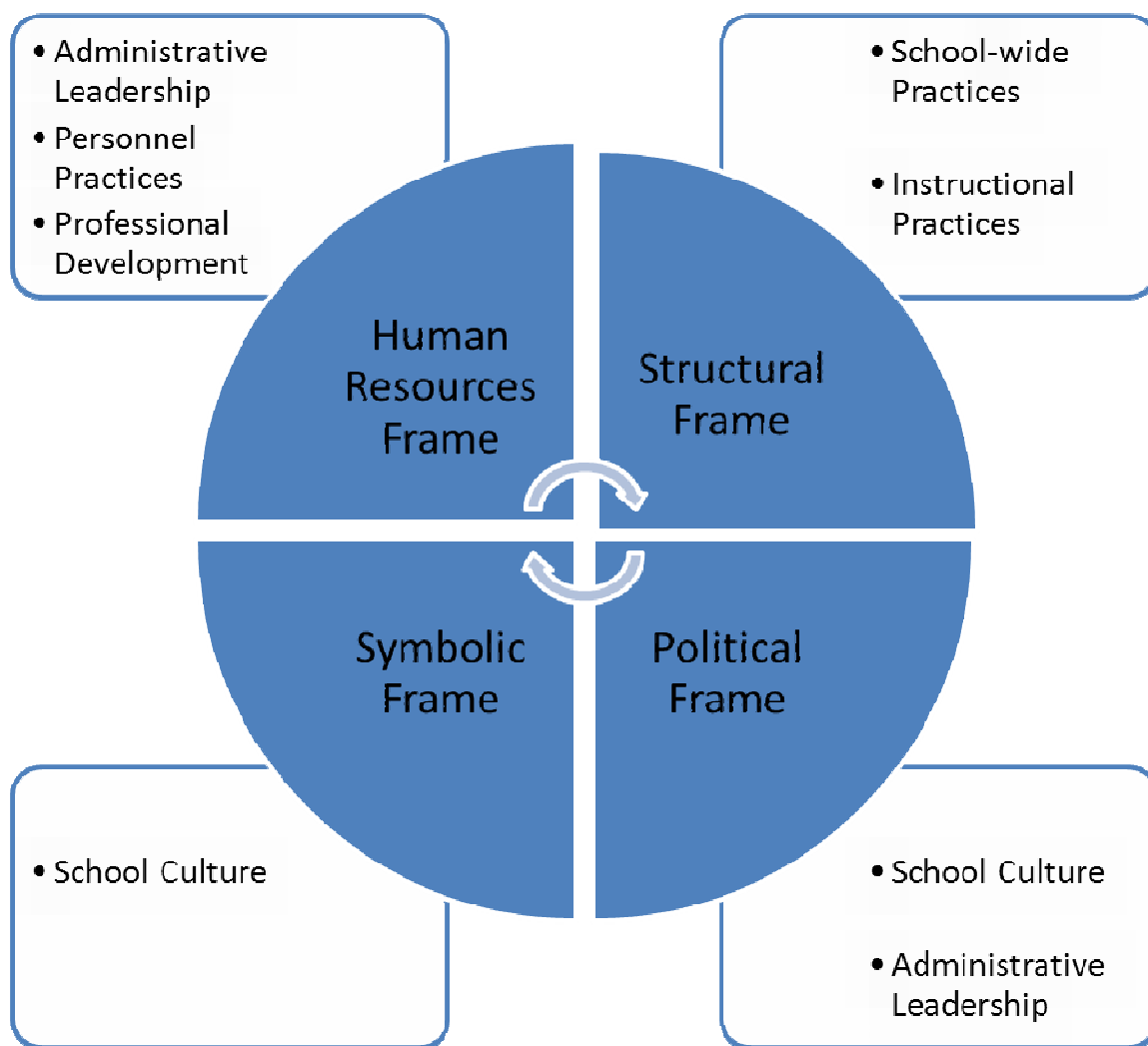


Figure 1. Conceptual Framework

Also included in the conceptual model are those factors identified in the literature as potentially reducing achievement gaps between various subgroups, including parent

communication, collaboration and data analysis, early intervention programs, and improved teacher quality. Finally, although not directly investigated by the research questions, the researcher anticipated the variables of school population characteristics, community/ family expectations and barriers, No Child Left behind requirements, school accountability, state testing, and globalization pressures would be found to influence the areas of school programs, school practices, and instructional strategies utilized in the classroom.

Setting

The participants in this study were 12 middle school educators including one principal, one curriculum facilitator, and one reading specialist. The general population of this study was all of the current middle school teachers at this school. The researcher began the selection process by gathering data on all the middle teachers currently serving students at the case study school. Once the list was created, an invitation to participate in the study in the form of an email letter was sent to teachers, the principal and support staff. The final participants for the study were then selected based on the survey results. To qualify for this study, prospective participants (regardless of gender or ethnicity) had to meet the following requirements: (a) demonstrate a willingness to participate in the study; and (b) be currently serving as a middle school teacher or support person at the case study school.

Poor timing of the solicitations for initial nominations resulted in only twelve viable candidates. The researcher made contact by phone and e-mail with all viable candidates in early October. The researcher described the project, the time commitment,

the value to the school system, and the confidentiality ensured for the participants. One of the researcher's goals throughout the study process was to develop rapport with the participants. This included being sensitive to the teachers' needs, their time, and their teaching. As a result, all interviews and meetings were scheduled at the teachers' convenience and not before holidays, prior to parent conferences, or preparation of report cards.

This study was conducted in a large urban school district in the southeastern quadrant of the United States. At the time of the study the school district employed more than 10,000 full and part-time employees with a student enrollment of more than 71,000 students. The school district has more than 120 schools located in both urban and rural areas. There were 71 elementary schools, 25 middle schools, and 28 high schools. The case study school was selected as an exemplar middle school based on my personal connection with school as a former principal and information about the school supporting the fact that it successfully supports and implements what the research indicates is characteristics of exemplary schools for young adolescents. The case study school is also the only K-8 school in the district. However for the purposes of this study, only data from the middle school was incorporated into the study. The research describing characteristics of exemplary schools for young adolescents draws on four key frameworks for high-performing middle grades schools: National Middle School Association's (NMSA) *This We Believe: Successful Schools for Young Adolescents* (2003); *Turning Points 2000: Educating Adolescents for the 21st Century* (Jackson & Davis, 2000); the National Forum to Accelerate Middle-Grades Reform's vision

statement (1998), and the National Association of Secondary School Principals' (NASSP) report *Breaking Ranks in the Middle: Strategies for Leading Middle Level Reform* (2006). Each body of research shares the following characteristics of exemplary schools which were used to select the case study school: Academically excellent, developmentally responsive, and socially equitable.

The case study school combines students from a very small district with a larger population of students who apply to the magnet program. All 344 students enrolled participate in the magnet program. Their diverse population of students includes 26% white, 43% black, and 29% "other." The "other" category includes students from an increasingly-wide variety of countries and continents bringing a wonderful mix of backgrounds and cultures to our school. The case study school demonstrates high expectations including academic excellence by challenging all students to reach their potential through the facilitation of a rigorous curriculum and instructional program. The administration and teacher leaders have been careful to align the magnet curriculum with the curriculum mandated by the state. Integrating global studies unto core subjects as well as the elective subjects makes for an interesting lesson plans and learning opportunities. To accomplish this goal, teachers utilize hands-on learning strategies and strategies that appeal to all learning styles. The teachers routinely participate in professional development to enhance the students' success. They focus on improving instructional and behavioral strategies on an ongoing basis through Positive Behavior and Intervention Support programs and with numerous workshops and initiatives sponsored by the district and state. Teachers are currently involved in Marzano's Classroom

Instruction That Works training, a well-respected and research based classroom instruction program. Achievement data from the past three years have indicated steady increases in student performance in Math, increasing from 65.3% of students at or above grade level to 77.6%, a gain of 12%. Data in Reading reflects significant gains from 2007-08 to the 2009-10 school year, increasing from 44.9% to 68.8%, a gain of nearly 24%.

The academic success and expectations goes across ethnic and social lines which indicates the school's position on social equity. The focus on global preparedness and seeking to keep students' options open by holding high expectations for all students and helping each student produce high quality work as seen in the magnet expectations and student outcomes supports is one of the characteristics of being socially equitable (National Forum, 1998). Further support for my selection of this school as an exemplar school can be seen in the awards received recently as listed in Table 1.

Table 1

Support for Selection of Case Study School as an Exemplar School

School Year	Award/Accomplishment
2008-09	<p>Reading proficiency increase of 21%, second highest in the district.</p> <p>Math proficiency increase of 8%; 14% performance composite increase.</p> <p>PTA Blue Key Award, Bronze Acorn Award, and "Score More with PTA" awards.</p> <p>Met expected growth and named a "School of Progress."</p> <p>Positive Behavior Support "Model School" designation, the top program award.</p> <p>Magnet Schools of Merit School of Distinction Award.</p>

Table 1 (cont.)

School Year	Award/Accomplishment
2009-10	<p>Second highest proficiency rate in the district on the NC 8th grade technology test.</p> <p>100% proficiency rate for Japanese I language placement test.</p> <p>Attendance rate > 96%- second highest in the district.</p> <p>Positive Behavior Support “Model School” designation, the top program award.</p> <p>Met expected growth and named a ‘School of Progress.’”</p> <p>Magnet Schools of Merit School of Excellence Award</p>

The final characteristics of supporting the case study school’s nomination as an exemplar school was its focus on the students’ development. A developmentally responsive school creates small learning communities of adults and students that are focused on respectful relationships and support for all students’ intellectual, ethnic, and social growth. The mission statement of this school provides the “tone” for these characteristics as well as their observed practices with students, staff and the community. The Mission/Vision Statement reads,

This school is a professional learning community that provides a curriculum rich in global studies and cultural awareness. We are committed to a safe and supportive environment in which all students can learn and become contributing citizens in a multicultural society. To help us achieve our goals, JSGS shares the following beliefs: (a) Treat others the way you want to be treated, (b) Do and be your best, and (c) Be a peacemaker.

Our goal is to provide a solid education as reflected in the North Carolina state standards and to educate students in the world’s geography, history, and culture. Using the five

themes of geography—location, place, region, movement and human/environmental interaction—we strive to provide them with an understanding and appreciation for the differences that make people unique, thus making students better equipped to make educated decisions as the future leaders of our complicated and ever-shrinking world.

The case study school routinely involves parents and others throughout the community to provide a good balance between the educational community of the school and the larger community, state, nation and world. Demonstrations of practical and engaging learning activities are offered to parents in our regularly scheduled Math and Reading nights. They also partner with two local Universities to provide learning opportunities for interns and student teachers. Interns from these highly-respected institutions assist students in achieving educational objectives by providing individualized attention to those who are working to grasp new concepts. As part of their parent outreach program, numerous staff members volunteer their time to offer an afterschool exercise program to students and their families.

Though not an exhaustive list of the characteristics of exemplary schools for young adolescents, it is a solid depiction of a successful school focused on the success of young adolescents. In reality, a list cannot capture the subtleties and complexities of schools and a list of any sort could be seen as somehow self-contained, which that can be addressed in isolation. Instead, research demonstrates that the characteristics listed above are “an interacting and interdependent group of practices that form a unified whole . . . [that] must be dealt with holistically, systemically, to ensure success” (Jackson & Davis, 2000, p. 27). Research evidence points to the value of a systems approach for improving

schools, an approach that intentionally and carefully considers the interactions between and among the characteristics of exemplary schools for young adolescents (Anfara, Andrews, Hough, Mertens, Mizelle, & White, 2003; Felner, Jackson, Kasak, Mulhall, Brand, & Flowers, 1997; Lee & Smith, 2000; Lee, Smith, Perry, & Smylie, 1999; Mertens & Flowers, 2003; Sweetland & Hoy, 2000).

Instrumentation and Data Collection

Collection of a wide range of qualitative data was completed at the school site over an eight-week period for this case study. Qualitative data came from sources such as interview responses, the School Accountability Report Card, the School Improvement Plan, and researcher observation. To ensure a systematic and comprehensive approach to data collection, a documents and records matrix was constructed (see Appendix F).

A paper-and-pencil qualitative survey was developed by the researcher using information found in Marzano's (2001) work and completed by the principal and eleven teachers and instructional staff to gather personal background information and administrator and teacher perceptions related to the three research questions (see Appendices A and B). A total of 20 staff members were invited to participate in the study, however only 12 were able to participate. Questions 1 to 6 gathered data on the first research question: "What school-wide programs promote student achievement?" Questions 7 to 25 addressed research question 2: "What school-wide practices promote students achievement?" Questions 26-40 gathered information on the third research question: "What instructional strategies were implemented to target the closing of the achievement gap?"

The questionnaire employed a four-point Likert-type scale asking participants to rate each survey question using the following scale: strongly disagree, disagree, agree, and strongly agree. The four-point scale was chosen to prevent participants from choosing a neutral position on any given statement. The questionnaires were divided into three parts, each section containing questions related to one of the three research questions.

Two interview protocols were developed by the dissertation group—a question set for teachers (see Appendix C), and a set for the administrator (see Appendix D). A total of 12 interviews were conducted and one focus group. The twelve interviews included an initial interview and follow-up interview with each participant. A member check was done during the second interview to increase the credibility and validity of the study. During the interview, the researcher restated information to the participant to determine accuracy. The focus group included 4 participants, all of who participated in the previous interviews. The length of the interviews ranged from 45 minutes to 90 minutes depending on depth of the participant's feedback. The interviewer, following a prescribed protocol, took detailed and structured notes during each interview. The interviews were audio recorded to ensure the accuracy of direct quotes included in the text of this dissertation document, and to make certain that the participants' responses could be more accurately reported and integrated into the data analysis than with written notes alone. Both interview protocols requested information relevant to the three research questions, including the identification of school-wide programs, school-wide practices, and instructional strategies that have promoted student achievement and the narrowing of the

achievement gap between African-American students and their more affluent White and Asian counterparts. In addition to information specifically related to the three research questions, respondents were asked to provide information related to promoting rigorous courses and support for high school preparedness strategies. These qualitative data provided rich, thick, and detailed descriptions of teacher-to-teacher, teacher-to-administrator, and administrator-to-teacher interactions and the relating of the school-wide programs, practices, and instructional strategies to student achievement.

In an effort to capitalize on the benefits of data triangulation to strengthen data interpretation conclusions, the researcher developed interview questions that mirrored questionnaire items. Although similar information was asked in the interview and on the questionnaire, the interview provided a forum for participants to expand on their perceptions of the school-wide programs, practices, and classroom instructional strategies.

Five full days for school observations were selected by the school principal to minimize disruptions to school routine. A standardized protocol (see Appendix E) was developed by the researcher using Bolman and Deal's (1997) four organizational frames paradigm. These frames include structural, political, human resource, and symbolic organizational factors. Information gathered from this protocol allowed the researcher to systematically gather and interpret school events and processes related to school-wide programs and practices. The four frames also provided a structure for gathering data on the school's culture and leadership characteristics.

A document review was conducted to gather information on the school's background and profile (see Figure 2). The School Improvement Plan and the School Accountability Report Card provided information on class sizes, number of suspensions and expulsions, instructional minutes, population breakdown (i.e., ethnicity, SES, ESL's), special programs, enrichment opportunities, electives, and extra-curricular clubs. Also examined were minutes of school group meetings, vision and mission statements, professional development plans, Safe Schools Plan, and the Title I plan.

Student achievement results on the North Carolina end-of-grade tests for the past three years were gathered and analyzed. Specifically, statistical data from the Adequate Yearly Progress (AYP) and end of grade data from reading and math were secured from the North Carolina Department of Education's website, and district benchmark achievement results were provided by the district office. The student benchmark achievement data supplied by the district office were also collated and analyzed.

Parent and community involvement information was gathered from the School Accountability Report Card, the school's parent handbook, parent involvement plan, parent surveys page on the school's website, The Single School Plan, parent club documents, parent and community newsletters, and parent programs and educational outreach documents.

Document	Questions the document answers	Question addressed	
<i>School background and profile</i>			
School Improvement Plan Title I Plan 2011 Excellent Magnet School Application North Carolina Report Card	<ul style="list-style-type: none"> • Class Size • Demographics Information • Supplemental Programs • Vision and Mission Statements • Teacher Committees • Student Data • Curriculum Initiatives • School Accolades • State Performance Expectations 	1, 2,3,4	
Staff Development Plan	<ul style="list-style-type: none"> • Collaboration Plans 	1,2,3	
Daily/Instructional Schedule	<ul style="list-style-type: none"> • Instructional Minutes 	1,2,3,4	
SWISS Data (PBIS)	<ul style="list-style-type: none"> • Student Discipline Data 	1,2, 3	
List of Teachers and Support Staff	<ul style="list-style-type: none"> • Experience, Credentials, Grade Levels • Years at Current site 	1	
<i>Achievement Results</i>			
Local and State Assessment Data for a 3 year period.	<ul style="list-style-type: none"> • AYP disaggregated data by demographics, subgroups, etc. 	2,3	
<i>Parent/Community Involvement</i>			
Parent Involvement Plan School Website School/Parent handbook	<ul style="list-style-type: none"> • Community and Global Partnerships • Parent Survey Results • Volunteers Hours • Parent/Community Communications 	1,2,3,4	
<i>Fiscal Information</i>			
School Improvement Plan Title I Plan	<ul style="list-style-type: none"> • Budget Information 	3,4	
<i>Participant Data</i>			
	<i>Information Source</i>		
Name	Interview	Focus Group	Survey
Principal	X	X	X
Reading Teacher	X	X	X
Curriculum Facilitator	X		X
Teacher 1	X	X	X
Teacher 2	X	X	X
Teacher 3	X	X	X
Teacher 4	X		X
Teacher 5	X		X
Teacher 6	X		X
Teacher 7	X		X
Teacher 8	X		X
Teacher 9	X		X

Figure 2. Case Study School Document Review

Data Analysis

Analysis and interpretation of data related to the three research questions involved the triangulation of comprehensive information from a variety of sources, following the procedural steps suggested by Creswell (2003). Relevant data related to the three research questions were gathered through questionnaires, interviews, school observations, and examination of a variety of documents and records. After the data-gathering phase was completed, the researcher first read and examined all the information to get an overall general perception of the many diverse pieces of information. Next, the data were aggregated into logically-related thematic units or conceptual categories. These thematic units provided the structure for the subsequent detailed descriptive narrative summarizing the factors teachers and administrators believed to be responsible for improved students' academic performance. Other data in the form of existing documents (e.g., School Accountability Report Card) also contributed to the richness of the summary narrative. Finally, possible extrapolations from this study's data were suggested and areas for further research were suggested.

A practical approach was used by the researcher to manage the data collected from the surveys, one-on-one interviews, and focus group interview. Data were analyzed for this study working inductively from the particulars to more general perspectives to derive themes or categories (Creswell, 1998). The data collected from the surveys were compiled and organized using results by survey item and then emerging patterns. A separate chart was created for each survey and then compared with the other for similarities and differences. Each section of the surveys was analyzed separately. The

one-on-one interviews were organized by the question, then by the participant, and lastly by emerging patterns and categories. Hard copies of all interviews were printed and color-coded. Coding allows the researcher to sort statements by content of the concept, theme, or event rather than by the people who told you the information (Rubin & Rubin, 1995). These became the basis for the initial data analysis. Next the researcher used a data analysis technique described by Maykut and Morehouse (1994) the researcher identified the chunks or units of meaning in the data. The search for meaning is accomplished by first identifying the smaller units of meaning in the data, which will later serve as the basis for defining larger categories of meaning. In order to be useful for analysis, each unit of meaning identified in the data must stand by itself (Maykut & Morehouse, 1994, p. 128).

The researcher identified these units of meaning by carefully reading through transcripts from the one-on-one interviews and focus group interview. The researcher let the units of meaning emerge from the data itself noting very finite categories. These units of meaning were written in the margins on the hard copy transcripts. The researcher completed an analysis of all first round interviews before beginning the second round. Quotes for all themes were placed on a matrix. This provided a visual framework to develop questions and probes, and to expand on themes from the first round of interviews when conducting the second. A final chart was created that displayed all the research questions along with the participant responses and themes identified by the researcher. Finally, all of themes were reviewed along with the responses from the participants. During this final analysis the researcher looked for ways to combine certain themes that

emerged from the first analysis. This afforded me a final opportunity to check my data collected and provided additional information for me to include in my description of the mentoring process from the teachers' perspective. Lastly, the researcher took great care to ensure that the data made sense. This is achieved by using "rich thick description" (Merriam, 1998, p. 211) that allows the reader to make decisions regarding transferability. Such description draws pictures in words of something tangible, giving vivid descriptions of what it feels and looks like.

The data analysis and conclusions drawn in this mixed qualitative study of an exemplary urban school in a low socioeconomic neighborhood utilized what Creswell (2003) termed "data transformation." The qualitative data were "quantified" through the creation of codes to identify reoccurring themes. The quantitative results from the questionnaires were transformed into qualitative data through the identification of major themes gleaned from the numerical data. The identification of themes from the qualitative data allowed the researcher to compare the two types of data, providing greater certainty for the study's conclusion and recommendations for further study. The researcher also utilized the peer review process for self-regulation and evaluation of the data analysis and the suitability of the study for publication. The two peer reviewers selected were qualified educators and scholars.

Subjectivity

The topic of adolescent achievement is very close to my heart. During administrative career, I served as an assistant principal for ninth grade. Unfortunately, I saw firsthand how large numbers of eighth-grade students were coming to high school ill-

prepared and subsequently failing many courses and in some cases later dropping of our school. Over the years, I have been drawn to offer support to teachers to help better prepare adolescences for high school to avoid the hopelessness felt by being unprepared. After serving briefly as a middle school assistant principal in a high needs setting, I was provided an opportunity to work as a principal in newly formed K-8 school. This opportunity although challenging, allowed me an amazing opportunity to approach learning from a developmental standpoint using the large grade span in the building and opportunities for small learning communities and relationship building with students and teachers. As the principal of a new program, my role was to provide support and professional growth opportunities to enhance the skills and effectiveness of teachers in the areas of classroom management, lesson planning, professional development, and time management. My own experience working with young adolescents encouraged me to examine the perceptions of other teachers serving as middle school students. As the principal researcher, I was upfront about my feelings and experiences with the participating teachers and support staff. My current position as principal and the fact that some of the participants in the study are current and former colleagues of mine impacted the lens in which I viewed the study. Several months of data collection and analysis allowed me to capture the true essence of the subjects and control my personal subjectivities. Each participant was given the opportunity to review the interview transcripts for accuracy. The data collected was detailed and reviewed by a colleague. By having another person review the data, I was able to monitor my personal subjectivities as I reported the results of the study.

Trustworthiness

Trustworthiness is established when findings as close as possible reflect the meanings as described by the participants (Lincoln & Guba, 1985). The researcher became an integral part of the process. In addition, participants were given time to review the data and make corrections as warranted. Lincoln and Guba (1985) saw this as one of the most critical techniques for establishing credibility in case study research. The process of peer review included the dissertation committee, especially chair and colleagues who were involved with the researcher in each step of the process. Their feedback and the resulting refinement, helped strengthen the conformability and dependability of my analysis and interpretations. In addition, the questions that they asked gave the researcher an idea of how much information needed to be included in the presentation of findings to create the kind of thick description that allows readers to determine the transferability of my conclusions. By using multiple sources of data the researcher was given frequent opportunity to verify data from one source to another. The researcher measured reliability by looking for consistency across the interviews. Consistency was evident through the use of similar words and descriptions of events.

Ethical Considerations

This case study followed the research guidelines articulated in The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research's *The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978). The National Research Act

passed by Congress in 1974 establishing this national commission that wrote *The Belmont Report*, as it has come to be known, identified three fundamental and essential research principles to be followed by all research involving human subjects: respect for persons, beneficence, and justice (Zimmerman, 1997).

Respect for persons recognizes the right of individuals for self-determination and autonomy. Respect is given when individuals are allowed the right to make informed decisions. Respect for persons mandates protection for those who are incapacitated by mental disability, physical illness, immaturity, or circumstances that limit the individual's freedom (e.g. the imposition of a prison term). The principle of beneficence requires the practice of making every effort to improve the individual's well-being and is grounded in the ethical tradition of the Hippocratic Oath espousing the helping of others and doing the least harm to the individual. Justice, the third principle advocated in *The Belmont Report*, requires that each person receives fair, equitable treatment. Benefits and unavoidable burdens are to be shared equitably among individuals, with no one person singled out for an unfair imposition of either condition. The 1974 National Research Act also mandated the establishment of Institutional Review Boards (IRBs) to review and approve all federally funded research. Prior to the establishment of these IRBs, institutional review of federally funded research was voluntary, informal, and lacked standardized guidelines.

This research, following The Belmont Report and University North Carolina at Greensboro's IRB guidelines was conducted so that no individual was placed at risk of harm, each individual was fully informed of the purpose and intent of the study, participation was made completely voluntary, and confidentiality of the participants

responses was assured to maintain the anonymity of all who participated in the study. All participants were treated respectfully and ethically to maximize the benefits to those involved in the study. All data collection instructions and research methodology employed in this study received UNCG IRB approval before the research began. Use of all existing public records, test data, written observations of public behavior, and surveys, although exempt from IRB approval has been done with the utmost ethical care.

Chapter III presented the research questions, research design, instrumentation, and data collection methods, a description of the research setting and participants, and data analysis procedures. This study was designed to explore the perceptions of teachers serving middle school students. By gaining insight into their practice and experiences, information on best practices to increase middle school student achievement can be shared with other middle school teachers to improve student achievement in similar settings. In the next chapter the findings from the data analysis are presented.

CHAPTER IV

THE FINDINGS

Description of the Case Study School

The school selected for this case study was an excellent exemplar of a high performing urban middle school possessing numerous characteristics of high quality schools identified in the literature. As a Global Studies Magnet School, the school utilizes a curriculum rich in global studies and cultural awareness. The school, nationally recognized by the Magnet Schools of America Association as a school of distinction and a school of excellence, has received ongoing recognition for increased student growth in the areas of math, reading, science, and Algebra I by North Carolina's Department of Public Instruction. The school has also received ongoing recognition as a Positive Behavior Support Model School for successful implementation of character education components, support with classroom management, and significant reductions in student discipline referrals, notably in school suspension and out-of-school suspensions (reduced by 50% over a period of two years).

Additional descriptors of the school making it unique and appropriate for the study are the demographics, which include 46% African-American students, 34% White students, and 20% other ethnicities to include Asians, American Indians, and others. Of those students 75% are identified under North Carolina's poverty index to qualify for free or reduced lunch, which qualifies this middle school as a Title I school. Title I schools in

the state of North Carolina receive additional funding to support instructional needs for students impacted by poverty. This Magnet School is situated in an urban district and provides additional support in the area of Global Studies as its school-wide theme, as well as an extended year calendar allowing students to receive an additional 20 days of instruction.

A courthouse greeting from the office of support personnel and the principal adorned the foyer followed by a viewing of thematic and ornate murals and predominately displayed school motto “Welcome to our Community of World Class Learners” and recognition banners in the school’s main foyer. The clean and orderly physical plant, with well-maintained grounds, numerous educational murals, and school-wide recognitions and displays further enhanced this inviting welcome to the school. The bell rang and students were observed transitioning to their next class in a calm, orderly manner, with an obvious intent to arrive at their next class on time. After the bell rang, teachers immediately began instruction and appeared well prepared for their lesson. Teachers were observed providing warm-up or opening instructional activities and had set procedures for the collection of materials and ordered use of instructional time. The teachers spoke to their students in friendly, positive tones indicative of pre-established relationships. Teachers were observed teaching and involving students in activities for the entirety of the instructional blocks which included formal or informal assessments, reviews, and homework assigned just before the end of the classes.

Introduction

This chapter presents the case findings and provides an analysis of the results framed by the research questions presented in Chapter I. Qualitative results from the focus groups interviews, field observations, document review, and quantitative teacher survey results are organized, analyzed, and interpreted with reference to the research questions. The research questions are addressed using triangulation of each of the aforementioned research data.

Description of Data Collection Methods

This case study employed a qualitative approach and allowed for triangulation of data sources. A 50-item paper and pencil questionnaire (see Appendix A), organized by three research questions was developed and completed by 12 Trojan teachers, supplying the quantitative data. Interviews were conducted with nine teachers, the principal, and the curriculum facilitator. To gather rich, detailed qualitative information, interviews school observations and a documents review were conducted. Two interview protocols were developed by the researcher, consisting of a question set for teachers (see Appendix C) and a set for the administrators (see Appendix D). The teachers were strategically selected to ensure that a sampling of content areas and teacher experiences were included. The researcher completed detailed notes following a prescribed protocol during each interview and an audio recording was made of each session to ensure a more accurate report and analysis of the interview than written notes alone could provide. The audio recordings were subsequently transcribed for ease of analysis. Two full days of school observations were completed. A standardized observation protocol (see Appendix E) was

developed by the researcher using Bolman and Deal's (1997) four-frame organizational paradigm. A document review was conducted to gather information on the school's profile and currently-employed practices, programs, and instructional strategies.

Addressing the Research Questions

In this section, the key qualitative data discovered during the course of the investigation are categorized into their respective research question from Chapter I.

Research Question 1: What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?

The case study school's instructional program primarily rests on curriculum mandated by the State of North Carolina; however, over the last three years the school has used other materials and resources to increase student achievement. The school's 2011 Distinguished Magnet School's application described the instructional program in the following terms:

The staff of Trojan Middle School routinely participates in staff development activities to enhance our school's success. We focus on improving instructional and behavioral strategies on an ongoing basis through the Positive Behavior Support Program and with numerous workshops and initiatives sponsored by our county and state. We are currently involved in Marzano training, a nationally recognized program for classroom instruction. Annual attendance at the World View Symposium at the University of North Carolina at Chapel Hill, where Trojan Middle School maintains a partnership, is a highlight of the year and provides progressive insight and practical applications for the essential service we are providing our students as we educate them to be global citizens.

Using Marzano's (2001) *Classroom Instruction that Works*, teachers were encouraged to engage in continual collaboration and dialogue with their colleagues. The principal

described his desire to increase student achievement using a collaborative environment in the following terms:

We've seen significant gains in student achievement and so it's always difficult to pin something on one thing. After the first two years we saw about 24 points in reading gains and about 12 points in math. So it's significant. It's been a much broader strategy than just using that one piece. So it's not really about checking off you're doing this, you're doing that, it's about getting information so that when we get into faculty meetings and grade level meetings we can talk about what we are doing and what we're not doing.

The case study principal continued with the comments below about the school's collaborative atmosphere and specifically described the atmosphere in terms that suggested it was conducive to student and professional growth.

Teachers have been able to have lots of different opportunities to reflect in lots of different ways. Yes, the Marzano's is big, so that's key. But one of the things we really tried to do, and I think that's coming back to that middle school philosophy, is really create a much broader teaming atmosphere. So we're really forcing the issues with the collaborative meetings and getting on the same page with classroom management plans.

The importance of the principal's leadership in supporting school-wide instructional programs was discussed in several interviews and one teacher elaborated on the principal's role in the following terms:

The principal is a very instructional leader. He spent a lot of time trying to find ways to focus our professional development and development on strategies that gives us tools. For instance, he didn't just present stuff on Marzano he actually had us participate in activities when he led us, using things that we could actually implement in our classrooms. He is very in touch with the instructional piece so a lot of things he advises us on are actually usable things, so he is very in touch with the curriculum, I would say.

An additional program supported with staff development was a book study on rigor utilizing the text entitled, *Rigor is Not a Four Letter Word*. Each staff member received a copy of the book and was required to read assigned chapters and respond to reflective questions using an online tool called Moodle. The emphasis on rigor, in conjunction with the focus on instructional strategies, was used to create common language, tools, and strategies among students. The strategies were not presented in grade specific or even contents specific terminology, but in terms of best practices for all students, particularly adolescents. The positive connection with the book study on rigor and student achievement was noted and discussed in the teacher interviews as described by one teacher's comments below:

We responded to discussion questions on Moodle. I think it has been very beneficial not only to have the staff read books about challenging students, but in terms of the Moodle to respond to questions yourself and also read responses from colleagues. It's cool to me to read something from someone in another grade level and compare how they use rigor to how I might use it in my grade level and content area. I learned that differentiation is imperative. I think it's easier in middle school . . . because they're grouped differently. In 6th grade I have a high and low group. So not only can you plan your instruction for that low and high group but you also need to differentiate between high and lows in those groups.

With 75% of the student population receiving free or reduced lunch services, many of the students in the case study school are challenged by the district's core curriculum and as result receive additional resources designated for schools with large populations of students in poverty. Some of the resources were used to purchase instructional staff including a Reading Specialist, a part time Curriculum Facilitator, tutors, and an instructional assistant. To provide structured support to all students, the

principal and curriculum facilitators created and facilitated a program entitled “Helping Understand Basics” (HUB time). This program was developed specifically to assist students with deficits and to accelerate students who mastered skills and objectives. The time was built into the master schedule for all students and each student was scheduled in small groups for services, depending on their individual needs. Title I funds and the support received from the magnet program also allow for a smaller 20:1 student-teacher ratio in each class. The small classes allow teachers an opportunity to build stronger relationships with students and to provide more individualized assistance to each student.

The case study school participates in end-of-grade and end-of-course tests, along with quarterly benchmark assessments as required by the state and school district. The quarterly assessments are used to determine the students’ level of understanding on objectives and to adjust and monitor needs for further instruction. Benchmark data are used in conjunction with other data to determine student needs for advanced learning, as well as extended remediation programs. Using student assessment data to make instructional decisions and reflect on teaching has become an important practice and expectation in this school as the principal reported in one of the interviews:

We have also focused on data a lot using our data notebooks we’ve created for teachers. Part of the data they use we use in the 15-3 re-teaching cycle for the common assessments. That’s how our grade levels run. At the beginning of that cycle we’re talking about the objectives we’re focusing on for the first three weeks and how we can use assessments in a small formative way. And as we go through, we talk about how we feel about it through small assessments and we get to look at where our kids are and we get back to re-teach.

One of the teachers assisting the principal with the initial creation and implementation of data notebooks commented on the purposes in the following terms:

We do worksheets to reflect back on the results from our benchmarks. And we have been trained on Achievement Series, ...a website that helps us breakdown our benchmark data. Collaboratively with the principal, I came up with an idea to create data notebooks. I was trying to think of a way for our teachers, principal, curriculum facilitators to keep track of all the data. When I remember from years past was that I would be given all these pieces of data that told me about student performance and what students were performing on benchmarks and IEPs and PEPs and all these different pieces of information. So what I came up with was something called a data notebook. It had a table of contents with a breakdown of the content based on different pieces of data sources.

A well-developed academic counseling and guidance program provides further academic support to all case study school students. During his tenure at the school, the principal has supported the guidance counselor's efforts and provided leadership to build what he called a "college bound" culture. The initial efforts began with placing college paraphernalia around the building, along with a working bulletin board on all the North Carolina Universities and Community Colleges. On one wall is a large bulletin board with a large caption stating "Where Will You Be?" On the door of each teacher's room is a poster reflecting where each teacher attended college. For example, it may read, "I went to North Carolina State University. Ask me about it!" According to the principal, this culture not only helps prepare the students for high school, but is also key in helping students make important academic and social decisions that help them strategically stay on track for success as mentioned in his interview comments below:

Our guidance counselor plays a big role in that (high school preparedness) and because of our size she has a really good opportunity. She meets regularly with

each child. As a matter of fact, she's already had most families in to sign four year plans for next year and so now they're in second semester talking to 8th graders about high school options. Fifty percent of our students go on to special programs. That is significant and I think it's because they get to look critically at high school needs. They do field trips in January where they get to look at all the choice schools in the area in addition to the traditional high schools.

Teachers in the case study school also spoke of the adaptive strategies used to prepare students for high school. In particular, the teachers discussed the fact that they felt that there is a strong focus on preparing students for high school and that these efforts have been successful in helping students transition to high school with confidence, and with solid academic and social skills. In one interview, a teacher spoke clearly about her views on how students are prepared for high school as noted in her response below:

Yes, we do a great job of preparing students for high school. I think most of that has to do with what guidance has been doing with the interests in the career building project and our efforts to build a college bound culture. What they've done is look at what they're interested in and looked at the resources in our school system available to help them go to the next level for where they want to be. They go online and look at different high schools and their options. They do the career thing. They go visit a couple of high schools. They also go visit a couple of middle colleges.

In 2007, the case study school implemented the Positive Behavior Intervention Support (PBIS) Program. This national program, supported by the district, was developed to improve student academic and behavior outcomes to ensure all students have access to the most effective and accurately implemented instructional and behavioral practices and interventions possible. Using the guided framework provided by the program and support and resources provided by the district, the case study school implemented the practices school-wide with the goal of improving academic and behavior outcomes for all students.

As a result, success followed with a 50% reduction in discipline referrals resulting in in-school and out-of-school suspensions as well as increased instructional time gained from more engaged students. This noted success earned the case study school district and national recognition in 2008 as a “Positive Behavior Support Model School,” one of the top recognitions provided to schools.

The principal frequently emphasized the importance of relationships in his interview and was quoted as saying “We focus a lot on student-teacher relationships. That’s what makes the difference.” The Reading Specialist also talked in-depth about relationships and touted the PBIS program as one that helped teachers understand the positive impact it could have with students. She emphasized relationships in her interview by saying “we spend a lot of time helping individual teachers, so they can help individual students.” She also shared the sentiments of the principal when she said “I’m one of these people who think it’s about people and what they do for our kids, not coined programs.” Another teacher in the focus group also commented about the positive outcomes seen in her classroom as a result of the PBIS program. She said, “Even though it’s geared towards behavior, I think that you can start improving behavior inside the classroom, it makes for a more productive learning environment.”

The case study school’s district uses an assessment system called Achievement Series to help principals and teachers balance the difficult task of meeting federal accountability requirements and maximizing student learning. This district-wide assessment tool from Scantron offers a comprehensive test management solution to provide immediate results.

Achievement Series allows teachers to develop and administer online and paper-based tests, capture immediate results, and produce standards-based reports. Used for all grade levels and subject areas, this district-wide tool provides administrators and teachers with the data they need to monitor student progress and guide instruction. Prior to the utilization of the Achievement Series, teachers at the case study school computed and analyzed test results data manually using paper and pencil, as described by a teacher during an interview. Teachers affirmed the effectiveness and ease of use of this system in their interviews and their positive responses to related questionnaire items. Ninety percent indicated “agree” or “strongly agree” to the statement “My school has a school-wide program or programs that provide effective, timely assistance for students who experience difficulty in attaining the proficient or advanced level of the academic content standards,” and 90% marked “agree” or “strongly agree” to the statement “My school has a school-wide program or programs to assist teachers in the use of academic assessments to provide information on, and to improve the achievement of individual students and the overall instructional program.”

To provide afterschool assistance to students, the principal and members of the School Improvement Team allocated school funds to support afterschool tutoring. Day tutoring is also provided to students using the reading specialist and math tutor, positions also purchased with Title I funds. When one of the teachers was asked by the researcher how the School Improvement Team supports student achievement, the following response followed:

One thing we do is share data with the School Improvement Team throughout the year. We start off by sharing data from our summer meeting the year before and then we just build on that all year and we just educate them on what's going on, even with our common assessments that we do every three weeks and our benchmarks every nine weeks just letting them know what's going on in our building.

Looking for other ways to support student achievement, the principal identified increased parent involvement as a high priority objective. The 2011 Distinguished Magnet School Application also discusses the case study school's commitment to parent involvement and notes that the school "strives to involve parents and others throughout the community to provide a good balance between the educational community of our school and the larger community of our area, our state, our nation and our world." During the research interview, the principal discussed his commitment and action:

I think the parent involvement piece is really important. We're at middle ground with our clientele because we have lots of parents that want to be involved but for lots of different reasons such as their job schedules or the distance they live from the school. It creates some issues for them.

The principal also discussed the school's parental involvement committee and the strategies they created to help parents be involved in all parts of the school. The comments below reference the visuals that have in the school to welcome parents and invite them to partner with teachers.

So as you'll see when you go out there's a sign-up board for parents. Changing the idea for volunteerism from signing up at open house to specific jobs they select and come in and do. It's a carbon copy form, they fill it out they sign it and leave the copy. Our volunteer coordinator calls them back within 24 hours to say we've got it and we'll be in contact with you later about the specifics. All the

research that goes into how that works, we're trying to incorporate that into what we're doing. So it's a good starting place. We recognize that it's really important.

The principal and the teachers indicated the use of the North Carolina Standard Course of Study as one of the school-wide practices advancing student achievement at their school. This resource is a blueprint of sorts for educators, as it includes competencies for each grade level and each course with a set of academic standards that is uniform across the state. The School Improvement Plan also lists the content standards as a foundational and non-negotiable resource for planning instruction and assessments. During the school visits, teachers were often observed referring to these standards when teaching, and the standards were seen prominently posted in every classroom observed in terms of lesson objectives or essential questions. According to the principal and reading specialist, ongoing communication is provided to teachers about the expectation that all lessons are to be based upon appropriate academic standards in every lesson. The teachers affirmed this standards-based teaching, describing the planning that takes place in their weekly grade level and bi-monthly content planning meetings. Standards selected for the lesson coverage are identified during these regular meetings to ensure that the most prominent North Carolina Standard Course of Study are taught throughout and re-taught as needed throughout the school year. With the principal's encouragement and assistance of the curriculum facilitator, the teachers also utilize instructional resources offered by the district to assist them with pacing, the selection of instructional activities and supplemental instructional texts. The reading specialist commented on the availability of instructional resources and assistance in the following manner:

Well we have our “teach and learn” session. That’s been a tremendous help. They’re here in the building, someone actually comes to us. They have our curriculum folks from downtown come talk to them about the latest information, pieces that needed to be addressed, sample lessons, and really providing us with tools and information that we need and resources out there and contacts we need. Weekly grade level meetings, our curriculum facilitators work very closely with the teachers and all of our teachers this year have data notebooks, which is new to us this year. This has really been an eye opener as far as tracking student achievement and seeing what’s going on.

The Achievement Series system has also given the teachers more freedom and flexibility in using state standards when assessing student learning using the provided curriculum and other instructional materials. This system not only scores the district’s benchmark tests, it also allows for the timely scoring and reporting of other curricular and teacher-made quizzes and tests, identifying how well students have mastered related content standards and allowing teachers to more accurately adjust their teaching. This student focus is illustrated in the expectation for teachers to have common assessments every three weeks followed by re-teaching support for all students not mastering standards. The principal talked about working with teachers on student-teacher relationships, which is followed up this year with a focus on rigor and having high expectations for all students. The principal specifically commented on one of the reasons why he thought student achievement increased:

We have really focused on data a lot using our data notebooks we’ve created for teachers. Part of the data they use in the 15-3 re-teaching cycle is the common assessments. That’s how our grade levels run. At the beginning of that cycle we’re talking about the objectives we’re focusing on for the first three weeks and how we can use assessments in a small formative way. And as we go through, we talk about how we feel about it through small assessments and we get to look at where our kids are and we go back and re-teach. So it’s pretty standard format. But that conversation about data is really a big part of what we’re doing.

According to the teachers, keeping the focus on teaching and learning practices and increasing student achievement is communicated often by the principal and curriculum support staff in all meetings. The School Improvement Team, which involves teachers in the school, has the responsibility of setting and monitoring school-wide goals each year, in addition to suggesting resources and practical and measurable strategies. The curriculum facilitator commented on the team's role in the following manner:

One thing is we share the data with the school improvement team throughout the entire year. We start off by sharing data from our summer meeting the year before. And then we just build on that all year and we just educate them on what's going on, even with our common assessments that we do every three weeks and our benchmarks every nine weeks just letting them know what's going on in our building.

The teachers embraced the principal's expectation of using data to drive teaching and learning, and frequently commented on how data were used to determine student success and progress. One teacher commented on the use of the data to help students:

Our instruction and everything we do is data driven, looking at where the kids are, where we want them to be and what strategies we need to put into place for them to get there. We really are looking at the children as individuals, I think more so than when I first got into education. It's very student driven and also our responsiveness to intervention, that we're really pushing now. Identifying those students and knowing where they are to get strategies in place helps them get where they're going.

To promote the utilization of best practices in the classroom, the principal as well as the district spend significant resources on staff development. Teachers newly hired by the district attend a district-sponsored training in elements of lesson design and instruction called "Right Start Orientation for New Teachers." This is to ensure that all

teachers have a good understanding of what the district considers appropriate instructional practice. After this training, many staff development opportunities are available for teachers, as described by the reading specialist in the following response:

We've actually done some vertical planning this year as far as our teachers. For example, all language arts teachers will meet together so we can really get some vertical alignment going. So that's been an eye opener for the teachers for them to say, "Oh I didn't realize this is what they needed." And we do teach-the-teachers, which is our technology component where a group of teachers reflect on what they've been doing and how they use technology. And then on our fourth Tuesdays, that's our professional development. We are doing teach-the-teachers where teachers get together and share with the rest of the staff what they're doing with technology and how they're implementing it in the classroom.

The reading specialist continued to elaborate on her observances of staff collegiality and the development of Professional Learning Communities. She attributes the increased collaboration on the professional development opportunities offered at the school because it provided opportunities for teachers to work with colleagues across grade levels and content areas as expressed in her comments below.

We have learned so much because you never get to see what your neighbor is doing down the hall. It is truly amazing and I think the kids are excited because it's like every month a teacher has something to go back and say look what I've found, or look what I've seen or look what we're going to try. I think it's really helped a lot with motivation for a lot of teachers.

A school-wide improvement team comprised of teacher leaders, guidance counselors, curriculum support personnel, and administration meets monthly to plan for continuous program improvement and professional development planning processes. The School Improvement Team solicits input from all staff members to help determine staff training

needs which are then incorporated into the school's School Improvement Plan and long-range professional development plan. A wide range of diverse trainings have been incorporated into these plans in the recent past, including sessions on differentiated learners, Five Themes of Geography, Positive Behavior Support, class-room management, rigor in the classroom, parent-teacher relationships, data-driven instruction, and literacy. The district office has provided training in the area of literacy to support increased student achievement in reading, and content knowledge is supported by attendance at monthly subject-specific professional development sessions with district curriculum specialists.

Collaboration among teachers has been an increasing phenomenon at the case study school. Two years ago, the principal worked with the teachers to implement a creative master schedule that allowed for additional collaboration time for teachers with their team and with content specific colleagues and the curriculum specialist. When asked about collaboration in the interviews, the teachers consistently framed their responses around the concept of building trust among themselves and committed acceptance of the principal's leadership and support. During one of the interviews, the researcher offered some observations about teacher collaboration, and then asked how this was done at their school:

You have talked a lot about efforts made in scheduling to allow for teacher collaboration; tell me more about how collaboration works at this school and how teachers work together as a team.

The first to respond was the curriculum facilitator, who was a lead math consultant/trainer prior to this role:

We work together as a team and I think we do a good job at that at this school. We have two types of meetings. Once a week I meet with the grade levels based on their planning times and we talk about objectives and pacing guides and what needs to be taught and we go one week at a time. Those same teachers meet together as a team because when I meet with them I am only meeting with that grade level. They work really well together. They plan very well together and make decisions based on their team together.

A teacher added to the discussion by saying “The collaboration here among teachers is huge.” Because of the positive, professional environment created by the principal, many of the teachers commented on their feelings of empowerment when it came to making instructional decisions. One teacher in particular elaborated by saying, “Our administration has put a lot of trust in our teachers to do what they need to do. He is always stopping by, so I know there is always that constant supportive piece that he teachers feel and the students feel because the teachers in-turn do the same thing.”

The teachers were collective in their feelings of the collegial and collaborative culture that has been established over there the last three years, and attributed much of that to the strong communication provided to teachers by the principal on the vision of the school, the collective learning and application of learning, and the sharing of newly-learned personal teaching practice. Much of the growth in teachers, according to one teacher, has been because of the availability of teacher-to-teacher support and professional development opportunities. One teacher described the principal’s role in collaboration as “helping teachers through the journey to student success.”

The principal's supportive rapport with the teachers is evident in how he shares his decision making through leadership and team meetings, and the empowerment and autonomy extended to teachers with regard to making instructional decisions and decisions affecting the school. Answering the researcher's question, "How do you measure success as a principal?," the principal gave the following example of how he looks much deeper at all aspects of the school instead of solely on test scores:

There are a lot of ways to measure success. My supervisor would measure success primarily through test scores. But for me it's a lot broader than that. I think we have had success in those areas, significant success. I also think you should be looking at the teacher working conditions surveys, teacher turnover, and discipline. And there are the intangibles of climate and culture in the building. All those things go into success. You can manage and create schedules, those skills people can learn, build those things out there that can sometimes be even more difficult to measure. ...I think they all affect one another, when teachers are satisfied and comfortable with coming to work generally they work harder if you have the right people. If someone is very unhappy and they're dissatisfied for whatever reason, it doesn't matter what professional development you do and how many strategies you give them. If they're getting through the day and getting through the week then that's not good for them, it's not good for the building, it's not good for the kids. So in the end, all this impacts scores.

Teacher responses like the one above revealed the collaboration taking place among the teachers when monitoring the progress of the students, and the sense of collective responsibility they feel for the well-being of all the school's children.

In addition to this generalized monitoring of students' progress through informal teacher collaboration, a number of specific accountability and assistance practices have been implemented at the case study school to facilitate student success. For example, the structure of the classes allows for the integration of literacy concepts and instruction in all classes. The principal specifically spoke of incorporating literacy objectives from the

language arts curriculum to social studies and science classes. Each of these teachers is charged with teaching and assessing language arts objectives using their content and incorporating clearly planned literacy activities as an additional way to reinforce literacy skills across the curriculums to increase student proficiency levels. During the recent school year, the principal required the social studies teachers to incorporate 29 minutes of daily writing instruction as well. Finding innovative strategies to support literacy development and learning has been a primary focus of the principal over the last three years. He said, “We’ve seen enough impact to say that it is statistically significant. So just doing things that are unique and very different we think have been very beneficial.”

Two years ago the principal, in collaboration with key teacher leaders, established a student support program known as “Helping Understand Basics” (HUB) to help facilitate additional success for students in reading and math. During HUB all students are grouped according to their skill level or mastery of skills and they receive either remediation or acceleration from a teacher. The principal’s vision of this program was that students would always be supported based on their individual needs. The groups are flexible and therefore may change from week to week, based on the objectives taught. The reading specialist commented, “That to me has been one of the most powerful things we’ve put into place. It allows that time of the day 40-45 minutes, where everybody is getting what they need, where they are.” Helping students master objectives and make connections in their learning has been one of the main ways, according to several teachers in their interviews, that the school helped to close some of the academic gaps.

The teachers also linked these strategies to helping with their overall success as a school over the last few years.

Research Question 2: What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

To better understand the developmental characteristics of middle school students and their intellectual needs, the principal read and introduced the research associated with the publication *Turning Points 2000*. The research-based information in this document provided the teachers with information addressing middle school students' unique learning needs, character development, social and emotional development, and physical development, in addition to recommendations for creating especially effective middle schools that address a wide range of concerns such as equal access, student diversity, school culture, extracurricular and intramural activities and school structure, scheduling, and assessment.

However, the principal said those discussions that began four years ago upon his arrival were not as sustainable as he had hoped because of the existing issues in the school, specifically the instability of personnel and practices. The principal talked in-depth about issues that went deep into pedagogy and transcended grade level and content area. He said,

There were just surface best practice things that needed to be put in place first as opposed to getting really deep in the middle school philosophy. We shifted the first year to just really looking at good teaching, good classroom management and making some staff changes.

The teachers at the case study school reported that they spend significant time in meetings discussing best instructional practices and that they continually refer to them when planning lessons and identifying long-range instructional goals. The 97% selection of “agree” and “strongly agree” on the questionnaire statement reading “When developing my lesson, I consciously select instructional materials based upon my knowledge of my students’ developmental needs and learning styles” further validated their interview responses in this area.

Having read *Turning Points 2000* and other research-based material on middle schools, during the interview the principal expressed his desire to apply the recommendations of best practices when he arrived to the case study school starting with the restructuring of the master schedule. After considering the recommendation to increase rigor of the academic program, the principal began to strategize how restructuring the school day might accomplish this objective. After much discussion with the school improvement team, the principal, with teacher approval, created a program for students during the school day that allowed them to receive additional help with math and reading objectives.

The schedule allows for remediation or acceleration time to be configured in the student’s schedule and involves all instructional staff members. The schedule also allows for all students to participate without penalty of other electives. When discussing the innovative schedule, the principal said, “This is unique and something that works for us, instead of them giving up an elective, because they have a flexible schedule of three days of electives one week and two days the next.” For those students scoring far below basic

and below basic on the math and reading end-of-grade tests, required tutoring is provided during the day for which they miss attending an elective. Additional support for those students is provided during a four-week Saturday Academy and separate after school tutoring program to help them recover non-mastered skills to get on grade level.

Recognizing the wide-range of academic abilities at the case study school, teachers have for the past three years, been encouraged by the principal to read and implement research based strategies found in such texts as Marzano's *Classroom Instructional Strategies that Work* (2001) and *Rigor is Not a Four Letter Word* (2008). Numerous information-organizing devices and strategies suggested by the research on the brain and learning are utilized throughout the school. During the observational visits, graphic organizers were prominently displayed in most classrooms and a number of classes had activities involving comparing and contrasting information.

As reported by all teachers, graphic organizers and effectiveness of homework practices are used in every core class to organize teacher lecture information. Real world experiences are often incorporated into lessons such as students applying the five themes of geography in social studies class and relating that information to activities correlated with the school's partner school in China. The teachers also reported making frequent use of collaborative groups, as affirmed by 94% of the teachers indicating "agree" or "strongly agree" to the questionnaire item reading "When developing my lessons, I consciously consider how to create cooperative learning experiences for my students." The teachers also emphatically stated that challenging students to higher order levels of thinking is essential for improving student achievement and was validated by 97%

“agree” and “strongly agree” chosen for the questionnaire item that read “When teaching, I consciously employ teaching strategies and instructional materials that stimulate higher-order thinking skills.” Finally, validating teachers interview responses indicating an understanding of the active, inquisitive nature of middle school students, over 97% choose the “agree” or “strongly agree” response options for the questionnaire item reading, “When developing my lesson, I consciously consider how to create active learning experiences for my students to facilitate engagement,” a well-established theme found in the brain-compatible learning research.

In keeping with the student-centered approach recommended by *Turning Points 2000*, teachers described the need for constant monitoring of student understanding during the teaching and learning process. The teachers clearly cited adjusting one’s teaching through formative assessment as an essential instructional strategy. Ninety-four percent of the teachers selected “agree” or “strongly agree” to the questionnaire item, “When teaching, I monitor students’ understanding of the content and make adjustments accordingly,” and 90% responded “agree” or “strongly agree” to the question “When a student is having difficulty with an activity or assignment, I am usually able to adjust it to his/her level.” When asked by the researcher in an interview about how teachers monitor teaching and learning, a teacher replied:

We do worksheets to reflect back on the results from our benchmarks. And we have been trained on Achievement Series, which is a website that helps us breakdown our benchmark data. ...I came up with an idea to create data notebooks. The data notebook is essentially a huge organization tool that keeps track of everything. We do different activities. For instance we were at a school improvement team meeting... and we tried to figure out why we didn’t make AYP and which subgroups and who was in these subgroups. We created an

activity for our curriculum facilitators to do during grade level meetings. So the data notebook has been a big tool for our staff to archive their data and track it and follow it and make sure it's organized. It also helps because they are required to bring it to their grade leveled meetings. We also have school tutoring for math and reading. The tutor works with our tested areas. Another program we offer is Study Island. That helps drive instruction as well.

Another instructional strategy, the use of technology, is a common occurrence in the classroom of the case study school to support the instructional program and reflects the district plan for the integration of technology across the curriculum. Smart Boards, IBEAMS, net books, and school pad interactive technology allows teachers to visually illustrate curriculum content to reinforce and explain major concepts, access and display websites, run educational software, and deliver PowerPoint presentations. According to the principal, "Technology has been a big focus for the school this year and teachers are expected and encouraged to implement innovative technology lessons." Reporting on the use of technology, a math teacher stated:

It's one of our leadership strategies in empowering teachers. What it's done is take the presentation out of the administrator's or curriculum facilitator's hands and put it in the hands of each grade level representatives. Every month, like I said, they have to represent a use of technology in the classroom. It's been eye opening. Last month it was a Microsoft video creating program. One of our teachers created a little movie with our exceptional life skills group. It was really inspiring because a lot of teachers did not know about this software and when they saw a student sing in it, they saw an effective way to get their standards in. It really motivated them. I've heard some conversations of teachers who have used that program over the past month or so just because they saw it being used in that presentation.

Using the monthly professional development days, teachers have an opportunity to expand their technology skills to support teaching and learning. The program has been

titled, teach-the-teachers. In essence, a group of teachers reflect on what they been doing and how they use technology. Then the teachers get together and share with the rest of the staff what they're doing with technology and how they're implementing it in the classroom. One teacher commented, "We have learned so much because you never get to see what your neighbor is doing down the hall." The idea of learning from colleagues has also extended the collaboration efforts of students in the case study school, particularly teachers who do not normally plan together.

The idea of benefiting from the wealth of resources existing among the staff is exciting to teachers. One teacher reiterated this thought by saying, "It is truly amazing and I think the kids are excited because it's like every month a teacher has something to go back and say look what I've found, or look what I've seen or look what we're going to try. I think it's really helped a lot with motivation for a lot of teachers." Students also use the Microsoft Word program to complete major research projects in all classes, create history PowerPoint presentations and use the Excel program in math and science classes. Supervised Internet access is available before, during, and after school. Each classroom has a television and VCR/DVD player connected to the school-wide network used for the instructional videos, in-house produced informational presentations, and career-based broadcasts.

Research Question 3: What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school?

The principal and the teachers support the implementation of strategies that help middle school students prepare for high school. Using the counseling department as the

hub for information and resources, the principal encourages and provides resources for the guidance counselor and middle school teachers to receive the support needed to identify individual student needs and create strategic academic and social opportunities/experiences associated with high school preparedness. The transition from middle school to high school involves various challenges associated with a new and often larger academic environment, varied academic requirements/expectations, and a change in a student's social setting. Schiller (1999) defines academic transition as "a process during which institutional and social factors influence which students' educational careers are positively or negatively affected by this movement between organizations" (pp. 216-217). This definition points to the shared responsibility of middle school and high school personnel for guiding young adolescents through this major educational transition. This responsibility is taken very seriously at the case study school and is often shared between the counselor and middle school teachers. In response to a question from the researcher about how middle school students are prepared for high school, the teacher responded with the following example:

The teachers work with the counselor all the time. They do high school visits and also the high school teachers come and do things with our middle school students. We set up peer mentoring programs in the spring with students from a middle college (high school). I know the counselor takes the students to visit the other high schools and other middle colleges. They also do college visits so they can see the curriculum and give the kids an opportunity to see beyond middle school.

Recognizing that parents play an important role in helping their children during the transition from middle school to high school, the principal at the case study school worked collaboratively with the guidance counselor to create a set of strategies used

routinely to educate parents and involve them in the process of preparing their student for high school. Falbo, Lein, and Amador (2001) found that students whose parents monitored their activities and intervened positively were more likely to have a smooth transition from middle school to high school. Furthermore, it was noted by Feuerstein (2000) that increased school contact with parents typically resulted in reciprocal parent contact, improving overall communication between the schools and families. When the principal was asked to discuss intentional strategies used at the case study school to involve parents in the middle school to high school transition strategies, he provided the following response:

Our counselor plays a big role in preparing students for high school and working with parents on how they can assist their children during this process. She meets regularly with each child. As a matter of fact, she's already had most families in to sign four year plans for next year and so now they're in the 2nd semester talking to 8th graders about high school options. So 50% of our students go on to special programs. I realize the numbers are smaller but the numbers are significant. I think it's because they get to look critically.

Effective transition programs involve constant collaboration between eighth- and ninth-grade buildings and their personnel (Mizelle, 1999). The case study school demonstrated an example of this collaboration in their routine work with the high schools in the district. The counselor developed relationships with other counselors at feeder high schools and middle colleges to allow a more seamless program for visiting programs and facilitating parent information settings. Eighth-grade students at the case study school participate in an annual field trip in January to area traditional and choice high schools. Students also participate in school-based programs aimed at career exploration and

development to reinforce the importance of academics and to educate students on how to plan for various career paths early. Teachers at the case study school talked in their interviews about the “college bound” culture that has been created with external bulletin boards, posters, and conversations, and also spoke of specific projects facilitated by eighth-grade teachers and the guidance counselor to help students prepare for the challenges associated with transitioning to high school. When discussing the evidence seen at the case study school a teacher made the following observation during an interview session:

Most of the evidence we see has to do with what guidance has been doing with the interest in career building projects. What they've done is look at what they're interested in and looked at the resources in our school system available to help them go to the next level of where they want to be. They go online and look at different high schools and their options. They go visit a couple of high schools. They also go visit a couple of middle colleges.

Successful transition programs address the information gap by providing students and families with a wealth of information about the academic, social, and organizational similarities and differences between middle school and high school (Mizelle, 1999). Efforts to make this process more cohesive and successful for students have been seen in the strategies outlined by the teachers at the case study school. Evidence for the effectiveness of these strategies are seen in the data associated with the number of students attending specialized programs requiring high academic standards and the number of students who participate in advanced courses following their freshman year in high school.

Discussion of the Findings

This section analyzes the findings of the study discovered during the course of the investigation, provides insights into the possible applications to other schools, and makes suggestions for further study found in Chapter V. Analysis of the qualitative data utilized a constant-comparison method (Strauss & Corbin, 1998). With the major themes identified in the review of the literature found in Chapter II in mind, the transcription of the interview responses and documents were analyzed for key issues, recurring events, and the like that were initially placed into relationship categories. Constant comparison among the individual data pieces within each category and with the major themes identified in the literature assisted with the refinement of each category. Ultimately, three major themes were identified because of their consistent recurrence at the case study school: (a) a culture of support for students, (b) the setting of high academic expectations for students, and (c) the establishment of school-wide systems and structures. Each of these themes is elaborated upon in the following section using Bolman and Deal's (1997) four-frames model providing the theoretical framework for an in-depth analysis of each theme.

A Culture of Support for All Students

Structural Frame

To provide additional academic support for students to meet academic improvement in reading and math, the principal, teachers, and instructional staff worked collaboratively to make structural changes in the school's master schedule. To better address the academic needs of all students, they created what they termed "Helping

Understand Basics” (HUB). This program was also listed in the school improvement plan as one of the main strategies for providing additional direct instruction to students.

Created to focus on re-teaching and reinforcing non mastered basic skills, HUB is a time of the day when students receive services/support based on their individual needs. All available instructional staff members are involved and assist students in small groups with specific skills based on formative assessments and feedback from teachers.

According to the reading specialist, HUB time “has been one of the most powerful things we’ve put into place. It allows that time of the day where everybody is getting what they need, where they are.” The daily sessions are part of the master schedule and last between 40 and 45 minutes. It is very skill specific and one of the strategies the case study school has employed to start addressing academic gaps. With the adoption of this school-based support, the case study school has started to see significant success in student growth over the last two years, particularly in reading.

Another structural change added as a strategy for increasing student achievement in math and reading in the case study school is acceleration and enrichment time. The principal, in collaboration with members of the case study’s school leadership team, created an innovative schedule as a variation of the existing core classes. Prior to this variation, students needing additional assistance were forced to give up an elective and students needing enrichment services did not receive this support as it was not always viewed as a priority. The approach for this support is viewed as a school-wide effort and treated as an elective course rather than a standalone tutoring group. The schedule allows for flexibility in that students are only pulled from an elective one day; for example, an

alternate schedule allows them to have electives three days one week and two days the next week. The exciting and unique piece of this strategy is that all students benefit, as they are either always a part of a remediation or an acceleration group based on current mastery level of objectives on reading and math.

Human Resource Frame

Early on in the teacher interviews, the human resource frame theme of “empowerment” emerged. Bolman and Deal (2003) describe “progressive organizations” as those that empower and invest in the development of their employees in at least three ways, including (a) providing information and support, (b) encouraging autonomy and participation, and (c) fostering team building. Each of these methods of empowerment is discussed below as related to supporting all students.

Supporting the teachers’ efforts to provide the best possible instructional program, the principal encouraged them to find additional resources to supplement the district’s adopted state curriculum. After district resources were approved and secured to support a school-wide professional development based on Marzano’s (2001) *Classroom Instructional Strategies that Work*, teacher leaders began organizing materials and were trained by curriculum specialists in the district office. The training was provided using a train-the-trainer model allowing select teacher leaders to receive training at the district level and to deliver the information in subsequent professional development sessions at the case study school. The principal referred to this training as a “framework of best practices” for which instructional expectations are based. The professional development plan created for the case study school involved a three-year commitment allowing for

ongoing professional development, teacher monitoring and support, and incremental mastery and increase in student achievement. When describing the implementation phase of this professional development, a teacher in an interview with the researcher described this program as “the cornerstone of our instruction.” The teacher went on to tell the researcher that the teachers have moved quickly towards being more data driven and “looking at where the kids are, where we want them to be and what strategies we need to put into place for them to get there.”

The principal, commenting on the teachers’ efforts to improve student achievement, described a “tipping point” leading to a significant jump in collaboration and teamwork that occurred after two years of focused instructional professional development and support, along with his efforts to motivate and empower teachers. Since the principal’s arrival at the school, he had been encouraging teachers to have high expectations for all students and to believe that collaborative, positive efforts would boost student achievement. In the interview, the principal discussed his sequential approach to improving student achievement and teacher collaboration with professional development and teacher collaboration opportunities. Prior to starting the focus on Marzano’s effective instructional strategies, teachers participated in a book study on student-teacher relationships; this school year the book study is based on instructional rigor, a natural sequel to relationships with students.

The principal also stressed the power of the book studies, particularly the collaboration that followed in combination with a focus on effective strategies and instructional rigor. To quote the principal during the interview: “This has been really

effective. It puts everyone on the same page. It gets common language in the building. We think it has and will continue to have an impact on student achievement.” The principal went on to describe the recognition the school began to receive from their positive, collaborative approach to their work, when he said, “We’ve seen significant gains in student achievement. After the first two years we saw about 24 points in reading gains and about 15 points in math, so that’s significant.”

Finally, the principal concluded this part of the interview by recognizing that collaboration had led to teacher empowerment, which in turn created what the literature terms a “Professional Learning Community” (PLC). He summarized his final thought on the matter as follows:

There have been quite a few adjustments in scheduling to allow for vertical teaming and routine collaborative teacher meetings and our walk through tools have been redesigned so that it’s not about monitoring, it’s about creating tools that allow for creating information to create conversations. So it’s not really about checking off you’re doing this, you’re doing that, it’s about getting information so that when we get into faculty meetings and grade level meeting we can talk about what we are doing and what we’re not doing. That’s the atmosphere we’re trying to create and so it’s become a much more collaborative environment over time and it’s reflective in our increased student achievement.

A third aspect of empowerment within the human resource frame, according to Bolman and Deal (2003), is the encouragement of autonomy and participation. One teacher described the principal as a “true instructional leader” and went on to describe the ways in which he is always looking for support and collaboration amongst the staff in the following terms: “He does help us unify the school to make sure we’re on the same page. He never just takes an idea and kind of runs with it and we’re expected to follow.”

Another teacher described the principal's invitation to participate in the journey towards improved student achievement as the beginning to a significant culture shift in the school leading to a more collaborative, collegial, and student-focused environment:

The school has had a very interesting change in culture over the last ten years. I'm not sure the teachers are always willing to follow what's out in front of them but they are always given autonomy so that when they feel like they have another suggestion, they can bring those in. We're really data driven as you know and it's all about trying to meet the achievement goals. I think that has been a strong focus over the years that the teachers feel empowered to do what's necessary to meet those achievement goals.

The principal described this process of trust building and empowerment as beginning with professional freedom to experiment with new teaching strategies and focusing on multiple indicators of success with regard to teachers and students. The principal described this process in the following terms:

There are a lot of ways to measure success. You can manage and create schedules, those skills people can learn, but there are also those things out there that can sometimes be even more difficult to measure, such as climate. When all those things are in place, because I think they can affect one another, teachers are satisfied and comfortable with coming to work and generally they work harder if you have the right people. So, all those things affect one another. If someone is very unhappy and they're dissatisfied for whatever reason, it doesn't matter what professional development you do and how many strategies you give them, if they're getting through the day and through the week, then that's not good for them, it's not good for the building, it's not good for the kids. So in the end, all this impacts scores [student achievement].

Ultimately, a teacher noting the principal's enthusiastic call to experiment and commitment to best practices and materials summarized the positive outcomes for the

school: “Our teachers are very empowered. The teachers work together as a team. Our principal has put a lot of trust in them to do what they need to do.”

Symbolic Frame

From Bolman and Deal’s (2003) perspective, the Symbolic Frame views organizational life as involving “culture.” Citing Schein (1992), organizational culture is defined as

. . . a pattern of shared basic assumptions that a group learned as it solved its problems of external adaption and integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 12)

The shared vision among the principal and school staff has been articulated in a number of documents. The 2011 Magnet School of Excellence Application, collaboratively prepared by representatives from all of the school’s stakeholder groups, answers questions about its beliefs and philosophy of education with the following mission belief statement:

We, the staff of Trojan Middle School, through providing a curriculum rich in global studies and cultural awareness, are committed to providing a safe and supportive environment in which all students can reach their full behavioral and academic potential. We are committed to preparing the students to be successful citizens in a multicultural society.

The district’s website features a web page dedicated to the case study school that describes the school as student centered through the display of the school’s motto, “Community of World Class Learners.” The guiding principles of the case study school, displayed on the web page and included in the case study school’s student and teacher

handbooks, are as follows: “Treat others the way you want to be treated; Do and be your best; Be a peacemaker.” The 2011 Magnet School of Excellence Application also elaborates on how the students, staff, and community are working together in a partnership to develop and support capable, responsible, and productive members of society. This philosophy and “guiding principle” is an integral part of the school’s global magnet theme, which is integrated in all classes and student experiences, is reinforced regularly in the Student Promise displayed on the case study school’s web site and school documents as follows:

I am a Trojan Middle School student; I uphold a tradition of excellence; I strive to reach my highest potential; I work to become a global citizen; I demonstrate moral character through my everyday actions; I am proud to be a part of the Trojan Middle School Family.

The 2011 School Improvement Plan summarizes the school’s efforts to improve teaching and learning with a brief summation of how the staff is working to improve student achievement. Research-based initiatives such as Literacy First, Positive Behavior Intervention Support, and Fullan Training were listed as the current initiatives in place or recently implemented. Staff development opportunities provided to allow teachers to learn how to incorporate the latest methodology into the classroom were also discussed in the School Improvement Plan, specifically the process of implementing Marzano’s (2001) *Classroom Instruction that Works* as a framework to help teachers maximize learning and help students reach their highest academic potential. The School Improvement Plan also summarized the school’s efforts to improve teaching and learning with the following written response:

All students at Trojan Middle School will learn and succeed, thus empowering them to become world-class learners. To lead us toward our mission, our school community shares the following beliefs: Each child has value; Students learn best when they are actively involved in learning.

These documents suggest a school culture that encourages its members to approach their work with a determination to (a) meet the educational needs of every student, (b) partner with parents and the larger community, (c) provide equal access career opportunities for all students, (d) deliver a standards-based instructional program that holds students to the highest possible levels of achievement, and (e) teach and model caring, responsibility, and respect for others.

Political Frame

As discussed by the principal, the district expected what he termed “fidelity” to the district-adopted curriculum, especially with regard to the Literacy programs. In discussions with the district’s central office personnel charged with curriculum and instruction, the principal recruited additional training and support for the teachers to supplement the state curriculum with combinations of other curricular resources. As a former teacher and assistant principal for many years prior to his appointment as principal of this case study school, the principal had developed a positive working relationship with the central office. Bolman and Deal’s (2003) citing of power sources would suggest that the principal, at this juncture, was relying on the alliances and networks he had developed over the years to secure approval to deviate from the district’s mandate for fidelity to assigned curriculum. Furthermore, the principal had carefully researched the instructional practices and their benefits for this school before making his

“case” to the district, calling upon the persuasive power of information and expertise.

Figure 3 provides a visual outline of theme one’s in-depth analysis discussed in this section using Bolman and Deal’s (1997) four frames model.

Structural Frame	Human Resource Frame
HUB	Staff Development
Acceleration & Remediation	Professional Learning Communities
Teacher Handbooks	Teacher Collaboration
Communication of the school’s vision	Instructional Leadership
Symbolic Frame	Political Frame
School Webpage	Principal Alliances and Networks
School Motto	
Teacher & Student Handbooks	
School Improvement Plan	

Figure 3. Analysis of Theme One

The Setting of High Academic Expectations for All Students

Structural Frame

Weick (1976) first introduced the concept of “loosely coupled systems” and applied it to educational organizations. Weick presented the interesting notion that “in place of the image that organizations are coupled through tight, dense linkages, it is proposed that elements are often tied together infrequently and loosely in the interest of

self-determination, localized adaption, sensing and innovation” (p. 14) in his seminal piece entitled “Educational Organizations as Loosely Coupled Systems,” as described by a website developed by Current Content (1989). This loose coupling notion was frequently presented in the literature during the years leading up to the era of the No Child Left Behind Legislation and the development of state curriculum standards as part of the federal government’s mandate to demonstrate continuous increasing student achievement. Since the late 1990’s, local and state educational systems have been increasingly faced with the need to account to the federal government for student achievement gains and have responded by “tightening up the linkages” between the various organizational levels. School districts provide reports verifying increasing student achievement on state mandated tests. Principals are held accountable to district level managers for test results at their schools, and teachers in turn are held accountable for the site principals.

From the structural frame perspective, Bolman and Deal (2003) would identify two reasons for this reframing of educational organization. First, there has been a dramatic change in the environmental forces affecting education. Even though federal funding accounts for a relatively small percentage of the state’s educational budgets, almost all states have chosen to comply with the NCLB regulations rather than lose this additional resource. Secondly, there have been significant technological changes since the late 1990’s in terms of the ability to monitor student achievement. With the development of NCLB mandated state academic content area tests and increased capacity of computerized systems to process large amounts of standardized test results, local

educational agencies can now be held accountable for quantified student achievement results.

The principal has witnessed several environmental, technological, and organizational changes during his educational tenure and has effectively responded to them as shown by continuous student achievement gains and improved services provided to the students at this school. The principal described in the following interview response his initially disorganized efforts to improve student achievement when asked about whether he focused on best practices for student achievement growth or strategies specifically associated with the middle school concept:

When I first got here we looked at some middle stuff. I was very familiar with *Turning Points 2000* so we looked at that stuff. But one of the issues I had when I first came here was that there had been so many changes in middle school and had been for several years. It has been unstable in some places and it continues that way. But the issues went deeper than that. There were just surface best practices things that needed to be put in place first as opposed to getting really deep in the middle school philosophy. We shifted late in the first year to just really look at good teaching, good classroom management and making some staff changes. That just worked or evolved into a process and that seemed to work better.

Realizing the need to involve teachers in this restructuring process, the principal used teacher leaders on the school's School Improvement Team to articulate the school's assessment system and to train teachers on how to understand and use all data sources to inform teaching and learning. Assessment data from three levels were identified, providing a systematic framework for re-teaching to close the achievement gap. The first tier involves the No Child Left Behind's Adequate Yearly Progress system, the North Carolina State Annual performance index system utilizing the North Carolina subject test

data to determine the proficiency level of students by ethnic group and socioeconomic level. These data are analyzed for gaps in student learning and are incorporated directly into the School Improvement Plan (SIP) to guide the school's efforts to improve academic achievement for all students. These first tier data are directly correlated to classroom instruction through the development of instructional strategies and action steps associated with the School Improvement Plan for student learning in English/language arts, math, science and history.

Tier two data consist of the district-level benchmark data generated by the Achievement Series, a web-based computer assessment service for English/language arts, math, science, and social studies/history. Achievement Series generates reports by standards, subject area, grade level, and instructional program. Teachers may also generate their own instructional assessments. The Achievement Series lesson bank provides teachers with materials aligned with the standards for re-teaching to close performance gaps.

The third tier consists of data gathered at the site level. Teachers in all four content areas evaluate student performance using a variety of common assessments, quizzes, projects, presentations, written reports, etc. Data from all three assessment levels identify individual performance levels from which strategies, materials, etc. used to close the achievement gaps are determined. The action plans developed and placed in the School Improvement Plan identify specific academic standards that become the focus of the instructional action plan for all students.

Human Resource Frame

Bolman and Deal's (2003) human resource frame suggests that managers must be selective when hiring employees to ensure that these new hires clearly match the organization's values and mission. Once the "right people" have been selected and assimilated into the organization, the effective manager takes action to encourage employees to be successful and sustain their career. According to Bolman and Deal (2003), a number of employment incentives, such as promoting from within, are available to organizations. The authors suggest that this practice provides a powerful performance incentive, fosters trust and loyalty, and capitalizes on employee knowledge and skills.

When asked by the researcher about the effect restructuring staff teaching assignments and assigning additional duties has had upon teacher productivity, the principal reiterated the importance of having the "right people" on board. He went on to say that having a dedicated staff has not only allowed for a common language and vision for student achievement, but allowed for additional collaboration opportunities that did not previously exist, as teachers were now initiating contact with staff outside of their content areas. When asked by the researcher about the current support available to teachers, the principal responded in the following manner:

It basically involves multi-leveled support. It includes increased visibility by me, again trying to stay away from being evaluative and then I use my reading specialist and curriculum facilitators. For people with significant issues . . . classroom management issues and instructional issues, they meet weekly with the curriculum facilitator and weekly with the reading specialist. That also involves an observation once a week by the curriculum facilitator and the reading specialist. The other part is that we set up opportunities to go outside the building to watch other master teacher's classrooms and they are accompanied by the

curriculum facilitator. And we try to provide at least one opportunity, separate from everyone else, for one professional development.

As a result of the principal's inviting style of leadership, the teachers responded with a sincere willingness and eagerness to collaborate with each other to provide the best possible instructional program for their students to improve student achievement. One teacher interviewee, in response to the researcher's question on how teachers are encouraged by the principal to participate in efforts to improve student achievement, stated:

We have different programs running. We are currently undertaking the Marzano training. We're working together on a book read and reviewing all our answers and reflections with that based on rigor and how that can be integrated in the classroom and across the board. I would say everyone takes part in it. I don't feel isolated or clustered as a specialist. I feel we are all putting in the same amount of effort and are able to implement the information that we gather so whether we are a classroom teacher or specialist, doesn't really matter.

As the interview continued, this particular teacher continued to discuss the principal's role in driving what happens in the school, as it relates to student achievement. In response to the question, "Does the principal take the lead on driving instruction or would it be more of a collaborative effort throughout the school?" the teacher provided the following response:

I think initially some of the topics are brought to the table by our principal but he is always looking for support and collaboration among others from the staff. He does help us unify the school to make sure we're on the same page. He never just takes an idea and kind of runs with it and we're expected to follow.

Symbolic Frame

According to Bolman and Deal (2003), from the symbolic frame perspective, “activity and meaning are loosely coupled; events have multiplied meanings because people interpret experience differently” (p. 242). Use of symbols is said to make this loose coupling more manageable by uniting people together around shared values and beliefs. One important means of encouraging mutual understanding and commitment to organizational values, beliefs, and mission is through “rituals.” Humans are described as having the propensity to personal and communal rituals to create order and predictability. A good example of this ritualizing of an educational process, in this case of data tracking and analysis leading to increased student achievement, is described below.

To emphasize the importance of North Carolina Subject test data, the principal mandated tracking of student data using the North Carolina Adequately Yearly Progress system categories of levels one through four, with levels three and four representing *proficient* and *advanced*. District benchmark tests assessing students’ mastery of state objectives using the Achievement Series web-based computer system identify specific academic content standards needing to be retaught. The principal also encouraged teachers to utilize the Achievement Series to access student performance on teacher-developed assessments of supplemental materials used. The principal described this assessment process as follows:

We have also really focused on data a lot using our data notebooks we’ve created for teachers. We’ve put as much data as, how do I say this, usable data. Part of the data we use is the 15-3 re-teaching cycle for the common assessments. At the beginning of that cycle we’re talking about the objectives we’re focusing on for the first three weeks and how we can use assessments in a small formative way.

And as we go through, we talk about how we feel about it through small assessments and we get to look at where our kids are and we go back and re-teach. So it's a pretty standard format. But that conversation about data is really a big part of what we're doing.

As a researcher, I feel the principal proudly followed up this description of data analysis—including its effect on student performance on the state's Adequate Yearly Progress—with a reminder that the school had a 24-point gain in reading achievement and 15-point gain in math achievement. The principal stated that this was a result of the focus on best instructional practices coupled with the use of data to drive instruction. The principal reinforced the ritualized school-wide practice of tracking and organizing student assessment data, leading to significant gains on the school's adequately yearly progress, individual student growth, and Magnet School of Distinction and Magnet School of Excellence Awards.

Political Frame

The political frame, according to Bolman and Deal (2003), assumes that organizational “goals and decisions emerge from bargaining, negotiation, and jockeying for position among competing stakeholders . . . not by fiat at the top but through an ongoing process of negotiation and interaction among key players” (p. 186). Furthermore, the political frame suggests that organizations are comprised of coalitions of diverse individual and interest groups. In the political frame example found at the case study school, the principal successfully negotiated with district level curriculum and instruction leaders to achieve a more rigorous instructional program.

The principal talked in his interview about his desire to build a collegial environment focused on meeting the needs of all students. His philosophy was captured and described in several of the teacher interviews as they described his efforts to make innovative changes and decisions that were geared towards thinking outside of the box to help students. The teachers unanimously referred to the principal as being involved in all aspects of instruction and school activities, as articulated in the following teacher response:

Mr. Principal is a very strong instructional leader. He spends a lot of his time trying to find ways to focus our professional development on strategies and stuff that gives us tools. For instance, he didn't just represent stuff on Marzano he actually had us participate in activities that we could actually use in our classrooms. Everything he brings is fairly usable. He is very in touch with the instructional piece so a lot of things he advises us on are actually usable things, so he is every in touch with the curriculum, I would say. So with his knowledge of that, I think it has helped him advise us in meaningful ways with creative and effective professional development.

The principal commented further on his differing opinions of how student success is measured and the pressure associated with having various test scores. In this discussion with the researcher, the principal was adamant about looking at various indicators and incremental and individual growth rather than just end-of-grade and end-of-course assessments. Specifically, he said, "For me, success is very broad. There are a lot of ways to measure success. My supervisor would measure success primarily through test scores, but for me it's broader than that." A long-time employee in the district, the principal had developed positive professional relationships with key district leaders over the years and called upon those friendships when asking permission and assistance with various

supplemental materials and time to assess their effectiveness. Figure 4 provides a visual outline of theme two's in-depth analysis discussed in this section using Bolman and Deal's (1997) four frames organizational.

Structural Frame	Human Resources Frame
Master Schedule	Teacher Empowerment
3- Tiered Assessment System	Principal Leadership
Data Notebooks	Multi-leveled Teacher Support
Staff Development	
Symbolic Frame	Political Frame
Data Tracking & Analysis	Allocation of Scarce Resources
Data Notebooks	Measuring Academic Success—AYP
Parental Involvement	

Figure 4. Analysis of Theme Two

The Establishment of School-wide Systems and Structures

Structural Frame

With regard to the Structural Frame, Bolman and Deal (2003) would describe the case study school's organizational structure as simple in nature. A simple organizational structure is described as having only two levels: the "strategic apex" defined as the supervisor, and the "operating level" consisting of those charged with carrying out the daily organizational operations. The coordination of these operations is done through the

direct supervision of the manager, or by the principal at a school site. At the school level, this simple structure allows the principal to efficiently guide the organization, working directly with his staff to communicate directives and provide performance feedback. Because of this two-tiered structure, the organization's structural components can be efficiently restructured under the guidance of an expert leader as described in the case study school example below.

Upon his arrival to the case study school, the principal began his efforts to restructure the master schedule to allow for additional teacher collaboration, professional development, and time for student remediation and acceleration. Working with the teacher leaders of the School Improvement Team and soliciting input from parents and other stakeholders, the principal successfully created a master schedule that maximized instructional time and capitalized on opportunities in the schedule to reteach skills to students with deficits. Following the creation of the schedule, the principal solicited support from various teacher leaders to help guide the implementation to provide teachers the support they needed and the opportunity to provide critical feedback on areas to revisit. The restructuring of the master schedule involved the participation of the guidance counselor, teachers, instructional staff, parents, and administration, and was successfully completed within one year of its inception. Operating within a simple organizational structure as described by Bolman and Deal (2003), the principal was able to effectively coordinate this restructuring work within a relatively short time frame.

Bolman and Deal's (2003) Structural Frame Paradigm would further describe the school site as a "professional bureaucracy," simple in structure with two organizational

layers: the leadership and the workers. But further definition is given for the characteristics of those workers. The professional nature of those carrying out the daily organizational activities within a professional bureaucracy defines them as possessing a high level of professional knowledge and skills. This expertise gives these professionals a certain degree of autonomy. The greater one's expertise, the more one earns greater autonomy and the more one expects to be given this freedom when carrying out daily activities. It was this expertise among teachers and support staff that the principal called upon when asking his staff to articulate and implement a school-wide structure of academic accountability for students early in his leadership at the case study school.

Having been charged with developing and implementing a plan for the academic accountability and support for students, teachers identified a three-tiered assessment and instructional framework. Assessment data from these three levels provides a systematic framework for re-teaching to close the student achievement gaps and to help attend to individual student needs. The first tier involves the No Child Left Behind's Adequate Yearly Progress system and North Carolina's State Annual Performance Index utilizing North Carolina subject test data to determine the proficiency level of students by ethnic group and socioeconomic level. These data are analyzed for gaps in student learning and are incorporated directly in the School Improvement Plan (SIP) to guide the school's efforts to improve the academic achievement for all students. These first tier data are directly correlated to classroom instruction through the development of the instructional strategies listed in the SIP for student learning in English/language arts, math, science, and social studies/history.

The Achievement Series system generates reports by standards, subject area, grade level, and instructional program. Teachers may also generate their own assessment instruments. The Achievement Series lesson bank provides teachers with instructional material aligned with the standards for re-teaching to close achievement gaps. The third tier consists of data gathered at the site level. Teachers in all focus content areas evaluate student performance using a variety of assessments including quizzes, projects, common assessments, and written reports. Data from all three tier assessment levels identify individual performance levels from which to determine which strategies, materials to use to close achievement gaps. The strategies and plans developed and included in the School Improvement Plan identify specific academic standards that become the focus of the instructional plan for all students.

Human Resource Frame

The Human Resources Frame, according to Bolman and Deal (2003), involves motivating one's followers for optimal performance within the organizational system through the concept of "empowerment." Empowering one's followers involves encouraging both autonomy and independent participation. Bolman and Deal assert that knowing what to do on the job is not enough; "the work itself needs to offer opportunities for autonomy, influence and intrinsic rewards" (p. 144).

From a Structural Frame perspective, the organization-wide systems must value one's expertise leading to autonomy, as well as recognition of the interdependence of organizational members to effectively accomplish the daily work. The principal, when working to improve the school's structural systems such as redesigning the master

schedule and systematic implementation of a student accountability system as described above, effectively utilized Bolman and Deal's Human Resources Frame's autonomy and participation paradigm. One teacher described an increased sense of control over her instructional program that resulted from the implementation of the principal's new organizational structures and encouragement in the following terms:

We really are looking at the children as individuals. I think more so than when I first got into education. It's very student driven. To move them further along we look at what we need to do and our responsiveness to intervention that we're really pushing now. Identifying these students and knowing where they are to get strategies in place to help them get where they're going.

The systematic changes combined with the principal's contagious optimistic assertion that these new programmatic changes would be effective motivated the teachers to confidently employ their expertise and willingly collaborate with fellow teachers.

Symbolic Frame

As described by Bolman and Deal (2003), "The symbolic frame sees life as more serendipitous than linear with organizations functioning like complete, constantly changing, organic pinball machines" (p. 243). The use of symbols increases the effectiveness of an organization by imposing order and structure upon this complexity and chaos, providing predictable patterns of beliefs, values, and practices. Two examples of this symbolic frame found at the case study school are represented below.

When the principal arrived at the school, he noticed the teachers did not have an organized way of previewing and using student assessment results. Responding to this lack of organizational accountability, he created what was called "data notebooks." The

data notebooks replaced the previous use of multiple pieces of paper teachers received with formative and summative student data. Within the data notebooks there was a table of contents listing the data sources in a systematic format as a guide for teachers, as well as a breakdown of the content based on different data sources. The notebook also included teacher data, student benchmark results including differentiated data by standards and individual students, information on exceptional students, and information to assist teachers with re-teaching and organizing tutoring groups.

Once the data notebook was implemented, the principal required teachers to use the information as a “working document” to help them make instructional decisions. To ensure consistent use of the notebooks, teachers were required to ensure their data were updated with “real time” data, and were required to bring them to all grade level and content meetings as a resource to discuss instructional needs and strategies. This personal attention to individual student data can be viewed as a symbolic gesture, reflecting the importance the principal as the instructional leader of the school placed upon maintaining order in the instructional program.

Parental involvement is another symbolic act which is made a high priority in the case study school. Increasing parent involvement became the focus over the last couple of years because of the principal’s belief in its correlation with student success. During the research interview, a teacher discussed the parent initiative plan supported by the principal:

This has been an area of need in that we haven’t been able to reach a lot of our families. We looked at our volunteer data because the district was making big initiatives about volunteer data. The principal brought it to me to discuss ways of

improving this and I was also looking a lot on my own graduate students. We created a committee and surprisingly 18 staff members volunteered. We just took a team approach and everybody thinks positive. We've only implemented one of our four strategies but we wanted to do that with fidelity and move on. Within the first two or three weeks we doubled our volunteers from the number we had last year.

This systematic and whole-school approach to educating parents about their children's academic performance and involving them in the school served not only to invite parents into the school, but was a forum for communicating to the staff the urgency of helping all students succeed, a shared vision he worked to create and maintain.

Political Frame

In Bolman and Deal's (2003) political frame dimension, the most important organizational decisions involve the allocation of scarce resources. This allocation of resources necessarily creates conflict among group members, as decisions and goals are made through a bargaining and negotiating process defining who receives which resources and how much. The role of the organizational leader is to manage the available resources to optimize the well-being of the organization. Described below is an example of the political frame with regard to the creation of a school-wide system for resource allocation at the case study school.

Understanding the political nature of resource allocation, the principal immediately offered to assist with the securing of the instructional resources to any teacher requesting it. In the teacher interviews, all teachers confirmed the constant support provided by the principal and agreed that materials and resources needed to support programs and instruction were always made available for them when requested.

The principal confirmed the fact that he always made a concerted effort to provide extra instructional resources to any teacher who submitted a proposal clearly articulating what they wanted and how the materials would be utilized to improve student achievement. The three research questions narrowed the focus of the investigation to school-wide programs, school-wide practices, and instructional strategies reported by teachers and administrator as having a positive impact on student achievement. Figure 5 provides a visual outline of theme three's in-depth analysis discussed in this section using Bolman and Deal's (1997) four frames organizational.

<p style="text-align: center;">Structural Frame</p> <ul style="list-style-type: none"> • Restructuring of Master Schedule • 3 Tiered Assessment System • Achievement Series 	<p style="text-align: center;">Human Resources Frame</p> <ul style="list-style-type: none"> • Teacher Empowerment • Teacher Autonomy
<p style="text-align: center;">Symbolic Frame</p> <ul style="list-style-type: none"> • Data Notebooks • Focus on Parental Involvement 	<p style="text-align: center;">Political Frame</p> <ul style="list-style-type: none"> • Allocation of Scarce Resources

Figure 5. Analysis of Theme Three

Research Question 1

What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?

School-wide Programs

Several school-wide programs were identified and examined during the study, however the only program associated with increasing student achievement was Marzano's *Classrooms that Works* staff development program introduced to the teachers two years ago. Teacher-level variables associated with raising the academic achievement of all students are commonly grouped into three categories: instruction, classroom management, and curriculum design (Marzano, 2000). Researchers at Mid-continent Research for Education and Learning (McREL) have identified nine instructional strategies that are most likely to improve student achievement across all content areas and across all grade levels. These strategies are explained in the book *Classroom Instruction That Works* by Robert Marzano, Debra Pickering, and Jane Pollock and include the strategies listed below:

1. Identifying similarities and differences
2. Summarizing and note taking
3. Reinforcing effort and providing recognition
4. Homework and practice
5. Nonlinguistic representations
6. Cooperative learning
7. Setting objectives and providing feedback
8. Generating and testing hypotheses
9. Cues, questions, and advance organizers

Over the course of three years, the case study school has made this the focus of their professional development for staff. Each month, the staff meets to receive training and or feedback on the implementation of one of the nine strategies listed in the book. The training is supported by the district and presented in a trainer-the-trainer model using the curriculum facilitator, principal and reading specialist. Following each month session, the teachers discuss the strategies in their team meetings and implement into their classroom during which time they receive ongoing feedback and suggestions from administration and curriculum support personnel as they walk through to observe the implementation.

All the teachers interviewed along with the principal attributed the successful implementation of these strategies with increased student achievement, particularly in reading. The teachers said it allowed for a common language, and fostered additional collaboration among staff as everyone was expected to participate. The use of practices across grade levels and content areas sparked additional collegial dialogue as teachers began to focus on “best practices” rather than practices for their particular grade level, which is typical of most teachers accustomed to teaching in isolation. Evidence of implementation was seen in the school’s walk through form used by the principal and curriculum facilitator for feedback purpose and examples of student work samples that used one or more of the strategies.

Personnel Practices

A review of the researcher’s data collection at the case study school revealed that the observed personnel practices were arranged into three categories including support

for teaching and learning, a focus on learning, and opportunities for professional development and support. Supporting students through enhancement and extra practice has been related to greater achievement (McLaughlin & Talbert, 1993; Middle Start, 2002; Mid South Middle Start, 2002). Extra help sessions were routinely provided for students needing ongoing remedial assistance, follow-up based on non-mastery of concepts recently taught and support for acceleration in math and reading. The students, identified using current and previous assessment data, were grouped into small groups based on their needed and provided these resources using a creative scheduling system during eth day. It is also interesting to note that all instructional staff members were involved in remediation and acceleration of students. Teachers willingly changed their schedule as required to accommodate the tutoring sessions and in some cases volunteered to support students in areas outside of their trained content. Support for teachers to improve their effectiveness was also a routine practice. For example, structural changes were made in the master schedule to allow for weekly collaboration among teams and across disciplines to support and foster time for teachers to work together to provide support for learning together, solving problems and planning opportunities. Teachers interviewed all agreed that establishing conditions to support teacher collaboration such as common on planning time and flexible scheduling assisted in their individual development as teachers as well as the instructional improvements that occurred in the classroom resulting eventually in increased student achievement.

Also evident in the school was the strong focus on academic achievement. A sense of direction was provided by the school improvement team using a school

improvement plan outlining the school wide goals for the year. Paramount in the improvement plan is student achievement. The school goals are publicized and review quarterly. The plan serves as a road map for the staff and helps them align resources, staff development choices, and curriculum decisions. Artifacts from the monthly team meetings reviewing the school's improvement plans indicated articulated goals for student achievement and results on current assessments to indicate where the school was currently in terms of accomplishing the goal. Conversations with teacher's on this team revealed that this team consistently analyzed student achievement data across the school to diagnose learning needs and degrees of mastery that influenced who to focus on and what to emphasize in instruction.

The final category of professional development and support for teachers was viewed in artifacts collected detailing plans for professional development and in the interviews of the participants. Professional development is needed for teachers to gain the skills necessary for school improvement processes, for teaming, for teaching young adolescents, and for implementing alternative assessments and data-based decision making (Flowers, Mertens, & Mulhall, 2002;Wenglinsky, 2000). Opportunities for professional growth were intentionally planned around the needs of the school as identified in the school's improvement plan. Priority areas included the use of technology in instruction, effective teaching strategies, a book study on rigor, a special program devised for new teachers. Teachers were all required to participate in the professional development opportunities and all seemed very willing to do so as they could connect the purpose and direct impact of the professional development sessions on their effectiveness

as teachers. The principal commented several times during observations and during the interviews about the professional development choices being teacher-led and based on student and teacher needs.

Administrative Leadership

Through the interviews with the teachers it became evident that they were grateful for the supportive leadership the principal provided. The principal encouraged his teachers to meet together and share ideas. He commented how he allowed the teachers to investigate different strategies and methods and present them to the entire staff and if there was enough interest, then further investigation took place. One of the teachers described the growth they had seen from the principal throughout this improvement process. The teacher remarked that “as an educational leader you have to decide not to fight every battle, but you have to decide what battles you are going to fight. Our principal has made growth in this area.” The teacher continued that no one would ever question the principal’s integrity or his pride for the school and his students, but sometimes he was criticized for trying to smooth out conflicts with the teachers so everyone was happy. One teacher felt the principal grew as a leader in making decisions and choosing the direction for the building. He also thought that he grew as an instructional leader with the teachers during all of the professional development that took place during this process.

He said, “The principal knew the training that needed to take place in the curriculum and he allowed the curriculum facilitator to take the lead in this area because this was not his expertise.” When the teachers were researching new instructional

methods to use with students, the principal encouraged the teachers to find materials that would work for them. One teacher said that the principal “was very open to if this wasn’t working let’s try something else.” Another teacher agreed the leadership style of the principal. She stated that he was a nice man who would try and get the teachers anything they needed to prepare for the achievement tests. This teacher further commented that the principal’s leadership had impacted the culture of the school. “The principal is wonderful and he backs us up so much in what we wanted to do with the students.”

Professional Development Training

Teachers who are well prepared and trained are more effective in the classroom and therefore have the greatest impact on student learning (Killion, 1999). We also know that the best way to increase teacher effectiveness in the classroom is through regular, high quality professional development. Teachers themselves report that the more time they spend in professional development activities, the more likely they were to indicate that it had improved their instruction (Killion, 1999; National Center for Education Statistics, 2001). Professional development activities also can be linked to increased student achievement. The National Staff Development Council (NSDC) identified 26 staff development programs for middle grades teachers with documented evidence to demonstrate the link between staff development and increased student achievement (Killion, 1999).

The case study school offered a wide variety of professional development opportunities to teachers to avoid the one-size-fits-all approach. Meeting minutes and interviews with teachers and the curriculum facilitator revealed that the staff viewed

school meetings as a source of professional development opportunity as they always focused on teacher and student work, many of the meetings allowed time for planning interdisciplinary units and curriculum mapping and teachers had an opportunity to work collaboratively with their colleagues. It was also interesting to note and witness staff development led by teachers and to verify that this was a common practice. Rather than scripted staff development led by the principal, teacher leaders were selected or self-nominated to lead sessions based on their particular skill levels. They also included writing as a means of reflection using an online tool called Moodle. This practice was set up as an accompaniment to their book studies on the book *Rigor Is Not a Four Letter Word*. After a set period of time teachers participated in a dialogue fostered again by teacher leaders based on how they were using the strategies discussed on the book and/or their thoughts in the best practices discussed. According to the principal, the conversations from the online exchanges often carried over into grade level and PLC discussions as an additional way to share information about best practices associated with teaching and learning.

School Culture

After completing my observation visits, I came to the conclusion that the information gathered did not fit my expectations regarding specific instructional strategies being used by the teachers to increase student achievement. I began to look for an alternative explanation in the area of school culture. I completed additional reviews of the literature in the area of developing a school culture and the process of change within the school environment. Clark (1972) provided three conditions in which a new culture

emerges within an organization. He stated that a culture is developed when a new organization is launched or a new culture will emerge when an organization is open to a revolution or there is a crisis in the organization. The condition of experiencing a crisis was present at the case study school in 2003 when the school was immediately changed from an Elementary school serving grades kindergarten through fifth to a K-8 school with additional middle grades sixth through eighth. The school also went from being a traditional elementary school serving the neighborhood community to a magnet school serving students throughout the county and an extended school year with 20 extra calendar days for instruction.

Every staff member interviewed with mentioned this change as a turning point for the school. One teacher remarked that the mindset of the staff had to change. She commented on how the diversity in the population and the academic needs spanning nine grades was other school in the district. This teacher confirmed my observations by stating, “All of a sudden it just hit them. They recognized the need to change what and how they were teaching.” The change in expectations and attitudes of the teaching staff began to redefine the academic culture at the school. Peterson and Deal (2002) defined culture as an organization’s unwritten rules and traditions, norms, and expectations: the way people act, how they dress, what they talk about or avoid talking about, whether they seek out colleagues for help or don’t, and how teachers feel about their work and their students. (p. 2) Additional research conducted by Fullan (2001) noted a positive culture change was found in schools where teachers possessed the knowledge and skills to teach the content and the school created professional learning communities for the teachers to

share ideas and discuss curriculum. These schools also focused on program coherence across the grade levels, provided technical resources, and had quality leadership.

Following the structural change in the school, professional learning communities began to foster naturally because of the different “groups” created. For example middle school teachers naturally became a group as did teachers with students in the primary grades and those teaching students in the intermediate grades. For a few years following this change staff members remained either isolated or grouped according by grade levels. However, with the assistance of the principal, effective and purposeful professional learning communities were established at the case study school where teachers were provided time to meet in grade levels and discuss curriculum alignment. Information was then shared across grade levels. One teacher remembered, “Now we’re comparing accomplishments and getting kids ready to move from one grade level to the next.” One teacher remarked that the “culture became a family culture, they talked with each other.” The curriculum facilitator added that “we all had the same goal and we worked together to have the school pass the tests because even though my personal class was not taking the test, we were all part of how the students did.”

Research Question 2

What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

Teacher Instructional Practices

The research on classroom practices and achievement frequently include the communication of clear academic focuses, learning goals that are performance based and

are measured periodically in addition to researched based teaching strategies (Jackson & Davis, 2000; Wenglinsky, 2000). Observations in the case study school along with the interviews with the participants revealed a strong focus on academic achievement. The learning goals for each grade level and content area (i.e. math, reading, science, or history) were clear identified for teachers and students and revisited often in collaborative meetings. Within the academic environment of the school, four instructional strategies appeared to be used effectively with at-risk students. The first was establishing and monitoring goals. Developing and monitoring goals was a major function of the school improvement team using the training supported by the district. Through the professional development trainings offered at the school all teachers were shown a number of quality tools that could be used with students in the classroom. White, Hohn, and Tollefson (1997) found that students who set goals and monitored their progress achieved at a higher level than those students who did not establish goals and monitor their progress. One teacher interviewed said that she established goals for reading and writing. She stated that “making the kids more aware by setting goals and having the students determine what level they could reach made them more responsible. It has made a huge difference.” She found academic benefit for her students to receive direct instruction in goal setting and monitoring. This instruction was supported by Marzano’s (2001) research on goal setting. He noted that for this process to have a positive effect on student achievement the students must have an understanding of how to establish realistic goals and then be involved in maintaining their own individual goals.

The direct use of instructional time observed was evident from the moment I entered the building. There was nothing exceptional about the design of the rooms or the teaching environment; however, the intentional use of instructional time was fascinating. Students began changing classes and although there was noise when the classes moved from room to room, once instruction began it was hard to notice the open classrooms. One of the teacher's commented that teaching time was important, and they tried to keep the instruction from being interrupted before lunch. In another classroom I noticed that the morning routine began immediately after the bell rang with a short literature lesson by the teacher. After the instruction, the students completed a written practice page while the teacher took attendance and lunch count. When the majority of the students completed the written assignment they would take out a self-selected book to read. At this time the teacher read a printed announcement sheet provided by the principal and began her language lesson of the day. Students who received tutoring left the classrooms and proceeded directly to the area where they were tutored without interrupting the learning taking place in the classroom. In a study completed by Roth, Brooks-Gunn, Linver, and Hofferth (2003) schools that had students engaged in core academic subjects for at least 65% of the day were able to provide a well-rounded school day for the students by providing enrichment and recess activities. Lee, Kelly, and Nyre (1999) supported this research in their study by stating that students showed a better completion rate of their work if the students were engaged more than 55% of the time.

The use of graphic organizers as a visual tool that aids in constructing representations of knowledge was another instructional practice embedded in this school

as seen in the observations and teacher lesson plans. These visual tools were present in the classrooms as posters on the walls and as attachments for writing prompts. The use of these tools was modeled by the classroom teachers in the observed classrooms and the students were required to complete some organizers as part of a daily reading journal activity. One teacher interviewed stated that they were using more organizers after talking with students about the assignment. They found that the students needed more preparation in organizing their thoughts, when writing on their own. She said, “We thought about what we were doing and we passed out the paper and gave them ten different ways on how to do the page instead of letting them think for themselves.” The visual organizers gave the students a framework for organizing the information they were reading to use later on to answer questions. Tileston (2004) supported the use of graphic organizers in this way. She found that the graphic organizer was most effective when it was presented to the students before the lesson, so that the students could develop connections between the text and their prior knowledge. Marzano (2004) and McEwan (2004) also supported the use of graphic organizers to develop critical cognitive learning. Finally, activities that provided effective in engaging students in learning was noted as a key practice by several teachers in their interviews.

Research Question 3

What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school preparedness? What evidence supports their link to increased student achievement?

Research studies and the analysis of effective school practices indicate that the middle grades need a specialized focus to ensure that all students have the academic and

career preparation they need for high school and beyond. The study school's principal referenced some of the research and discussed how he tried to implement as many of the suggestions as possible to help prepare his students for high school. Familiarity of best practices listed in the research was evident in the teacher interviews. Several teachers mentioned the importance of middle school preparation and discussed how they intentionally worked as a team to implement key practices they found most important for students in the preparation for high school. Although the case study school does not have an official transition program for 8th grade students, it does implement many of the practices for effective transition program including the following: Monitoring student progress and addressing the instructional needs of all students, addressing the social and emotional needs of all students, emphasizing career planning, communication with families, and personalizing the learning environment.

Monitoring student progress appears to be an expectation of all teachers and part of the school's culture. A middle school math teacher's interview comments below discuss the instructional practice of data notebooks in the study school.

This summer for my internship I worked with the principal on a couple of ways to organize our data. I was trying to think of a way for our teachers, principal and CFs to keep track of all the data. I remember from years past that I would be given all these pieces of data that told me about student performance and what students were performing on benchmarks and IEPs and PEPS and all these different piece of information. So what I came up with was something called a data notebook. It had a table of contents with a breakdown of the content based on different pieces of data sources. In there is our tested areas, EVAAS data, then there's a tab for benchmark scores and a tab for their re-teaching plans.

The teacher went on to discuss the principal's expectation for teachers to not only have access to student performance data, but to also routinely analysis student data for instructional purposes. When asked about interpreting data, one teacher described how she systematically went through this process. Her comments below were similar to two other teacher's interview responses showing consistency in the school's expectation.

We do worksheets to reflect back on the results from our benchmarks and we have been trained on Achievement Series, which is a website that helps us breakdown our benchmark data. The data notebook is a huge organization tool that keeps track of everything. The data notebook has been a big tool for our staff to archive their data and track it and follow it and make sure it's organized. And it also helps because we are required to bring it to their grade level meetings.

Addressing the academic and social needs of students as seen in the literature is an important piece as well in helping students successfully prepare for high school and beyond. This school has a very unique approach to this best practice, in part, because of their small student body and class size. The middle school counselor also has been provided the primary role of supporting middle school students and their teachers. Unlike other middle school settings this counselor is not completely burdened down with paperwork and testing demands and therefore can contribute more time to the needs of students. When asked about the counselor's role in helping students prepare for high school, all the participants spoke highly of the counselor's dedication and passion for helping eighth graders make this transition successfully. In fact, I discovered she meets with each student and their parent or guardian individually to create a transition plan and works with them as much as needed to help them select a high school that best fits their needs. High school visits and meetings with high school representatives is also a routine

part of the eighth-grade students' experience at this school. Many of the students select small high school options such as a Middle College or Academy because of the counselor's efforts to make every student knowledgeable of all options for high school and efforts to help students match up their strengths with the best setting. Another aspect of social support for students has come through the school's behavior support system known as PBIS (Positive Behavior Support Intervention System). The school has received numerous awards for its successful implementation of this program and has seen a drastic change in student discipline referrals. When asked about the link between this program and academics, one teacher commented that the school experienced a 40% reduction in discipline referrals over a two-year period and an increase in student engagement levels and time on task.

The counselor also serves as an academic advisor and mentors students on course selections and helps teachers mentor students to ensure all students are being challenged. As a member of the middle school team, the counselor participates as well in assessing students in various academic areas for the purpose of getting baseline data for tracking progress throughout their middle school career. This is an unusual counselor task; however, this has served this school extremely well in that students are often identified for academic support much earlier than normal because of this counselor's monitoring practices. In the comment below, one teacher provides information on the counselor's role in baseline data as an asset to the team.

Our guidance counselor, who is also our IST chair, helps us provide baseline data. It was very interesting the data that we got because we could really see where the children were in relation to each other and how to go in and put things in place to

either go in and help them catch up or move ahead. But it was really interesting information.

Additional academic support is apparent in the school's extra help system that serves all students, based on their individual needs. Using the baseline data and any other data source available for predictive performance in math and reading, students are assigned support twice weekly by way of remediation or acceleration. This intervention is arranged like an elective and essentially replaces the student's elective when implemented. All teachers participate in the support and are assigned student groups and content areas based on their area of expertise. One teacher commented on the success of the program below.

This is unique and something that works for us. Instead of them giving up an elective, they have a flex schedule of 3 days of electives one week and two days the next. So if you're in tutoring you come out of an elective one day, so you still get an elective you just miss a day. So the day they come out, that's an acceleration day for those teachers. So for example, on Friday, and that's Japanese, that's the day the Japanese teacher does acceleration activities and not class materials. We try to set that up as best we can.

Ongoing communication and personalization of the learning environment is also a part of this school's culture. For example, the counselor provides routine communication to middle school parents via email and newsletters and hone in on 8th grade students and parents with specific information related to supporting students as they transition into high school. With a small student body, the counselor can also visit classrooms often to speak with student groups about upcoming event, get suggestion on activities that interest

students and also work with them on career inventory activities that also serve as a springboard for high school.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Introduction

Over the past several decades, school districts have faced increasing public pressure for improved student achievement and the closing of what has become commonly referred to as “the achievement gap” (Trimble, 2008). The term achievement gap has become a common term frequently used to describe general discontent with public education’s performance from school districts to Capitol Hill (Anderson, Medrich, & Fowler, 2007). The pressure for accountability perhaps reached an all-time high with the passage of the No Child Left Behind Act (U.S. Department of Education, 2002). Beginning in 2002, local school districts were held responsible for having every student attain the educational success labeled “proficient.”

In an attempt to correct these educational disparities, current research continues to study educational inequalities and identify and examine factors associated with improving student academic performance (Carpenter, Ramirez, & Severn, 2006). A plethora of variables have been identified including principal instructional leadership, teacher expertise and relationships with students, curriculum and instruction, community and parent involvement, opportunity to learn and student time on task, school climate, student assessment, among others (Davis & Pokorny, 2005; Lezotte, 2001). As seen in the Effective Schools Movement, much of today’s research is attempting to identify high

performing schools, particularly in low socioeconomic minority neighborhoods. A wide variety of research data is being collected and examined including standardized achievement results, focus group interviews, questionnaires, school site observations, and documents attempting to isolate variables that may be positively impacting student achievement.

Purpose of the Study

The purpose of this study was to examine an exemplar urban middle school in order to identify key programs, practices, and instructional strategies that have had a positive impact on student academic performance serving to close the achievement gap between white and non-white students, as well as those from low socioeconomic and affluent backgrounds. Furthermore, this study sought to uncover themes emerging from the examination of the programs, practices, and instructional strategies identified at the study site associated with improving student achievement.

This research study also sought to identify achievement gap closing programs, practices, and instructional strategies, with the goal of extrapolating its findings to comparable socioeconomic status schools, providing the promise of significant student academic performance improvement to similar schools that have yet to close the achievement gap. The concept of “achievement gap” in this study was defined as the persistent disparity in academic performance between groups of students, particularly between white students and students of color, minority students, and second language learners. Ideas and practices related to the education of adolescents in public middle schools were incorporated in this research. Academic preparedness and socialization of

students will be explored in order that comparisons can be made related to patterns that exist in public adolescent education. Finally, this research study sought to understand if strategies exist for improved student achievement at the study site and if so, how they are organized.

Summary of Findings

Research Question 1: What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?

In response to the varying and individual needs of the students at the case study school, the principal took the initiative to encourage the teachers to supplement the district and state curriculum. The principal described this willingness to experiment with instructional resources that might prove effective with his particular students as “innovative.” Over a period of four years, the staff assembled a wide variety of instructional resources and materials they believed were associated with the significant student achievement gains as measured by the end-of-grade tests in reading, math, and science.

With 75% of the student population receiving free or reduced lunch services, many of the students in the case study school are challenged by the district’s core curriculum. As a result, the teachers and principal created an acceleration and remediation program called Helping Understand Basics (HUB). Integrated into the master schedule, the program allowed each student to receive strategic and skill-specific support 40-45 minutes each day. Created to focus on re-teaching and reinforcing non-mastered basic skills, HUB is a time of the day that students receive services/support based on their individual needs. All available instructional staff members are involved

and assist students in small groups with specific skills based on formative assessments and feedback from teachers. The principal, in conjunction with teacher leaders in the school, also created a tutoring program and Saturday school program. The program provided additional assistance to students scoring far below basic and below basic on the North Carolina end-of-grade subject tests in math and English/language arts. The tutoring program supported students in dual capacities—during the school day as a pull-out service and after school hours.

Using the Achievement Series web-based assessment system, the teachers at the case study school have been able to secure comprehensive and timely student assessment reports to help inform teaching and learning. This system provides the district benchmark assessments given three times a year as well as common assessments and other formative assessments generated by the teacher. The Achievement Series system allows teachers to disaggregate and analyze data by student, class, grade, subject area, educational program, or other demographic information. The Achievement Series system has also given teachers more freedom and flexibility in using state standards when assessing student learning using the provided curriculum and other instructional materials.

The principal worked closely with the guidance counselor to make changes in the school's guidance program to better meet the students' academic, social, and emotional needs. Teachers in the case study school spoke of the adaptive strategies used to prepare students for high school and ongoing support provided to parents. In particular, the teachers discussed the fact that they felt there was evidence to suggest that there is a strong focus on preparing students in the case study school for high school and that these

efforts have been successful in helping students matriculate with confidence and with solid academic and social skills. This well-developed academic counseling and guidance program provides further academic support to all case study school students. The principal has supported the guidance counselor's efforts and provided leadership to build what he called a "college bound" culture.

When the principal first began his job at the case study school, he identified increased parent involvement as a high priority goal. Increasing parent involvement became a focus because of the principal's belief in its correlation with student success; therefore, a committee was established to create and facilitate strategic goals and strategies aimed at providing parent education and opportunities to be involved in the school. This systematic and whole-school approach to educating parents about their children's academic performance and involving them in the school served not only to invite parents into the school, but was a forum for communicating to the staff the urgency of helping all students succeed—a shared vision the principal worked to create and maintain.

Several school-wide programs were identified and examined during the study, however the only program associated with increasing student achievement was Marzano's *Classrooms that Works* staff development program introduced to the teachers two years ago. Teacher-level variables associated with raising the academic achievement of all students are commonly grouped into three categories: instruction, classroom management, and curriculum design (Marzano, 2001). Researchers at Mid-continent Research for Education and Learning (McREL) have identified nine instructional

strategies that are most likely to improve student achievement across all content areas and across all grade levels. These strategies are explained in the book *Classroom Instruction That Works* by Robert Marzano, Debra Pickering, and Jane Pollock.

Over the course of three years, the case study school has made this the focus of their professional development for staff. Each month, the staff meets to receive training and or feedback on the implementation of one of the nine strategies listed in the book. All the teachers interviewed along with the principal attributed the successful implementation of these strategies with increased student achievement, particularly in reading. The teachers said it allowed for a common language, and fostered additional collaboration among staff as everyone was expected to participate. The use of practices across grade levels and content areas sparked additional collegial dialogue as teachers began to focus on “best practices” rather than practices for their particular grade level, which is typical of most teachers accustomed to teaching in isolation. Evidence of implementation was seen in the school’s walk through form used by the principal and curriculum facilitator for feedback purpose and examples of student work samples that used one or more of the strategies.

The case study school offered a wide variety of professional development opportunities to teachers to avoid the one-size-fits-all approach. Meeting minutes and interviews with teachers and the curriculum facilitator revealed that the staff viewed school meetings as a source of professional development opportunity as they always focused on teacher and student work, many of the meetings allowed time for planning interdisciplinary units and curriculum mapping and teachers had an opportunity to work

collaboratively with their colleagues. It was also interesting to note and witness staff development led by teachers and to verify that this was a common practice. Rather than scripted staff development led by the principal, teacher leaders were selected or self-nominated to lead sessions based on their particular skill levels.

Three times during the school year, the case study school utilizes the district's benchmark tests to monitor and evaluate student performance in English/language arts, math, science, and social studies. Using the Achievement Series web-based assessment system allows for immediate disaggregation of student performance on benchmark tests and other formative assessments. Printed reports identify those North Carolina standards least mastered by the students in each of the subgroups. Based upon these data, English/language arts, math, science and social studies teachers within their respective departments identify re-teaching strategies collated and included in the school's School Improvement Plan for improved student achievement.

The case study school utilizes the North Carolina academic standards in English/language arts, math, science, and social studies. This standards-based practice provides essential information to students covered on the North Carolina end-of-grade tests, as mandated by the state's annual performance index assessment system used in North Carolina. Standards selected for lesson coverage are identified during these regular meetings to ensure that the priority of state standards are thoroughly taught and retaught as needed throughout the school year. With the principal's encouragement, teachers began to use the state curriculum in combination with district curriculum supplemental materials as additional tools for teaching the standards' content, selectively choosing and

utilizing only relevant portions. The Achievement Series system has also given teachers more freedom and flexibility in using the state standards when assessing student learning using the state curriculum and other instructional materials. The Achievement Series system not only scores the district's benchmark test, it also allows for the timely scoring and reporting of other curricular and teacher-developed assessments to identify how well students have mastered content standard/objectives, allowing teachers to more accurately adjust their teaching.

To promote the utilization of best instructional practices in the classroom, the principal—as well as the district—spends significant resources on staff development for teachers. A School Improvement Team comprised of teacher leaders, guidance staff, instructional support staff, and the administration meets monthly to plan and coordinate a continuous program improvement and professional development planning process. The School Improvement Team solicits input from all staff and parents to help determine staff training needs, which are then incorporated into the school's School Improvement Plan and a long-range professional development plan.

Collaboration among teachers has been an increasing phenomenon at the case study school. Because of the positive professional relationship the principal was able to establish over the course of several years, teachers were willingly drawn into what has become known as a "Professional Learning Community" (PLC) in which teachers and instructional support staff share common values and vision for the school, collective learning and application of learning, and the free sharing of newly-learned personal teaching practices.

In addition to this generalized monitoring of students' progress through informal teacher collaboration, a number of specific accountability and assistance practices have been implemented at the case study school to facilitate student success. At the beginning of the school year, teachers were provided a data notebook with various data sources for all students to help them better understand and monitor the individual needs of their students. Teachers are required to update the data throughout the school year as assessments are provided. The data notebooks not only serve as a resource for planning instruction, remediation and tutoring needs, teachers are also required to bring this information to all grade level meetings and collaborative instructional meetings as data is used to make decisions in all areas of the school.

A review of the researcher's data collection at the case study school revealed that the observed personnel practices were arranged into three categories including support for teaching and learning, a focus on learning, and opportunities for professional development and support. Supporting students through enhancement and extra practice has been related to greater achievement (McLaughlin & Talbert, 1993; Middle Start, 2002; Mid South Middle Start, 2002). Extra help sessions were routinely provided for students needing ongoing remedial assistance, follow-up based on non-mastery of concepts recently taught and support for acceleration in math and reading. Support for teachers to improve their effectiveness was also a routine practice. For example, structural changes were made in the master schedule to allow for weekly collaboration among teams and across disciplines to support and foster time for teachers to work together to provide support for learning together, solving problems and planning

opportunities. Teachers interviewed all agreed that establishing conditions to support teacher collaboration such as common on planning time and flexible scheduling assisted in their individual development as teachers as well as the instructional improvements that occurred in the classroom resulting eventually in increased student achievement.

Also evident in the school was the strong focus on academic achievement. A sense of direction was provided by the school improvement team using a school improvement plan outlining the school wide goals for the year. Paramount in the improvement plan is student achievement. The school goals are publicized and review quarterly. The plan serves as a road map for the staff and helps them align resources, staff development choices, and curriculum decisions. The final category of professional development and support for teachers was viewed in artifacts collected detailing plans for professional development and in the interviews of the participants. Professional development is needed for teachers to gain the skills necessary for school improvement processes, for teaming, for teaching young adolescents, and for implementing alternative assessments and data-based decision making (Flowers, Mertens, & Mulhall, 2002; Wenglinsky, 2000). Opportunities for professional growth were intentionally planned around the needs of the school as identified in the school's improvement plan. Priority areas included the use of technology in instruction, effective teaching strategies, a book study on rigor, a special program devised for new teachers. Teachers were all required to participate in the professional development opportunities and all seemed very willing to do so as they could connect the purpose and direct impact of the professional development sessions on their effectiveness as teachers. The principal commented several

times during observations and during the interviews about the professional development choices being teacher-led and based on student and teacher needs.

Through the interviews with the teachers it became evident that they were grateful for the supportive leadership the principal provided. The principal encouraged his teachers to meet together and share ideas. He commented how he allowed the teachers to investigate different strategies and methods and present them to the entire staff and if there was enough interest, then further investigation took place. One of the teachers described the growth they had seen from the principal throughout this improvement process. The teacher remarked that “as an educational leader you have to decide not to fight every battle, but you have to decide what battles you are going to fight. Our principal has made growth in this area.” The teacher continued that no one would ever question the principal’s integrity or his pride for the school and his students, but sometimes he was criticized for trying to smooth out conflicts with the teachers so everyone was happy.

Research Question 2: What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

To better understand the developmental characteristics of middle school students and their intellectual needs, the principal required the teachers to read research associated with *Turning Points 2000*. This information/research has provided the teachers with information on how to most appropriately address middle school students’ unique learning needs, characterized development, social and emotional development, as well as physical development, followed by recommendations for creating schools that

specifically address a variety of concerns such as equal access, student diversity, scheduling and assessment, and middle to high school transitions. The teachers at the case study school reported that they spend a significant amount of time in meetings discussing best instructional practices, and that they continually refer to them when planning lessons and in identifying long-range instructional goals.

With 75% of the student body identified as being impacted by poverty, a deliberate effort has been made to create a master schedule that maximizes time available for instruction, re-teaching, acceleration, and enrichment. The programs resulting from the restructured schedule allow for the implementation of HUB and additional time created from the previous elective schedule for tutoring, all based on students' performance on current objectives. The need for these strategies to be in support of learning content and providing opportunities for all students to have access to the rigorous core curriculum is stressed. Finally, in keeping with the student-centered approach, an emphasis is placed on utilizing data for all instructional decisions to ensure instruction is student-centered and rigorous.

Recognizing the wide range of academic abilities at the case study school, research-based strategies found in such texts as Marzano's (2001) *Classroom Instruction that Works* have been implemented. Copious information on organizing devices, suggested by the research on the brain and learning, is utilized throughout the school and are often incorporated into lessons, including graphic organizers, Cornell notes, and "real world" experiences.

Teachers often use technology to support their instructional program, an instructional strategy in keeping with the district plan for the integration of technology across the curriculum. Smart Boards, IBEAMS, net books, and school pad interactive technology allows teachers to visually illustrate curriculum content to reinforce and explain major concepts, access and display websites, run educational software, and deliver PowerPoint presentations. Students also use Microsoft Word to complete major research projects in all classes, create history PowerPoint presentations, and use Excel in math and science classes. Supervised Internet access is available before, during, and after school. Each classroom has a television and VCR/DVD player connected to the school-wide network used for the instructional videos, informational presentations produced in-house, and career-based broadcasts.

Observations in the case study school along with the interviews with the participants revealed a strong focus on academic achievement. The learning goals for each grade level and content area (i.e. math, reading, science, or history) were clearly identified for teachers and students and revisited often in collaborative meetings. Within the academic environment of the school, four instructional strategies appeared to be used effectively with at-risk students. The first was establishing and monitoring goals. Developing and monitoring goals was a major function of the school improvement team using the training supported by the district. Through the professional development trainings offered at the school all teachers were shown a number of quality tools that could be used with students in the classroom. White, Hohn, and Tollefson (1997) found that students who set goals and monitored their progress achieved at a higher level than

those students who did not establish goals and monitor their progress. One teacher interviewed said that she established goals for reading and writing. She stated that “making the kids more aware by setting goals and having the students determine what level they could reach made them more responsible. It has made a huge difference.” She found academic benefit for her students to receive direct instruction in goal setting and monitoring. This instruction was supported by Marzano’s (2003) research on goal setting. He noted that for this process to have a positive effect on student achievement the students must have an understanding of how to establish realistic goals and then be involved in maintaining their own individual goals.

The direct use of instructional time observed was evident from the moment I entered the building. There was nothing exceptional about the design of the rooms or the teaching environment; however, the intentional use of instructional time was fascinating. Students began changing classes and although there was noise when the classes moved from room to room, once instruction began it was hard to notice the open classrooms. One of the teacher’s commented that teaching time was important, and they tried to keep the instruction from being interrupted before lunch. In another classroom I noticed that the morning routine began immediately after the bell rang with a short literature lesson by the teacher. After the instruction, the students completed a written practice page while the teacher took attendance and lunch count. When the majority of the students completed the written assignment they would take out a self-selected book to read. At this time the teacher read a printed announcement sheet provided by the principal and began her language lesson of the day. Students who received tutoring left the classrooms and

proceeded directly to the area where they were tutored without interrupting the learning taking place in the classroom. In a study completed by Roth, Brooks-Gunn, Linver, and Hofferth (2003) schools that had students engaged in core academic subjects for at least 65% of the day were able to provide a well-rounded school day for the students by providing enrichment and recess activities. Lee, Kelly, and Nyre (1999) supported this research in their study by stating that students showed a better completion rate of their work if the students were engaged more than 55% of the time.

The use of graphic organizers as a visual tool that aids in constructing representations of knowledge was another instructional practice embedded in this school as seen in the observations and teacher lesson plans. These visual tools were present in the classrooms as posters on the walls and as attachments for writing prompts. The use of these tools was modeled by the classroom teachers in the observed classrooms and the students were required to complete some organizers as part of a daily reading journal activity. One teacher interviewed stated that they were using more organizers after talking with students about the assignment. They found that the students needed more preparation in organizing their thoughts, when writing on their own. She said, “We thought about what we were doing and we passed out the paper and gave them ten different ways on how to do the page instead of letting them think for themselves.” The visual organizers gave the students a framework for organizing the information they were reading to use later on to answer questions. Tileston (2004) supported the use of graphic organizers in this way. She found that the graphic organizer was most effective when it was presented to the students before the lesson, so that the students could develop

connections between the text and their prior knowledge. Marzano (2004) and McEwan (2004) also supported the use of graphic organizers to develop critical cognitive learning. Finally, activities that provided effective in engaging students in learning was noted as a key practice by several teachers in their interviews.

Research Question 3: What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school preparedness? What evidence supports their link to increased student achievement?

Research studies and the analysis of effective school practices indicate that the middle grades need a specialized focus to ensure that all students have the academic and career preparation they need for high school and beyond. The study school's principal referenced some of the research and discussed how he tried to implement as many of the suggestions as possible to help prepare his students for high school. Familiarity of best practices listed in the research was evident in the teacher interviews. Several teachers mentioned the importance of middle school preparation and discussed how they intentionally worked as a team to implement key practices they found most important for students in the preparation for high school. Although the case study school does not have an official transition program for eighth-grade students, it does implement many of the practices for effective transition program including the following: Monitoring student progress and addressing the instructional needs of all students, addressing the social and emotional needs of all students, emphasizing career planning, communication with families, and personalizing the learning environment.

Monitoring student progress appears to be an expectation of all teachers and part of the school's culture. A middle school math teacher's interview comments below discuss the instructional practice of data notebooks in the study school.

This summer for my internship I worked with the principal on a couple of ways to organize our data. Collaboratively with him I came up with an idea to create data notebooks. I was trying to think of a way for our teachers, principal and CFs to keep track of all the data. I remember from years past that I would be given all these pieces of data that told me about student performance and what students were performing on benchmarks and IEPs and PEPS and all these different piece of information. So what I came up with was something called a data notebook. It had a table of contents with a breakdown of the content based on different pieces of data sources. There was one for our CFs that dealt with their focus areas and a very large one for our principal. In there is our tested areas, EVAAS data, then there's a tab for benchmark scores and a tab for their re-teaching plans. For the re-teaching plans there is a tab where they can log on and see responses or reactions to the student responses so far from their benchmarks which breaks down each individual standard. It also allows them to track their re-teaching plans so they can look back at what they've done and what the success rate is. Then there's a PEP tab and IEP tab so that they can track that to make sure they are doing the differentiation and instruction they are supposed to be doing and a tutoring tab.

The teacher went on to discuss the principal's expectation for teachers to not only have access to student performance data, but to also routinely analysis student data for instructional purposes. When asked about interpreting data, one teacher described how she systematically went through this process. Her comments below were similar to two other teacher's interview responses showing consistency in the school's expectation.

We do worksheets to reflect back on the results from our benchmarks and we have been trained on Achievement Series, which is a website that helps us breakdown our benchmark data. The data notebook is a huge organization tool that keeps track of everything. We do different activities. For instance, when we were at a school improvement team meeting and we were trying to figure out why we didn't make AYP and which subgroups and who was in these subgroups we

created an activity for our CFs to do in grade level meetings. It basically allowed teachers to take their rosters and break their students down into subgroups so they could actually recognize what students were in what subgroups and how that subgroups impacted our AYP and so on. It also possibly helped them to create better tutor groups that are reflective of each subgroup and make sure subgroups are not being left out. The data notebook has been a big tool for our staff to archive their data and track it and follow it and make sure it's organized. And it also helps because we are required to bring it to their grade level meetings.

Addressing the academic and social needs of students as seen in the literature is an important piece as well in helping students successfully prepare for high school and beyond. This school has a very unique approach to this best practice, in part, because of their small student body and class size. The middle school counselor also has been provided the primary role of supporting middle school students and their teachers. Unlike other middle school settings this counselor is not completely burdened down with paperwork and testing demands and therefore can contribute more time to the needs of students. When asked about the counselor's role in helping students prepare for high school, all the participants spoke highly of the counselor's dedication and passion for helping eighth graders make this transition successfully. In fact, I discovered she meets with each student and their parent or guardian individually to create a transition plan and works with them as much as needed to help them select a high school that best fits their needs. High school visits and meetings with high school representatives is also a routine part of the eighth-grade students' experience at this school. Many of the students select small high school options such as a Middle College or Academy because of the counselor's efforts to make every student knowledgeable of all options for high school and efforts to help students match up their strengths with the best setting. Another aspect

of social support for students has come through the school's behavior support system known as PBIS (Positive Behavior Support Intervention System). The school has received numerous awards for its successful implementation of this program and has seen a drastic change in student discipline referrals. When asked about the link between this program and academics, one teacher commented that the school experienced a 40% reduction in discipline referrals over a two year period and an increase in student engagement levels and time on task.

The counselor also serves as an academic advisor and mentors students on course selections and helps teachers mentor students to ensure all students are being challenged. As a member of the middle school team, the counselor participate as well in assessing students in various academic areas for the purpose of getting baseline data for tracking progress throughout their middle school career. This is an unusual counselor task; however this has served this school extremely well in that students are often identified for academic support much earlier than normal because of this counselor's monitoring practices. In the comment below, one teacher provides information on the counselor's role in baseline data as an asset to the team.

Our guidance counselor, who is also our IST chair, helps us provide baseline data. It was very interesting the data that we got because we could really see where the children were in relation to each other and how to go in and put things in place to either go in and help them catch up or move ahead. But it was really interesting information.

Additional academic support is apparent in the school's extra help system that serves all students, based on their individual needs. Using the baseline data and any other

data source available for predictive performance in math and reading, students are assigned support twice weekly by way of remediation or acceleration. This intervention is arranged like an elective and essentially replaces the student's elective when implemented. All teachers participate in the support and are assigned student groups and content areas based on their area of expertise. One teacher commented on the success of the program below.

This is unique and something that works for us. Instead of them giving up an elective, they have a flex schedule of 3 days of electives one week and two days the next. So if you're in tutoring you come out of an elective one day, so you still get an elective you just miss a day. So the day they come out, that's an acceleration day for those teachers. So for example, on Friday, and that's Japanese, that's the day the Japanese teacher does acceleration activities and not class materials. We try to set that up as best we can.

Ongoing communication and personalization of the learning environment is also a part of this school's culture. For example, the counselor provides routine communication to middle school parents via email and newsletters and hone in on eighth-grade students and parents with specific information related to supporting students as they transition into high school. With a small student body, the counselor can also visit classrooms often to speak with student groups about upcoming event, get suggestion on activities that interest students and also work with them on career inventory activities that also serve as a springboard for high school.

Discussion

The students at the case study school have made significant academic gains in their performance on the North Carolina end-of-grade tests as reflected in the school's

designation of School of Distinction by the state of North Carolina ABCs and a performance increase of 24 points in reading and 15 points in math. Throughout this research, the teachers and principal consistently attributed this achievement increase in student achievement to the programs, practices, and instructional strategies implemented during the 2008-2010 school years.

While the relationship between these instructional changes and the significant student achievement gains should be viewed as correlational rather than causal, the theoretical support provided by Bolman and Deal's four-frame paradigm provided a theoretical framework for the findings analysis, suggesting robust correlations. Furthermore, the interview data, documents, and site visit information readily falling into a relevant frame or frames within Bolman and Deal's model during the analysis phase strongly suggests comprehensive and wide-ranging organizational improvement.

As the research data were analyzed for the identification of themes and then placed into relevant Bolman and Deal's categories, it was rapidly apparent that the most important catalyst for change at the case study school has been the principal. The principal's commitment to comprehensive program improvement, resourcefulness in securing instructional materials and resources, ability to inspire intense commitment to student achievement among the teachers, and ability to collaborate and positively involve all stakeholders in the mission of the school have created profound school-wide improvement.

Instructional and student performance improvements were also associated with the teachers' use of supplemental instructional materials combined with the district-

adopted curriculum. The teachers described how the principal first gave them “permission” to find and incorporate innovative and appropriate supplements in their daily instruction, followed by direct principal encouragement to do so as student achievement improved, allowing for more support and collaboration with the district officials. The teachers’ initiative to experiment with various curriculum supplements, supported by the principal, led to significant student gains, in the opinion of the teachers.

The tracking and analysis of student achievement test data was viewed by the teachers and principal as another profound catalyst for student academic gains. This process has given the teachers and principal a systematic means for identifying specific North Carolina content standards and objectives not yet mastered by students. North Carolina’s assessment data and reporting system and the district’s benchmark tests collated by the Achievement Series web-based assessment system provide organized, user friendly data to effectively design new lessons and target concepts for re-teaching as needed.

Participation and collaboration among the various stakeholders was readily apparent at the case study school. The principal reported his intentional and enthusiastic efforts over the years to encourage teacher collaboration in lesson planning, student assessment, and curriculum use. Increasing parent participation/involvement has also been a major focus and has become a major goal at the case study school through a school-wide parent involvement program aimed at increasing opportunities to partner and involve parents in the education of the students.

A number of accountability structures have been put into place to improve student performance. Data notebooks with all student performance results and tools to help teachers disaggregate and use data were provided to all teachers, in addition to support and expectations for them to use the data in instructional planning, tutoring, and re-teaching efforts. Regularly scheduled meetings with students and parents provide the time to share student achievement data and encouragement to students to improve performance. A restructured counseling department based upon national standards provides students assistance with their academics, emotional and social needs, as well as middle to high school transitional needs to help all students achieve success.

Conclusion

The case study school employed many of the successful strategies for improving student achievement found in the literature. As indicated in the literature review, promoting achievement in the middle grades has more in common with the effective strategies applied at other grade levels than not. While one case study cannot provide the precise method for improving academic achievement for middle school students, this research suggests some components that a comparable urban middle school with similar demographics might implement to increase the academic achievement of the students. The process and strategies the principal and teachers implemented to raise expectations, align curriculum, and provide the necessary instruction and intervention programs to improve student achievement had a profound impact on the entire learning community.

After reviewing data and constructing the major themes and subcategories I would have liked to have had more time in the school especially in the early part of the

year to explore the themes and instructional practices from the literature more thoroughly. Having additional time to complete the interviews with each of the teachers would have provided additional insight into the educational philosophy of the staff members. It would be interesting for a replication of this study to be completed spending more than four days observing and collecting data at the school. Further research could also be conducted by comparing an additional urban middle school with the same demographics to determine what instructional strategies are consistent between the two schools and how much the school culture is a factor in determining academic excellence.

At the time I completed the study, I was the principal of a middle and high school in a large urban district. Viewing the world through the lens of a practicing principal, in addition to my familiarity with the study school, may have impacted my perspective as I maneuvered through the various components of the study. An unintentional outcome of this study was the focus on the principal. In reviewing the findings section, I noticed that many teacher suggestions and perceptions involved the principal. Although research suggests the principal is the instructional leader of the school and has an impact on student achievement, the focus in this study was not the principal, it was the teachers. The study set out to highlight the teacher's voice; however the findings focused a lot on the principal's perspective and impact. Because of this, I think it's important to note my awareness of my subjectivity during the study and the inclusion of a members check during the data collection and utilization of peer reviewers for validity and credibility purposes. It was the intent of the study to determine the teacher's perception of effective instructional strategies increased student achievement. My hope is that educators could

use this information in the study's finding to assist their middle grades students, so they have everything they need to become academically successful.

Implications for Further Research

There has been growing pressure for the improvement of student achievement in public school systems. This pressure for accountability reached a high level with the passage of NCLB federal legislation requiring state and local educational agencies to demonstrate ongoing and continuous student achievement. This quest for student academic improvement has also been a strong theme in the research literature with a plethora of variables having been identified with such factors as principal instructional leadership, teacher expertise and relationships with students, curriculum and instruction, community and parent involvement, opportunity to learn and student time on task, school climate, and student assessment, to name but a few (Davis & Pokorny, 2005; Lezotte, 2001).

This study searched variables associated with the programs, practices, and instructional strategies at one case study school that may be associated with increasing student achievement. To the extent that the findings can be generalized to other urban schools, there are clear implications for educational leaders and classroom teachers. Although the data reported are exploratory and warrant further investigation, they suggest clear suggestions for school and classroom practice.

Principals may benefit from an examination and analysis of their own leadership behavior and practices to determine their effect on teacher and student motivation, school-wide direction setting, curriculum and student achievement data use, and other

factors identified in this study. This study found the principal's inviting, positive demeanor to be the most powerful force encouraging teachers, parents, and students to commit to achieving student academic gains. A study of the principals leading schools to significant student academic improvement would perhaps validate this study's findings and uncover other effective principal leadership traits and behaviors.

Perhaps the second most influential force associated with student achievement in this study was teacher collaboration. The teachers consistently reported the powerful impact of what is popularly termed "Professional Learning Community" (PLC). This study did uncover some of the characteristic attitudes (i.e., willingness to share new ideas) and teacher behaviors (i.e. systematically meeting with other teachers) of teachers functioning in a PLC, but further study may uncover richer descriptions. Furthermore, the study did not seek to find out how PLCs develop and thrive over time. Further study in this area might provide a more comprehensive picture concerning the nature of PLCs and how they come to support student achievement.

Finally, completing comparable research at other similar high-performing urban schools and examining similarities among these schools may further corroborate this study's findings. The identification of unique school characteristics may contribute to a more comprehensive understanding of how to improve student achievement among this particular student population, warranting further corroborative study of similar schools. Combining these case studies may offer an in-depth exploration and provide a greater understanding of the innovative changes made by high-performing urban schools leading to greater student achievement.

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APPENDIX A
TEACHER SURVEY

Research Question 1: What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?

1. My school has a school-wide professional development program or programs for teachers to ensure all children in the school meet the North Carolina Standard Course of Study (NCSCOS) requirements.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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2. My school has a school-wide program or programs to increase parental involvement using literacy services.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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3. My school has a school-wide program or programs providing training to teachers in research based instructional methods and strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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4. My school has a school-wide program or programs that provide effective and timely assistance to students experiencing difficulty in mastering or attaining proficiency on the NCSCOS content standards.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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5. My school has a school-wide program or programs to assist teachers in the use of academic assessments to impact the quality of teaching and learning.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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6. My school has a school-wide program or programs that provide teachers training in the implementation of effective classroom management and discipline strategies.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

7. Teachers are encouraged to collaborate regularly with other teachers on instructional topics.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

8. Teachers provide feedback in the identification and implementation of professional development goals and objectives for the school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

9. I have regular conversations with an administrator or curriculum personnel about my teaching.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

10. I receive feedback on my evaluations from my administrator that assist me in improving my teaching effectiveness.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

11. I am aware of specific areas of interest that my administrator or curriculum personnel looks at while visiting my classroom.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

12. Assessment of student learning is related to improving rather than monitoring student performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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13. The assessment of student learning is specific, measurable and clearly identified standards for student performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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14. Teachers regularly seek feedback from other teachers to improve their teaching effectiveness.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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15. Decisions about school improvement are always based on our school improvement plan.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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16. Teachers at this school have comparable expectations regarding student academic performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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17. Professional development training over the past year has provided useful information, helping me increase my teaching effectiveness.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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18. Teachers at this school are encouraged to use the same or similar instructional strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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19. Intentional efforts are made to improve home-school relations and parent participation.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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20. The district dictates the academics content teachers are expected to teach.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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21. You and your colleagues determine the content you expect students to learn.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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22. Students determine the academic content they will learn.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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Research Question 2: What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

23. I intentionally include district and state performance standards in my lessons.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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24. My lessons include instructional materials/resources to support my students' developmental and learning styles.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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25. My lessons are developed to include teaching methods and strategies that accommodate the individual needs and interests of my students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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26. My lessons are designed to include high expectations to challenge and stimulate all students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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27. I develop my lessons to build upon my students' existing knowledge and experiences.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
---------------------------	---------------	------------	------------------------

28. When developing my lessons, I consider how to create active learning experiences for my students to facilitate engagement.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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29. I develop my lessons to include opportunities for students to be engaged in cooperative learning experiences for my students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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30. I create lesson that require the integration of content from more than one content area.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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31. When teaching, I monitor students' understanding of the content and make adjustments accordingly.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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32. When teaching, I circulate among the students, engaging individually and collectively with them during the learning experiences.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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33. When teaching, I employ teaching strategies and instructional materials that stimulate higher-order thinking skills.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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34. When teaching, I create social interaction among students by requiring them to work as a team with both individual and group responsibilities.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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35. When teaching, I vary the size and composition of learning groups.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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36. When a student is having difficulty with an activity or assignment, I adjust his/her level.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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37. At your school, peer tutoring is often used to assist struggling students.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

Research Question 3: What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

38. My school uses historical student data to advise students about participating in advanced classes.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

39. My school provides opportunities for students to visit a high school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

40. My school has a program or opportunities for students to learn about high school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

41. My school encourages students to take Algebra I in middle school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

42. My school sponsors a program or programs for students to help them transition to high school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

43. My school sponsors a program or programs for parents to make them aware of skills needed to be successful in high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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44. Students at our school are taught goal planning and organizational strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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45. Students at my school receive information about their high school while attending eighth grade.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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46. Students at my school are prepared for the transition to high school before the end of their eighth grade year.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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47. Students at my school are taught effective study habits.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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48. Students at my school are encouraged to participate in extracurricular activities.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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49. My school provides training to teachers to help them prepare students for high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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50. My school participates in discussions with high school teachers to collaborate on experiences needed for students to be successful in high school.

Strongly Disagree	Disagree	Agree	Strongly Agree
1	2	3	4

APPENDIX B
ADMINISTRATOR SURVEY

Research Question 1: What school-wide programs and practices, in this middle school, do teachers perceive as promoting student achievement?

1. My school has a school-wide professional development program or programs for teachers to ensure all children in the school meet the North Carolina Standard Course of Study (NCSCOS) requirements.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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2. My school has a school-wide program or programs to increase parental involvement using literacy services.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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3. My school has a school-wide program or programs providing training to teachers in research based instructional methods and strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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4. My school has a school-wide program or programs that provide effective, timely assistance to students experiencing difficulty in mastering or attaining proficiency on the NCSCOS content standards.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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5. My school has a school-wide program or programs to assist teachers in the use of academic assessments to impact the quality of teaching and learning.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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6. My school has a school-wide program or programs that provide teachers training in the implementation of effective classroom management and discipline strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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7. Teachers are encouraged to collaborate regularly with other teachers on instructional topics.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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8. Teachers provide feedback in the identification and implementation of professional development goals and objectives for the school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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9. I have regular conversations with teachers about their teaching practices.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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10. I provide feedback to teachers on their evaluations that will assist them in improving their teaching effectiveness.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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11. Teachers are aware of my specific areas of interest when I am visiting their classroom.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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12. Assessment of student learning is related to improving rather than monitoring student performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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13. The assessment of student learning is specific, measurable, and clearly identified standards for student performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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14. Teachers regularly seek feedback from other teachers to improve their teaching effectiveness.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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15. Decisions about school improvement are always based on our school improvement plan.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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16. Teachers at this school have comparable expectations regarding student academic performance.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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17. Professional development training over the past year has provided useful information to teachers for helping them increase their teaching effectiveness.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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18. Teachers at this school are encouraged to use the same or similar instructional strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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19. Intentional efforts are made to improve home-school relations and parent participation.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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20. The district dictates the academics content teachers are expected to teach.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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21. Teachers determine the content they expect students to learn.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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22. Students determine the academic content they will learn.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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Research Question 2: What instructional strategies, in this middle school, do teachers perceive as being implemented to target increased student achievement? What evidence supports their link to increased student achievement?

23. Teachers intentionally include district and state performance standards in their lessons.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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24. Teacher lessons include instructional materials/resources to support their students' developmental and learning styles.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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25. Teacher lessons are developed to include teaching methods and strategies that accommodate the individual needs and interests of their students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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26. Teacher lessons are designed to include high expectations to challenge and stimulate all students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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27. Teachers develop their lessons to build upon my students' existing knowledge and experiences.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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28. When developing their lessons, teachers consider how to create active learning experiences for their students to facilitate engagement.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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29. Teachers develop their lessons to include opportunities for students to be engaged in cooperative learning experiences for their students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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30. Teachers create lesson that require the integration of content from more than one content area.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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31. When teaching, teachers monitor students' understanding of the content and make adjustments accordingly.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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32. When teaching, teachers circulate among the students, engaging individually and collectively with them during the learning experiences.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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33. When teaching, teachers employ teaching strategies and instructional materials that stimulate higher-order thinking skills.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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34. When teaching, teachers create social interaction among students by requiring them to work as a team with both individual and group responsibilities.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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35. When teaching, teachers vary the size and composition of learning groups.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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36. When a student is having difficulty with an activity or assignment, teachers adjust his/her level.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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37. At your school, peer tutoring is often used to assist struggling students.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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Research Question 3 What strategies, in this middle school, do teachers perceive as existing for the development and implementation of adaptive strategies for high school preparedness? What evidence supports their link to increased student achievement?

38. My school uses historical student data to advise students about participating in advanced classes.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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39. My school provides opportunities for students to visit a high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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40. My school has a program or opportunities for students to learn about high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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41. My school encourages students to take Algebra I in middle school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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42. My school sponsors a program or programs for students to help them transition to high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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43. My school sponsors a program or programs for parents to make them aware of skills needed to be successful in high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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44. Students at our school are taught goal planning and organizational strategies.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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45. Students at my school receive information about their high school while attending eighth grade.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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46. Students at my school are prepared for the transition to high school before the end of their eighth grade year.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
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47. Students at my school are taught effective study habits.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
---------------------------	---------------	------------	------------------------

48. Students at my school are encouraged to participate in extracurricular activities.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
---------------------------	---------------	------------	------------------------

49. My school provides training to teachers to help them prepare students for high school.

Strongly Disagree 1	Disagree 2	Agree 3	Strongly Agree 4
---------------------------	---------------	------------	------------------------

50. My school participates in discussions with high school teachers to collaborate on experiences needed for students to be successful in high school.

Strongly
Disagree
1

Disagree
2

Agree
3

Strongly
Agree
4

APPENDIX C

TEACHER INTERVIEW

Middle School Teachers—math, physical education, science, English/language arts, and exceptional children

Support Staff—counselor, reading specialist, curriculum facilitator

1. What is your position and role in the school and how many years have you been a faculty member of the school and in education overall?
2. What programs do you have in your department/grade level that promotes student achievement?
3. How does the program work?
 - a. Does it target a specific population?
 - b. Does it require any additional funding? Source?
 - c. How do you measure its success?
 - d. Has it been successful?
4. Do you have any specific instructional practices that your department/grade level uses to promote student achievement?
 - a. What kind of professional development have you received in those practices?
 - b. How do you measure the effectiveness of the instructional practices?
5. Does your department/grade level have specific strategies that target the closing of the achievement gap for all students and what are they?
6. How do you promote enrollment in your most rigorous courses?
7. How does the school's leadership team support your efforts in these programs and practices?
 - a. Who is on your leadership team and what role do they play?
8. What does collaboration look like at your school?
9. What specific aspects of your schools culture support student achievement?
10. How much parent participation do you receive?

APPENDIX D

ADMINISTRATOR INTERVIEW

Principal and Principal Intern

1. What is your position and role in the school and how many years have you been a faculty member of the school and in education overall?
2. What programs do you have in your department/grade level that promotes student achievement?
3. How does the program work?
 - a. Does it target a specific population?
 - b. Does it require any additional funding?
 - c. How do you measure its success?
 - d. Has it been successful?
4. Does your school have any specific instructional practices that are used to promote student achievement?
 - a. What kind of professional development have you received in those practices?
 - b. How do you measure the effectiveness of the instructional practices?
5. Does your school have specific strategies that target the closing of the achievement gap for all students and what are they?
6. How do you promote enrollment in your most rigorous courses?
7. How do you support your teachers' efforts in these programs and practices?
8. What does collaboration look like at your school site?
9. What does collaboration look like at your school?
10. What specific aspects of your schools culture support student achievement?
11. How much parent participation do you receive?
12. How does the school's leadership team support your efforts in these programs and practices?

APPENDIX E
OBSERVATION TOOLS

Trigger Words:	Welcoming	Environment
	Engagement	Rigor
	Focus	Standards
	Programs	Practices
	Strategies	Stakeholders
	Assessment	Collaboration

Four Frames:

Structural: Goals and information are clear, cause and effect understood.

Human Resources: Employee morale, resources, and creativity.

Political: Power, conflict, competition, organizations.

Symbolic: Culture, meaningful, ritual, ceremony, stories.

What is Happening?	What do I think is Happening?