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# THE EXPERIENCES OF A RURAL MISSISSIPPI MATHEMATICS TEACHER: A CASE STUDY

Ву

John Hamilton Lamb

A Dissertation
Submitted to the Faculty of
Mississippi State University
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy
in Secondary Education
in the Department of Curriculum and Instruction

Mississippi State, Mississippi

May 2006

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2006

# THE EXPERIENCES OF A RURAL MISSISSIPPI MATHEMATICS TEACHER:

A CASE STUDY

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This study investigates my experiences as a rural Mississippi secondary mathematics teacher. The culture surrounding accountability testing and rural education as well as student perceptions of my mathematics instruction and classroom management were investigated. With recent educational legislation such as the *No Child Left Behind Act of 2001*, teachers and students are experiencing education differently than teachers and students of the past. Through this basic interpretive case study, I sought to increase the limited research surrounding student perceptions of rural mathematics instruction and accountability testing and to provide a descriptive image of teaching in this rural school.

The students, administrators, and test-based accountability were shown to have strong influences on mathematics instruction. The use of math manipulatives, competitive games, and reward systems were perceived as beneficial to many students. Some students' perceptions regarding cooperative learning and technological implementations

were not as definitive or as positive as the engaging instruction. Disruptive behaviors, poor classroom management, administrative organization, and standardized test preparations caused instructional time to be lost. Inconsistencies in scheduling, instruction, and management were shown to influence the instructional climate. Teacher preparedness to teach students of differing cultural, ethnic, and economic backgrounds was shown to create various challenges in classroom instruction. The rural characteristics of this school minimized course offerings, increased individualized instruction, and presented monetary issues that were challenging and also beneficial to the students and teachers. As for accountability testing, teachers and administrators in this school tended to accept the testing culture with some disagreements, while students believed state assessments motivated them to perform better in class despite increasing certain levels of anxiety before and after the assessments.

The implications of this study describe how teaching and learning in this school were filled with obstacles both teachers and students had to overcome in order to improve student achievement. Several recommendations for this school, future educators, and state and national departments of education are provided. Finally, this study provides an in depth look at the small details that make teaching in this rural school an everyday challenge.

# **DEDICATION**

I would like to dedicate this research to my wife, Laura, and both my son, Peyton, and my daughter, Rachel. Since the beginning of this longitudinal study, my wife and children have been without their husband and daddy for many nights and weekends. My wife became a dissertation widow. I would like to thank my wife for being the driving force in my writing, editing, and defending. Without her full support and motivation, this study would not have been completed. I love each member of my family and dedicate this finished product to them so that they can have their husband and daddy back home.

# **ACKNOWLEDGMENTS**

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# CHAPTER I

#### INTRODUCTION

On January 8, 2002, President George W. Bush signed into law the *No Child Left Behind Act of 2001* (NCLB) (2002). This landmark education act, the latest amendment to the original *Elementary and Secondary Education Act of 1965* (ESEA) (1965), seeks to provide a framework by which American public school systems may accurately determine student competency and school effectiveness. According to the U. S. Department of Education (USDOE) (2004), "[NCLB] is built on four common-sense pillars: accountability for results, an emphasis on doing what works based on scientific research, expanded parental options, and expanded local control and flexibility" (p. 1). Under these four pillars, standardized test results sit atop the accountability model for improving student achievement. School administrators, educators, and learners must maintain improving test results each year, or school districts and their schools will undergo sanctions connected to federal funding.

Elementary and Secondary teachers across America have voiced either their admiration or disapproval of NCLB. In a national survey of American classroom instructors, Public Agenda (2002) found that 58% of K-12 teachers believed that all students should pass a basic skills test in order to earn a diploma. Similarly, Beckner (2003) found teachers believe accountability is a big step in the right direction. One

teacher from Arkansas having 13 years of teaching experience and an earned Doctorate stated:

I like that States get to set their standards, inclusion of local involvement, and the accountability features of NCLB. Seems a good and fair blueprint to be put forth, especially by the federal level of government. Five years is too long to give any school to meet minimum standards. (p. 3)

Even though testing students may be desirable, many teachers disagree when high-stakes accountability is attached to test results. For instance, Public Agenda (2002) found 80% of K-12 teachers believe their evaluations of students should be integrated with standardized test results for school and student accountability. Costigan (2002) provided one elementary teacher's disregard for accountability standards as this teacher stated, "I just don't feel like I can exercise any creativity that I might want to implement in my teaching" (p. 31). Similarly, Rapp (2002) conducted a study focused on the perceptions of teachers certified by the National Board of Professional Teaching. Rapp noted how politicians refer to these teachers as "exemplary professionals" (¶ 2) and found that 97% of these teachers agreed that state funding for schools should not have its basis from student test results. Rapp also found that 88% of these board-certified teachers claimed a loss in autonomy in their classrooms. Depending on which teacher is asked, the accountability system under NCLB has many teachers taking a stance for or against its legislation.

#### The No Child Left Behind Act of 2001

NCLB (2002) mandated that by the 2005-2006 academic school year all states must create annual standards-based assessments in reading, language arts, and mathematics for every child in grades three through eight with science testing to be implemented by the 2007-2008 school year. NCLB (2002) required 95% of all public educated students perform proficient or higher on state-mandated standardized tests in reading, language arts, math, and science by the 2013-2014 school year. This long-term growth applied to five disaggregated student subgroups categorized by (a) socioeconomic status, (b) learning disabilities, (c) limited English proficiency (LEP), (d) ethnic backgrounds, and (e) gender. Linn (2003) predicted how long it would take 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> grade students to all score proficient or above on the National Assessment of Educational Progress (NAEP) in mathematics by 2014. Using linear regression, Linn predicted 4<sup>th</sup> graders would score proficient or above in 57 years, 8<sup>th</sup> graders would attain this mark in 61 years, and 12<sup>th</sup> graders would need 166 years to reach this goal. Even though NCLB does not hold schools accountable for results on national assessments like the NAEP, these results provided a broad picture of the uphill climb public schools face having to acquire such a high student proficiency level by 2014. Along with these longitudinal requirements of NCLB, each individual subgroup of students under NCLB must show statistical growth from year to year to meet "adequate yearly progress" (AYP) as defined by each state (NCLB, 2002, Sec. 1111).

The USDOE (2004) discussed how states define their AYP by setting "minimum levels of improvement—measurable in terms of student performance—that school districts and schools must achieve within time frames specified in the law" (p. 26). Establishing a statistical baseline by which each state may accurately govern their AYP occurred during the 2001-2002 school year. The USDOE outlined the process:

Each state begins by setting a starting point that is based on the performance of its lowest-achieving demographic group or of the lowest-achieving schools in the state, whichever is higher. The state then sets the level of student achievement that a school must attain in order to make AYP. Subsequent thresholds must increase at least once every three years, until, at the end of 12 years, all students in the state are achieving at the proficient level on state assessments in reading and language arts, math and science. (p. 26)

NCLB (2002) required public schools to be held accountable for AYP but the burden of proof was given to the state and local levels. If schools and school districts fail to meet AYP or are successful in exceeding their AYP, then NCLB (2002) provided sanctions and incentives states and local governments must use as guidelines in an effort to improve these underperforming schools or school districts.

#### Sanctions

When a school does not meet AYP for two consecutive years, it is labeled "in need of improvement" (NCLB, 2002, sec. 1116). If a school is so labeled, parents are given the option of moving their child to another school within the district that is not

labeled in need of improvement. Additionally, the federal government supplies districts with funds under Title I of NCLB to help meet AYP. Of these funds, 10% are earmarked toward improving teaching practices grounded in scientifically based research to improve student achievement (USDOE, 2004). The USDOE defined scientifically based research as "research that involves the application of rigorous, systematic and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs" (p. 30). This research must be persuasive and rooted in suitable methods that produce strong empirical evidence of its effectiveness (Beghetto, 2003). It is the intent of NCLB (2002) that teachers and other school officials educate in scientifically proven methods. Once a school is labeled in need of improvement, the district must provide a two-year plan steeped in the scientifically based research outlining corrective measures for improved student achievement (USDOE, 2004). Improving student achievement to meet AYP becomes the focus of schools in need of improvement.

If AYP is not met for a third consecutive year, parents may continue to transfer their child to another school in the district at the expense of the Title I school.

Additionally, students from low-income families are afforded additional funds for "supplemental educational services" (USDOE, 2004, p. 28). These supplemental services include but are not limited to tutorial services from a state approved provider. In the quest to meet AYP, Title I funding is allocated to help schools in need of improvement.

When schools fail to attain AYP for a fourth consecutive year, greater sanctions occur. Schools must either replace low performing faculty or implement a new curriculum (USDOE, 2004). The final sanction outlined by NCLB develops when a

school or school district fails to meet AYP for five consecutive years. These schools are either restructured through the replacement of all staff members, become a charter school, or have a state or private organization take over operations of the school. Either way, when schools show they cannot improve, the government fully intervenes.

Under Title I of NCLB (2002), schools in need of improvement will be provided federal dollars to help move their students toward improved academic success. However, if schools struggle with AYP, they could face sanctions as high as restructuring under private managerial institutions or even closing the doors of the school. Schools and school districts have essentially five years to turn their programs around, but as Linn (2003) demonstrated, it would seem it's going to take a little more than five years to reach the goals of NCLB.

#### **Incentives**

NCLB (2002) required public recognition of school success, but places financial incentives in the hands of the states. The USDOE (2004) illustrated the incentive plan stating,

No Child Left Behind requires states to provide state academic achievement awards to schools that close achievement gaps between groups of students or that exceed academic achievement goals. States may also financially reward teachers in schools that receive academic achievement awards. In addition, states must designate as "distinguished" schools that have made the greatest gains in closing the achievement gap or in exceeding achievement goals. (p. 28)

Although the incentives are limited, achieving schools are to be recognized and possibly rewarded for their successes in maintaining AYP.

Many states have adopted incentive plans providing monetary rewards for high performing schools (Amrein & Berliner, 2002b). According to Amrein and Berliner, only eight states provided monetary bonuses to teachers effectively preparing students for high-stakes tests. For Example, North Carolina rewards teachers in schools exceeding expectations with \$1,500 bonuses (Jones, Jones, Hardin, Chapman, Yarbrough, & Davis, 1999). Kentucky provides high achieving schools with extra funds and the teachers determine where and how that money is spent (Willis, Koch, Lampe, Kellor, & Odden, 1999). However, Mathis (2003) pointed out how many states do not provide monetary incentives for high-achieving schools or teachers but rely on "punitive incentive systems" (p. 684) to improve student success. Mathis compares these punitive incentive systems to B. F. Skinner's behaviorist theories of "negative reinforcement" and doubts the effectiveness by which they are implemented.

As described, rewards and sanctions need to be made available to teachers and students. These sanctions must not be too severe and the rewards not too rewarding (Hamilton & Stecher, 2004). NCLB (2002) requires states to publicly acknowledge high performing schools, but financial incentives are left to the discretion of each state. With financial incentives gaining popularity in research (Hamilton & Stecher, 2004), states must consider these rewards in lieu of budgetary challenges associated with NCLB expectations (Mathis, 2003).

The incentives and sanctions of NCLB (2002) illustrate the recent move toward an improved educational system through greater accountability and higher standards. This accountability attached to student achievement calculated through standardized test results has not always been the case in the United States. Many events have taken place in the last 50 years that have led to these most recent educational laws and emphasis on accountability testing.

# **Accountability Testing**

Heubert and Hauser (1999) defined high-stakes testing in two ways: (a) high stakes for students when "decisions involve tracking (assigning students to schools, programs, or classes based on their achievement levels), whether a student will be promoted to the next grade, and whether a student will receive a high school diploma" (p. 1) and (b) high stakes for districts, schools, and teachers when accountability is attached to academic outcome. American schools have been assessing students with high-stakes tests since the mid-1960s. Heubert and Hauser stated, "under Title I of the Elementary and Secondary Education Act of 1965 [ESEA], program evaluation through large scale testing has been an integral part of federal support for the education of low-achieving children in poor neighborhoods" (p. 15).

Before ESEA was established, American interest in accountability standards and testing was in its infancy. Amrein and Berliner (2002a) discussed how Americans became heavily interested in increasing mathematics and science standards and testing in schools following the Russian's launch of Sputnik I in 1957. At the time, money was being spent on improving gifted education in mathematics and science evolving into the

creation of ESEA based on President Lyndon B. Johnson's "war on poverty" (Amrein & Berliner). Lyndon B. Johnson believed low-income schools could greatly benefit from additional funding. Therefore, ESEA allocated Title I financial assistance for low-income schools.

Following ESEA and the financial assistance Title I provided to many schools, the educational system in America moved toward accountability testing in schools. The minimum competency testing movement of the 1970s placing standardized testing at the forefront for grade promotion and graduation (Heubert & Hauser, 1999). Performances on these minimal competency assessments were widely used to help school officials determine grade placement and diploma status for many American students. Despite these high stakes for students attached to the minimum competency assessments of the 1970s, the early 1980s found the educational system to be in need of improvement.

The National Commission on Excellence in Education (NCEE) (1983) released *A Nation at Risk: The Imperative for Educational Reform* recommending states hold their students to higher and more rigorous standards. The NCEE recommended assessment of these standards through standardized tests:

Standardized tests of achievement (not to be confused with aptitude tests) should be administered at major transition points from one level of schooling to another and particularly from high school to college or work. The purposes of these tests would be to: (a) certify the student's credentials; (b) identify the need for remedial intervention; and (c) identify the opportunity for advanced or accelerated work.

The tests should be administered as part of a nationwide (but not Federal) system

of State and local standardized tests. This system should include other diagnostic procedures that assist teachers and students to evaluate student progress.

[Parenthesis in the original] (p. 28)

The NCEE cited many unpopular educational facts such as America losing the academic race with other industrialized countries and school curriculums being diluted and diffused. These remarks made by the NCEE sparked a national panic with regard to the poor conditions of American schools. This panic led to the increased emphasis on accountability testing prevalent in today's public schools (Amrein & Berliner, 2002a).

Eleven years after *A Nation At Risk*, Congress signed into law two Acts establishing higher standards for under-performing American public schools titled (a) *Goals 2000: Educate America Act* (known as Goals 2000) (1994) and (b) *Improving America's Schools Act of 1994* (IASA) (1994). Goals 2000 was signed into law on March 31, 1994. In section 102, the Clinton Administration set forth eight goals by which America could improve its educational system:

# (1) SCHOOL READINESS.--

(A) By the year 2000, all children in America will start school ready to learn. ...

# (2) SCHOOL COMPLETION.--

- (A) By the year 2000, the high school graduation rate will increase to at least 90 percent. ...
- (3) STUDENT ACHIEVEMENT AND CITIZENSHIP.--

(A) By the year 2000, all students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our Nation's modern economy. ...

# (4) TEACHER EDUCATION AND PROFESSIONAL DEVELOPMENT.--

(A) By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century. ...

# (5) MATHEMATICS AND SCIENCE.--

(A) By the year 2000, United States students will be first in the world in mathematics and science achievement. ...

# (6) ADULT LITERACY AND LIFELONG LEARNING.--

- (A) By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship. ...
- (7) SAFE, DISCIPLINED, AND ALCOHOL- AND DRUG-FREE SCHOOLS.--

(A) By the year 2000, every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and will offer a disciplined environment conducive to learning. ...

# (8) PARENTAL PARTICIPATION --

(A) By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children. ...

In order to obtain these goals, an amendment to Title I of ESEA (1965) was written into law on October 20, 1994 (IASA, 1994).

IASA (1994) amended Title I of ESEA (1965) to meet the goals of Goals 2000 (1994) through various measures including "improving accountability, as well as teaching and learning, by using State assessment systems designed to measure how well children served under this title are achieving challenging State student performance standards expected of all children" (IASA, 1994, sec. 1001). IASA required accountability testing for schools that received Title I funds to document the financial effectiveness of raising student achievement. Just as the original ESEA (1965) set out to accomplish, IASA (1994) required states to hold the schools receiving Title I funds accountable for improving student achievement in low-income learners. Eight years later, NCLB (2002) expanded the accountability standards addressed in IASA for low-income schools and required all schools to be held to those same standards.

Accountability testing in America has moved from creating higher standards for mathematics and science students following Sputnik I to holding all schools and schools

districts accountable for student competency under NCLB. The essentialist criteria of core academic courses and standards-based assessments have made their way to the pinnacle of today's educational system. From the minimal competency examinations of the 1970s to the state accountability systems of today, administrators, teachers, and students are faced with end-of-the-year assessments that are high-stakes for everyone involved (Heubert & Hauser, 1999).

#### **Rural Education and NCLB**

Maintaining AYP for every group of students is, as Tyler (2003) titled his article, a "Tall order for small districts." Rural schools face challenges unlike many of their urban counterparts (Hodges, 2002). The National Rural Education Association (NREA) (2004) stated, "Voices of those who care about the future of rural America must enter the fray over how federal education policies and regulations play out in rural schools and their communities" (p. 2). The NREA illustrated how rural schools are challenged to meet these federal mandates because of current budget deficits. Howley (2003) discussed how 63.8% of America's schools are comprised of rural and small school districts and are faced with unique circumstances under NCLB. Tyler (2003) stated the small enrollment of rural schools and the even lower student enrollment in disaggregated subgroups creates statistically unreliable results from standardized tests. With small grade-level class sizes, rural schools also have greater fluctuation in student ability levels from year to year (Coladarci, 2005). On top of these difficulties, Glascock (2003) stated,

The growing reliance on drill and practice (ostensibly in order to raise test scores) would seem (not surprisingly) to weaken critical-thinking skills further—the very

skills that developers of standardized tests (and makers of standards) have warned are *already* weak among students, especially poor, working-class rural students.

Teachers and students in rural schools are faced with challenges unique to their rural structures.

[Parenthesis and italics in original] (p. 17)

According to the National Center for Education Statistics (NCES) (2000), 70% of Mississippi public school students are enrolled in rural school districts. These rural school districts struggle to fill vacant teacher positions (Richard, 2002). With teacher positions already difficult to fill in many Mississippi school districts, NCLB (2002) required all teachers to earn a bachelor's degree and acquire a state certificate demonstrating knowledge in their content area by the 2005-2006 school year. These teachers are termed "Highly Qualified" by NCLB. The USDOE (2004) stated these teachers are paramount in the education of American students. Richard (2002) discussed comments made by Mississippi's then state superintendent of education Richard Thompson who stated, "We will drastically have to change the way we do business to have a highly qualified teacher in every classroom by '05-'06" (A Dead End? section, ¶10). This state superintendent of education in Mississippi found filling the need for highly qualified teachers challenging in a predominately rural state. Additional monetary and cultural issues in the rural schools only exacerbate meeting this highly qualified requirement. Money also affects many of the sanctions established when schools do not meet AYP.

Many of the sanctions attached to AYP require additional transportation of students to either another school in the district or to additional educational services such as tutoring that require additional funds. Hodges (2002) pointed out that many rural schools have to travel "over mountains, ninety miles away, or around the Grand Canyon" (p. 6). Busing students to other schools in the district and providing transportation for supplemental educational services affect all school districts, especially the rural ones (Tyler, 2003). Rural school districts enroll children from remote areas. Requiring these schools to add additional transportation costs for parents moving students and requiring tutorial services would greatly affect educational funds available to students. Every school that fails to meet the federal guidelines of AYP are faced with financial challenges associated with the Title I spending requirements (Young, 2003), but rural schools, which already have limited budgets, spend a large portion of these federal dollars on transportation across these remote areas (Tyler, 2003). Hodges (2002) pointed out that while every school, rural and non-rural, may have shortcomings with NCLB rural school challenges are "exacerbated by small size, isolation, and lack of money" (p. 3).

On top of the growing challenges NCLB places on rural schools, many rural schools in Mississippi are comprised of students who live in poverty (Children's Defense Fund, 2004b). The culture of a school defined by its size, socioeconomic makeup, or ethnicity is important to the success of the school (Blake & Swartz, 2002). The way a person processes information and acts are both affected by culture (Stolp, 1995). Barth (2002) illustrated these cultural issues stating, "[School culture is] a complex pattern of norms, attitudes, beliefs, behaviors, values, ceremonies, traditions, and myths that are

deeply ingrained in the very core of the organization" (p. 7). Often this school culture affects the academic achievement of students, especially economically disadvantaged and minority students (Blake & Swartz, 2002).

Rural schools have their own unique place in today's accountability systems. As Hodges (2002) noted, rural areas have been testing their students for well over 70 years, but today's accountability standards add high-stakes to testing which is much different than the early testing years. With low enrollment, limited faculty, and isolation having such an affect on schools, small schools must work even harder to meet the accountability measures of NCLB (Tyler, 2003), especially if these small schools are filled with poor, minority students (Blake & Swartz, 2002).

# **Purpose of the Study**

During the 2004-2005 academic school year, I was one of two mathematics teachers at West Spike High School (WSHS), a small, rural Mississippi secondary school. (Pseudonyms are used for names of schools, school districts, students, faculty/staff members, and administrators.) This 7<sup>th</sup> through 12<sup>th</sup> grade school offered eight regular math classes and two compensatory mathematics courses. My teaching load consisted of 7<sup>th</sup> Grade Mathematics, Pre-Algebra, Algebra I, Advanced Mathematical Concepts, and Compensatory Mathematics. Mrs. Reed, the other mathematics teacher, taught 8<sup>th</sup> Grade Mathematics, Transition to Algebra, Geometry, Algebra II, and Compensatory Mathematics.

Under the Mississippi Statewide Accountability System (MSAS), there are two levels of testing: (a) the Mississippi Curriculum Test (MCT) assesses 3<sup>rd</sup> through 8<sup>th</sup> grade students in reading, language arts, and mathematics; and (b) the Subject Area Testing Program (SATP) assesses secondary students enrolled in Algebra I which may be taken in grades 8-12, Biology I (9-12), English Reading/Language (9-11), and U.S. History from 1877 (10-12). Mississippi students enrolled in 7<sup>th</sup> Grade Mathematics must pass each portion of the MCT in order to be "directly" promoted into the 9<sup>th</sup> Grade. To clarify, if a student fails any portion of the MCT (e.g., reading, language arts, or mathematics) they must retake that portion during their eighth grade school year to be eligible to move from middle school to high school. If a student does not pass the original 7<sup>th</sup> Grade MCT benchmarks or the following test retakes, an External School Review Team (ESRT) must evaluate that student (Test Use, 2002). The ESRT is comprised of teachers outside the school from which the student failed. These teachers determine if the student should be retained in 8<sup>th</sup> grade or promoted to the 9<sup>th</sup> grade based on factors aside from the state assessment results like course grades and teacher comments. However, the Mississippi SATP assessments that determine graduation do not require an ESRT (Graduation Requirements, 2004). Therefore, high school students must pass their classes and the state assessment unlike some middle school students.

High school students who were first enrolled in 9<sup>th</sup> grade during or after the 2002-2003 academic school year must pass all four SATP assessments in order to earn a high school diploma (Graduation Requirements, 2004). There are no course-promotion stakes attributed to the results of the SATP assessments, but students must pass each test in

order to graduate from any public high school in the state of Mississippi. Students may retake the test as many times as needed to attain a passing score of 60%.

Our school tested 22 seventh graders, 26 eighth graders, and 17 Algebra I students. I taught 21 seventh graders, 4 eighth graders, and all 17 Algebra I students. I taught approximately 65% of the students in tested mathematics classrooms.

Understanding the culture and climate of a rural school, its students, teachers, and administrators, is vitally important in understanding the challenges associated with high-stakes testing and the teaching of mathematics. The purpose of this study is to gain an understanding of my rural Mississippi mathematics teaching experiences and the experiences of my students during test-based accountability. This study seeks to gain a greater understanding of the experiences associated with the phenomenon of high-stakes testing in one rural secondary school.

The social interactions between the researcher and his administrators, colleagues, and student body as they relate to high-stakes testing are paramount in this inquiry.

Unlike the positivist paradigm of most quantitative studies, a qualitative study implements an interpretive paradigm "which portrays a world in which reality is socially constructed, complex, and ever changing" (Glesne, 1999). An interpretive, constructivist, paradigm is constructed by the participants and discovered through the research as opposed to being external to the people being studied and intrinsically measurable through the analysis of positivist researchers.

#### Justification

Cicourel et al. (cited in Palonsky, 1986) stated, "if you want to know why it is that teachers behave as they do, you must work as a teacher, subjecting yourself for an extended period of time to the same routines, rewards, penalties, and problems to which teachers are subjected" (p. 192). Tyler (2003) noted that rural teachers are faced with unique challenges under NCLB. I taught in a rural, high minority, low socioeconomic Mississippi secondary school where I was the *only* 7<sup>th</sup> Grade Mathematics and Algebra I teacher in this school. These classes made up two-thirds of the mathematics curriculum tested under the Mississippi Accountability Testing Program (MATP) for secondary education; therefore, a large responsibility was placed on my instruction. This study chronicles the essence of my instructional methodologies for preparing students to take their high-stakes mathematics tests. Research pertaining to secondary mathematics instructors was predominately focused on an outsider's view of the instructor and his or her instructional techniques (see for example, Manouchehri & Goodman, 1998; Pourdavood, & Harrington, 1998). Most research covering the topic of mathematics instruction from the teacher's point of view is pedagogical (see for example, Funk, 2003; Martinez, 2001). Palonsky (1986) provided a picture of teaching through the teacher's eyes. Gaining a first hand account of mathematics teaching, especially in a rural setting, is desirable because teachers can learn from the positive and negative practices illustrated through the observations of both the researcher, school faculty, and students.

My particular teaching assignment provided me with an unmatched opportunity to work with well over half of the mathematics students in this particular rural

environment. As their teacher, I was provided the opportunity to observe their learning styles, social interactions, testing worries and reactions to my personal instructional techniques. Gaining their perceptions on these topics awarded me a first-hand account of the structure that surrounds a rural public school mathematics classroom through the lenses of the teacher and the students. Students provide teachers with the opportunity to understand what methodologies are best suited for a particular set of students (Latimore, 2005). Analysis of student perceptions of instruction is extremely important to channeling children's energy in the mathematics.

Research has shown that in a national comparison of rural versus non-rural schools comparing mathematics achievement on the National Assessment of Educational Progress (NAEP) rural schools outperformed their non-rural counterparts (Lee & McIntire, 2000). However, in their analysis, the authors comment that the national results do not provide state-to-state generalizability. When investigating the achievement gap between rural and non-rural schools for Mississippi in 1996, there was almost a 10 point statistically significant difference in favor of the non-rural schools. Mississippi rural schools are struggling with mathematics achievement when compared to their urban neighbors based on these results. Research in the field of mathematics instruction and learning in the rural schools of Mississippi is a definite need.

With high-stakes testing encompassing the structure of all schools, especially rural, providing a picture of my life as a rural educator while delving into the perceptions of my students is justified. The essence of today's schools under NCLB is unparalleled in American educational history. Many researchers and data collection agencies provide

qualitative teacher perceptions pertaining to administrative involvement, administrative planning, teacher morale, student achievement and instructional ramifications of high-stakes testing. However, student voices are seldom heard in the research surrounding school experiences and accountability testing (Lattimore, 2003). As Lattimore stated, "If the programs, practices, and policies rendered within the framework of schools are delivered with students' best interests in mind, we must ask why their voices are not heard" (pp. 118-119). Adding to the wealth of information surrounding education during accountability times is one aspect of this case study. Providing an understanding of the essence of rural mathematics instruction, learning, and testing will hopefully help future educators and researchers create an educational system comfortable for both teachers and especially learners.

# **Research Questions**

The following questions guided my research throughout the course of the school year.

- 1. What are my experiences as a rural mathematics instructor?
  - How does the administration influence instruction?
  - How do the students influence instruction?
  - How does test-based accountability influence instruction?
- 2. What are the essential experiences of the students in my rural mathematics classroom?
  - How do students perceive my instructional techniques?
  - How do students perceive my classroom management?

- How does test-based accountability influence my students?
- 3. What is the culture of my rural secondary school during test-base accountability?

# **CHAPTER II**

#### LITERATURE REVIEW

The two main topics of interest in this research are teachers and students. Embedded in this research is a look into the teaching and learning, especially in rural secondary schools during accountability times. This review of literature takes each of these main topics and provides a look at the literature surrounding each. Within the topic of teachers, a look at the culture surrounding administrative, student, and testing effects on instruction are reviewed. Research related to student perceptions of the culture of teacher instruction, classroom management, and accountability testing is also reviewed. Within these two components of education, a broad picture of teaching and learning is presented.

Once the doors to the classroom are shut, the curriculum theorists, curriculum developers, legislators, principals, parents, and city officials fall to the side, and the teachers and students are left to improve achievement. Extensive research has been conducted illustrating the impact of accountability testing on K-12 teachers, but very little research has been conducted regarding student perceptions of today's educational system. Likewise, the "current research base for mathematics and science education in rural contexts is extremely limited, resulting in few education reform efforts that are tailored for rural schools" (Harmon, Henderson, & Royster, 2003, p. 57). This review of

literature begins with a rational and concludes with research related to teaching and learning in today's schools.

# **Rational for Review of Literature**

Many American children have circumstances in life dissimilar to those of their teachers (Hollins, 1996). The Children's Defense Fund (CDF) (2004a) provided evidence showing how America's children have difficult challenges facing them everyday:

- 20% of children are born poor.
- 33% of children will be poor at some point.
- 17% of children are poor now.
- 33% of children are not in their correct grade.
- 14% of children will never graduate from high school.
- 33% of children are one or more years behind in school.

CDF (2004b) illustrated the increased difficulties Mississippi children face:

- Every 46 minutes, a child in Mississippi is born into poverty.
- 70% of Mississippi children are poor.
- Mississippi ranks 50<sup>th</sup> out of the 50 states in the percent of poor children.
- 82% and 83% of fourth graders are below grade level for reading and math respectively.

These national and Mississippi statistics show children's lives at home are filled with obstacles that filter into their school lives. Students must overcome these difficulties in their lives so they will not become one of the 14% of children who do not graduate from high school nationally (CDF, 2004a).

My research study takes place in a small rural Mississippi school. As CDF illustrated, Mississippi children are well below the national average when it comes to economic difficulties at home. These statistics support the claim that many Mississippi children are poor and cognitively behind in their development. A large majority of these poor children attend rural schools like the rural school in my study. Over 90% of the students in my study live in low-income households with over 80% of them African American. The demographics of my students force a large portion of my literature review to focus on research pertaining to poverty, African American students, rural education, and mathematics instruction. Lattimore (2001, 2003, 2005) is one researcher who documents African American student's perceptions of instruction and accountability testing. I have used his research extensively in my review of related literature because of the closeness of his work to this study. There are other aspects of education that are not extensively reviewed, but the uniqueness of this study limits the scope of this review of literature.

### **Teachers**

Being a teacher in today's classrooms has its share of challenges. From multiculturalism to accountability testing, teachers must stay active in understanding what does and does not work in the classroom. Crawford (2004) provided her readers with four characteristics of being a successful teacher through organization, communication, positive relationships, and allowing students to be self-managers. In Crawford's third characteristic of building a positive relationship with students, teachers must be aware of the cultures surrounding their students in order to build that

relationship. A growing number of students have ethnic backgrounds unlike those of their teacher (Hollins, 1996). Thomas (2000) provided six areas of cultural influence surrounding the cultural dynamics of the classroom: the learner, the teacher, school and classroom management, parental and community influences, and the training and development of teachers. Being culturally sensitive to the needs of all classroom students is vitally important to being a successful teacher. Mathematics teachers are not immune to this call for multicultural awareness (D'Ambrosio, 2001). Mathematics instruction must become equitable for every diverse student (NCTM, 2000).

Mathematics teaching has its own set of characteristics that helps determine success and exemplary instruction. The National Council of Teachers of Mathematics (NCTM) (2000) stated that effective mathematics instructors should provide explorations into the procedures that build greater levels of understanding through inductive and deductive methods grounded in contextual knowledge. NCTM promotes the teaching of math as a place where students are challenged by their teachers to question their thinking and build a more conceptual understanding of the mathematics being taught. Mathematics teachers are called to be creative, engaging, and attune to each of their students individual needs (NCTM, 2000). This connection with students can be coupled with Thomas' (2000) multicultural objectives to create an even more effective mathematics instructor.

Being a successful mathematics teacher requires content knowledge and the ability to spread that knowledge in engaging (Martinez, 2001) and multicultural (D'Ambrosio, 2001) ways. Greenberg (2004) also noted school size contributed to challenges in the school's environment. Many rural schools are faced with size and

cultural challenges unlike their urban and suburban counterparts (The Rural School and Community Trust, 2002). Being a mathematics teacher in a small, culturally diverse rural school is filled with many advantages and disadvantages.

Ralph (2002) analyzed student intern and cooperating teacher perceptions of their rural teaching experiences finding 15 advantages and 8 disadvantages. Seven of the 15 advantages were found to have consistency between both the interns and cooperating teachers. Ralph stated:

These benefits were: Becoming better acquainted with students and their families; Becoming involved in community activities; Enjoying the supportive atmosphere of the school and the community; Widespread opportunities to become active in a variety of school and community events; Experiencing relatively fewer student discipline problems as compared to those in many urban schools; and Enjoying the relative quietness of country-living. (pp. 16-17)

Ralph continued to discuss five of the eight disadvantages shared by the interns and cooperating teachers. Ralph stated:

These drawbacks were: (a) The distance from sources of instructional resources and cultural activities; (b) The fact that one's personal life is often known in the community; (c) The extra school and community work that is expected and required by rural teachers; (d) The scarcity of rural housing/accommodation. (p. 17)

Rural schoolteachers face environmental and cultural situations both revered and unacceptable.

As discussed, teaching is filled with challenges associated with diversity, school size, and instructional practices. No matter if one teaches in the city or the rural countryside, today's educational system is structured so that all schools are to be held accountable for their students' standardized test results (NCLB, 2002). Today's teachers must balance administrative demands, student demands, and legislative demands with their personal theories regarding instruction.

### How Does Administration Affect Instruction?

Hart (1993) illustrated how superordinate administrators can positively and negatively affect the climate in which a subordinate teacher works. Hart pointed out that this influence occurs through intentional and unintentional means. Teachers and administrators have social and professional interactions throughout the school day that affect both the instructional climate and organization (Bossert, Dwyer, Rowan, & Lee, 1982). Pressures associated with personal, district, and community organizational issues establish the behaviors articulated by many building principals (Glascock, 2003). Since the building principals are the hierarchical leaders of the school, these behaviors directly affect the climate of the school and indirectly affect the instructional effectiveness of teachers (Bossert et al., 1982). Therefore, the leadership of a school is vital to effective classrooms where instruction is occurring.

Rural mathematics teachers are not isolated from the influence building principals have on classroom instruction (Blanton & Harmon, 2005). Blanton and Harmon discussed how less than 5% of the rural schools involved in their five-year Coastal Rural Systemic Initiative (CRSI) had a principal or curriculum supervisor with background

knowledge or experience in teaching mathematics. Rural mathematics teachers are provided few human resources that would enlighten their insight into meaningful lessons addressing teaching and learning needs of rural mathematics students (Blanton & Harmon). Glascock (2003) illustrated how the principal must work cooperatively with the teachers and students in the school by promoting effective teaching and learning techniques. Ralph (2002) discussed how cooperating teachers, who had considerable years of experience working in rural schools, believed an increased amount of extra work within the rural school setting added to the difficulties of working in a small school. Ralph described this extra work as "having to teach split grades, being responsible for a greater number of subjects, and having to conduct more extracurricular activities" (p. 17). Harmon (2003) found similar results regarding rural schoolteachers and their additional duties. These additional duties and responsibilities of teachers may take needed time away from effectively deciphering standardized test results or planning instructional lessons. Rural administrators, especially building principals, are asked to fill leadership roles contrary to their level of expertise (Blanton & Harmon, 2005). For instance, they often fill the role of curriculum specialist, and merely providing statistical data from standardized tests in an attempt to reform mathematics classroom instruction (Blanton & Harmon). Rural administrators often have dual responsibilities of being the building principal and curriculum specialist thus affecting the instructional climate of rural teachers in multiple ways.

Planning for standardized tests is not new for rural schoolteachers either. Small schools have coupled their rural challenges with the requirements of standardized

assessments for nearly 70 years (Hodges, 2002). However, school accountability has not always been attached. With this accountability comes administrative pressures associated with improving test scores. Pedulla et al. (2003) conducted a survey of 12,000 American schoolteachers and found teachers in states having high-stakes tests for both students and schools believed more pressure was placed on them from superintendents and building principles than teachers in states with moderate-stakes and low-stakes. Building principals are pressured by their superordinates to stress the importance of test preparation leading to the constriction of school curricula as well (Glascock, 2003). Winkler (2002) investigated both veteran and novice teachers regarding their perceptions of administrative and testing pressures and found certain teachers experienced a great deal of pressure from their administrators. One teacher in Winkler's study stated, "I feel it in the pit of my stomach when the scores come in. I think, 'Oh, Lord, am I going to get yelled at?" (p. 224). Jones et al. (1999) discussed how students could also experience these emotional effects of accountability testing by stating, "When administrators do admit that external testing has an emotional effect on children, many blame the teachers for overreacting to the test" (p. 202).

The perceived pressures associated with administrators and accountability systems are also echoed in Costigan's (2002) qualitative study with six first year elementary teachers in New York City. Costigan quoted one teacher as saying,

The pressure is on. The test is in two and a half months, and the principal told my cooperating teacher that every day she wants a review in the class. They have to know these words. And this is reiterated constantly. The principal told [my

cooperating teacher]: 'We spent a lot of money on you, getting these packets to you and giving you review sheets' because the school has to spend the money on the review. The district just gives the test. In their eyes it's [like the district is saying], 'You do what you have to do to get these kids to pass the test; we pay for the test.' (p. 29)

Another teacher stated, "I still have to answer to my principal. They can come in at any minute and see what you're doing. And I certainly don't want to jeopardize my job, so I feel like I have to do what I'm told" (p. 29). Unlike other studies, Costigan also found some teachers believed their principals were supportive and less demanding as previously described. One teacher said,

My principal is really great. She backs you up. She constantly is showing up to things and teaching us. It's not that I blame her. I have the utmost respect for her, and I think she's a very good businesswoman. It's like the trickle down system. She's pressed for these scores, too, so it just goes down the line. We've even had conferences with her about this. Like this is crazy—and she admits it! She's like, 'I know, I was a school teacher myself.' She is a principal who was a teacher, and she knows the deal. So I think that these standards that are mandated have made everybody crazy. (p. 32)

Many principals sympathize with teachers. They understand the undue pressures for meeting accountability standards. Costigan pointed out how communication between teachers and principals can help eliminate many of the pressures teachers may experience during these testing times. Winkler (2002) concluded by stating, "When expectations are

clear and teachers are not 'under the gun' to produce unreasonable score gains in a year, administrators will more readily allow teachers the pedagogical freedom to teach the standards as they see fit" (p. 224). No matter if you are an elementary teacher in a large urban school or a rural secondary teacher, the administration has a direct effect on instruction in both positive and negative ways.

### How Do Students Affect Instruction?

Secondary teachers instruct diverse populations of students. The job of the teacher is to teach to the needs of all students (Hollins, 1996). These children come to the classroom with poverty issues, behavioral issues, and minority issues. Teachers must understand these issues in order to be successful teachers (Crawford, 2004).

# Poverty and Antisocial Behavior

Kelleher, McInerny, Gardner, Childs, and Wasserman (2000) compared the rise in childhood poverty with the rise in childhood psychosocial incidence from 1979 to 1996 and found the two events grew at practically the same rate. Kelleher et al. also found a connection between poverty and single parent households with an increase in psychosomatic and behavioral problems in children between the ages of 4 to 15. The authors provided statistics showing how the increase in these behavior problems rose from 1% to 7.5% in line with the rise in child poverty and single parent households during this time. Similarly, McLeod and Shanahan (1996) conducted a longitudinal survey and found children living in households having a history of generational poverty experienced substantially higher "rates of increase in antisocial behavior ... than for

transient poor or nonpoor children" (p. 207). McLeod and Nonnemaker (2000) discovered a more direct connection between antisocial behavior and the single mother's self-esteem as it relates to her generational poverty. McLeod and Shanahan (1996) noted, "Parents who face persistent poverty are under greater stress than those who face transient poverty. Their stress may lead to parental discord and harsh disciplinary practices, both of which increase children's risk of antisocial behavior..." (p. 216). McLeod and Nonnemaker (2000) stated:

Poor parents report relatively high levels of depression and anxiety, and, as a result, are less responsive to their children and more likely to use harsh discipline than non-poor parents. In turn, their harsh, unresponsive parenting increases the probability that their children will develop emotional and behavioral problems. (p. 139)

These studies have shown a connection with generational poverty and increased behavioral problems in children that could affect the behavior of students in the classroom.

According to Lattimore (2005), some researchers report disruptive classroom behavior is more prevalent in African Americans, especially African American males. McLeod and Nonnemaker (2000) found that "...poverty is less strongly associated with child problems for blacks than for whites, and that much of the effect of poverty for blacks is attributable to the association of mother's early self-esteem with her subsequent poverty history" (p. 150). McLoyd (1998) found teachers tend to exacerbate antisocial behaviors and poor academic success in poor students because of teacher bias and

misconceptions. In addition, looking at the cultural characteristic of poverty and its affect on the climate of the school was found to connect these medical connections of poverty and problem behavior based on student and teacher perceptions (Greenberg, 2004).

Greenberg found a connection between less positive school climates and the poverty of the schools. Greenberg used NAEP survey results of school climate based on student behavior, parental involvement, and school morale. She conducted a factor analysis of these three aspects of school climate and correlated them with the poverty level of schools. Teacher perceptions of a positive school climate were related to the socioeconomic status of the schools student population.

In addition to school climate as it relates to the poverty of its students, researchers have also investigated poverty's effect on student achievement. Okun and Friedlander (2005) conducted a study investigating the disparities between the poor, socially lower class Arab minority and the Jewish majority based on educational attainment. Okun and Friedlander found the Arab minority was starkly underrepresented in higher levels of schooling beginning with high school and extending through the university level. Graziel (1997) also investigated the affects of economically disadvantaged students and achievement finding a connection between a disadvantaged school culture and that school's academic effectiveness. Graziel's study was not a definitive study and other studies (See, for example, Montoya & Brown, 1990) have not succeeded in connecting achievement with school culture. The Rural School and Community Trust (2002) investigated poverty factors from four states and compared results of students based on the size of the school: (a) Urban, (b) Suburban, and (c) Rural. Over 13,000 students

participated in the study and they determined the larger the school, the more negative the effect poverty has on achievement. There are both positive and negative effects poverty has on students and the school environment.

Poverty affects schools in many ways. Students are more susceptible to problem behaviors if they have a family history of poverty. Teachers working in poorer schools are more likely to have less positive perceptions of their schools climate than teachers in more affluent schools. Research also shows economically disadvantaged students are less likely to proceed into higher levels of education or perform as well academically. Poverty affects today's classrooms in more than one way.

## **Minority Status**

For effective instruction to take place, teachers must understand the components of minority students. Blake and Swartz (2002) stated, "... school culture plays a role in the academic performance of students, especially those from minority ... backgrounds" (p. 26). Cultural values and practices of both teachers and students shape the administrative and instructional practices of today's schools (Hollins, 1996). Teachers will either mix their cultural beliefs and mannerisms with those of their students or teach the way they were taught and learned best (Hollins, 1996). Zeichner (1993) discussed how many teachers entered the classroom without having experiences with ethnic and culturally diverse students unprepared to teach diverse populations of students. Obldah and Howard (2005) discussed how teacher preparation courses did not adequately prepare preservice teachers to be effective instructors of students from differing cultural

backgrounds. Many teachers, especially white teachers, must be conscience and aware of the diverse cultures of students from racial minorities (Milner, 2003). Milner stated,

[Teachers must] reflect about their own experiences where race and the particulars of contexts are concerned. This introspective behavior could lead teachers to better understand and relate to their students of color because they better understand themselves as racial beings in a world that attempts to mitigate who we [people of color] were, who we are, and who we will become. (p. 179) American schools were founded on Caucasian teaching and social ideals (Hollins, 1996). However, not all students are Caucasian. Understanding the cultures of minority students outside the majority is essential in today's classrooms.

Fyans and Maehr (1990) found the cultural environment of the classroom significantly affected minority students' motivation and academic achievement. Bol and Berry (2005) conducted an online survey of randomly selected math teachers finding teachers working in schools with a high Hispanic population reported significantly higher correlations between language issues and the achievement gap than did teachers from predominantly Caucasian schools. Knowing the culture of African American students is also important for teachers (Lattimore, 2005). There is a definite lack of documentation regarding successful teaching practices for African American students as Ladson-Billings (1997) stated:

The challenge of improving the mathematical performance of African American students must be fought in three fronts: programmatic, personal, and political.

Programmatically, we must participate in the development of meaningful and

challenging curricula. Personally, we must come to develop caring and compassionate relationships with students – relationships born of informed empathy, not sympathy. Politically, we must understand that our future as a person is directly tied to our children's ability to make the most of their education—to use it not merely for their own economic gain and personal aggrandizement, but rather for a restructuring of an inequitable, unjust society. (p. 706-707)

Lattimore (2005) provided five components to channeling the energy of African

American males in the mathematics classroom: (a) teacher competence, (b) teacher

patience, (c) teacher attitude, (d) mathematics instruction, and (e) student accountability.

These researchers point out the need for teachers to be aware of the cultural differences

of minority students and teach in ways that best suit their demographics.

Being an effective mathematics teacher requires this same amount of cultural awareness. Teachers of African American students can become more effective when they begin to know their students (Lattimore, 2005). Ladson-Billings (1997) provided four effective principles of teaching African American students exhibited by one successful mathematics teacher: (a) students treated as competent are likely to demonstrate competence, (b) providing instructional scaffolding for students allows students to move from what they know to what they do not know, (c) the major focus of the classroom must be instructional, and (d) real education is about extending students' thinking and abilities beyond what they already know. D'Ambrosio (2001) illustrated how students cannot fully grasp the importance of the school's mathematics curriculum because of the

disconnection they have between its practical uses in the student's lives. Lattimore (2003) presented teachers with a challenge to present lessons in ways different from their common methods of teaching mathematics. D'Ambrosio (2001) noted, "Children of color as a group have not realized the same level of mathematical success as [Caucasian] students in our classrooms. ... Many of these children simply do not realize that they are mathematically capable and that they do in fact possess a long and rich mathematical heritage" (p. 310). However, once the classroom doors close, many teachers only embrace the culture they grew up in thus limiting the level of achievement of their students (Hollins, 1996).

Teachers should be aware that students enter classrooms with their particular ethnic cultures (Hollins, 1996). Understanding the cultures of these students is essential in being an effective multicultural teacher because the dominant Caucasian culture of many teachers and schools is starkly different than the non-dominant cultures of certain ethnic minorities (Irvine, 1990). Teachers must reflect on their individual culture as well as the culture of their students to provide an educational environment welcomed by the learner (Milner, 2003).

#### Adolescent Behavior

Levin and Nolan (2000) stated, "...disruptive, off-task behavior takes time away from learning" (p. 29). Levin and Nolan defined a discipline problem as "any behavior that (1) interferes with the teaching act; (2) interferes with the rights of others to learn; (3) is psychologically or physically unsafe; or (4) destroys property" (p. 34). Successful teachers must be capable of managing misbehaving children in order to provide

instruction in a class conducive to learning. However, teaching young adolescents can seem overwhelming due to the unique physical, social, personal, and intellectual needs of the students (Crawford, 2004). Kiesner and Pastore (2005) found Italian adolescents had a positive correlation between their antisocial behavior and their peer acceptance—thus misbehaving students were not losing friendships due to their problem behaviors.

Teachers of young adolescents have reason to feel frustrated and anxious about managing this behavior. Coupling the inherent behavioral problems in children with a history of poverty (McLeod & Shannahan, 1996) with hormonally dampened behaviors of adolescents (Crawford, 2004), managing poor adolescent children can put quite a strain on instructional methods of teachers.

Levin and Nolan (2000) discussed how many times students who are generally on-task are distracted by other students. These distractions or unruly antics create "ripple effects" (p. 30) causing some attentive students to take part in the misbehaviors of their peers. When student misbehavior becomes excessive, teachers become stressed in their everyday duties as a teacher (Montalvo, Bair, & Boor, 1995). Teachers begin to question their professional choices and become frustrated over lesson plans that are not followed because of unruly students (Levin & Nolan, 2000). Ennis (1996) noted student confrontations regarding disruptive behavior prevents effective coverage of classroom content leading to teacher stress and lost instructional time. Teachers begin to spend much of their time handling disruptive students.

As teachers begin to experience more discipline problems, their motivation to teach is often replaced by, at best, a "who cares?" attitude. If conditions do not

improve, this attitude may develop into a "get even" attitude. When a "get even" attitude overrides a teacher's motivation to assist students in learning, supportive and effective teacher behaviors are replaced by revengeful behaviors. Once a teacher operates from a basis of revenge, teaching effectiveness ceases and teacher-student power struggles become commonplace. (Levin & Nolan, 2000, p. 33)

Teachers must not become the revengeful instructor. Teachers must learn to manage classrooms effectively to reduce the negative consequences student behavior has on teacher instruction.

What Role Does Test-Based Accountability Have with Instruction?

The effects of test-based accountability on classroom instruction, as seen by teachers, vary from positive to negative. An extensive amount of research has been conducted with reference to teacher perceptions of the recent NCLB legislation and other state accountability models implemented in the last decade. Research conducted to investigate the views and opinions of American classroom teachers and their perceptions of accountability testing have ranged from small case studies (see for example Costigan, 2002; Jones et al., 1999; Winkler, 2002) to large-scale surveys (see for example Beckner, 2004; Pedulla et al., 2003; Rapp, 2002). Nationally stratified samples of teachers (see for example Pedulla et al., 2003) have provided quantitative views of teaching during testing times. In all of these studies, researchers have found teacher perceptions regarding accountability testing have expressed both approval and disapproval for the measures implemented in state and national accountability systems.

### **Positive Perceptions**

Winkler (2002) found novice teachers of all levels believed they gain more opportunities for collaboration with colleagues while being given freedom to explore innovative ideas in the classroom. One teacher commented:

It's amazing how we all work together. Everything is so well developed. We have all the same materials and all the same units; it's aligned... you want each kid to leave the school with the same experiences. You don't want one kid to be doing great activities or projects all year and another kid to miss out because his or her teacher didn't have the materials or wasn't going in the same direction. ... I don't think [the departmental alignment with the Virginia Standards of Learning (SOL)] is so rigid that a teacher feels cramped in. She'll still do various activities and projects and stuff. (p. 221-222)

Teachers from Winkler's study discussed how departmental meetings focusing on alignment of the curriculum was a beneficial way for teachers to share ideas, lessons, and challenges they are facing in the classrooms. Having time to share, discuss, and collaborate with fellow teachers was desirable to those new teachers. Winkler (2002) added that newer teachers believed the accountability standards and the aligned curriculum gave them enough "flexibility to teach in the way they wanted within the required pacing and content guidelines" (p. 222). Bushweller (1997) stated, "[curriculum alignment] means teaching knowledge and skills that are assessed by tests designed largely around academic standards set by the state. In other words, teaching to the test" (¶

effectiveness resulting in many teachers teaching to the test, one newer teacher stated, "If they are going to be tested on it, they need to know it. And I feel better knowing I taught it to them" (Winkler, 2002, p. 223). Winkler also discussed how the accountability testing gave these newer teachers confidence in their instructional decision-making giving credibility to their instruction. These newer teachers liked how the standards outlined their curriculum and provided structure within their classrooms. These teachers found gains in being held accountable for their instruction.

In a national survey of members from the Association of American Educators (AAE), Beckner (2003) found most of the 1000 teachers surveyed believed "NCLB is a step in the right direction" (p. 2). Many teachers in Beckner's survey provided positive comments regarding the national accountability standards spelled out in NCLB. One high school Geometry and Algebra teacher from Virginia with six years of experience stated,

I am thankful that President Bush is trying to help the students of America. I really like that NCLB says decisions will be made by local districts, and by each state. I think that overall NCLB is a step in the right direction (p. 3)

A physics teacher with 5 years of experience concluded,

NCLB is far from perfect, but it is better than anything else that has been offered over the past twenty years and it is at least somewhat consistent with current educational research on meeting the needs of individuals in the classroom. It focuses on the goal and allows local school districts the freedom to choose how they will achieve that goal.

NCLB also seems to do what the NEA [National Education Association] has never wanted, which is to shift the focus of education on the needs of students rather than the needs of teachers. I am a public servant. I have chosen a career that allows me the privilege to serve our nation's youth. Those youth don't owe me anything. I pledged myself to serving them and putting their needs above my own.

NCLB theme seems to be consistent with my perspective. (p. 3)

The teachers in Beckner's survey provided insight into the views of many teaching professionals. Comments ranged from positive to negative regarding the impact NCLB has on instruction. When teachers responded to the question asking if they felt NCLB was unfair to teachers, 41% said yes with 45% saying no. However, when teachers were asked if they felt NCLB was unfair to students, 28% said yes with 60% saying no. Teachers are split in their opinions of the positive and negative effects of NCLB on instruction.

### **Negative Perceptions**

While studies like Winker (2002) and Beckner (2003) have shown some teachers feel accountability models are beneficial to teachers, other studies have shown teachers disagree with these testing models for accountability. Pedulla et al. (2003) conducted a stratified teacher survey across America covering a teacher population of 12,000. In this analysis, states were categorized based on their levels of accountability placed on schools and students. Pedulla et al. labeled states as having high-stakes, moderate-stakes, or low-stakes attached to their end-of-the-year assessments for their schools and students. Nine categories were established ranging from high-stakes for schools and high-stakes for

students (H/H) to moderate-stakes for schools and low-stakes for students (M/L). There were no states with low-stakes in both cases. Pedulla et al. (2003) found that 80% of teachers working in schools with high-stakes testing for both schools and students felt they spend a considerable amount of time teaching to the test. Pedulla et al. compared survey results of teachers from H/H and M/L categories and found the greatest differences between H/H and M/L teachers were in these three teaching practices: (a) providing students with practice items similar to test questions (H/H 75% vs. M/L 54%); (b) providing preparation materials that are "test-specific" and generated by the state of some commercial supplier (H/H 63% vs. M/L 19%); and, (c) providing actual test items released by the state (H/H 44% vs. M/L 19%).

Costigan (2002) found first year teachers feel limited in their instructional methodology due to the growing pressures of high-stakes testing. One teacher remarked:

Well, I'm a little frustrated, because all I feel I do is teach for a test. The kids hate it. I hate it. You try to make it fun as you can, but I'm just mandated to teach specifically for the test, and it's a little frustrating – for everyone (p. 31).

Public Agenda (2002) found 79% of K-12 teachers feel they are teaching to the test, and Tyler (2003) found this type of instruction is limiting the instruction of the whole child. Teaching to the test has clearly become a primary focal point of daily classroom practice for many teachers.

With the increased emphasis on teaching towards the test, more and more teachers are implementing teaching strategies that undermine the innovative aspects of classroom instruction. Jones et al. (1999) surveyed teachers from 16 elementary schools in five

school districts in North Carolina focusing on North Carolina's high-stakes accountability program known as "The New ABCs of Public Education." Jones et al. used a "three-level stratified random sampling process" (p. 200), which created a random sampling of schools based on geography, size, and achievement from the previous school year's end-of-grade assessment. Jones et al. discussed how increased use of tests during instruction is creating a less meaningful and lasting form of pedagogy and found,

Eighty percent of the teachers indicated that students spend more than 20% of their total instructional time practicing for the end-of-grade tests. More than 28% indicated that students spend more than 60% of instructional time practicing for tests. ...more than 70% indicated that students were spending more time practicing for end-of-grade tests than in the past. (p. 201)

Rapp (2002) surveyed 669 board-certified Ohio teachers with a response rate of 29% yielding 191 usable surveys and found 88% of teachers feel less autonomy in the classroom. Rapp also concluded, "Ninety-six percent of respondents said they believe (76% strongly) that standardized tests are not the best assessment of student success, and 91% said they feel (74% strongly) that teachers' assessments are better than standardized tests" (p. 217). Of the responding teachers, 98% feel students spend too much time preparing for these standardized tests.

Costigan (2002) quoted a teacher as saying, "I went into teaching because I like children, I like to have fun. I'm very child-like myself in many ways, but I just don't feel like I can exercise any creativity that I might want to implement in my teaching" (p. 31). Costigan described how "... the culture of testing in her [the interviewed teacher's]

school has shaped her class into a 'covering the material' transmissive approach that is of a high level of difficulty, which, of necessity, leaves certain students behind" (p. 30). If teachers had their say, test preparation would take the back seat to other meaningful learning opportunities.

Teachers have also voiced their disregard for accountability models through their loss of power and professionalism (Winkler, 2002). Teachers having more than 2 years of experience believed accountability testing increased their amount of paperwork and decreased their time to teach lesson not covered on the tests. Veteran teachers in the Winkler's study also indicated they have less freedom for flexibility in the classroom and that time has been taken away from hands-on and critical thinking activities. One teacher says "What I see as important is not on the [North Carolina Standards of Learning (SOL)] test, so I have to spend less time on that" (p.221). Testing has taken away much of the autonomy these veteran teachers once owned in their classrooms.

### **Mathematics Teachers**

Teachers experiencing test-based accountability measures pose many legitimate arguments pertaining to the negative impact accountability has on instruction. Abrams, Pedulla, and Madaus (2003) found teachers in states that required state-mandated testing believed their instruction was conducted in ways opposite of "sound educational practice" (p. 18). Teachers from multiple content areas found the pressures associated with accountability testing created instructional practices opposing their personal teaching philosophies. Mathematics teachers are not free from these pressures of test preparation as Schorr and Koellner-Clark (2003) suggested. Mathematics teachers

attempting to implement research based teaching practices, even with summer workshops and reflective interviews pertaining to the implementation of reform-based instructional techniques in mathematics, could not keep from teaching against these techniques. In the Schorr and Koellner-Clark study, teachers constructed, revised, and refined teaching models based on students' modeling behavior. One of the modeling procedures dealt with students expressing their thinking processes. Roger, one of the teachers, expressed his interest in student thinking by stating:

I know where the students are in their thinking by how they respond. It is like an informal assessment that I use to decide what to teach the next day. I guess it is like a barometer for me to make sure they got it and I don't need to go over it again, you know, in a different way. It is a marker of progress. (p. 204)

Schorr and Koellner-Clark described Roger's progression through the workshops discussing how Roger's concept of listening to students to gain a better understanding of their conceptual understanding changed. He made changes to his questioning techniques following workshop discussions allowing better classroom discussions building a better communication of the mathematics. Roger said,

In order for students to discuss solutions in a way that I can help them talk about big ideas I first have to give them problems so that this can happen. ... I keep trying to 'hear' the discussion that might take place when I give my students different problems to solve because I figure when I organize my curriculum-unit the way I want, then I will be able to 'hear' a discussion that I can facilitate to make sense of big ideas. (p. 206)

Toward the end of the school year, Roger had established a sound methodology to promote communication of mathematics within his classroom; however, as Roger points out, things change when testing times approach. Roger was asked to describe an effective mathematics teacher, and he stated,

I guess someone who knows how kids think about mathematics but realizes that they do think about it differently. You cannot always know how they are thinking so you should always remember that and teach in light of that. I try and listen to my kids individually and when they work in groups. I try and figure out how to proceed for the day's lesson as well as the next day's lesson based on what I heard from them. I must be honest though, I do do this but I do not do this everyday because too many things are happening everyday. I would say that I believe this is what I should do and I do it most of the time but like recently the kids were getting ready to test [standardized testing] and although I tried to review with them from a conceptual way I don't think reviewing can really be done without traditional procedures and rules. I did remind them of previous things we did to help them understand particular concepts but anyway, testing isn't really aligned with how I teach math. (p. 208)

Roger pointed out that even innovative mathematics teachers interrupt their conceptual teaching to proceed with drill and practice exercises aimed at effectively preparing students to perform well on standardized tests.

Other research pertaining to innovative teaching methodologies associated with mathematics came in an ethnographic study by Manouchehri and Goodman (1998). In

their research, 35 middle and high school teachers were asked to implement one of four mathematical programs influenced by the cognitive developmental theory of constructivism. Manouchehri and Goodman provided a list of nine goals these four constructivist programs sought to achieve. These nine goals were:

- 1. The teacher acts as a facilitator of learning instead of as one who imparts information; he or she asks questions, probes student understanding, and encourages active learning.
- Mathematics is meaningful to students. Students play an active role in deciding what to do and how to do it.
- 3. Students explore a broad range of real-life problems and make real-world applications appropriate to their level of development.
- 4. Students complete work instead of discrete exercises.
- 5. Students are introduced to computational procedures, as needed.
- 6. Students reflect on their work orally and in writing, asking themselves "why" and "how" questions.
- 7. Students work together to solve problems and to evaluate their individual and collective work.
- 8. Assessment is integrated into instruction and focuses on what students understand and can do, rather than what they do not know and cannot do.
- 9. Students and teachers share a common understanding of interpretive standards for evaluating work that includes consideration of the quality of students' understanding of task, their approaches to problems and the procedures used

for solving them, their reasoning about why choices were made; the connections they make across ideas and tasks; and their communication of ideas through mathematical terms and representations. (p. 28)

Manouchehri and Goodman found teachers who worked in progressive schools with supportive administration and faculty members were more likely to implement the programs effectively, and teachers working in more traditional environments were not supported and failed to implement the programs effectively. Test-based accountability also prevented many of these teachers from implementing their constructivist programs. One teacher stated,

Maybe if the students had used these programs earlier they would be ready for what we have to do with them in the 7<sup>th</sup> Grade. But I have kids in my class that cannot even sit still for five minutes, they don't even know their multiplication tables. I have too much to do with them to get them ready for the test at the end of the year. Doing investigations that are in the programs would not help them get ready for the test. It is not a good investment of the time. (p. 32)

This teacher placed a considerable amount of importance on the test at the end of the year preventing her from implementing the reform-based instruction.

Teachers are called to be creative in the classroom. NCTM (2000) standards of teaching stress the implementation of engaging activities through the use of cooperative grouping and technology, but math teachers like the ones in the study by Manouchehri and Goodman (1998) are placing these teaching standards to the side to make way for the testing standards of accountability systems. Many innovative teachers were influenced to

stray away from their creativity and "... use traditional textbooks and instruction methods because of school administration pressure for standardized tests and evaluation" (p. 34).

# Summary

Teachers face administrative, student, and accountability pressures throughout the school year. The administrator sets the instructional climate, the student culture and behavior affects instructional techniques, and administrative policies like test-based accountability create teaching environments parallel and unparallel to many teaching philosophies. Classroom teachers must balance these external influences in order to be successful teachers.

#### **Students**

Research investigating student perceptions of teaching effectiveness is scarce.

Teachers provide much of the research available pertaining to students. Student's voices are seldom heard (Lattimore, 2005). These voices are even fewer pertaining to experiences within the mathematics classroom.

Teachers of mathematics have their own principles stressed by NCTM (2000). Students are also called to exhibit certain principles outlined by NCTM:

Students confidently engage in complex mathematical tasks chosen carefully by teachers. They draw on knowledge from a wide variety of mathematical topics, sometimes approaching the same problem from different mathematical perspectives or representing the mathematics in different ways until they find methods that enable them to make progress. Students are flexible and resourceful

problem solvers. Alone or in groups and with access to technology, they work productively and reflectively, with the skilled guidance of their teachers. Orally and in writing, students communicate their ideas and results effectively. They value mathematics and engage actively in learning it. (p. 3)

These learning principles help mathematics instructors understand what expectations they should hold for their mathematical learners.

#### How Do Students Perceive Mathematics Instruction?

As mentioned, there are two essential players in the educational system: (a) the teacher and (b) the student. Much research is available pertaining to teachers and their perceptions of the learning environment with little attention allotted for student voices (Lattimore, 2005). One researcher devoted much of his scholarly interest into the views and experiences of African American students. Lattimore (2001, 2003, 2005) stressed the importance of listening to children, especially African American children, to gain a better understanding of how these students best learn. Lattimore (2005) used qualitative data collected through participant observations and interviews to provide two African American male 'voices' pertaining to the teaching of mathematics. Lattimore asked one student to explain some of the traits an effective mathematics instructor possesses. This student stated:

I know people say that not everything in life will be fun, but that would help. That is what most students need. I know for me, if it is not interesting then it is hard for me to enjoy it and devote myself to it. Just it being more interesting would help.

Oh, also teachers taking their time and actually explaining the concepts. (p. 271)

This same student felt that mathematics teaching was one-dimensional and failed to connect students to mathematics applications beyond the classroom. In a European study, Angier and Povey (1999) followed 30 mathematics students from the age of 13 to 16 to investigate the culture of mathematics education in England. These students were asked to discuss how the instructor's teaching method helped their understanding of mathematics. One student in Angier and Povey's study, stated,

If you are learning something which is real there is a point to learning it. ... She [the teacher] makes all maths relevant ... when we were doing statistics we used political stuff ... to understand not only the data but the relevance it had ... and how you could manipulate it ... and that were much better than doing just made up statistics ... it gives you an understanding of the world as well as maths. (p. 151)

Based on the comments of this student, teacher instruction should be active and provide real world applications. Teachers need to listen to what their students say. Students want applicable knowledge of mathematics. Students desire mathematics instruction that is fun and explained to them in understandable ways. A second student in Lattimore's (2005) study stated,

[The] teacher could explain concepts clearer, and not make mathematics so difficult. They could make mathematics more interesting instead of just teaching the lesson, have the class participate. ... Another thing is to lighten up some. I have a mathematics teacher that is so uptight and never has any fun. If it were as

little as crack a joke every now and then, or play some mathematics games, it would make the class a lot more interesting. (p. 272-273)

Students are tired of teachers presenting algorithms, procedures, and stressing repetition during their instruction. These students want to engage in their learning as stressed by NCTM (2000).

Teachers must understand that many students like African American males, thrive off competition (Lattimore, 2005). One student from Lattimore's study discussed how teachers could "make some kind of competition out of the lessons. Make a game out of it and students will try harder while doing their work" (p. 273). These African American males deem making mathematics classrooms more competitive would aid in their achievement. However, some research has shown competition to be less associated with the goal of learning the content and more toward the goal of out performing other students (Ames & Ames, 1984). When competition is used, students do not gain a complete understanding of the material, especially the students who lose the competition (Vallerand, Gauvin, & Halliwell, 1986). Research has found competition can be both positive and negative in the classroom environment.

Aside from competition, mathematics teaching should incorporate engaging activities connecting the classroom knowledge with the real world (NCTM, 2000). Boaler (1998) conducted a longitudinal study comparing one content-based school to another starkly different process-based school in Great Britain where the process-based school relied heavily on student problem solving skills as used through the completion of openended tasks during the course of the school year. Boaler found no significant differences

in the standardized test results between the two sets of instruction; however, the students in the process-based school performed much better at critical thinking and problem solving.

Like Lattimore (2005), Boaler (1998) also provided student perceptions of preferred instructional techniques. He found students in the content-based school believed the school emphasized rote memorization in learning mathematics as opposed to understanding through experiences, while the process-based students believed their experiences increased their metacognition and confidence in thinking through problems. Studies like Lattimore (2005) and Boaler (1998) demonstrated how students interpret their learning environment. Boaler (1998) stated, "One important conclusion ... is that a traditional textbook approach that emphasizes computation, rules, and procedures, at the expense of depth of understanding, is disadvantageous to students, primarily because it encourages learning that is inflexible, school-bound, and of limited use" (p. 60). It is very important that student perceptions are heard and acted upon. Students provide important feedback for teachers. Researchers can also gain insight into effective teaching practices when student comments are investigated. Students do have a voice regarding instruction, and that voice should be taken seriously.

How Do Students Perceive Classroom Management Styles?

Teachers have everyday adventures associated with managing their classrooms as Crawford (2004) stated:

Classroom management...includes three interrelated dimensions of the learning environment.

- 1. The first component is the physical, or the teacher's use of time, space, and structural environment.
- 2. The second is the affective element, or those strategies used to promote positive personal and interpersonal development.
- 3. A third dimension of classroom management is the cognitive element, or the teacher's use of intellectual engagement to motivate students' appropriate behavioral management and commitment to learning. (p. 2)

Classroom management connects the physical, affective, and cognitive elements of student's behavior and learning. Levin and Nolan (2000) proposed the teacher's behavior and classroom management had the greatest effect on the learning environment.

Haberman (1995) found many proficient teachers believed the teacher's role was to manage student misbehavior. With effective teaching having such a connection to classroom management, students' perceptions of effective classroom management techniques may provide glimpses into the management styles most effective to these students.

In a study by Angier and Povey (1999), students discussed how effective mathematics teaching was made "fun", "enjoyable", and sometimes "funny" (p. 151). Lattimore (2003) found students desired teachers who were concerned about them on a personal level (Lattimore, 2003). These African American students desired a teacher who was "willing to help interested students learn the subject of mathematics, has patience, and willing to find other possible ways to make students understand mathematics" (p. 123). Powell (2000) in her qualitative inquiry into two successful African American

college mathematics students found that these students found their most effective mathematics teachers genuinely cared about their learning and well being. Powel called this affective managerial trait the teachers "caring ethic" (p. 17). Some students were turned off to learning because their teacher's management style was less inviting (Angier & Povey, 1999). One student in Angier and Povey's study stated,

I think when everyone is strict and sort of tense in a way it just puts you off because it gets you all psyched up. ... I always remember with the sewing group with Miss Taylor that was always a really strict atmosphere and I'd panic and do things wrong all the time. ... If it's ordered the classroom then no one really wants to work, they are just doing it because they have to and then they are not learning anything. (p. 153)

Understanding managerial characteristics best suited for the intellectual growth of students is desired.

Teachers need to show they care about the well being of their students. Teachers need to be patient, not boring, and attune to the lives of their students. Teachers should not be so strict that they loose their caring ethic with students. Effectively balancing structured instruction, with respectful management is how students interpret a teachers management style.

How Do Test-Based Accountability Assessments Affect Students?

Research concerning the effects of test-based accountability on students is centered on teacher perceptions. Very little research provides student perception of accountability testing. However, by looking into the perceptions of teachers and limited

views of students, this literature review demonstrates how further research needs to be conducted.

# **Teacher Perceptions**

There are many side effects to holding students accountable for test results as Jones et al. (1999) stated,

Although 28% [of teachers] indicated that they felt their students were more prepared for learning and 15% indicated that their students had more confidence. 61% felt that their students felt more anxiety, and 24% felt that their students were less confident. (p.201)

Eighty percent of teachers in Pedulla's (2003) study reported their students were under "intense pressure to perform well and were extremely anxious about taking the state test" (p. 2). Rapp (2002) found that 91% of board-certified teachers believe these tests "do not support developmentally appropriate practices for students" (p. 216). Teachers also found that teachers feel students have lost their "love of learning" (Jones et al., 1999, p. 201) because of high-stakes tests.

Teachers have provided personal perspectives linking anxiety, lack of interest, and lowered confidence with the increase in high-stakes testing. Understanding this outsider's view of the personal effects of testing on students is desirable because no one is more closely attached to the student experience than the teacher. However, gaining insight into student's actual perceptions is ideal.

# **Student Perceptions**

Lattimore (2003) provided his readers with descriptive qualitative information pertaining to the perceptions of three African-American students who had failed the mathematics portion of the Ohio Proficiency Examination, commonly called the Ninth Grade Proficiency Test. In his research he found,

These students perceived the test as a barrier, they remained hopeful, although they realized the test was an impediment. It is particularly interesting that according to these students, at best; these imposed pressures tend to create an improvement in their sense of self and instilled a committed passion for learning and passing the test. (p. 124)

Even though teachers feel students are affected negatively by state tests, Lattimore found that students use these accountability standards as motivation to learn by stating, "A myriad of students' responses illustrated a surprising lack of bitterness toward the test and mathematics. According to the students, the test provided an impetus to try harder in school" (p. 123). This motivation attached to the test causes one to wonder what the real challenge is with testing based on student responses.

One of Lattimore's (2003) participants stated, "The teacher should give the practice materials earlier and stop waiting until the last minute to give the practice testing materials" (p. 122). Another student stated, "If you try to cram everything in at the last minute, then you are going to forget something. It is a rush, and it is a rush on your mind" (p. 123). Students are revealing that teaching methodologies are some of the biggest

hurdles students face when preparing for state tests. Lattimore (2001) provided one students narrative regarding his high stakes testing experience as the student stated:

Preparing for the proficiency test has been memorization. Memorization means being sent home from school with a ton of worksheets that I am to study several weeks before the test and then being tested by a practice test during my regular mathematics class. I felt like I had adequately prepared for the test. When I took the test I felt really confident. I had been studying all my preparation materials. I felt some of the material on the test was very simple. Some parts were very difficult and I kept checking them over and over until it was time to turn in the test. I feel the mathematics section of the test is really something I want to pass because it is deciding my life. (p. 60)

Lattimore (2003) discussed how teachers who predominately used "drill and practice, memorization and rote, computation out-of-context" (p. 123) find students who were bored with mathematics and typically unwilling to engage in their learning.

Students can provide an insight into their tested classrooms that no one else can. When teachers say that tests have affected student's love of learning (Jones et al. 1999), these teachers need to investigate their methodologies of preparing their students for the test. Understanding student perceptions of accountability testing is essential to understanding the culture surrounding students and their teachers' instructional, managerial, and accountability testing effects.

Educators must educate and instructors must instruct. Just as teachers have external influences, students are externally influenced as well. Students strive to meet the expectations of teachers as they pertain to instruction and behavior. Every year students take tests that have high-stakes attached to their results. However, very little research has been conducted on student perceptions of instruction, classroom management, and accountability testing. Students are an integral part of today's tested classrooms and their voices need to be heard (Lattimore, 2003). The available research has shown student perceptions of instruction, classroom management, and accountability testing is dissimilar to teacher perceptions. Improving the amount of student comment in literature is afforded.

# **Chapter Summary**

This review of related literature focused on two main characters in today's schools, the teacher and the student. Within the realm of teaching, administrators, students, and accountability testing played significant roles in influencing the instruction of the teacher. The administrators influenced the instructional climate and autonomy, especially when related to accountability testing. Student behavior, ethnicity, and socioeconomic status had apparent effects on the classroom instruction as well. As for accountability testing, teachers from around the United States believed testing could be useful, but teaching during accountability created displeasure in many teachers' classrooms.

As for students, perceptions of mathematics instruction, classroom management, and accountability testing were limited but informative. Students believed mathematics instruction should be meaningful, applicable, engaging, and especially entertaining. Students believed teachers should have a caring ethic toward their students, while challenging them to be critical thinkers and problem solvers. Some students believed accountability testing motivated them to be more active in their learning, but the process by which they were prepared to take these tests was not seen as effective. This small glimpse into the available literature pertaining to these two major characters in the school supports conducting this study and investigating the experiences I had as a rural mathematics teacher in Mississippi.

### **CHAPTER III**

### **METHODOLOGY**

Merriam (2002a) stated, "Qualitative research is a powerful tool for learning more about our lives and the sociohistorical context in which we live" (p. xv). Qualitative research involves an interpretive, naturalistic approach to the world (Denzin & Lincoln, 2003). Patton (1990) quotes from *Halcolm's Evaluation Laws:* "Qualitative inquiry cultivates the most useful of all human capacities—the capacity to learn from others" (p. 7).

Denzin and Lincoln (2003) stated, "Qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (p. 13). If one wants to "understand the meaning" (Merriam, 2002b, p. 4) participants have with regard to the phenomenon they are experiencing, then an interpretive design is justified.

This chapter is presented in six sections. They are research design, the researcher, participants, data collection, data analysis, and reliability and validity.

# **Research Design**

Qualitative research can be conducted in many different ways including grounded theory, phenomenology, narrative analysis, ethnography, case study or just a basic interpretive study (Merriam, 2002a). Since my study seeks to understand the unique

experiences of my mathematics teaching and the experiences of my students in one rural secondary school, a single holistic case study (Yin, 1994) was chosen. In order to conduct a case study, one must consider asking "how" and "why" questions. Merriam (2002a) stated, "Since it is the unit of analysis that defines the case, other types of studies can be and sometimes are combined with case study" (p. 8). The research design for this study was a single holistic case study (Yin, 1994) incorporating basic interpretive analysis (Merriam, 2002a).

Basic interpretive qualitative research combines phenomenology and symbolic interactionism (Merriam, 2002a). Since qualitative research seeks to understand a phenomenon, one might think that all qualitative research is phenomenology. However, "...phenomenologists focus on how we put together the phenomena we experience in such a way as to make sense of the world and, in so doing, develop a worldview" (Patton, 1990, p. 69). Phenomenology is defined as the study of essence and structure associated with an experience (Merriam, 2002a). Patton (1990) noted that phenomenology provides evidence into the experiences of participants within a program and the culture surrounding those experiences. Wolff (2002) described phenomenology as the study of the essence of its participants and especially the researcher. This case study of my experiences and the experiences of my students pertaining to accountability testing requires the use of phenomenological interpretive techniques.

Along with the analysis of the essence and structure surrounding the teaching and learning experiences of my rural mathematics classes, an investigation of the common set of symbols and understandings that emerged throughout the school year will give

meaning to the interactions of all involved in this case study. This investigation of the common set of symbols and understandings that emerge giving meaning to people's interactions is known as symbolic interactionism. Patton (1990) stated, "People create shared meanings through their interactions, and those meanings become their reality" (p. 75). Merriam (2002a) noted, "drawing from phenomenology and symbolic interactionism in particular, qualitative researchers conducting a basic interpretive study would be interested in (1) how people interpret their experiences, (2) how they construct their worlds, and (3) what meaning they attribute to their experiences" (p. 38).

This study focused on three aspects of the educational experiences during one school year: (a) the teacher/researcher's experiences, (b) the student's experiences, and (c) the culture of this rural secondary school. Within the aspect of the teacher's experiences, I investigated administrative, student, and testing influences throughout the school year. Empirical data related to student experiences focused on instructional and managerial strategies preferred and disregarded by students throughout the school year. The student perceptions of the testing influences experienced by these students were also investigated. The aspect regarding the culture of the school encompassed both the experiences of the teacher/researcher and students along with the experiences of administrators and other faculty members. The basic interpretive strategies of Merriam (2002a) governed the design for these inquiries.

### The Researcher

I have never experienced teaching without accountability testing (See Curriculum Vitae, Appendix A). Around 1998, Mississippi, in compliance with IASA (1994), developed a testing model for every school especially low-income schools. By 2000, these tests were being field tested in each of the schools to increase the reliability and validity of these assessments. I began teaching in 2000; therefore, I have always taught students who were to be tested. By my third year of teaching, all of my Algebra I students were required to pass their Algebra I end-of-the-year assessment in order to graduate from high school. Each year that I taught Algebra I, I was able to view the student results on the end-of-the-year exam and critique my teaching performance. I would take the previous years results and adjust my instruction to better suit my students. I had about 12% of my students fail the state test my first year of teaching Algebra I, and about 1% of my students have failed since. During the 2003-2004 school year, 60% of my rural seventh grade students failed their MCT. This was my first year to teach middle school mathematics, and my first year to teach in a small, low socioeconomic school. My first three years of teaching took place in a large four-year suburban high school with demographics consisting of approximately 1,000 students with 70% Caucasian and 30% African American. The small rural 7<sup>th</sup> through 12<sup>th</sup> grade secondary school in which I taught middle school and high school consisted of 160 students with 10% Caucasian and 90% African American.

This research study occured during my second year of teaching in this rural

Mississippi school. This was my second year of teaching middle school mathematics and

fourth year of teaching Algebra I. I have had success in preparing my students to take their Algebra I state test, but with the percentage of failures so high with my seventh graders, I knew I could do better. I came into this study with biases associated with testing and with the teaching loads of rural teachers. I had read literature, written papers, and spoken often about my perceived effects state testing has on my profession and the students I teach. As Merriam (2002a) pointed out, the researcher must "bracket" his views during a phenomenological study to better understand the essence of the phenomenon. Thus through reflection, I bracketed my preconceptions and analyzed the experience as it was structured.

# **Participants**

The participants in this study were selected purposefully for their "information-rich cases" (Patton, 1990, p. 169) to be studied in depth. My teaching experience in West Spike High School (WSHS) (psudonem) is unique in that I am the only 7<sup>th</sup> Grade Mathematics instructor and the only Algebra I instructor in the school. Each of these courses required end-of-the-year assessments that serve accountability purposes associated with the students and the school. Many teachers in rural schools are the sole instructor for their tested course (Arnold, 2003), but there are very few teachers who have the duel responsibility of teaching both middle school and high school tested subjects.

The study began with 22 seventh graders and 18 Algebra I students who were to take either the Mississippi Curriculum Test (MCT) or the Algebra Subject Area Testing Program (ASATP). Five 7<sup>th</sup> graders and two Algebra I students withdrew from the school before testing occurred. Four new 7<sup>th</sup> graders and one new Algebra I student enrolled

after winter break to make the final tested students to be 21 seventh graders and 17 Algebra I students. Both school administrators and the other 16 WSHS teachers agreed to participate in the study.

Nine of the 7<sup>th</sup> graders were African-American males (43%), eight were African American females (38%), and four were Caucasian males (19%); there were no Caucasian females. Six of the Algebra I students were African-American males (35%), 10 were African American females (59%), and one was a Caucasian male (6%); there were no Caucasian females. Of the total enrollment of students in these two classes, 39% were African American males, 47% were African American females, and 13% were Caucasian males. Of these students, 53% were male, and 47% were female.

Both administrators were African American. The building principal was female and the assistant principal was male. Of the teachers, not including myself, one teacher was an African American male (6%), five teachers were African American females (31%), four teachers, not including myself, were Caucasian males (25%), and six teachers were Caucasian females (38%). Of the 18 adults in this study, 38% were male and 62% were female.

Following approval from the Institutional Review Board (See Appendix B), I obtained permission to conduct this study from the school board. Letters from the superintendent and building principal were then acquired giving permission to conduct this study during this school year. Parental consent was acquired for all participating students within the first month, and student assent was obtained upon the return of their parental consent form. Consent for all adult participants were also acquired during the

beginning of the school year. Three phone calls were made to parents requesting consent forms to be signed. These parents were willing to allow their child to participate, but their child had not provided them with the consent form to be signed. I had one student who initially refused to sign his assent form. When asked why, he responded, "I don't want you to fail if I fail." I assured him that his success or failure in my class would not hinder my grade by any means, and the child signed his assent. When new students enrolled in school, parental consent and student assent was requested and acquired within the first month enrolled.

### **Data Collection**

### Interviews

Prior to any data collection, an interview protocol was established providing a guide for conducting an effective interview (Patton, 1990). For faculty and administration interviews, my protocol focused on experiences with testing, administration, students, and the culture of the school. The student's interview protocol focused on instruction, learning, administration and accountability testing. During the spring semester prior to this study, I conducted a field test of questions related to teacher perceptions of accountability testing. These questions followed similar structures as the 35<sup>th</sup> Annual Phi Delta Kappa/Gallup Poll of the Public's Attitudes Toward The Public Schools (Rose & Gallup, 2003). Questions pertaining to classroom effectiveness were structured around teacher evaluation documents and online student questionnaires I had collected over the years of my teaching.

Throughout the school year, various informal interview opportunities arose that were recorded via a handheld recorder or were revisited and recorded in a reflective journal I kept. Many of these informal interviews were conversations with teachers in the hall, at the lunch table, in classrooms, or around campus during and after the school day. Few informal interviews were conducted with the students in similar manners because of limited access to the students outside of regular school hours. Utilizing the interview protocol, the majority of my interviews were semi-structured (Merriam, 2002b).

Other, more formal interviews were conducted with other teachers, administrators, and students that were recorded using a handheld voice recorder and partially transcribed by the researcher. These formal interviews with administrators took place in their offices throughout the school year and into the summer. Interviews with teachers took place at their convenience and in locations that were suitable to them. These interviews addressed issues materializing from observations or previous informal conversations. These interviews were also semi-structured.

Interviews with the students were conducted throughout the school year, and were recorded using a handheld recording device and electronic recording software. These interviews were typically follow-up interviews to clarify comments or observations occurring during class. Following the publication of test results, all students were contacted and asked to participate in an interview regarding these results. I arranged four interview times separating both the 7<sup>th</sup> mathematics students and Algebra I students into two interview groups. Six Algebra I students attended the interview and two 7<sup>th</sup> graders attended. The interviews took place during the summer and many students were not

available or did not have transportation to the school. Throughout the school year, approximately 40 hours of interviews were recorded with students, faculty, and administration.

### **Observations**

I was an active observer in this study (Merriam, 2002). Since I was the teacher of these students as well as the researcher observing the phenomenon, I was formally considered a participant observer (Spradley, 1980). As a participant observer, I experienced six principles outlined by Spradley:

- 1. Being both insider and outsider simultaneously
- 2. Becoming explicitly aware of things usually blocked out to avoid overload
- 3. Engaged in activities appropriate to the situation and observed the activities, people, and physical aspects of the situation
- 4. Took in a much broader spectrum of information
- 5. Learned to use oneself as a research instrument
- 6. Kept a detailed record of both objective observations and subjective feelings
  During my participant observation, I wrote field notes during faculty meetings, staff
  development seminars, and following school activities throughout the school year.

  Merriam (2002a) added, "observational data represent a firsthand encounter with the
  phenomenon of interest rather than a secondhand account obtained in an interview" (p.
  13). Since I was the teacher in the classroom, it was difficult for me to effectively be an
  observer who catches all the idiosyncrasies that establish the essence of my classroom.
  Therefore, audio recordings of numerous classroom discussions and lessons were

partially transcribed. These transcriptions provided instructional dialog unable to be written in field notes since I was such an active participant as the teacher of the classroom. Eighteen hours of classroom activities and lectures were recorded throughout the school year.

### Written Documents

Personal narratives, reflections on instruction, reflections on classroom management, and school improvement plans were collected throughout the year. Student work, teacher documents, school memos, district memos, and newspaper articles were also collected. Merriam (2002b) stated, "public records, personal documents, and physical material are types of documents available to the researcher for analysis" (p. 13). Merriam discussed how these written documents help corroborate interview and observational data, which aids in the trustworthiness of the study.

Because of difficulties speaking with each of my students on an individual basis with regard to conducting an interview, I provided them opportunities throughout the school year to write their perceptions in their journals. There were no consequences for grammatical or vernacular mistakes, allowing students to write without fear of failure.

# Survey

An end-of-the-year survey was administered to the students (See Appendix C) and teachers (See Appendix D) covering topics found through the constant comparative analysis of this qualitative study to be of further interest. The student survey consisted of 108 items incorporating a five-option Likert scaled response. The teacher survey

consisted of 30 items incorporating a five-option Likert scaled response. Each survey included two open-ended questions relating to perceptions of the school and the students learning environment.

# **Data Analysis**

### Qualitative Analysis

Glaser and Strauss (1967) outlined the constant comparative method of data analysis in qualitative research. Constant comparative analysis is very similar to the simultaneous data collection and analysis of both Glesne (1999) and Merriam (2002b). With simultaneous data collection and analysis, "one begins analyzing data with the first interview, the first observation, the first document accessed in the study" (Merriam, 2002b, p. 14). From the very first day my pen wrote the name of my superintendent welcoming the teachers to a new school year, my data analysis began.

Throughout the school year, tape recordings of interviews and everyday occurrences were collected and partially transcribed by me. Every hour of recording required about four hours of full transcription time, which justifies partially transcribing "only those quotations that are particularly important for data analysis and reporting" (Patton, 1990, p. 350). During transcription, the recordings were repeatedly played to establish conversations and comments that fit the categories established for analysis then transcribed. Observational recordings of the classrooms were partially transcribed and then summarized adding personal reflections and comments pertaining to their applications to this study. Throughout the school year, students would make comments in

class, teachers would make statements in the hall, or administrators would announce important issues over the intercom that would lead to future interviews with teachers, students, and administrators.

Triangulation of data occurred throughout the collection of data and for a considerable time afterwards providing "cross-data validity checks" (Patton, 1990, p. 188). Through the simultaneous data collection and analysis, interviews, observations, and documents were categorized in folders on my desk or on my computer "condensing the bulk of our data sets into analyzable units" (Coffey & Atkinson, 1996, p. 26). Observation, interview, and document analysis results would triangulate within the categories.

# Quantitative Analysis

This study incorporated descriptive statistics based on attendance reports, the endof-the year assessment scores, and classroom performance grades. The student survey
was determined to be unusable because less than half of the students completed the
anonymous survey. Several students did answer the open-ended questions, which were
used as supportive results. All of the faculty members completed their survey and both
the descriptive survey analysis and open-ended responses were used.

# Reliability and Validity

Creating a reliable and valid case study is obtained through triangulating the data, conducting member checks, establishing peer review, and carefully reflecting on the research methodologies throughout the study. Triangulation of data aids in the internal

validity of a qualitative study since "what someone tells you in an interview can be checked against what you observe in a field visit or what you read or see in documents or artifacts relevant to the investigation" (Merriam, 2002c, p. 25). Richardson (cited in Merriam, 2002c) stated that triangulation occurs from much more than three angles. In this study, triangulation occurred by connecting personal observations with student, administrator, and faculty comments and actions throughout the school year, as well as the use of document analysis, interview transcripts, and surveys.

When an interviewee made a comment or an observation was made regarding this study, follow-up interviews or informal conversations were conducted to help establish the reliability and validity of my analysis or interpretation. Merriam (2002c) called this process member checking where "you take your tentative findings back to some of the participants ... and ask whether your interpretation 'rings true'" (p. 26). Member checking with my students occurred when comments or actions were made in class and later conversations, individually or as a group, took place discussing those revelations.

Reflecting on research methods and analysis and discussing them with coresearchers and advisors aids in the trustworthiness of the results. Throughout this study, I reflected on my research process in a journal and verbally with my advisor and other committee members. As the analysis was written, "peer review" (Merriam, 2002c, p. 26) occurred through submissions and revisions made to and from my dissertation co-chairs and other committee members. This peer review aids in effectively justifying the findings and implications of this research. One situation occurred with my advisor regarding my interpretation of a certain situation with one of my administrators. I discussed the advice

and results provided by this administrator throughout the school year noting that her support and admiration for my classroom instruction had always been positive. I came to a conclusion that her opinion of my instruction was based on window visits and conversations I had had throughout the year regarding the activities and methods I used throughout the school year. This administrator had no formal or informal classroom observations of my teaching. I did not want to portray the administration in a negative sense event though the data lead me to that conclusion. I discussed this with my dissertation director, and he helped me understand that every bit of information is one piece of the puzzle and that my job is to report the data collected. I took his advice and in a later conversation with this administrator, she revealed her procedure for observing instruction without entering the classroom.

Many researchers want results that can be duplicated. Qualitative results in the social sciences are seldom reliable in this sense because human beings and their behavior are never static (Merriam, 2002c). Results from my study may not occur in another rural school in another state; however, making sure the results match the collected data aids in the reliability of the study. Merriam illustrated this point by stating "rather than insisting that others get the same results as the original researcher, reliability lies in others concurring that given the data collected, the results make sense – they are consistent and dependable" (p. 27). To make sure that data were collected and analyzed without bias, constant reflection with peers, committee members and my advisor aided in establishing the reliability and validity of this study.

The final aspect of reliability and validity of this study falls with the generalizability of the results. Unlike quantitative research, creating a study that has implications far beyond the borders of the study, qualitative research is more "context-bound extrapolations rather than generalizations" (Patton, 1990, p. 491). Merriam (2002c) noted, "Providing *rich, thick description* is a major strategy to ensure for external validity or generalizability" (p. 29) in qualitative case studies such as this. This study provides a wealth of descriptive data adding to the current research surrounding accountability testing. This study provides the insider's view of a math teacher and the internal structures of accountability testing in one rural Mississippi school to help spark interest in researching similar situations.

### **CHAPTER IV**

### **RESULTS AND DISCUSSION**

# My Journey To Talon

In my life, I have met many important individuals. When I say important, I mean those people who have had a greater influence in the lives of Americans than most U.S. citizens. One such encounter happened two months after my fifteenth birthday. I earned the Boy Scouts of America's highest honor of Eagle Scout. One of Mississippi's U.S. Senators, Trent Lott, presented my badge to me. Trent Lott later became the U.S. Senate Majority Leader. Shaking his hand and hearing his words of encouragement and congratulations was one of the greatest moments in my life.

A second encounter with an important American came in the summer of 1992. The starting tight end for the Dallas Cowboys during all three of their SuperBowl Championships in the 1990s, Jay Novacek, was a friend of my aunt, and he invited my brother and me to attend his summer football camp in East Texas. One of the greatest moments of this camp did not occur on the football field, but occurred in the lobby of the dormitory. My older brother had lower back troubles. During a casual conversation with Jay Novacek, my brother asked what he could do to decrease the pain. Without hesitation, Jay Novacek escorted my brother and me to a carpeted area of the lobby and proceeded to demonstrate, and have each of us mimic, various stretching and abdominal exercises lying on our backs. Before we knew it, a gallery of campers had huddled

around this personal training event with Jay Novacek. From then on, my brother and I were quite popular with the other campers having what was perceived as quite a personal relationship with this great athlete.

Almost everyone has a story about encounters with famous individuals. However, these noteworthy meetings rarely create long-term effects. I shook the hand of the future Senate majority leader, and I have the autographs of most of the 1992-1993 SuperBowl Champion Dallas Cowboys' football team. However, the local Boy Scouts leaders and football camp coaches were the individuals who made the greatest impact on my life because they took the time to make me a better person and athlete.

Great athletes, politicians, and actors receive most of the public recognition for their unique abilities. However, these individuals owe a lot of their successes to their unsung heroes who challenged and pushed them to be the great individuals they became. Many of these un-sung heroes were teachers, coaches, and instructors who motivated, inspired, and taught them valuable lessons throughout their lives. There have been many actors and athletes who have acknowledged past teachers and coaches during important moments in their lives. Oscar winning actors like Ben Affleck and Tom Hanks have taken time during their acceptance speeches to acknowledge teachers who made significant impacts on their lives. Teachers are inspirational figures in everyone's life. From someone's first grade teacher to their dissertation chair, teachers influence the lives of individuals. I became a teacher because of my teachers, and I have been successful in the classroom because of those teachers.

### Becoming a Teacher

The very first time I told anyone about my desires to become a high school math teacher was in the guidance counselor's office my junior year in high school. I had just received my ACT score and had earned an outstanding score on the mathematics section of this college aptitude assessment. I discussed my desire to become a mathematics teacher, and a quick reply from my guidance counselor suggested I would be better suited for a profession that made more money. I investigated several career majors in college before realizing my personal passion for teaching and devotion to being a math teacher guided my decisions to become a high school mathematics teacher.

When I looked back on my greatest teachers, I remembered the teachers who showed a genuine interest in their students. My least effective teachers were the teachers who made their profession routine and uneventful. These teachers arrived at school, presented their lectures, and went home at the end of the school day. I had many math teachers who's daily routine consisted of walking around and checking students homework, working 15 to 20 problems on the overhead projector, and assigning homework to be checked at the beginning of the next day. I never modeled any math problems. I never applied mathematics to the real world. All I ever did in my high school math classes was work multiple problems and take tests. Since I had a gift of absorbing mathematical information quickly, I remember sitting in math classes and thinking of different ways I would have taught the day's lesson. After the teacher worked her first few problems, I understood the process and spent the rest of the class observing and listening to other students' challenges. Their questions were consistently answered by the

teacher reworking the problem only at an adjusted pace. Students were never provided individualized instruction. Application problems always came in form of word problems at the end of each section in the textbooks. I wanted to demonstrate alternative ways of working math problems, individualize instruction, and engage students in ways that made mathematics a relevant subject. I had a desire to become a mathematics teacher.

I completed my undergraduate degree in mathematics with a minor in secondary education and began teaching in a prominent suburban high school near Jackson, the capital of Mississippi. This school enrolled nearly 1,000 students and offered a wide variety of courses. About 70% of the student enrollment was Caucasian, 24% was African American, and 6% was from other ethnic backgrounds. These students came from working class families with approximately 35% of the students economically disadvantaged. I was one of eight mathematics teachers, and learned a great deal of instructional and managerial techniques from these influential colleagues during my first years as a teacher. The teaching staff consisted of over 60 members, nearly 80% Caucasian.

My first year of teaching began with optimism and ended with learning experiences to last a lifetime. I taught four sections of Pre-Algebra, and in one of those classes, I had two students who had failed Pre-Algebra three times during the previous three years. On top of their obvious difficulties in mathematics, both of these students were 19 years of age and turned 20 during that school year making them around 4 years older than other students in the class and just two years younger than me. These students became discipline problems early in the school year, and my lack of experience created

quite a bit of frustration in my teaching. I approached my principal for some advise. I remember leaning against the balcony wall overlooking 1,000 students congregating in the school commons area and telling him that if I were able to remove these behavior problems from my classroom, the rest of my school year would be smooth sailing. He joked with me about my statement and noted that I had discovered one of the leading causes of teacher burnout in today's schools: dealing with disruptive students. I worked through the classroom management difficulties, and after three years of teaching in this great institution, I made a life change that brought me to West Spike High School (WSHS).

# My Interview in Talon

This study was conducted during my second year as a teacher of mathematics at West Spike High School (WSHS). Several experiences during my first year are discussed in this section providing a clearer picture of my experiences. The events of my interview, the school building and school layout are discussed.

WSHS had a high minority population and the school district had received some negative press regarding their recent consolidation of the county high schools. Colleagues from my first school believed I would be faced with many cultural challenges working in a school like WSHS, so different from ours. I was warned not to interview at WSHS. Despite their concerns, I was determined that kids are kids no matter where they attended school, and I accepted my invitation to interview.

I drove from Jackson, MS, north to Talon for my interview. I had printed the directions from the Internet and was sure I would have no problems finding the school.

As I drove in to Talon on the main highway, I stopped at one of the two four-way stop intersections in town. I proceeded through the intersection continuing my search for Route 1. About a mile down the road, I came across an elementary school. I knew this wasn't my destination because of the playground equipment next to the gymnasium. I was interviewing in a high school and a high school does not have recess as one of its activities during the school day. I continued to travel north on the main highway realizing the houses were becoming more and more spread out. I was leaving the city limits and decided to turn around. I remembered glancing down a side street as I came into town that stretched up a slight hill ending at the doorstep of an old white building. This building reminded me of some of the older elementary schools from my hometown, so I decided to turn back and explore this street.

I backtracked to this side street, drove past the Baptist Church, and headed north toward the old school building. Emerging from behind some wooded brush, the main school building was nestled atop a small hill to my right. I turned onto 5<sup>th</sup> Avenue and parked near the front entrance of the school. There were four buildings on the campus. The main brick building included 14 classrooms, the library, the cafeteria, and the building principals office, and the main office area. There was a newer building to the east of the main building. The "New Building" was predominately metal and included 7 classrooms plus the assistant principals office. One of the classrooms was converted into the In School Suspension (ISS) room. The third building on campus was the old school building I had saw during my attempt find the high school. This building was actually a vocational training center complete with a garage, two classrooms, and a working

kitchen. ISS was conducted in one of these two classrooms during my first year at WSHS before the building was condemned and the class moved to the new building. The building then became a storage space for old desks and other discarded school furniture. The last building was the newly renovated gymnasium and was located to the north of the main building. Inside the gym, the court was squeezed between two elevated wooden stands on the east and west sides of the building. The ends with the basketball goals were less than four feet from the tall concrete walls supporting the goals.

Even though the entrance to the school was located on 5<sup>th</sup> Avenue, the mailing address had the school located on Pleasant Street. My driving directions from the Internet had the school nestled on Route 1. Despite these small geographic setbacks, I made it to the school in time for my interview.

I came dressed in my matching pants and sport coat, freshly shined shoes, and favorite teacher tie with hand drawn children of various ethnic backgrounds painted by a 12 year old child named Dana. This tie was from the collection of Save The Children ® ties focused on "Helping children and their families around the world." I was dressed to impress. I stepped out of my SUV onto the small gravel parking lot that could hold about 50 automobiles and proceeded to cross 5<sup>th</sup> Avenue on my way to the front entrance. As I approached the school, I noticed there was no school sign on or around the school. There were two signs that warned students and visitors not to have weapons or drugs on campus, but there was nothing designating this school as WSHS. Since consolidation, the Talon High School sign had been removed. The new WSHS sign came during the second semester of the second year I worked for WSHS.

The main building's exterior was reddish, orange brick having long vertical windows evenly dispersed from the east end of the building to the west. Each window was around 3 feet wide and 8 feet tall. Each had vintage 2 inch metal Venetian blinds that I grew up with in my old elementary school building. I do not remember how these blinds were arranged the day I arrived for my interview, but during both of my district convocation meetings, my superintendent addressed the proper orientation of these blinds by proposing our blinds be raised or lowered to the same height. I personally had never considered this as being an eye sore, but some teachers with whom I worked felt the same as our superintendent. Mrs. Jones said, "When you walk in that school ... its just very drab, very un-kept, and you know blinds at different levels, its just little things that make it look bleak and despairing when you come here."

At the top of the front steps, WSHS had a small gathering area with two double-door entrances. This gathering area was around 20 feet long and 6 feet deep and resembled a front porch. Along the long wall of the porch were the two double doors, each having a narrow window beside them. The right doors' window was to it's left and the left doors' window was to it's right. Between the windows was a plaque dedicating this building as the new high school for this half of Spike County. Following my first year of teaching at WSHS, our school earned a state academic performance level of 4 (Exemplary). One month into my second year of teaching in WSHS, our principal had a 4 feet by 8 feet metal sign painted that read, "We made the score. WSHS is a Level 4." She had it placed underneath the front dedication plaque between the front entrances. This

sign was not present when I interviewed but was a reminder throughout my second school year at WSHS of our admirable achievement.

After exiting my automobile during my interview, I made my way through the front right entrance and into the main lobby. As I entered the lobby, a small dangling sign suspended from the ceiling directed me to stop and sign in with Mrs. Blair, the Parent coordinator and attendance officer. Her office was located about 15 feet from the right front entrance. Her office has a wall of windows stretching from the floor to the ceiling around 9 feet wide allowing her to observe any visitors or students who entered the building. I glanced in her window and she was not present.

A round table with one chair sat between the two double doors and was used by many teachers during their morning and afternoon bus duties to gaze out over the covered steps as the six bus loads of children loaded and unloaded their occupants. Above the welcoming table hung a hand painted forest scene complete with one gray wildcat, one black wildcat, and one brown wildcat standing on a grassy clearing surrounded by tall trees. Mrs. Jones painted this mural along with some of her special education students. I had to take a closer look at this painting the day of my interview to determine the type of animal pained on the canvas. Once I realized the school's mascot was a Wildcat, I understood that the three four-legged figures were definitely cats.

Directly across from Mrs. Blair's office was a trophy case whose most resent additions came from the early 1990s. This trophy case gave the impression that West Spike was an athletic powerhouse. However, with closer observation, the trophies were mainly awarded in the 1960s and 1970s when the school was the Talon Mustangs. WSHS

had not won any district or state tournaments since consolidation. Instead of having an empty trophy case, the trophies from the old Talon High School remained. Some faculty members from Bakersfield High School, the other school involved in the consolidation, felt the trophy case should have also included their awards. However, none of the trophies made it to the Talon trophy case during my first or second year at WSHS.

My interview commenced shortly after I entered the building. I needed to find the office, and since Mrs. Blair was not available, I walked past her empty office and around the corner. I gazed down a hallway around 100 feet long. Halfway down the hall, there was a staircase leading down to the lower level of the hallway. In the lower level, the cafeteria was to the north and the library was on the south side of the building. Originally the staircase was as wide as the hall, but because of the American's with Disabilities Act (ADA), a small one-person elevator was installed in place of the south half of the stairs. Therefore, students with wheelchairs or crutches could make their way to and from the cafeteria and library. The librarian could also transport televisions and other heavy media items without having to leave the building and walk along the sidewalk.

The teacher's lounge was located at the base of the staircase. It housed a copy machine, sink, soda machine, microwave, two gender specific restrooms, one round table, one long table, and 21 teacher mailboxes. There was a small two-person sofa underneath a poster of the new graduation requirements from 2000 and several abandoned rolling chairs who's lives were once well lived in a teacher's classroom.

As I turned the corner exiting the front lobby, I found the entrance to the main office. The office door had a 2 ft. by 2 ft. square grated window allowing views in and

out of the office. The glass had metal wire running through it to deter anyone from attempting to illegally enter the office by breaking through the window. I opened the single door and found quite a confining area. The foyer was around 40 square feet having three armchairs placed along the left wall, which intersected a small 4 ft. tall counter welcoming all visitors into the office. This counter contained the teacher sign-in binder and stacks of paper handouts for teachers and students regarding administrative issues.

I signed in at the visitors counter and scanned the office layout. Around 5 feet past the visitor's counter was the secretary's desk. This desk had three stations: (a) the main desk, (b) the computer desk, and (c) the storage desk. The main desk area allowed the secretary to busily conduct phone conversations and complete paperwork, while having a view of the main entrance and visitor's counter. The secretary also had a computer desk at a right angle to her main desk. The computer desk had several cabinets above the monitor used for storage. Perpendicular to the computer desk was a multipurpose filing desk complete with storage cabinets above and below a flat writing area. The storage desk sat directly behind the main desk along the exterior wall of the building nestled between two narrow windows the height of the wall. The secretary's workspace seemed to be a practical arrangement for the many duties of the secretary.

To the left of the secretary's island, I noticed a tall filing cabinet adjacent to a pigeonhole paper organizer. This paper organizer housed all document forms from faculty absence sheets to school bus trip tickets. There were around 40 pigeonhole slots in this organizer, and the most amazing fact was that the secretary could pretty much point to whatever document without spending too much time deliberating. A long cabinet

set was found along the east wall of the office used for copier paper storage. The copier was found along the same wall of the visitor's counter directly across from the pigeonhole paper organizer. The school intercom system and operating box for the school bell was along the west wall of the main office where I found the principal's office door. I then met the principal, completed my interview, and within a few weeks accepted an offer to be one of WSHS's math educators.

I was slated to teach both the 7<sup>th</sup> grade mathematics students and Algebra I students. I had two years of experience teaching Algebra I before I came to WSHS, but I had no experience in the middle school prior to my employment. I came to WSHS with a decent track record for preparing my Algebra I students to perform well on their standardized end-of-the-year assessments. Only about 10% of my students failed the state assessment while under my guidance in my first teaching position. Every student passed the Algebra I state assessment my first year of teaching in WSHS. I was a decent Algebra I teacher. With no experience in middle school, my first group of 7<sup>th</sup> graders in WSHS did not perform as well as the Algebra I students having only 40% pass. I took that disappointing statistic as motivation to become a better middle school math teacher this past school year. I learned, however, sheer determination was not all I needed.

# **Teaching in West Spike High School**

West Spike High School was located in an upper corner of the county in the small town of Talon, MS. WSHS was originally called Talon High School, but in the early 2000s, the Spike School District (SSD) consolidated the local schools into a secondary school and an elementary school on the east side of the county and a secondary school

and an elementary school on the west side of the county. Talon was designated as the location for one secondary school, which combined county students who originally attended Talon High School with students who originally attended Bakersfield High School. This consolidation occurred the year prior to my employment and was said to be fairly uneventful at WSHS.

WSHS enrolled students from three main living areas. The students either lived in Talon, Bakersfield, or near the Spike County Lake. Sixteen miles south of Talon was the small town of Bakersfield. Twelve miles to the east of Talon was the Spike County Lake. WSHS provides an education to students living within approximately a 220 square miles area. However, only about 150 students from these three main living areas attended WSHS this past year.

Of the three main living areas, Talon and the Spike County Lake were predominately African American based on the census in 2000, and the population of Bakersfield was mainly Caucasian. However, the majority of students who attended WSHS from the Bakersfield area were African American. I enquired about the racial makeup and history of the school, and most of the comments focused on "white flight" from the late to early 1970s until the present. I had been told that most of the white families that lived in the area either illegally send their students to another public school in the area, or the families send their children any one of the area academies. I sat down with one teacher who had been teaching in the county for close to three decades, and she explained one of the events that took place in the 1970s to help spread the races pertaining to teacher demographics. Mrs. Sanders stated,

When I first came here, the school was predominately white. ... There were just four black teachers working at Talon. The students were predominately white during that time when I first started. I would say it was 65% white and the other 35% black. Then all of a sudden when the NAACP got involved with this ... the state department and [Washington] DC got a hold of it ... and we had to be shipped ... all around. ... Therefore they took, I hate to use that word white and black but just to illustrate what I am trying to say, all the black teachers who was at [the other county high school and elementary school], all the white teachers at Bakersfield and Talon. So it was against the law, they had to reshuffle everything. They had to put so many whites at Talon, so many whites at [the elementary school]. ... That's how Mrs. Stubbs got up here. She was at [the other high school] and they had to shift everybody around. And the [white] teachers that they had at this school they had to go to [the other high school]. ... And they brought the black teachers up here.

I then enquired about the students and Ms. Sanders replied, "They started leaving going to [the high school up the road] because [of] their parents. The parents did not want to [send there student to Talon High School] ... because more black teachers were coming in."

Other teachers described the recent consolidation as a move to even the racial demographics of the Bakersfield and Talon campuses. However, that plan backfired. Coach Bryant said,

We had about 180 students at each school before consolidation. Now we have 160 in one school. The first year they consolidated, Talon had 215 students, but that was because the seniors from Bakersfield wanted to graduate together so they all came to Talon, but many of the students, mostly white, went to [the local academy] or [the high school in the next county] ... Many black parents moved their kids too, but most of the kids who left were white.

Based on Coach Bryant's statistics, 360 students were enrolled in the two high schools before consolidation, but only160 remained after two years following the move. Teachers and other individuals personally involved in WSHS racial issues throughout history have their personal understandings and reactions of recent and past structural changes.

My 7<sup>th</sup> grade mathematics students consisted of 21 students. Thirteen students were male, eight were female, 17 were African American, four were Caucasian, two had learning disabilities, and 18 were economically disadvantaged. The 7<sup>th</sup> grade students in this study were Christopher, Damontae, Demarkes, Gerald, Harold, Jala, Julie, Keith, Kyle, Lamar, LeKisha, Montavious, Naketta, Paul, Sue, Susan, Tanessa, Thomas, Tramere, Tykira, and William.

My Algebra I students in this study consisted of 17 students. Sixteen students were African American and one was Caucasian; one student had learning disabilities and 15 were economically disadvantaged. The Algebra I students in this study were Bobby, Cathy, Jaisa, Jamon, Jazmine, Joshua, Keshon, Latrice, Lashondra, Monte, Samantha, Saul, Shameka, Sharyl, Steve, Talena, and Telsa.

WSHS was comprised of 17 teachers. The teachers consisted of Coach Bryant, Mr. England, Mrs. Gills, Miss. Harpole, Mrs. Jones, Miss Lyte, Mrs. Magnum, Mrs. Neely, Mr. Peppers, Mrs. Pipes, Mrs. Reed, Coach Rose, Ms. Sanders, Mrs. Stubbs, Mrs. Tyler, Mrs. Victor, and myself. WSHS had two administrators, Mrs. Prince and Mr. Jack, and several staff members as well. The scope of this study focused on the faculty and administrators.

There were only three new faculty positions filled at the start of the year in study. This was Mrs. Prince's first year as the building principal as well as Mr. Jack's first year as an administrator. Returning so many teachers in this rural school that had a high level of turnover in the past gave our staff a certain level of optimism for the upcoming school year. This optimism was demonstrated during the first district convocation one week prior to the students returning from their summer break. Mr. Peppers and I traveled together to our district's first convocation meeting one week before the students began this past school year. As Mr. Peppers and I entered the room, the high level of spirit that resonated throughout the banquet room overcame us. We saw co-workers wearing matching t-shirts. We heard teachers ringing bells every time good news was announced. Mr. Peppers and I were both amazed at this high level of teacher morale. With positive attributes being heralded as celebratory moves upward for our schools, I listened intensely as various administrators and guest speakers took the podium and issued words of encouragement and advice for the upcoming school year.

Our superintendent offered many words of encouragement and praise throughout his introductory speech. At the time of this meeting, the results from the previous years tests had arrived, but the achievement and growth levels from the state department were still a month from being available. Despite this lack of future knowledge, our superintendent stood in front of his employees and said, "We have improved. We are getting to our goal of being top in the state. ... We are the turtle not the hare." This added to the already high morale of the districts teaching staff and especially the staff from our school. Since there was only one new teacher amongst our staff, our confidence in maintaining our level of success was very high. Mr. Peppers and I agreed that neither of us had ever experienced a district faculty meeting quite like that one. We were encouraged and eager to enter our classrooms. The school year began with great expectations.

During our first WSHS faculty meeting, Mrs. Prince welcomed the new and returning faculty members to what appeared to be a positive start for our school year. She introduced everyone to our new assistant principal, Mr. Jack, and presented Mrs. Neely our newest teacher. Mrs. Prince thanked everyone for returning and discussed how we, as teachers, needed to be positive. Mr. Jack said, "We need to stay positive. We need to focus on the positive."

WSHS had every reason to be positive. Into the second month of the school year, our school was moved to the exemplary level of the school achievement and accountability model. We had moved from a level two (Under-performing) to a level four (Exemplary). We were returning every teacher who taught a tested course creating a certain level of optimism within the faculty. With morale high, my school year began in the right direction.

Themes emerged during the school year that affected the morale of the entire school in both positive and negative means. The themes associated with teaching in this small, rural school included the close-knit, interpersonal relationships of the teachers and students, the lack of Carnegie Units, and monetary issues.

### Close-Knit Environment

Teachers were aware of the advantages of having a small school. As one teacher stated in my end-of-the-year questionnaire, "The [small] size of the student body has many advantages. The instructor can get to know the student on an individual bases, thus better providing the best learning styles for the student." A second teacher noted, "Small class size should give us more opportunities to reach each child." I asked Mrs. Bracey why she had chosen to work in this school district for nearly 20 years, and she simply said, "The kids." She lived 20 miles from the school and has never tried to leave this school district. She felt she would not have the same opportunity to touch as many lives as she did in this small school setting. Ms. Sanders who had been with the school for nearly 30 years stated,

I would say that ... from day one ... I was accepted by the community. ... They treated me as if I was part of the family. ... But the reason ... I stayed out here was [so] I can make a difference, and I have. If I could do it all over again, I would.

I was able to learn a great deal about every student attending school. Even if the student never set foot in my classroom, I knew their name and various facts about their lives. In my previous school, I was unable to know all 1000 students by name. If

someone asked me about one of the 160 students from WSHS, I had no problem providing small bits of information that painted a picture of who that student was both academically and personally.

Students agreed the small school atmosphere contributed to better relationships between students and teachers. One student, named Jaisa, commented, "When it's small, you get more time to get one-on-one with your teachers because if it were bigger, your teacher wouldn't have time for just you personally. He'll just have to help everybody at one time." According to Talena, "Teachers here, they really care. They take the time to teach and help out."

Jaisa and Talena discussed how teachers and students built greater relationships within the smaller parameters of this rural school. Other students discussed how students themselves built stronger peer relationships that might have been lost at a larger school. When asked about our school being small in numbers, Joshua noted,

It's very small...we all don't live in two-story, three-story houses, but we [are] all like fun good people cause we [are] all close. We [are] closer than like a [larger] school because everybody knows everybody. We help each other. And within a [larger] school...everybody might not like each other and all that.

Another student, Telsa, commented about the low enrollment of our school saying, "It's straight. You get used to it. Me, I get along with everybody. There are no strangers." These students and teachers agreed that the small school atmosphere created a close-knit environment.

# Carnegie Units

The close-knit aspect of our small school was not the only outcome of low enrollment. Many things other than relationships are affected when a school had low numbers of students (Ralph, 2002). One of those outcomes was course-offerings. Our students, teachers, and administrators agreed that our students were not provided the necessary courses to adequately challenge them academically and artistically. Our school did not offer any foreign language class, any Advanced Placement classes, or many types of fine arts electives (like band or chorus) other than art and theater arts.

The only fine arts elective offered during my first year in WSHS was theater arts. A 7<sup>th</sup> grade art class and a high school drawing class were added during my second school year after the principal discovered our new social studies teacher, Mrs. Neely, was also certified to teach art. Therefore, our students were able to have a 7<sup>th</sup> grade art class, high school drawing class, and high school theater arts class. These course offering were a wonderful addition to the school's curriculum.

Despite having these fine arts electives added to WSHS's course offerings, the administrators and teachers agreed that the inability to offer elective courses such as band and choir was detrimental to our school and its enrollment. Mrs. Prince said, "I really think [more classes] would make us more appealing to the kids who are running out." Mr. Jack stated, "Sometimes [students] can express themselves in other ways other than academics. 'I may not be that good in academics but let me show you I can play this music." One teacher agreed there needed to be more electives offered for our students,

and these offerings did not have to cost the school very much money. Mrs. Jones, one of the special education teachers, noted,

Our curriculum does not challenge any other talents than the language arts. ...

There's no dance. There's no music. There's no band. There's nothing but the basics. ... Let's get the community involved and the church. We don't have to pay somebody. ... We could rain dance.

Teachers and administrators agreed that providing a holistic learning environment was desirable. The core academic subjects needed to be complemented with a greater number of fine arts electives. These faculty suggestions focused heavily on the musical electives provided through a band or chorus.

Students also acknowledged the need for our school to provide more Carnegie Units other than the core subject areas. Jaisa had moved a lot with her family over the years and had the opportunity to attend larger schools inside and out of our state. She stated:

The schools that I've been to, they're a lot bigger than this school. They have more classes, opportunities, and more students. [There were] more people to associate with. A lot, lot different. ... If you go to a school with more classes, ... you get more opportunities cause ... they have more classes that you could take at school. You don't have that at a small school ... I want to play in the band, but we can't take band at this school.

Talena tended to be happy with our school offering courses that challenged the arts, but she saw a greater need in the foreign languages. She said: But to me, if you look at people that want to go to a university, that foreign language would be more [valuable] than that art. Cause half of us don't know how to draw and don't want to be in no art class.

Talena was concerned about college and the foreign language requirement for most universities. We offered advanced world geography as a substitute, but some of our students felt WSHS needed a foreign language. There was a certified teacher available to teach geography and not a foreign language. Therefore, even though Talena felt she would benefit greater from a foreign language, WSHS was only able to offer world geography because of the faculty limitations.

## Monetary Issues

Mrs. Prince wanted money for more teacher positions, technical assistants, and computer upgrades, and to offer more Carnegie Units. Mr. Jack was a strong advocate for students taking field trips and exploring new areas and experiencing new things. Hodges (2002) noted transportation costs are much higher in rural schools. Taking field trips and providing opportunities for students to experience other places and social cultures takes money. Mr. Jack stated,

I like exposure. I wish you could just jump on a bus and take them places. ...

That's what a rural community of kids lack mostly. ... It's all about the funding, you know, you have to have the money to do these types of things.

During my second year at WSHS, our freshmen were able to take multiple field trips to different colleges around the state of Mississippi as a result of appropriated money through a Gear Up Mississippi Grant. However, other teachers and school organizations

had to raise money to take their trips, which is why almost 90% of the field trips taken this year were taken by freshman that had Gear Up funding.

Money, or lack there of, was a large contributor to the school climate facing teachers. During my first year at WSHS, all teachers received well over \$1200 in classroom supply money. This school year provided each teacher with a little over \$100. The reason for this sharp decrease in classroom supply money came from the lack of state allocated money for education. During my first year as a teacher, education in Mississippi was fully funded. However, during that school year, a new governor was elected and educational funding was cut sharply. In order for school districts to operate on their limited budgets, classroom supply money for teachers was minimized. There was barely enough to purchase the basic necessities of the classroom to last throughout the school year. Mrs. Jones stated, "This year I only had money to buy ink for 1 printer and dry erase markers."

Mrs. Neely, the new art teacher, entered an empty classroom only having \$100 to spend on her supplies. Since the school did not previously have an art teacher or an art budget, Mrs. Neely did not have any art supplies and there was no funding to get any. In a conversation with her toward the end of school, I asked her if her students brought their own supplies or if the school supplied any money to help buy the supplies. She told me she ended up purchasing most of the materials they used. She stated, "Well, we need markers, paint, and paint brushes in an art class. ... How else was I going to get it?"

There were other teachers who used their personal funds to help supply students with needed materials. Ms. Sanders, one of the special education teachers, told me she

always spends about \$250 dollars of her own money to buy things for her classroom. She told me,

That's how much the government will let me spend in my classroom. ... I can write it off on my taxes. I don't see anything wrong with buying this stuff for these kids. They need it and I can afford it. ... My [biological] children even donated supplies.

Whether teachers had stored supplies or used their own money, classroom supplies needed to be purchased and the money provided by the district was insufficient.

I had a conversation with Mr. Peppers about inadequate funding early in the school year. I felt my math classroom had adequate supplies. I had stocked up on basic necessities during my first year at WSHS, and I saw little need for money. I had enough textbooks and seemed to find money through Title I or Gear Up to fund many of my projects or interests. However, I had overlooked many of the basic necessities that helped make teaching and learning less cumbersome.

Mr. Peppers discussed how his middle school students did not have reading textbooks or enough seats for him to maximize his instructional effectiveness. He pointed out that many of the classrooms at WSHS have desks that are decades old and are not sufficient for our students. I had desks with cracks in the plastic, tops that could be removed, and mold that had to be bleached every month. Mr. Peppers, in describing the small desks used by his middle school students, said, "I can't fit in these desks and I know many of my students can't either."

Other teachers agreed with Mr. Peppers writing "desks are too small for students...Student desks are needed in several classrooms." Mrs. Prince mentioned the need for desks and how the previous principal only ordered enough desks to minimally supply the main building. She quoted the previous principal as saying, "Those teachers in the new building had the newer classrooms, and they don't need new desks." Therefore my students had to sit in uncomfortable, unsightly student desks as they muddled through each of my mathematics lessons.

Some students remarked that my class could be improved if I had "better and bigger desks." Buying new desks would seem to be an acceptable usage of money since teachers, administrators, and students feel many classroom desks should be replaced. In Mrs. Prince's Summary of the 2004-2005 School Year Report, desks, teachers, and computers were on her list of future needs. Money for classroom supplies like new desks, art supplies, and textbooks were concerns of teachers, administrators, and students. Computers were also on everyone's wish list.

WSHS had plenty of computers, but they never worked at the same time. WSHS had a computer lab that joined Mrs. Tyler's business classroom. There were over 30 computers between the two rooms, but nearly half of them did not have a working hard drive. Many computers were infected with viruses that made certain programs unusable. Mrs. Stubbs said, "There isn't enough technology equipment at our school. ... There is an essential need for another computer lab. Plus, the one in use need to be brought up to date."

All classrooms had at least one computer with Internet accessibility. My room had three working computers. I also used my personal laptop with the mathematics department's multi-media projector because hooking the classroom computers up to the projector was too time consuming. If I used the classroom computers, I had to use a small portion of the white dry erase board as my projection screen because the cords for the projector would not extent far enough to place the projector in line with the built in screen. We had technology at our school, but certain inconveniences of use could have been avoided if there had been more money. For example, our full-time computer technician was unable to keep many of the computers up and running, which could have been avoided with more "up-to-date" computers.

### **Student Influences**

Students impacted the flow and effectiveness of my classroom instruction. Crawford (2004) illustrated how teachers must understand their students in order to be effective in their instruction. Throughout this school year, I became acclimated to the uniqueness of my individual student's speech, mannerisms, unique behaviors, problem behaviors, and motivations that affected my instruction daily.

Speech, Mannerisms, and Unique Behaviors

I grew up in an upper middle class household, attended a public elementary school, attended a private secondary school, and earned college degrees at a private Baptist college. My educational and personal life experiences were in stark contrast to the

daily lives of most of my students. Relating to these students and finding ways to motivate them became a challenge each day. Mr. Peppers noted,

The majority of our students are poor, African Americans from rural Mississippi, and that was not your paradigm. ... I'm sure there is a language barrier in terms of cultural norms that you probably also face. Cause I look at these kids and sometimes I don't here what they're saying ... I don't understand the things they are saying. There are nuances to their speech that I don't get. There are nuances in behavior that I don't understand.

Mr. Peppers was a Caucasian from an Atlantic coast state who had taught in WSHS for one more year than I had. He discussed how Sue, one of my 7<sup>th</sup> graders, would not look him in the eyes when he reprimanded her. He and I both were raised to look at someone when they were speaking to us, but Sue and some other students would not make eye contact during certain conversations. Sue informed Mr. Peppers that she was not allowed to look at an adult when they were reprimanding her. She told Mr. Peppers that she was not even allowed to look at her mother during a reprimand.

Mr. Peppers continued to explain how these nuances in behavior were much different than his northern upbringing. He described how certain students in WSHS would respond to one form of behavioral modification, a small slap on the hand or pinch on the arm. These teacher actions were forbidden in his old school. I never contemplated slapping a student on the hand of pinching them on the arm, but I did observed one veteran African American teacher, Mrs. Stubbs, doing these very things. Instead of receiving threats of lawsuits, Mrs. Stubbs seemed to gain apologetic students who sat

quietly in her classroom. I could not see myself engaging in any behavior modification remotely similar to these physical actions even if the students and some teachers accepted them as behavioral norms.

I questioned these actions with my assistant principal. Mr. Jack said "[Mrs. Stubbs] can pinch, arm slap, and talk loud to any student she pleases because she is a strong black woman who resembles many of her student's mothers." He continued to say these actions would be difficult me to perform because I am a Caucasian male. I discussed these actions with another veteran African American teacher, and Ms Sanders said:

And let me tell you what else. Like I told these kids, I'm going to tell you ... I didn't pinch on my children. I didn't beat on my children. That's one thing I didn't do. So therefore, I'm not going to do it to anyone else's child. ... One young lady curse a couple weeks ago. I heard her cuss in the cafeteria. I said come here, she said 'Okay, where you going to pinch me at.' I'm not going to pinch you. She said 'Why not' and I said cause I didn't do it to my children

Ms Sanders refused, like I did, to resort to these types of behaviors. But some teachers used these tactics since many of my students, like the student in Ms. Sanders' example, expected these types of behaviors from their teachers. Mr. Jack alluded to the realization WSHS's students expected actions such as these because they receive this type of discipline at home. I also observed parents administering similar arm slaps and pinches to their children while attending athletic events and parent meetings during the school year.

Since the scope of this research did not include cultural norms from outside the school, further observations would be needed.

Pinching, slapping, and yelling were all behaviors that students performed amongst themselves. I observed many students slapping each other in the hallway or in my class. One Algebra I student often vented her frustrations with other students by raising her voice and administering a strong slap on their arm. Most of the slaps Talena made were on the arms of her male classmates. This could have been a form of flirting; however, the force of these slaps caused me to doubt any student would find this type of behavior flattering. Despite the possible mating ritual, this pinching, slapping, and yelling seemed commonplace amongst certain faculty members and many students.

These nuances in behavior were difficult to comprehend. Like Ms. Sanders, my parents did not pinch or slap me on the arm to get my attention and prevent me from misbehaving. During my earlier teaching situation, none of my students, either African American or Caucasian, slapped, yelled, or pinched another student without the possibility of a fight. Every time I heard a student yell at another or slap the arm of another student at WSHS, I quickly addressed the situation as if the two students were preparing to fight.

One morning, I was interrupted during my lesson to the sound of three sharp arm slaps across the arm of Jamon. Talena had a carton of milk on her desk, and when she returned from sharpening her pencil, the milk was gone. She immediately blamed Jamon. Without conducting a quiet investigation or informing me, the teacher, of the incident, Talena took it upon her self to scream, "Give me back my milk!" at the top of her lungs,

while administering several bruising arm slaps. The milk was never recovered, and my heart took a while to calm back down. This behavioral norm was much more nerve racking to me than the student unwillingness to make eye contact.

Certain nuances in speech also created challenges for me and for other teachers. Mr. Peppers explained how Tramere, one of my 7<sup>th</sup> graders, came up to him and asked how to spell "surp." Mr. Peppers asked Tramere to repeat the word and he said, "Surp, you know, like cough surp." Tramere was trying to spell syrup, so Mr. Peppers told him the correct spelling. Tramere then corrected Mr. Peppers saying he did not want the spelling for syrup that you put on pancakes. Tramere wanted the spelling for surp like cough surp. These nuances in speech were prevalent in many conversations with students. This year's District Convocation guest speaker coined such vernacular as "the language of the street."

This speaker warned teachers against using or succumbing to this type of vernacular. She had a history working in urban school districts, but the same language many of the urban youths used was also prevalent in our school. In an earlier quote by Telsa, she stated that attending this rural school was "straight." Telsa's meaning of the word straight was not linear or without bends. Her vernacular defined straight as decent or acceptable. Knowing that "straight" and "tight" were terms used in place of acceptable, I often checked my students understanding of a lesson by asking, "Are we straight?" When students completed activities that resulted in visual or creative products I often complemented them by saying "Awe, that's tight!" Unlike the district's guest

speaker, I felt the usage of popular words and phrases created connections between the older teacher and his younger, culturally different students.

About three quarters of the way through the school year, I encountered a situation in class that illustrated how new terms arose unexpectedly during lessons. My Algebra I students were covering the topic of percentages and I presented them with a hypothetical situation to illustrate how percentages affect everyday lives. The goal of my example was to show how credit cards add high percentage rates onto the principle balance each month. I walked around the room and said we were going to have a Super Bowl party. I asked the students what we would need for the party and students created a list of items that included chips, dip, hamburgers, hotdogs, and one big screen television. I continued to discuss how we would pay for these items using our credit card. I asked what seemed to be a simple question and received a response that everyone seemed to understand but me. I asked, "How much will the big screen T.V. cost?" Jamon answered, "A couple stacks." Just after he said stacks, I stopped walking around and looked at him with a puzzled expression. I asked what he meant by "stacks," and he replied, "A couple thousand. A stack is a thousand dollars." I had never heard this expression. As I investigated it's meaning, I could hear the students chuckling throughout the class. They were amazed that I did not know their terminology. I conducted some more investigations into other phrases regarding money, and Jamon informed me that a twenty-dollar bill was known as a "Dub" because it was double ten. I also found out that a twenty-inch diameter rim on an automobile was known as a "Dub" as well for the same reasoning as the twenty-dollar bill.

There were many phrases used by my students that required further investigations in order to fully understand their meanings. When one of my students asked where another student or teacher lived, they would ask, "Where do you stay?" Mr. Peppers discussed how students would respond by saying "I stay on a rock road." The word "stay" had no connection to permanence. As my students referred to their homes as places with no security or longevity, I realized these nuances in speech speak worlds about the lives my students lived.

Differences in speech like the provided examples occurred throughout the school year. The receptive nature of students to pinch, slap, yell as well as use misplaced or misspelled terms influenced many instructional situations like the lesson dealing with credit cards. However, the mannerisms that most affected the way I taught was the elevated volume levels of most of my students' speech.

A typical event before class began would occur with a group of my freshman Algebra I students huddled in conversation. I would be standing in the hallway greeting my students as this group walked down the hall from Coach Hayes's biology class into my room. Many of these students were very animated with their gestures as they spoke. Saul, one of the physically larger students in his grade, would wave his arms in the air and practically scream the words he wanted everyone to hear. If somebody said or did anything funny, everybody would burst out into laughter, which would resonate throughout the classroom and into the hallway. I understood that laughter is not quiet, but for many of my students like Talena and Saul, laughter and speech were consistently very loud.

These events would occur almost every day and I would walk over to the group and say "Lower your voice, you are two feet from each other. There is no reason to scream." This typically worked for a minute or so and then someone would say something funny, and the deafening laughter would begin again.

I discussed this observation of the volume level with two of the special education instructors. Mrs. Jones was a Caucasian having taught in WSHS for three years and Ms Sanders was an African American with almost 30 years of teaching in this school district. Ms Sanders and I had worked on numerous committees together, and she had witnessed my quiet method of trying to gain students attention as their volume level increased. She saw how I would calmly ask students to quiet down. Then I would gradually increase my volume level before practically screaming at the students to close their mouths and listen. In response to the volume level of our students, these teachers commented,

Mrs. Jones — That's poverty. That's an indication of poverty no matter what color you are.

Ms Sanders — I would say in this particular community, um, this cycle has been going on for years. ... Most of these kids have environmental retardation. That's the main part in their social lives. You got four generations living in one house [or] in [one] two-room trailer.

Mrs. Jones — And their hollering' back and forth very loud.

Ms Sanders — And that's the only way they communicate with each other is through abusive language. You know, being talked to abusive.

That's the only way they react. ... Let me tell you, in your room you talk to them in a low voice, tell them to stop doing something. Then continually raise your voice. They look at you.

Amazingly they stop. That's what they [are] used to.

Mrs. Jones — And you don't like to get loud at the students. I mean it's against our nature. But after we've asked them three or four times then you have to raise your voice.

Mrs. Jones and Ms Sanders agree the increased volume level of my students is directly related to the generational poverty of these students. With almost 90% of my students economically disadvantaged, their arguments seemed justified. Ms Sanders' experiential knowledge of this community and the home lives of my students were valuable to my understanding. She told stories of students living in isolated homes in the woods where the roofs leaked and the floors creaked. Mrs. Sanders said,

[The students] live in one community ... where only one person has water in the neighborhood. One electrical cord will hook up to about five trailers. You go to their house and you see snakes crawling through the ground.

Ms Sanders was a firm believer that culture played a large role in how we instructed and reacted to our students. Another African American teacher, Mrs. Gills, had considerable years of experience and stated, "You got to change your teaching styles because of culture. ... Poverty is generational, not situational."

Coach Bryant who had coached for over 13 years in Talon said, "We can't help the population we have." We did not recruit the students who attended WSHS. As

teachers, we were asked to teach every student no matter what their background. The guest speaker at our District Convocation said,

Being poor does not equal failure. ... We must treat all students, especially the poor ones, as if they have equal intelligence. ... We allow them to be lazy, the families as well as the students. We must work together to give all children opportunity.

Mrs. Reed believed a teacher could only do as much as the culture would allow. She said, Well I'm concerned too about socioeconomic factors. We look at the history of this school. Primarily in Mississippi and Louisiana, I do know that people tend to die within a hundred mile radius of where they were born. If we look at the statistics of how this school, which produced the parents of these children, graduated and retained students and the dropout rate. I think we'll find that education has never been a big priority. And if it's not a priority at home then realistically I don't think it will be a priority here.

I was called as a teacher to embrace the differences with our students and teach them in a way that showed we cared and understood each individual situation. Mrs. Jones said,

The way I look at Talon and this community is ... Maslow's hierarchy of needs are not being met. They don't have shelter, they don't have food, and they don't have love. And in our classroom, a lot of time all we can do is give the love.

Because we can't do anything about the shelter, we can't do anything about the

home, and we can't do anything about the food. [Except for the free breakfast and lunch during school days]

Mrs. Reed made numerous comments throughout the school year that established her stance on generational imperfection. She commented that most of our test scores accurately portrayed the population we teach as low performing economically challenged African Americans. My impression of her attitude suggested she believed there was no way to break the cycle of low expectations from parents resulting in diminished academic desires for their children. In a discussion with students about the parental effect on students, Talena, one of my Algebra students said, "It ain't yo' parents fault. Yo' parents at work." I don't think there could be a truer statement than that.

Mrs. Prince commented "If you work in a school district that you would not send your own child, there is something wrong." Our faculty was challenged to be teachers who looked past the cultural backgrounds of our students and taught them as if they were our own biological children. I had to adapt to the speech, mannerisms, and behavioral differences of my students in order to be an effective instructor. Their home lives may be troubled, but embracing and understanding the culture of our students was a challenge even for veteran teachers.

### Problem Behavior

Embracing cultural differences was challenging. Many teachers claimed the generational poverty by which our students lived played a large role in the actions and vernacular of our students. Mr. Peppers illustrated that my students lived lives starkly different than my paradigm and many of their actions and words were culturally driven.

Just as McLeod and Nonnemaker (2000) found, our teachers connected disruptive behavior to the poverty of our students.

There was one phrase that I continuously heard students say to one another. This phrase was "Shut-up talkin' to me." If two students were engaged in a conversation and something was said that was not acceptable or rude, a student would tell them to "Shut-up talkin' to me." I joked with my students that that phrase needed to be on a t-shirt as the slogan of our school. I would hear this phrase at least 10 times during the course of a day. This manner by which they spoke to one another was imbedded in their culture. Like Ms Sanders said, "The only way they communicate with each other is through abusive language."

There were times in both my Algebra I and 7<sup>th</sup> grade mathematics classes when students would say and do thing that demonstrated their lack of respect for me as a teacher. I have only had one student in my career use vulgar language toward me, and that event did not occur during this school year. Students did use inappropriate tones and make comments that demonstrated their lack of respect for my authority as a teacher.

At the beginning of the school year, I was writing notes pertaining to the various real number sets on the board, and as I finished, I walked around my Algebra I class discussing what I had written. As I spoke, my students were writing the notes from the board. There were times when I would block a student from seeing the board, but since I was in continuous motion, I would not be in their line of sight for long. As I walked around, several students began to make disrespectful remarks like, "Get out of my way, I can't see" and "Move, Mr. Lamb!" The students made these comments without regard for

my authority as a teacher. I quickly stopped walking and addressed the entire class. I said, "I am not your friend. I am your teacher. I am twice your age and I will not be spoken to in a disrespectful manner." I told them that to get respect from me, they must first show me respect. If that respect were not shown, then there would be consequences. I said I would prove to them that I am the adult.

One morning as my 7<sup>th</sup> grade students arrived for class, I asked everyone to take their seats and get their homework out on their desk. Susan was very talkative that morning. I repeatedly asked her to stop talking but she became too involved in her morning gossip session with another student. After the first request for Susan to get her homework out, she replied, "I don't got it." The tone in her voice was rude and disrespectful. I interpreted her statement as if she were speaking to one of her friends. I paused and gathered my thoughts because I did not want to say something I would later regret. I politely asked her to then turn around in her desk and get out her textbook and notebook even though she did not have her homework.

For the next 10 to 15 minutes, I repeatedly asked Susan to turn around in her desk, stop talking, and get out her materials. Susan's insubordination had reached a limit, and Susan had passed my tolerance level. Mrs. Prince stated,

They've been able to read you as you're able to read them. ... They're able to read you so they know that "Okay, I can go this far with Mr. Lamb, but I know that I can't cross this. So now I'd better stop and cool it."

Susan did not stop at my tolerance level, and continued to disrupt class and not follow directions. In the middle of one of her conversations, I asked her to step out in the hall so

I could discuss her behavior privately. From my experience with Susan, I knew she would not stand down when confronted amongst her friends. Therefore, I needed to remove her from her friends.

When Susan was instructed to leave, she placed her books on her desk and acknowledged that she was doing what was asked. She said, "Why, why do I have to go to the hall!" At this point, I realized she wanted to argue with me in front of her peers.

Mrs. Prince said, "A verbal fight will not work. Don't punk them down." Mrs. Prince's usage of "punk them down" refers to gaining an advantage in an argument that makes the student look bad in front of their peers. This typically occurs when students argue about certain consequences or reasons for certain consequences with the teacher providing relevant facts to justify their actions, while at the same time degrading or "putting down" the student. Mr. Jack agreed stating,

They would rather get in trouble so they don't have to do the work. ... Watch what you say to them. They are not going to let you punk them down in front of their friends. ... These students pride themselves on getting you mad and off your daily plan.

In an intentional condescending voice, I replied to Susan's comment saying, "Because I am the teacher and I am asking you to step out in the hall." Susan continued, "I have my books out on my desk and I will stop talking." I asked her to leave the room a second time trying not to comment any further because by this point I was very upset and feared I would say something I would later regret. When my request was not followed,

my voice elevated and I told, almost screamed at her to "Step out in the hall, now!" Susan stood up and slowly walked down the aisle.

Susan's back was toward me as she made her way to the door at a snail's pace. Judging by the chuckles and entertained facial expressions of the seated students, I gathered Susan was making a mockery of the situation. As she walked down the aisle, I told her if she did not stop, she would go straight to In School Suspension (ISS). When Susan finally made her way through the classroom door and into the hall, I asked the class to work some practice problems from the textbook as I dealt with Susan.

Susan's antics continued into the hallway. As I discussed the reason for her departure and disgust with her hijinks, she mumbled remarks as her eyes stared at the floor. I became furious that she would not look at me while I was speaking to her. I had remembered certain undergraduate professors that discussed cultural behaviors like limited eye contact that are not disrespectful, but I did not consider Susan to be from a culture where this behavior was normal. At this point, I considered her diversion of her eyes as a sign of disrespect, and as I questioned her behavior further asking that she look at me while I spoke with her, she turned her back in utter defiance of my authority as a teacher. I then realized our hallway visit would not remedy the disobedient nature of her actions, so I instructed her to walk down to ISS.

Susan slowly meandered down the hall projecting more of her defiant behavior. I watched as Susan inched closer to the ISS classroom door, only to witness her pass the door and walk to the exit. She stood at the exit, gazed out the window, turned around, and slowly walked past the ISS classroom door once again. I walked back into my classroom,

paged the office, and summoned Mr. Jack. Within two minutes, Mr. Jack was at my door and escorted Susan to the office. During the two minutes before Mr. Jack appeared in my doorway, I filled out a discipline referral form documenting this event. It read,

Failure to respect teacher when she was asked to turn around and work at her desk. When asked to step out in the hall, she was very insubordinate, which led to me telling her to go straight to ISS, where she purposefully meandered down the hall and right past ISS.

Mr. Jack's punishment was for Susan to spend the rest of the day in ISS. This punishment was equally upsetting to me. Since Susan was in my 1<sup>st</sup> period class, she would be able to return to my classroom the next day without having any time suspended from my class. This made me furious. By the time I returned to my classroom, 15 minutes had passed from the time I asked Susan to step out in the hall and Mr. Jack escorted her to the office. A total of 25 minutes had elapsed in the classroom by the time I returned to teach. There was less than half of the instructional time remaining for other students to learn, and Susan's punishment did not compensate for my students' loss of time.

There was one 7th grader, Paul, who spent a fair amount of time in the hallway outside of my classroom and down the hall in ISS. Paul was a 15 year-old 7<sup>th</sup> grader who was one of three of my students living in a home for children. Paul craved attention. His age played a large role in his behavior problems. His family life also played a role in how he acted at school. One afternoon, Paul was placed in my classroom, as I was teaching my 7<sup>th</sup> period Algebra I students, to calm down before being sent home for one of his many

Out of School Suspension (OSS) punishments. As he sat in my room, I asked him about the reasons for his disobedience and behavior. There had been a time shortly after winter break when Paul had attended my class with improved behaviors. Paul stated that he was able to visit with his brother over the holidays and came to school with a better attitude. I asked if he saw his family very often and Paul replied that he could not have contact with his parents and his brother was sent to a detention center shortly after the New Year. In our discussion, I asked if he could write his brother letters, but he said he did not have money to mail them. I offered to mail any letters that he wanted to write to assure him that we could find a way to make that contact that seemed to have such a positive effect on Paul. He did not write any letters and his behavior stayed the same.

Paul wanted to be the leader of the seventh grade, but in the classroom, he struggled to learn his material. To make up for his limited cognitive ability, Paul would instigate conversations and many arguments with other students to keep from having to pay attention to the lesson. Paul made small victories throughout the school year when it came to his mathematics understanding, but his end-of-the-year average was too low to even qualify for the school's extended year program intended for middle school students who needed a few more weeks to master the objectives they failed during the school year.

Paul interrupted many of my classroom activities with his verbal disruptions.

There were many days when I would say, "Get out of my room" in response to Paul repeatedly disobeying my directions and continuing to talk without permission. Paul also threatened to fight other students, but his threats were never carried out. Although he

never fought, Paul was not exempt from announcing these intentions leading to suspension.

As I stood at my doorway greeting students one morning, I recognized Paul's agitated voice above the normal hallway chatter. Certain phrases like "Listen up Bitch" and "You better shut the Fuck up man" resonated throughout the hall. Anytime these proverbial "Fightin' words" were spoken, adjacent students became remarkably quiet and tended to form a circular ring of people around the prospective fighters. This action was two fold: (a) the students did not want to be hit by any misguided punches and (b) the students wanted to create some space for better viewing. As this spectator ring formed following this altercation between Paul and another student, I quickly stepped into the ring between the two students and guided Paul into my classroom making sure he could not make any sudden moves toward the other student as my hands were very firmly placed on each of his upper arms. As I walked him into the classroom, I provided a gentle push to assure he made it through the doors before punches were thrown. Coach Rose grabbed the other student and a major event was diffused. I paged the office and Mr. Jack retrieved Paul from my classroom. Paul was later assigned OSS for three days. This incident occurred three days after Paul had finished serving three days in ISS for other behavioral problems. Since I was not in the principal's office to know the exact reason for his suspension, I do know this verbal altercation and threat to fight played a large part.

Paul was not alone in his violent attempts to settle disputes. Unlike Paul's verbal threats, Christopher, who also lived at the home for children, did not utter a word before his intentions to splatter another student's blood across the floor and wall outside my door

came to fruition. The morning of Christopher's fight, my 7<sup>th</sup> grade 1<sup>st</sup> period class went as smoothly as possible. The lesson was covered and all students seemed to follow the lesson. During 2<sup>nd</sup> period, my seventh graders attended class across the hall in Mrs. Stubbs class. The 7<sup>th</sup> graders were down the hall in Miss Harpole's class. After the end of third period, all hell broke loose. The bell to end third period rang, and Christopher made his way down the hallway outside of my classroom and landed a punch on one 8<sup>th</sup> grader's face, splattering blood across the opposite wall. Christopher later told me that this student had made threats toward him earlier that morning because Christopher had spoken to this student's girlfriend over the weekend. Christopher told me that he was going to fight before school started, but he felt it would be better to fight after third period because both he and this student would be in the same hall and most teachers are not in their doorways immediately when the bell rings. His observation was correct because the only teacher in the hall during the beginning of the fight was Coach Hayes who was 30 feet from my classroom.

As my Algebra I students were leaving my classroom, I noticed they stopped at my door and were making common spectator noises of "Oooh!" and "Awe!" The bell had just rung and I was putting some things away before I stood at my monitoring post outside my classroom. With the commotion, I rushed to my door and found Christopher and the other student wrestling on the hallway floor. Christopher had been in the science teacher's class at the end of the hall and the other student had come from the classroom adjacent to mine. Before I could process the scene I was witnessing, Mr. Jack and Coach Hayes were both on the floor separating the two. My heart was pounding during this incident at the

thought I may have to break these two up from fighting. Judging by the blood that was already on the floor and dripping down the wall, I did not want to place myself in any situation where I could possibly hurt a student or be hurt myself.

The year before, I broke up four fights, with one resulting in a slight scratch across my chin. At the beginning of this school year, I wanted to have an official policy for breaking up fights. I brought this issue up in a faculty meeting led by Mr. Jack. I informed Mr. Jack of four fighting incidents the previous year I broke up, and I asked what the district or school policy was regarding teacher intervention during student altercations. Mr. Jack and Coach Hayes were very vocal in supporting teacher intervention for the safety of the children, especially the student losing the fight. The female teachers were very quiet during this conversation; however, Mrs. Stubbs added, "We cannot just sit back and watch a child being beaten to death." I added my story about the fight I broke up in Mrs. Reed's room the previous year that would have ended in disaster if it had proceeded. That fight was between two eighth grade female students with one student almost 18 years old and the other barely 14. The 18 year old was pounding the younger child's head onto the hard tile floor as blood gushed out of her nose and the scratches on her left cheek. I pulled the older child off the defeated child as Coach Hayes scraped the loser off the floor. If I had not intervened, severe damage could have incurred as a result of the altercation.

Intervention was the dilemma in my mind. I knew and had proven that I wanted to stop fights for the safety of the child. I also did not want to break up a fight, injure a student in the process, and be sued for my efforts. I mentioned to my administration that

my previous school district stated a teacher must ask the students to refrain from fighting three separate times and then call the police allowing the students to fight until the police arrive to professionally stop the brawl. At my other school, there was a School Resource Officer (SRO) on duty at the school who could respond to a fight much faster than a police officer still at the police station. Mr. Jack was a Karate instructor who felt there was no reason why a fight should proceed if it could be stopped by a teacher and promised to look farther into the topic.

Mr. Jack did follow up on my request and a memo from our superintendent was circulated. This memo discussed an incident involving a teacher who broke up a fight resulting in monetary damages paid by the District.

There were three major accidents listed that prompted concern by the safety consultant. One accident involved an employee being assaulted by a student while breaking up a fight. ... The total cost of this accident was \$48,679. Employees should not attempt to break up a fight unless they are absolutely sure no bodily harm will result. The appropriate action is to ask students involved in the fight to stop three times. If that does not resolve the fighting, the employee should seek help from other school officials (principals, assistant principal, etc.)...All employees should use good sense and good judgment while in the workplace to ensure the safety of themselves and everybody around them.

Mrs. Prince responded to this memo stressing to me that teachers should break-up fights if the child is being hurt, and that saying "stop" three times and getting help is not good enough.

Thankfully I did not have to break up any more fights this year. I came close to breaking up Christopher's fight, but Mr. Jack and Coach Hayes made it there first. Coach Rose and I intervened before Paul could begin his altercation. I also had two close calls during both my 7<sup>th</sup> grade class and Algebra I class with students "Bowing up" to one another moments before throwing a punch. I was lucky to intervene in these situations before they were exacerbated. I found fighting to be a major problem in our school. I was always worried about the slightest argument interrupting into a physical altercation. Mr. Peppers agreed, stating,

Fighting is a problem at our school. For a school of our size, we should have zero fights yet our students consistently rely on violence to solve their problems. If we could reduce violence and the threat of violence toward each other, students could focus their energy on mastery of the lesson instead of 'getting in the licks' so to speak.

Violence or the treat of violence interrupted class instruction as much or more than standard insubordinate behavior. Just as Mr. Peppers pointed out, these students focused more of their energy on the possibilities of violence to settle arguments than they did on solving a math problem. Their constant disruptive behavior was also a major hurdle I faced in covering the state standards in mathematics.

Explaining this behavior came from many different angles. The student's culture based on living conditions may play a part in their misbehavior. The particular generation by which they are being raised may be a contributing factor. Adolescence may contribute to these behavior problems as well.

Ms Sanders and Mrs. Jones had stated they believed the low socioeconomic status of our students coupled with their home lives contributed to the behavioral problems I faced. In an earlier excerpt from my conversations with Ms Sanders and Mrs. Jones, these teachers discussed how loud abusive speech was related to the poverty of these students. During our conversation, Ms Sanders also discussed how much of the behavior, especially the violent behavior, stemmed from family disagreements outside of the school. Ms Sanders said, "What we are forgetting is that ... most of these fights ... come from the community. Because this family does not get along with this family and they bring it up here."

Mr. Jack claims it's generational. He stated,

You say a child is being disrespecting. A child really don't know what you talking about. ... My grandparents thought saying 'What?' to them was disrespectful. You better say 'Mam. Yes Sir." It's a generation gap. When you say 'You're being disrespectful.' They be like 'How's I being disrespectful?' Because they really think it's okay to holler and shout back. They do that to their parents. They don't know what disrespectful is.

There were many teachers who agreed with Mr. Jack. Teachers like Mrs. Stubbs who have been teaching for over 30 years discussed with me how students are talking more in class, and becoming less afraid to talk back to teachers and administrators in a disrespectful way. She continued to say, "Their parents didn't talk back as much as they do. ...These kids really love to talk." Mrs. Stubbs was known as "Mom" to many of my students. In a vote for teacher of the month, many of my students wrote "Teacher of the

Mother" and "Mrs. Stubbs AKA mom." She did not have any children of her own and claimed, "these are my children." Mrs. Stubbs was well respected by most of the students and other faculty members as being a caring stern teacher with many years of experience. I looked to her for much of my guidance during this school year, and whenever I addressed the issue of behavior, she discuss how these students acted differently than when their parents attended her classes.

Adolescence was also a contributing factor in these behavioral issues. I found my seventh graders were much more talkative and preoccupied with issues such as relationships than my high school Algebra I students. My 7<sup>th</sup> graders also threatened each other and used more abusive language than any of my Algebra I students. One morning one of my seventh graders, Julie, came to class but did not enter the room. I asked her why she was standing outside of class and she said, "I need to stay out here or I am going to do something I'm not supposed to." I asked her what was the matter and she replied "Somebody called me this weekend and said some things about my momma that aren't true and I know who it was." I pressed her for more details and she pointed out three of the 7<sup>th</sup> grade girls. I gathered that Julie was upset that the image of her family, especially her mother, had been called into question and wanted me to be aware of her anger.

I kept Julie in the hall and asked these three girls to step out into the hall. All three of them denied the allegations. I asked Julie if everything was going to be okay, and she said, "as long as they don't say anything." I instructed all the girls to drop whatever the issue was and return to their desks. In less than a minute, a classroom disruption ensued and I asked Julie to go back into the hall. I called the office and requested Mr. Jack come

to my room. Within a few minutes, he met me in the hall with Julie who told him the story. The three students Julie accused were asked to go with Mr. Jack to the office and they all four missed the remainder of the class.

Adolescent behavior also played a part in grouping situations when I had students participate in cooperative activities. I was asked three times by three different 7<sup>th</sup> grade female students to change their groups because of a male student's presence in their group. Sue was the first student to ask to change her group assignment. She asked me to step out in the hall and discuss why she needed to be changed from the group. The conversation follows,

Lamb – What do you need to talk about?

Sue – I don't like that group.

Lamb – What's wrong with the group?

Sue – It's a long story.

Lamb – Go ahead.

Sue – It's personal.

Lamb – Then you don't have to share it if you don't want to.

Sue – It's about Montavious. It's how he be doin' stuff.

Lamb – Is he doing stuff that's inappropriate toward you?

Sue – Yeah, I told my momma and my momma had told me to tell you to move me out of that group.

I found out that Montavious was saying some things that were sexually inappropriate. I told her to let me know if he did it again and I would call and speak with her mother to

see if she needed me to go any farther with this situation. I asked if she could stay in the group for the remainder of class, and I would find another group the following day. She agreed and we went back into class. Later that day, I spoke with Mr. Jack and said that I believed Montavious was saying or doing some things that were sexually inappropriate. I recommended a conference between him and Montavious. Later that day, I spoke with Sue's mother to make sure these comments did not require further investigation, which they did not.

On top of these examples of my seventh graders' issues related to gender specific situations, the overall maturity level of my seventh graders made teaching them a challenge. I had a discussion with two other teachers who taught both the middle and high school educational levels. Both of these teachers agreed that the adolescent maturity of our seventh graders made instruction a challenge. Mrs. Neely stated,

I would rather teach high school because seventh and eighth graders hormones are kicking in and they cannot control their behavior and they do not realize the importance of an education. Whereas once you get past the eighth grade you start going down hill from 'fool's hill' and you get more wisdom and intelligence and you are more willing to listen to teachers and adults who care about you.

# Mrs. Reed said,

My problem with this age group is they're not mature enough to focus for the entire time. It's my opinion that 7<sup>th</sup> and 8<sup>th</sup> graders are not able to focus the entire 50 minutes non-stop. ... If we give them a group assignment, they are going to

kill 7 or 8 minutes talking before you can get to every group ... because their sense of reality or their sense of the future is such short range.

My 7<sup>th</sup> graders created a learning environment that was riddled with constant interruptions. Mr. Peppers labeled this as the "culture of interruption." I constantly had to stop my instruction to get students back on task. I had to waist instructional time preventing students from taking their arguments to the next level of physical abuse. Whether my student misbehavior was a result of adolescents, poverty, or their generation, its effect on instruction was felt by the amount of time lost. Just as Mrs. Reed illustrated, time was precious to students and teachers.

#### Student Motivation

I have always been motivated to do my best in any classroom I enter. This internal motivation may have been engrained in my by my parents. I had a hard time teaching students who accepted mediocrity. I constantly struggled to understand why certain students did not perform to their capabilities. I know there were students simply not competent in mathematics, but even with constant praise and an occasional above average score, some capable students were not motivated to reach their potential. One such example was Christopher, one of my 7<sup>th</sup> graders, who performed at minimal competency until I called his bluff.

Christopher was a bright student and lived in the group home with Paul and William. Everyone knew Christopher could achieve in mathematics, but he simply accepted average and below average scores. Christopher would answer questions in class, but would never perform at his ability level on tests. I had some time to speak with

Christopher shortly after winter break and he said, "I already knew how to do a lot of this stuff. I just didn't study before the test. ... I knew it in my mind and stuff, but I ain't think I needed to study."

In this conversation, I pointed out that he had scored so low on a recent practice MCT test that I did not record it. He admitted he simply selected random answers on this multiple-choice test. We talked a while about his future plans and what he enjoyed in life. I talked to him about a middle school mathematics competition sponsored by a nearby community college that awarded the top two students in the 7<sup>th</sup> and 8<sup>th</sup> grade an opportunity to compete against other top 7<sup>th</sup> and 8<sup>th</sup> grade students. I told Christopher that I felt he could do well in that competition if he really tried. Christopher made the highest score for our 7<sup>th</sup> graders and went with another 7<sup>th</sup> grader and two 8<sup>th</sup> graders to compete against other students from other area schools.

Following that conversation and his success in this competition, Christopher's grades in my class began vastly improve. He began competing with other students in the grade for the highest score on each test. Christopher also made the second highest score on the MCT for our 7<sup>th</sup> graders. I was very proud of Christopher and I am sure he was proud of his score as well. Christopher was a success story that shows how, with a little encouragement from the teacher, this student reached his potential.

Other students did not require motivational speeches from me to do their best.

These students either had innate abilities or were motivated by other means. Several of my students simply understand mathematics without much explanation. These advanced students either grasped the topic after a few examples or typically within one class

period. The slow pace of my classroom often discouraged them. However, what motivated these students most was my assignment of challenging problems.

Toward the end of the school year, I conducted an activity using a global positioning system (GPS) with my Algebra I students. This activity had students use a map to find latitudinal and longitudinal coordinates of certain locations on campus then walk around campus and find latitudinal and longitudinal coordinates of the same locations using a handheld GPS. When they returned to class, they compared the two methods of finding coordinates via a map and a GPS. I then modeled how one could compare the distances the GPS computer made to distances calculated via the distance formula using conversions between degrees and feet. The process was challenging and many of my students needed extra motivation to complete the activity. I offered a reward for the student(s) who could find the distance between the fifty-yard line on the football field and the front doors to the gymnasium using the distance formula and the coordinates from the GPS. Most of my students disregarded the challenge, but four of my Algebra I students took the challenge and attempted the problem. Even though no one correctly understood or worked the conversions between latitudinal and longitudinal degrees and feet, I was pleased to see these students were motivated to complete this task.

I knew these students desired a challenge and had the potential to accomplish many things in life and mathematics. Telsa, one of the students who attempted the GPS activity, wrote in one of her final journal entries, "I think Mr. Lamb is a very smart person who tries very hard to help us reach that level." A lot of the more advanced

students needed a challenge to motivate them to reach their potential. This GPS activity was just the challenge to get their creative brains workings.

Some students needed pep talks, some students needed challenges, and some students were motivated effectively from home and I seldom had to push them to succeed. Joshua was one such Algebra I student whose mother was active in the Parent Teacher Organization (PTO), substitute taught at WSHS, ended up becoming WSHS's interim ISS teacher toward the end of the school year. Joshua was a well-mannered student, worked hard, but always managed to score just below an "A". That was Joshua's ability level in mathematics, and his failure to achieve the "A" he and his mother desperately wanted was not for lack of trying. Joshua discussed with me how his parents were motivators for his success in school and in life. Joshua stated,

If you really care like I care and my mom care ... you going ... to get all you can out of this class. ... If you got some parents pushing, you are going to work as hard as you can to get everything out of that class. ... I have very aggressive parents. They push me, push and then push harder until I'm on an edge. I have to study really hard. And if I didn't have [my mom] pushin' me or my dad pushin' me, ... I wouldn't have read as much and I wouldn't have worked them problems like I usually work them. Cause ... if they're pushing me ... I have to do it.

Joshua was the type of student whose parents were involved. He attributed his hard work to his parents constant monitoring of his progress. For Joshua, the parents were his motivation.

My students were motivated by their parents, my conversations, and classroom challenges. Some students were not motivated to learn mathematics no matter what I did. Christopher said,

I know some students they came in here and like they don't care. They still don't care after all you have done for them ... so it's not really your fault. It's they fault cause they don't want to pass inside they self. They don't think they need an education or something. They think they parents are going to take care of them all the time. It's not really your fault. It's their fault and they parents fault.

Christopher summed up what I had a hard time accepting. I have always been the teacher who felt every student could learn with the proper motivation and attention. I constantly questioned my actions or inactions when student failure was present, which led to the statement made by Christopher. Despite my obligation to leave no child behind, I came to the realization that some students are not motivated. There may be a time in the future when that student becomes motivated, but all I could do was provide them with opportunities to learn.

Motivation was an everyday challenge. Some students were self-motivated, and other students needed motivational guidance from their parents or from me, their teacher. The hardest fact I had to accept was that some of my students really did not care. In the words of Steve, "I mean some kids that feel like ... they don't have anything going on for them in life may not care. They may just come to school to eat." My constant nagging to do better, and my attempts to challenge may have been unsuccessful with some students. I do feel that my attempts and words of encouragement were not in vain, and hopefully

one day, these students who did not care may start to care and may remember things I did or said to help them reach their full potential.

### **Administrative Influences**

It is easy to think that, just as the students are the subordinates to the teacher, the teacher is the subordinate to an administrator. In our school, we had one building principal, Mrs. Prince, and one assistant principal, Mr. Jack. Mrs. Prince was in charge of staff development, class scheduling, organizing committees, overseeing classroom instruction, and making sure each school day ran smoothly. I am sure there were other duties, especially those handed down from the District administration, which kept Mrs. Prince busy. Mr. Jack handled all disciplinary actions except for Out of School Suspension (OSS) and other extreme matters that would expel or relocate students. Mr. Jack also handled classroom inventories and duty scheduling.

Just as Bossert, Dwyer, Rowan, and Lee (1982) discussed, principals do affect the climate surrounding the professional lives and actions of teachers. principals and administrators say and do things that overtly and covertly affect their subordinates as Hart (1993) suggested. I had several positive and negative encounters with my administrators throughout the school year. I could agree with one of my colleagues who said in their anonymous questionnaire "The leadership here is the best we have had in a long time."

Taking the year as a whole, I believed my administration had complete confidence in my abilities as a teacher and leader on campus. At the beginning of my second year with the school district, my Assistant Superintendent asked me to lead the Spike School District Professional Development Departmental Meeting for Mathematics. I was also given the responsibility to create the exam schedules throughout the school year. A week prior to the end of the first quarter, I asked Mrs. Prince if our first 9-weeks exams were going to be an hour or two hours in length. I needed to know how long my students had to complete the exam. Mrs. Prince did not know and asked if I would make out two schedules of exams for both a one- and two-hour time slot to use after the teacher's opinions of length were collected. We decided to provide two-hour time slots for exams and the schedule I created was used throughout the school year during quarter and semester exams. I was also assigned the duty of junior class co-sponsor, Homecoming committee co-leader, and Teacher Support Team member during this school year.

This was Mrs. Prince's first year as a building principal. She was an award winning elementary instructor before becoming the assistant principal my first at WSHS. I found her to be extremely caring toward the students and me. I had administrators who knew when I was worried or excited about my classes. They were always willing to listen to my troubles and accomplishments. Mrs. Prince was the type of principal who genuinely cared about my well being as an instructor. As I noted in my journal:

I walked in the office today and Mrs. Prince said, "You're kind of looking down." It's really good to have an administrator that is aware of our feelings not just what's going on in the classroom. It's great to have a principal aware of how her teachers are doing in life and what might be bothering us. As a teacher, I am thankful for that. Not many teachers have administrators that are supportive as well as demanding. Mrs. Prince is also good at giving advice. I am pleased with that and happy that we have an administrator like that. We all have our little problems. Not everything that Mrs. Prince does I'm happy about, but for the most part, she is there, she is supportive, she's concerned, and she does a good job.

Mrs. Prince was also aware of the role teachers played in the lives of our students. She believed our job, as educators, was to provide experiences that teach the whole child and not just the intellectual aspect of their lives. Just before Christmas, our faculty had a meeting where Mrs. Prince told us, "You are the light in many of our students lives." She then presented each teacher with a scented candle as a metaphor of the light of hope, knowledge, perseverance, and security we teachers give our students. This gesture sent me and other teachers away for the holidays with a feeling that our jobs are very important. Mrs. Prince understood these important aspects of being a schoolteacher.

A teacher's working environment has a lot to do with the perceived opinion a building principal shows toward a teacher (Bossert et al., 1982). I worked in total confidence that my principal trusted my teaching abilities. In a discussion after my 7<sup>th</sup> graders finished their end-of-the-year assessment, Mrs. Prince said,

We are our worst critique. We are supposed to have a bar that we measure ourselves by, and then we are supposed to be attaining all the time ... challenging ourselves as instructors, ... as teachers, as facilitators of learning, ... that is wonderful, but don't beat yourself up across the head. ... Cause I know you have done a good job with them and I've seen some things done differently. And then even at the beginning of the year when you came in, ... you took from even the scores that were not favorable and you said 'How can I do this differently for this set of kids who are coming in?' And that's the way you planned your year out. ... It was purpose driven. You know, all the teaching, all of the different activities and the manipulatives, and all of that that was used. You know, down to every activity, every homework all of that was planned. And I've got to believe that it worked.

In this discussion, Mrs. Prince revealed to me that she trusts the methods and strategies I used to prepare these students. She supported the usage of hands-on activities, group work, projects, and other activities. She was also observant of the time I spent catering my instruction to the needs of my students. She saw how I was aware of the test scores from my first year and that I used those results to better my instruction during my second year.

Mrs. Prince's confidence in my abilities was high. I never once felt my Principal doubted my actions in the classroom. Mrs. Prince did doubt the actions of other teachers who were not effective in her eyes. Mrs. Prince was very direct with these teachers and often asked my opinion of their teaching effectiveness following one of their meetings.

The most common questions asked my opinion of the other mathematics teacher's methods. I often noted good teaching traits and areas that needed improvement. I did not want to have my comments used to relieve another colleague of their teaching position, just because, for example, Mrs. Reed and I did not teach mathematics in similar fashions. Mrs. Reed was more traditional in her approach. She worked a lot of problems in class and assigned even more for homework. Her tests covered numerous topics, and her goal for the year was to complete the textbook. I used more games, hands-on activities, and technology than Mrs. Reed, but as I told Mrs. Prince, "There is a lot to be said about a more traditional teacher during testing times."

I gathered that Mrs. Prince sought my opinions of effective math instruction based on my experience and mathematics specialization. She informed me that students were not responding as well to Mrs. Reed's instruction as they were with mine. She discussed how I do not have as many failures, and the students speak better about my classroom. Our district did not have a math coordinator or district specialist in any of the subject areas. Mrs. Prince's experience was not in secondary mathematics, so she often looked to me for guidance. Her disapproval of some of Mrs. Reed's techniques was obvious. In later conversations with Mrs. Reed, I was able to see how much pressure Mrs. Prince was putting on her.

Mrs. Reed felt constant pressure from both Mrs. Prince and Mr. Jack to do a better job in the classroom. Mrs. Reed complained about the way she was treated by the administration. She would be summoned to the office for conferences with Mrs. Prince and report back to me with statements like "I'm getting out of education" alluding to the

negative connotations of her most resent visit with Mrs. Prince. Mrs. Reed constantly stated that the administration deems her teaching as incompetent. She often felt that our administration pressured her to lower her standards so that students could do better in her classroom. Mrs. Reed stated,

If you're competent you're leaned on, you're leaned on, you're leaned on, you're leaned on ... It is a group of people buying into the philosophy that we can lower the standard. And it equates things. And that's tantamount to buying into the philosophy that we can't do. ... Somewhere in this educational process for these people who are in charge of this. They have been told, they have been led to believe, or they have bought into the fact that lowering the standard is okay.

Mrs. Reed was very upset by administrators coming to her and asking if certain students could have second and third chances to make up work on exams.

There was one incident at the end of the school year where Mrs. Reed thought the administration was trying very hard to ensure that a student, who had not met graduation requirements, would be allowed to graduate. This student did not do well in Mrs. Reed class, and a week before graduation, Mrs. Reed reported a visit from our principal. She discussed how Mrs. Prince asked for her grade book and inquired about the possibilities of this child retesting and passing. Mrs. Reed was furious and in our discussion stated,

[When] I left high school ... none of this junk 'Can you give this kid a hundred?' I never encountered anything like that. It was, well, parents were in charge of homes then as well. And parents expected their children, if they were average, to

make average or above grades or there were, there were consequences at home as well.

Mrs. Reed was not happy with the way Mrs. Prince perceived her instructional capabilities. Other teachers also believed the principals did not treat them fairly. In the anonymous survey at the end of the year, one teacher stated, "Teachers should be treated with more respect by the administration." Another teacher wrote, "I feel that each and every teacher should be treated the same for accomplishments and shortcomings." In conversations with other teachers, I found the student's opinions were accepted over the teacher's account of certain instances. Mr. England stated, "[The administrators are] more willing to listen to the students when they have excuses than to listen to the teachers who saw or heard what actually happened."

As the instructional leader, Mrs. Prince had to evaluate the effectiveness of teachers. One way she did this was requiring all of her teachers to plan one week in advance for their instruction. Just outside Mrs. Prince's office was a basket labeled Lesson Plans. Each teacher received a template to follow regarding the format of our lesson plans. I was very diligent and punctual with my lesson plans throughout the first semester of my second year at WSHS. There rarely was an instance when I forgot to plan ahead for my instruction. However, toward the end of the school year, I began to slip with my lesson plans, and on February 1<sup>st</sup>, I received a reminder in my mailbox from Mrs. Prince acknowledging my tardiness. She wrote,

Let's plan for our instruction for optimal student achievement. You have not turned in your lesson plans for this week. Prepared, planned instruction = good instruction = high student achievement = success!

After that warning, I continued with my planning but it seemed that the closer I came to the state assessment, the fewer lesson plans I created. I knew what was left to teach and how much time I had to teach these objectives. About four weeks prior to the state assessment, I created a lesson plan of the remaining days on one of my dry erase boards to show my students (and me) what objectives would be covered and when they would be covered before testing took place. During these weeks, I never turned in any new lesson plans to Mrs. Prince, but I never received any reminders either. I assume both she and I understood this was crunch time and my official planning took a backseat to the teaching.

Mrs. Prince and Mr. Jack were also called to guide teachers' instruction by providing feedback from observed lessons. At the beginning of the school year, Mrs. Prince made classroom observations part of her vision plan. She and Mr. Jack may have observed other teachers, but they never entered my classroom to conduct a formal observation. There were many times one or both of these administrators would peer through my window during a lesson. When this would happen, I often made an effort to follow up on this observation and gather feedback regarding what they witnessed. I knew they would not call me in their offices to reflect on the lesson.

During both years at WSHS, I had three visits to my classroom from an administrator. The first visit came from my first building principal at WSHS. That observation occurred during the last 10 minutes of an Algebra I lesson. The other two

visits were from my assistant superintendent who observed about 10 minutes of a lesson each year I taught. Mrs. Prince and Mr. Jack did not sit down in my classroom the entire school year to observe my instruction. They simply relied on their views from the window and comments from students.

Mrs. Prince said of my teaching,

[The students] can really see what's going on and know what's going on in the classroom. ... And that's why ... this year we've gotten away from just the coming in [and] just sitting, sitting, sitting in the classroom. We felt that going around and looking in we could get more of actually [what was] going on than for us to make a designated time to say 'Okay, we are going to come on this day. We are going to come at this particular period.' You know, here we have a truer picture. The kids can give us ... that picture better than say us coming in and sitting down. ... And when you come around and you can see that even with the 7th graders who are hyper, who are excited, who have a lot of things going on ... they're actually learning.

I can understand the rational behind this reasoning not to observe teachers teach. However, even with my passion to give students a voice in their experience in the classroom, I wanted the administrator to come into my classroom and observe. I know they observed my hands-on lessons via their window observations. They were not able to hear the interactions taking place or experience how I handled discipline. In a later section, I explain how my classroom management was ineffective at times. I could have benefited from an administrator observing some of my mannerisms and guiding me

toward a better solution. For this study, I made an effort to approach my administrators after I witnessed their covert observations, so that I could hear their evaluations. If I had not had this motivation to collect the data, I would have been like most of the teachers at WSHS who, like Mr. Peppers said, "close their doors and teach in their little island." I needed the feedback for my study and for the constant improvement of my instruction. Observations were important, but they were never conducted.

# Disciplinary Management

Throughout the school year, other teachers and I had difficulties with the discipline and educational desire of many seventh grade students. Following progress reports for the third quarter, I struggled to guide student motivation towards a desire to improve academic performance. I was also becoming increasingly distraught over the lack of respect many of my students were showing me. Several 7<sup>th</sup> grade students continuously talked out of turn and disrupted class. Even after parental phone calls and hallway conversations pertaining to appropriate classroom behavior, I discussed my concerns with both administrators. I asked if either Mrs. Prince or Mr. Jack would come to my 7th grade class and talk with my students about how their behavior is affecting their future. Mr. Jack agreed to speak to my students and on the 17<sup>th</sup> he arrived carrying a bouquet of candy bars.

Mr. Jack began by saying, "I'm going to give some of this away, but there is nothing free." He asked students to clear their desk and proceeded to ask the whole class why they come to school. The students looked around at each other hoping that someone would speak. Eventually Jala raised her hand and said, "To get an education." Mr. Jack

agreed with her and addressed the class stating, "Some of y'all don't know why you are here." He posed the question "Who wants to be a millionaire?" Every student raised their hand and Mr. Jack continued saying "Guess what, you can do it. All you have to do is dream big ... but you're not going to be a millionaires working at McDonalds. It's a good job, but it's not going to get you a million." Mr. Jack had their attention. All eyes were on him as he spoke. Whether it was from his authoritative voice, his continuous energetic movement, or the possibility to make lots of money, the students seemed captivated by what he was saying.

He continued by saying "This is where you learn to be a millionaire." He made a hand gesture to the floor and then circled his hand around and around making reference to my classroom and this school. He proceeded to walk to the dry erase board and list four Keys to Success. Mr. Jack was a coach at one time and continued to be a private Karate instructor since his promotion to becoming our assistant principal. I was once a coach also and I realized what he was doing. Before every basketball game I coached, I would write those same words on the board and list the actions my players needed to win the game. Mr. Jack obviously believed in defining the desired result and establishing one's actions that would provide that result. His list consisted of:

- (1) Dream
- (2) Plan
- (3) Execute your plan
- (4) Test your plan.

As he made his list, I realized that Mr. Jack was helping these seventh graders learn to not only pay attention in my classroom, but also pay attention in life. Too many times I focused on the students and their immediate futures in my classroom. I wanted them to sit in their desks and pay attention to my lesson because they were my responsibility. Mr. Jack did not come into my classroom and say, "Mr. Lamb has had enough. Anybody that doesn't do their work or pay attention will go directly to ISS." That was what I thought I wanted him to come in there and say. I wanted him to scream, yell, and threaten them within an inch of their lives, but he came to give them some purpose in life.

Mr. Jack pointed out the need for getting an education and paying attention in the classroom stating,

If you can't count, you will get ripped off, and if you don't pay attention in class, you will not make it in class. ... Knowledge is power, and those that have an education will be paying you to work for them. ... Hardheaded folks end up in Parchman [Mississippi's State Correctional Facility]. You have to follow the rules. Teens are being charged and serving time as an adult. ... You better get what you can get while you are here. ... Mr. Lamb has experiences. You need to get some of those experiences.

Mr. Jack warned students about idolizing many famous individuals who flaunt their fame and end up spending all their money. Mr. Jack asked students to find a trade and be the best person in that trade. Mr. Jack finished his talk relating these dreams and aspirations to each of these students. He acknowledged that most of these students would not move far away from home if and when they graduated. He noted that his life was

similar to many of the students who attended WSHS. He never traveled outside of his corner of Mississippi, and he worked his way through college to make a better life for his children. He bragged that his children had seen parts of our nation that he was never able to see. He ended his presentation by challenging these 7<sup>th</sup> graders to set goals, even if they are to leave their hometowns, and follow through with those goals.

I thanked Mr. Jack for his visit and thought my students would gain a lot from his message. For a few days after his visit, my students sat quietly and attentively through my lessons. I would make references back to Mr. Jack's message, which would quell some classroom disturbances, but after about a week, my students returned to their talkative and disruptive behavior that left me tired and agitated. I began to think that my plan to have Mr. Jack enlighten my students about the importance of paying attention was lost on this group of 7<sup>th</sup> graders.

Later in the semester, I asked some students to discuss how they have been motivated to learn in their mathematics classroom. One 7th grader, who had continually been reprimanded by other teachers and me throughout the course of the school year for his behavior, commented about this presentation by Mr. Jack. I did not directly ask about the presentation and Paul's comment revealed Mr. Jack did have an affect on these students' perceptions of life and mathematics. Paul stated,

Like that day Mr. Jack came in, that was fun. Then it was learnable. You were trying to teach us, you know, what we needed to do in life. ... Math is a very important thing in our life that we have to take care of ... We need math through all of our life not in just this grade.

Even though Paul gave me credit for Mr. Jack's words, the presentation did have an impact on his thought process. As a teacher, sometimes one small victory is all we desire.

Mr. Jack definitely set goals before entering into his first year as an administrator. Just as I observed, one of those goals was to show a child that schooling was more than the knowledge in the classroom. In an interview, Mr. Jack illustrated how teachers and administrators are to prepare students for the workforce. Some of the job skills taught in school included being on time. This was why our school stressed assigning tardies to students who were late for class. Mr. Jack said,

Tardies are very important and I try to get [teachers] to understand, let [students] know that 'I need you here and on time.' [Spoken like a teacher talking to a student]. And work [is] going to be the same way. We are preparing them for work. ... They got to understand that when the whistle blows, 'Let's go' [said like a rallying cry] and if you not in your spot when the whistle blows, the boss man [is] going to be 'Look you missed a couple times for us starting. The whole factory depends on one person.' That's what I try to get [students] to understand. It's not just about school. It's about life learning. Life preparation.

These life lessons did not stop with time management. Another goal that was evident to teachers and students alike was Mr. Jack's desire to consistently enforce the school's uniform policy. Each student received, reviewed, signed, and had their parents sign the Spike School District Secondary Student Handbook acknowledging their understanding of the expectations of teachers and administrators. During the beginning of

the school year, each first period teacher distributed and highlighted important policies and procedures of our school district. The dress code was found in Section III and read,

There appears to be a definite relationship between good dress habits, good work habits, and proper school behavior. Cleanliness, neatness and appropriateness are the standards that should be observed by all students in their personal dress grooming. Appropriate school dress helps to promote the best learning situation for all students. Any type of attire, which attracts undue attention to the wearer and thus causes a disturbance in the school is in bad taste and is not acceptable. In cooperation with parents, school officials, and students, the following rules and regulations are adopted in regard to school dress and personal appearance. All teacher, principals, and administrators are expected to enforce them.

The handbook continued to provide a page long description of acceptable and unacceptable attire for the students.

Violating the dress code was one of the most common infractions in our school. Many male students allowed their pants to sag below their waistline, wore earrings, and wore stockings, bandanas, and baseball caps while on campus. Male and female students did not tuck their shirttails into their pants and would wear unacceptable shirts and pants. I was the type of teacher who noticed the shirttails, typically during my morning duty time. Whether I was welcoming the students off the school bus or gazing over them at the bottom of the stairs. I typically addressed these violations in a manner that provided quick results.

When I noticed students violating dress code, I would provide them with physical and verbal gestures asking them to correct their violations. Students with earrings simply received eye contact as I pointed to my ear. Students with headgear were given a hand gesture signifying the removal of a hat or bandana, and students with sagging pants or untucked shirts were given a verbal command to correct their violation.

I never really stressed too much about the dress code. I did not write a referral this year with regards to the dress code. I would always tell colleagues and administrators that as long as the students were in their desk, I never paid too much attention to the dress code. However, Mr. Jack definitely paid attention to the dress code. A very common observation during the morning duty time would be to hear Mr. Jack loudly calling a student's name from down the hall and instructing that student to either tuck his or her shirttail in or spit their gum out into the trash. Ms. Sanders nicknamed him "Radar" because of his ability to track down the slightest rule violation.

Students constantly complained about how strict Mr. Jack was, but these same students agreed that his consistency was effective in causing students to be more willing to adhere to the dress code. Talena stated, "He is effective. Cause you know, people keep that shirt tucked in when he's coming around." Sharyl added,

Mr. Jack is on the job even when he doesn't really have to be. He's an on time guy. He's very strict about dress code and everything, and if you come out of uniform, he is going to notice. And you can bet you going to ISS, buddy. He does a great job doing his job even though sometimes I get into trouble.

Teachers also agreed with the students about the effectiveness of Mr. Jack's management style. Some teachers went as far as coaching students to be respectful and non-confrontational with Mr. Jack because, as Ms. Sanders put it, "[Mr. Jack's] not going to back down." Mrs. Stubbs expressed her support of Mr. Jack with:

I really feel like that's a good thing because if you are constantly, our kids are taking it for granted for too long. They know what the rule is. It's just like with anything, they'll push it to the limit and even though, you know, it becomes tiresome, I think it's something that's good. It should be done. Because now they are to the point 'Well, there's Mr. Jack' and they go to feeling, you know, is the shirt in, or just even checking to see if the shirt is in. So because you know he's really not doing anything that he's not supposed to. Your shirt's supposed to be in.

## Mrs. Jones added,

I've been teaching my kids all year that no matter what happens just to say 'My bad man' and back up. Cause they're going to lose. They are going to lose. And they pretty much have done that this year so we've survived.

Mr. Jack was "Radar" and did enforce the rules. I admitted to him that I was not as consistent with the discipline as he had been, and he discussed how some teachers did not handle small disciplinary violations effectively and resorted to simply sending them to the office with a referral. Mr. Jack said,

You all need to start punishing them in your classroom, now. You send them to me [and] they think that ... I am punishing them. ... If you go on and send them

to ISS, you jumped over other things. ... What I am saying [is] write-offs and stuff like that ... [the students] look at it [as if] I'm punishing them when you're writing them up.

Mr. Jack knew what he wanted and had his way of handling situations, which was direct, loud, and in your face. Many times Mr. Jack would enter a teacher's room and address a student's dress code violation or violation of a minor infraction such as chewing gum. Mrs. Stubbs said, "He usually backs what I say, usually. Every once and a while something may come up that I don't agree with, and um I let it go ... [such as] come in my room 'Get the gum out you mouth. Tuck your shirt tail in'." Mrs. Stubbs acknowledged that she simply did not let these things bother her. She knew he was setting the atmosphere that students will not get away with breaking policy. Other teachers like Mrs. Reed took these actions to heart. Mrs. Reed believed Mr. Jack was directly attacking her competency as a disciplinarian. Mr. Jack was a strict administrator, but many times his actions invalidated our authority.

There were times during the school year when I thought my classroom discipline was micromanaged by Mr. Jack. He liked to observe classroom teaching through the window of the classroom door. However, sometimes, he would observe something that he did not like and react at that moment instead of allowing the teacher to conduct their disciplinary steps to modify the behavior. There were several situations that occurred in my classroom where I felt my authority was usurped. Two of these events occurred at the beginning of the school year. As I recorded in my journal,

The 7<sup>th</sup> graders were horrible today. I tried to be an interactive teacher, but these 7<sup>th</sup> graders really do not like to pay attention and love to talk. Mrs. Stubbs agrees with me that these students love to talk.

The 7<sup>th</sup> Graders kind of got out of hand and were passing notes and not paying attention. I addressed the class and order began to be restored. Mr. Jack must have heard the commotion and stood at the door and just stared. All the kids simply looked at him instead of listening to me. Two students passed a note and I picked up the note. Mr. Jack opened the door and called the passer out into the hall. He later returned, and in front of the entire class, he told me that Paul has received his warning. If he acts up or does anything, write him up.

[Mr. Jack] told me that I can write them up and he can deal with them. I took offence to this because I like to handle little things like passing a note myself. I felt as though I lost a little respect from the kids because of the way Mr. Jack told me how to discipline my students.

About six weeks after this incident with Mr. Jack and the note, I had another encounter with Mr. Jack that led to a conference with Mrs. Prince and Mr. Jack. In a faculty meeting just before the end of the first quarter, Mr. Jack and Mrs. Prince discussed how some students were taking trips to the restroom way too much during the school day. There were several students he named who had been going to each class during the day and asking permission to go to the bathroom. Since secondary teachers do not see their students all day long, it was difficult for us to know who had or had not been to the restroom before our class. Mr. Jack said that students have plenty of time to go to

the restroom before school and between classes. Therefore, only students with emergencies should be allowed to go to the restroom.

One of the students Mr. Jack named during this faculty meeting was Montavious. During my first quarter exam, several students finished early and began asking permission to use the restroom. After two or three students were given permission, Montavious finished his exam and wanted to use the restroom. At that time, I did not remember the faculty meeting and did not think twice about letting Montavious out of my room. Several minutes later, I received a knock on my door and Montavious was standing with Mr. Jack in the hallway. I opened the door and Mr. Jack proceeded to say,

Montavious does not have permission to use the restroom during class. I have spoken with his dad, with Montavious, and with his teachers. He needs to use the restroom before class not during class.

I felt my face flush as I became embarrassed because of the tone of Mr. Jack's voice and because I did not remember the content of the last faculty meeting. I felt as if I was being reprimanded in front of Montavious and the rest of my class who could listen through the opened door. Mr. Jack took Montavious with him, and I returned to my classroom with my proverbial tail tucked between my legs.

I later addressed this situation with Mrs. Prince stating that if Mr. Jack had a problem with anything I do in my classroom, I would prefer he address those issues with me privately and not in front of my students. Mr. Jack later came into the office and I confronted him about the earlier incident with Montavious. Mr. Jack realized I took his remarks to be addressed toward myself when he was simply pointing out to me the

reasons why Montavious was in the wrong and would be punished. He apologized for the misinterpretation and agreed that if he had anything to address with me that it would be done in private and not in front of the students. I left feeling that the problem was resolved and found that nothing like this occurred again during the school year. Mr. Jack told me that he would continue to come to the classrooms and address violations with students as the infractions incur, but that was not meant to be a reflection of my skills as a disciplinarian. Mr. Jack did follow students into my room that had their shirts un-tucked or were chewing gum throughout the remainder of the school year, but I came to accept this as not a reflection on me but rather Mr. Jack's method of keeping order.

At the end of the school year, Mr. Jack addressed students and teachers over the intercom. There had been quite a few students roaming the hallways with teacher passes. The administrators believed teachers were allowing these students to leave their rooms without a legitimate reason. Thus, Mr. Jack announced to the school that no students should be in the hallways during class with out an acceptable excuse, and if a student had a pass from a teacher, "Mrs. Prince and myself will determine if it is legitimate or not." Mrs. Stubbs reacted to this comment saying,

First of all, I think it's really due to inexperience, and um that's the first thing. The statements that were made should not have been made. I guess you should say, in the presence of children. It should not have been made over the intercom, period. It isn't anything that children, that students should hear simply because we have enough disciplinary problems already. ... It came across as if ... I'm the man. And we [teachers] don't ... have any authority in our room. Regardless as to

what we say, what we tell the student, it could be vetoed. I'll put it that way. And ... it's just already too many problems. Too many disciplinary problems. Too many problems with who's in authority in the classroom.

Even if it had to do with experience, Mr. Jack demonstrated with that statement how he had usurped the authority of many teachers through his micromanagement.

The students also experienced instances where they observed Mr. Jack reprimanding teachers in front of students. I asked some Algebra I students what they thought the administrators role was in the school. Joshua replied,

The principal's role is to make sure that the teachers are doing their job and enforce the rules of the school ... like go around ... walk up at the [classroom] door and just point out people. ... They should like, just walk up at the door and administrate them and see what they are doing. If [the teachers are] not on task, after class is over or sometime after school is over with, [the administrator] can pull them to the side and talk to them. Give some pointers about how they're doing in class and try to help them.

Talena disagreed and said "Even if you is the principal, you shouldn't be walking up in a teacher's room and tell them what they be doing wrong." After Talena said this, I asked them to describe our administrators. With regards to Mr. Jack, Talena said,

He just walk in your classroom 'Hey man, hey man. Get up.' or something. You know what I am saying. That's something you should. You'll enforce it, but could have did better than that. Like many a times he'll walk up in the middle of a classroom just talking to folks. Just having a conversation. Talking about 'you

been doing this, all that.' It should have waited till after class when the bell rang, Told 'em to call that student, or talk to you, 'Mr. Lamb you should have told so and so to spit out his gum' or something.

These students knew that an administrator should provide feedback to the teacher about their disciplinary actions or inactions. They also felt administrators sometimes overstepped their boundaries. Teachers and students alike agreed that Mr. Jack was consistent in his management of rule violations in the school. There were times when he overstepped his boundaries and tried to micromanage the classrooms, but that could be explained by inexperience. Our students acted better during this school year than my first year at WSHS, and I have to attribute that to Mr. Jack. Even though I did have behavioral problems, I was pleased to know that many of the students were being held accountable for their actions based on the management of the schools discipline.

## School Organization

There were many days when I knew what needed to be taught, but I did not plan how it would be taught. Therefore, I was teaching by the proverbial seat of my pants. Like teachers, administrators must preplan as well. Just as Mrs. Prince outlined to me the time I failed to turn in a lesson plan how planning leads to success, administrative planning also aids in success in the classroom. Knowing when students would be taking field trips, when teachers would have faculty meetings, when the school would be operating on any activity bell schedule, and knowing when guest speakers and assemblies would be conducted helps teachers plan their instruction. Mrs. Prince required us to have our week's lessons written and turned in to her before the lessons were taught. Since

teachers were required to plan ahead, they need to be aware of school events that would remove students from class or overlap instructional time. When a teacher knows students will be away from class, teachers can prepare their instruction around these events. Our faculty was often made aware of assemblies, field trips, activity periods, and other important meetings without ample notice. Mrs. Prince did not practice what she preached in this instance. One teacher wrote on the end of the year questionnaire regarding improvements that could be made to our school, stating,

A more consistent form of communication from the administrators in regards to scheduling, forms needed and other important items would help me in teaching more effectively because I would be more prepared. And not have to be stressed about 'throwing' stuff together.

Mr. England said, "I am fed up. I'm fed up with the way things are run around here. Not letting us know about events ahead of time so that we can schedule our instruction around it."

Teachers provided comments regarding improvements that needed to be made to our school on the questionnaire at the end of the school year. One teacher made a list of items that could help improve our school. In this list of 10 items, 6 corresponded to administrators becoming more consistent and better organized. These six items were:

- Reduction of interruption to instructional time
- Standardization of procedures
- Long range planning meetings
- Well thought-out calendar of events

- Improvement of communication
- Prioritizing academic activities

Another teacher made a list of five items with the first three pertaining to administrative improvements:

- Fewer classroom interruptions
- An enforced discipline plan
- Better organization

These teachers saw a need for administrators to plan more effectively. They also listed classroom interruptions as ineffective administration. One teacher provided more insight into their observation of classroom interruptions at our school. This teacher wrote,

Interruption influences my teaching greatly. Because I am regularly interrupted, I have no difficulty interrupting others because interruption is the norm. If we could change the cultural norm that allows students to inappropriately interrupt teachers when they have questions; teachers to interrupt others when they need to know something; administrators from interrupting class when they need information; and the central office from interrupting the administrators; as well as parents from interrupting class students would have security knowing that our business is learning and teaching.

Interruptions came from students, teachers, and administrators. I was just as guilty as the next teacher for going to a classroom, knocking on the door, and asking for some items or pieces of information that could have been acquired at a more appropriate times.

Administrators did interrupt my classroom on various occasions such as when office

workers were sent to my classroom to retrieve or inquire about the exam schedule I created. There were instances mentioned earlier regarding the assistant principal and how he would come into class to reprimand students. During a Septemeber faculty meeting, Mr. Jack discussed how he did not want to continue knocking on windows and doors, and reprimanding students in the classroom. He said he would eventually start having to write the teachers up for not managing their classrooms. Mr. Jack stated, "Be more consistent with gum, sleeping in room, chips, eating in halls. Write [the students] up. You are in charge of the classroom." While admitting he did interrupt class, he challenged teachers to be more consistent. Consistency was difficult for the administrators as well.

The morning announcements were a known interruption each day that occurred sometime between 7:50 and 8:10. These announcements lasted from 5 to 15 minutes. At the beginning of the school year, I proposed a new bell schedule that would provide more time in first period designated for morning announcements. This proposal was acknowledged but not implemented because Mrs. Prince believed with time everyone would become adjusted to the set bell schedule. Therefore, first period was inconsistently interrupted with morning announcements taking away from instructional time.

The bell schedule follows:

1 <sup>st</sup> Period	50 minutes	7:48 – 8:38
2 <sup>nd</sup> Period	50 minutes	8:41 – 9:31
3 <sup>rd</sup> Period	50 minutes	9:34 – 10:24
Activity Period	22 minutes	10:28 - 10:50
10: 53 – 12:08	75 minutes	4 <sup>th</sup> Period with Lunch

5 <sup>th</sup> Period	50 minutes	12:11 - 1:01
6 <sup>th</sup> Period	50 minutes	1:04 – 1:54
7 <sup>th</sup> Period	63 minutes	1:57 – 3:00

The school bell would ring every morning at 7:43. The students then had five minutes to report to their first period class. At 7:48, the tardy bell would ring and announcements should begin; however, announcements typically began closer to 8:00. There was speculation among teacher that announcements typically began about five minutes after our principal arrived on campus. There is no evidence supporting this gossip, but I often observed Mrs. Prince arriving to school after many school buses and teachers had already arrived.

The inconsistency of morning announcements made it difficult to plan instruction for my classroom. If the announcements occurred every day at 7:50 and lasted until 7:55, then I would have until 8:38 to implement my lesson, giving me 43 minutes of instruction. Since this timeline rarely occurred, my first period instruction would typically begin anywhere from 8:05 to 8:10 each morning. My students would arrive. I would have them get out their materials and I would either begin the lesson or go over the homework. It seemed everyday I began my lesson before announcements, I would have obtained the most desired student attention only to have that attention taken away with the words, "Good morning and welcome to another great day here on the West side at West Spike High School, home of the Wildcats. At this time we are going to pause for a moment of silence." The Pledge of Allegiance to the American flag, the ISS list, and other pertinent announcements followed the moment of silence. If activity period was

needed for clubs or homeroom or if teachers needed to report to an afternoon faculty meeting, the principal would include these in her announcements. By the time announcements were concluded, I would spend a few minutes obtaining the students attention again, then conclude my instruction.

Activity period was an interesting concept. WSHS had 22 minutes designated for activity period each day. This time was always available each day, and if this time was not needed for clubs, homeroom, or assemblies the 4<sup>th</sup> period class absorbed the time creating an extra 25 minutes of instructional time including the transition time allotted for returning to class after activity period. Announcements could have been conducted during this time, or as I proposed, this time could have been dispersed to other period especially 1<sup>st</sup> period, which had instructional time lost due to announcements. Sometimes the activity period would not be announced and seconds before third period was dismissed, Mr. Jack or Mrs. Prince would announce, "We are having activity period. Go to homeroom."

Sometimes teachers would not know about 3:10 faculty meetings until 3:00. This created quite a scene as teachers entered the library with grimaces on their faces mumbling comments like "I could have been told earlier" or "I have more important things to do." Teachers appreciated consistency and limited interruptions. However, despite these inconveniences, many teachers stated we had leadership that was missing in years past. Mrs. Stubbs stated, "These are the best principals we have had in many years." And Mr. Peppers said, "In years past, our school has had a lack of leadership." The leadership this year steadily became better acclimated to their leadership roles.

Overall, the school was managed well by these administrators and another school year was completed.

Mr. Jack was consistent in addressing students who came to school in violation of the school dress code. As earlier results pointed out, our students were more aware of their proper attire because of his diligent behavior. Despite this consistency with addressing the students' misbehavior and violations, administrators adhering to the punishment steps tended to be inconsistent. In the student handbook, the steps of administrative punishment are well defined.

### Grades 7-12

### MINOR OFFENSES

- Step 1 ISS/Corporal Punishment or out of school suspension not to exceed three (3) days
- Step 2 Out-of-School Suspension (3-5 days)
- Step 3 Out-of-School Suspension (5-9 days) or referral to Alternative School
- Step 4 Automatic referral to Alternative School or expulsion

## Please Note:

- Depending on the severity of the offense, students may be placed at any level on the discipline ladder.
- Parents will be notified when students are sent to the office.
- Once a student has been suspended, a parent must accompany the student before he/she can be readmitted.

## Grades 7-12

#### MINOR OFFENSES

- Step 1 Teacher intervention
- Step 2 Referral to office (reprimand, ISS, corporal punishment or parent care not to exceed three (3) days)
- Step 3 Out-of-School Suspension (3-5 days)
- Step 4 Placed on Step 3 major offense ladder (p. 28)

[All underlined text and parenthesis were included in the original text.]

I had access to the student's discipline and personal school files because I was their teacher. However, the design of this study did not allow me as the researcher to analyze this information. What I experienced within the parameters of this study occurred through situations in my classroom. My observations of inconsistencies with the implementation of the minor and major offense ladders related to the number of days certain students were absent from my class due to suspension. Since many of the suspensions were a result of misbehavior in other teacher's classrooms, I did not know why many of the students were placed in ISS.

The inconsistencies in following the punishment ladders were illustrated by many of my students going in and out of ISS because of minor offenses, but these students were never moved to the next step of OSS. The minor offenses ladder specifically stated that students who were referred to the office and spent no more than 3 days in ISS must move to Step 2 of the major offenses ladder resulting in suspension out of school. For example, Susan's school year was filled with trips to ISS: 9/23, 10/8, 10/19, 1/18, 1/27, 1/28, 1/31, 2/7, 2/15, 3/30, 4/25, 4/26, 4/21, 5/9, 5/10, 5/13, and 5/16. During this year, Susan was

assigned OSS on one occasion for fighting. This seven-day suspension from February 7 through February 15 was not a result of her moving up the steps of the minor offenses ladder. She had complied much more than 3 days in ISS to constitute her moving up the steps and receiving OSS for her punishment. As mentioned, earlier, Susan was one student who caused disruptions in class that affected instructional time. Had her disciplinary punishments adhered to the handbook, her behavior might have been modified and instructional time may not have been affected by her behavior and not being in my classroom for part of the school year.

Paul was another student who was not consistently punished by the administration. Paul was sentenced to 22 days of ISS and 15 days of OSS. Within the first three months, Paul spent 10 days in ISS and was sent home for a total of 9 days. The sequence of Paul's suspensions suggested that he would always start over before he made it to step 4 of the major offenses ladder, which was "Automatic referral to Alternative School or expulsion." The pattern of his suspensions, revealed in my absence log, follows: 8/19 ISS, 8/23 ISS, 8/27-8/30 OSS, 9/21-9/23 ISS, 9/27-10/4 OSS, 10/7-10/8 OSS, 10/12-10/13 ISS, 10/27-10/29 ISS, 11/19 ISS, 12/10-12/14 ISS, 1/4-1/5 ISS, 1/26-1/28 OSS, 2/1-2/3 ISS, 3/9 ISS, 3/10-3/11 ISS, 5/3-5/5 OSS. Paul's consequences were not consistent with the districts policy. Paul should have been referred to alternative school long before his suspensions totaled over 35 days. A student who does not spend a day in ISS can only have 20 days of absences before their course credit is terminated. The district policy read.

A student may not be absent for more than ten (10) days during a semester course (1/2 Carnegie Unit) and receive credit for that course or twenty (20) days for a one-year course (1 Carnegie unit). Excessive absences as defined above will result in a student receiving no credit (NC) for the semester or year in each class in which ten (10) or twenty (20) absences respectively have been recorded.

Paul surpassed the allowable 20 absences with just his suspensions. Paul had a total of 44 absences in my classroom by the end of the school year by combining his suspensions with his absences due to sickness or for other reasons. If the school had been more consistent with its enforcement of its major and minor offenses ladder, then Paul may have performed better in school had he been sent to Alternative school as prescribed in step 4 of the major offenses' ladder.

Deeper investigation in to the reasons for Paul and other student's moves up and down the discipline ladder was justified. The scope of this study did not encompass an empirical investigation into administrative decisions made throughout a school year. The breadth of this study exposed how Paul's constant see-saw between ISS and OSS kept him absent from class and revealed to me, the teacher, that the school's disciplinary actions only stopped the misbehavior for a while before Paul's antics got him in trouble once again. Other students like Susan also had classroom time lost because of their suspensions, which could have been avoided with more consistent punishment. A table of my students' suspensions and absences showed that many students were out of my classroom more days than the acceptable 20 days, and on average, my 7<sup>th</sup> graders were suspended and absent more often than my Algebra I students (See Table 4.1).

ISS does not count against a student with regard to absences and termination of credit. The student is considered to be present, just not present in the classroom. By not being in the classroom, students did not receive the instruction they needed. Mrs. Reed was very vocal about her stance on the inconsistencies of our discipline. She and I both agreed that when our students were disruptive in the classroom, there was only one avenue of consequences we favored over a referral because we both believed ISS was not consistently effective.

Mrs. Reed and I preferred to talk to students in the hall or in class rather than refer them to the office. Our conversation follows:

Mrs. Reed – We talk entirely too much to these children.

Lamb – I'm guilty, I talk to them.

Mrs. Reed – Oh, I am too, but when you know that's all that's going to happen after you get done talking, you might as well do the talking and keep them in the classroom teaching something. ... There is a way to talk to [the students] to diffuse the situation. For instance, everybody's been through that seminar where you discuss how to handle that child, to walk a step closer to them, lower your voice. Those things ... we know work.

Table 4.1 Student Suspension and Absence Report

	7	<sup>th</sup> Grade	;			Algeb	Algebra I		
Student	ISS	OSS	Sick	Total	Student	ISS	OSS	Sick	Total
Christopher	19	9.5	11	39.5	Bobby	0	0	11	11
Damontae	12	0	5	17	Cathy	0	0	1	1
Demarkes	21	0	2	23	Jaisa	7	0	9	16
Gerald	2	2	29.5	33.5	Jamon	9	0	0	9
Harold	3	0	11.5	14.5	Jazmine	0	0	5.5	5.5
Jala	5	0	2	7	Joshua	0	0	6	6
Julie	4	0	12	16	Keshon	13	4	12	29
Keith	1	0	16.5	17.5	Latrice	3	0	4	7
Kyle	11	2	14	27	LeShondra	4	0	14	28
Lamar	17	0	1	18	Monte	2	0	7	9
LeKisha	7	3	2.5	12.5	Samantha	1	0	5	6
Montavious	11	0	0	11	Saul	5	0	10.5	15.5
Naketta	0	0	7	7	Shameka	5	0	46.5	51.5
Paul	23	15	6	44	Sharyl	0	0	13	13
Sue	5	0	0	5	Steve	6	2	7	15
Susan	15	7	5	27	Talena	0	0	2	2
Tanessa	5	0	0	5	Telsa	2	0	3	5
Thomas	5	0	9	14					
Tramere	3	0	2	5					
Tykira	12	0	8	20					
William	4	8	7	19					
$\mu^a$	8.81	2.21	7.19	18.21	$\mu^a$	3.35	0.35	9.21	12.91

Note. Total represents the total number of absences from Mathematics class combining suspensions with sick days. Total allowable absences for credit combines OSS and Sick absences. <sup>a</sup>Average number of absences for each column and grade level.

Neither Mrs. Reed nor I felt our students benefited from spending time in ISS after committing minor offenses. Most mornings, the principal would announce the students attending ISS for the day. We teachers were asked to generate assignments and send those assignments to ISS. Even though worksheets or book problems were sent to student in ISS, these students missed valuable instructional time, which may have helped them understand content better. Many students completed assigned work but remediation upon their return was needed for them to have a better understanding of the work. Still other students would not complete the assigned work and remediation desired by these students as well. I often would hand deliver assignments to students in ISS and would find many students working while others had their heads down on their desks sleeping. Students often felt that ISS was a free day out of class. One day Kyle was assigned ISS, and I noticed him leaving the restroom with his shirttail un-tucked. I asked him to fix the problem, and he said, "I don't have to tuck my shirt in. I'm in ISS."

There were students should have been sent to ISS and have the District policy enforced, like Paul, but we found it more beneficial to talk to the students who were mildly insubordinate or disrespectful because we felt our conversations would lead to better results than having them miss one to three days of instruction sitting in ISS because they would not stop talking in class. Even my students realized my reluctance to refer them to the office. In a conversation with one twelfth grader and one 7<sup>th</sup> grader, I asked if I often referred students to the office, and they responded respectively,

Steve – No you don't write people up.

Tramere – No, you send [them] in the hallway for a minute, and you go out there and talk to them.

Another 7<sup>th</sup> grade student's reality of my limited number of referrals is illustrated through him saying, "You be looking out for us. You're trying to keep us out of ISS." I did not feel many of my students who committed minor offenses, like chewing gum or violating the dress code, would benefit from having consequences that primarily removed them from the classroom. However, in an earlier example regarding Susan and her insubordinate and disrespectful actions, I felt she deserved to be sent to ISS and referred her to the office. I was not happy that Susan only spent the rest of the day in ISS. Her behavior caused me to be away from my instruction for nearly 25 minutes, but she would only have to spend the rest of the day in ISS. That meant she would be right back in my classroom without any time suspended from my classroom. I recommended she spend three days in ISS, but she ended up not spending any time suspended from my class since this punishment allowed her to come back into my classroom the following day.

Two days after the initial incident, Susan began talking during a test. She was not the only one, but her talking continued after repeated statements for the class to stop talking. She and Tanessa continued to talk leading to their separation and assignment of punishment writing to be completed by the following day. Tanessa returned her work, but Susan did not complete the written assignment. I then wrote another referral for failure to complete her punishment work. Susan spent another day in ISS, which I thought could have been avoided if she had spent a few more days in ISS for her earlier misbehavior.

There was a part of me that was relieved Susan committed another offense so that she could spend time in ISS. I even waited until the end of the day to turn in my referral to Mr. Jack. I did not want Susan to be given ISS for the remainder of the day and have her back in class too soon.

I suggested to Mr. Jack that we implement an after school detention for students who committed these minor offenses because I believed an alternative form of punishment that did not take students away from class would be beneficial to students. Mr. Jack pointed out two challenges our school would face in implementing such an after school detention program. A sizable percentage of our students do not have adequate transportation home and we could not afford the transportation costs needed to return these students to their distant homes. Also, our faculty would not be receptive to the added duties imposed upon them to monitor the students during after school detention. While these were challenges, I thought there could be ways around these obstacles.

During my conversation with Mr. Jack, Coach Hayes, Mr. Peppers, and Mrs. Reed were in the room. Coach Hayes coached many extracurricular sports that required practices after school. He had experiential knowledge pertaining to students getting rides after school. He noted, "Many parents won't pick their kids up." He later noted that these parents have transportation but many would rather drive 20 miles to the nearby town for shopping rather than drive to Talon and pick their children up from school. Many of my students traveled over 20 miles each morning and afternoon on their way to and from school. Students lived in isolated areas across the county on winding dirt roads weaving

their way through the heavily wooded area. Just as Hodges (2002) noted, rural schools had transportation challenges unlike most metropolitan school districts.

Everyone inquired about how these students got home, and Coach Hayes said some walk, some catch rides, and some have to wait long hours after practice or games for their parents or guardians to make their way to the school. This lack of transportation or interest would definitely cause problems with requiring students to stay after school for detention. Mr. Peppers suggested we have the Talon police collect the students without transportation, and have the parents pick their children up at the police station.

Since we had buses and bus drivers every Monday, Tuesday, and Thursday driving students home who stayed for the Extended Day tutoring sessions, I suggested we schedule the after school detention on those days that already had transportation. Mr. Peppers and Mr. Jack noted that the transportation costs for Extended Day was appropriated through external funds and could not be used for transporting detention students. The funds were to be used for remedial or enrichment activities, which detention does not fit either. My plea for an additional step on the minor offenses ladder was quickly muffled with difficulties unique to working in a rural school where over 90% of its student population relies on school bus transportation.

I observed and experienced how the major and minor offenses ladders were both inadequate and inconsistently implemented. Some students like Paul were spending too much time in ISS and OSS without moving up the ladder. Even though some colleagues and I believed adding another step on the minor offenses ladder would solve many of the problems, other teachers did not. Coach Bryant stated, "The discipline will work if we do

what we say we are going to do." He thought that if after three days of ISS students were sent home, then we would not have many of the discipline problems we faced. Coach Bryant believed the major and minor offenses ladders were adequate; it was the inconsistency of the administration in applying the discipline ladder that resulted in so many students becoming discipline problems.

#### **Student Perceptions of The Classroom**

#### Classroom Instruction

Research showed students in mathematics classrooms desired engaging instruction focused around applying mathematics facts (Angier and Povey (1999) and establishing an enjoyable learning environment through competition and engaging activities (Lattimore, 2005). African American students responded better to teachers who made mathematics learning less mundane by incorporating games, competition, and fun into the curriculum.

Just as the research has shown, my students benefited from classroom activities and discussions that were focused around entertaining and engaging the learner. Students also perceived the hands-on instruction, and the utilization of math manipulative and technology as having a positive effect on their achievement and comfort in the classroom. My students discussed effective instructional techniques, commented on engaging activities, and reported on their perceptions of cooperative learning and competition during this school year. Their comments are presented below.

#### **Effective Instructional Techniques**

Powell (2000) found African American students believed exemplary teachers are those teachers who showed a caring ethic toward each individual student. Lattimore (2003) discussed how African American students believed an effective teacher implemented different and alternative ways of teaching mathematics. Since almost 85% of my students were African American, I tried to be a teacher who exemplified both of these characteristics.

When one of my students was asked to define an effective teacher, Steve stated, When a teacher is consistent in teaching. ... A great teacher has to be thorough. They have to touch all their students. If one student doesn't understand, they have to take time out and go one-on-one with that one student and explain. To make sure that that student doesn't get left behind from the other students. ... Some days ... you may not reach out to all the students like you should ... but I mean you have been an effective teacher. I'm just saying like if, I can remember one day that ... I needed some help and you didn't come around to me. ... I mean it just may be like one day out of every month.

Providing one-on-one instruction was particularly important to my students. I made concerted efforts to provide time in class so I could individually work with many of my students. Jaisa, an Algebra I student, wrote,

When he teaches he shows us more than one way to learn. So if he teaches like this everyone can learn the material. If none of the ways he teaches is [comprehensible] to one student, when he finishes his lesson for the day he helps that student so that he or she can understand better.

However, there was a limited amount of time in each class period to effectively provide each student with an ample amount of individualized instruction. Therefore, I tried to teach at a pace by which most students could grasp the material.

My students discussed how the pace of my classroom was just right for some but could have been a little faster for others. One of my Algebra students, Cathy, wrote in her journal,

He makes sure that we understand how to work problems. He does not move on until he makes sure we got it. If you don't get it the way he teachers it, he tries to find another way for you to learn how to work the problem. Mr. Lamb is a good math teacher.

Many of my seventh graders also felt that way. Jala summed up their feelings when writing,

Mr. Lamb would go over things over and over again till you got it. And when the class did bad on a test, he wouldn't even record the grade. He would just go over it again, and we would take it again. He let us tell him what makes us learn better and then he would try it.

Another Algebra I student, Latrice, stated, "He keep explaining it over and over until you gets it. He handles it really well. He is very patient."

I often listened to what my students were saying. As Jala pointed out, when my students discussed their troubles with any particular mathematics topic, I would take the time to find an alternate way of teaching that topic and present it during the next class.

LeShondra, an Algebra I student, stated, "When a child don't understand how to work a

problem, [Mr. Lamb] will go home and come back the next day with a game or blocks to let you see the problem." I wanted all of my students to be given an opportunity to learn based on their specific learning styles and pace. Julie, a 7<sup>th</sup> grader, wrote, "Mr. Lamb teachers very slowly. Which is a good thing. Mr. Lamb makes sure that everyone understands everything. Nobody might not listen, but he teaches the material." Another Algebra I student said, "You break problems down that everybody can understand and that can make a difference in our performance."

My pace was slow and my students knew that. This pace and philosophy was sometimes troubling to many of my more advanced students. They needed the class to move at a much faster pace, but I tended to instruct in a way better suited to the more at risk students. Jaisa said, "You go over problems that we know more than we need." Another Algebra I student, Telsa, wrote, "I think the pace of this class ... is going too slow because we spend about 2 to 3 weeks on easy stuff such as 2 step equations, distributive properties, and so on." Some students went so far as to say that my teaching was "boring."

I sacrificed the advancement of many of my brighter students by teaching at this slower pace. However, as another advanced Algebra I student, Talena, illustrated, "I don't find anything wrong with that because I know people up in here that we know they claim to know it, but they don't. You know what I'm saying? So that's good." Some students understood and were accepting of my slower pace in some cases.

Playing games was a big part of my instruction. I wanted the class to be entertaining as well as educational. As Angier and Povey (1999) discussed, students

prefer an entertaining teacher. By incorporating the games into my instruction, I was able to capture the competitive side of many of my students while reducing the boredom often experienced in a math class. Tanessa, one of my 7<sup>th</sup> grade students, wrote in a journal entry about her relationship with math:

Mr. Lamb show us how to use block, numbers, and all that good stuff with math. When he ask us what we did when we was in 6<sup>th</sup> grade I said nothing just talk, eat, and working Terra Nova. But when I came up here Mr. lamb made math fun. When we was up in 6<sup>th</sup> grade it was boring. Now I'm having so much fun in 7<sup>th</sup> grade.

Another 7th grader, Tykira, illustrated this point writing,

I really like our math teacher. He's a smart, cool, funny man. He brings math to life. I bet if we had an old man teaching math, we'd probably take notes all day and quizzes. But with this man we ... do activities in class to stimulate are minds and make us more motivated in math.

Many students felt this way about my class. They believed they were having fun while learning mathematics thus reducing the boredom. One of my Algebra I students, Samantha, said,

Some teachers they make [their] work boring, but it was like you played games with your work. Like around test time, we played games like the wheel of fortune game and then like the shoots and ladders game. We played on the board. You made your work fun.

I tried to make my class fun and entertaining while providing my students a comfort level by which they could trust me to do what was in their best interest. Mrs. Prince once told me that she saw how my students trusted me and that was something very valuable in our profession. In an interview with one of my seventh graders, Christopher said,

I think some students would come to you and tell you stuff that they wouldn't tell other [teachers]. Because you know, they trust you because they think that you trust them. ... If a student trusts you, they'll have more confidence in you and you know you're a role model for them. ... They don't want to fail you. ... They think that you're a role model and ... if they flunk they'll think that they ... let you down cause you know you want everybody to pass and like if they flunk they think they let you down so they want to pass. So that motivates them to go to the next grade.

In one of their last journal entries, I had my students write about their relationship with mathematics. I wanted the students to discuss the highs and lows about being in their math class. Jala wrote, "I also believe that [Mr. Lamb] is the only [teacher] that didn't just say, 'whatever' to the 7<sup>th</sup> grade class because we were very bad and didn't listen all the time." Just as Jala said, I did not give up on the seventh graders. I continued to muddle through the challenging situations and continue to make sure everyone had an opportunity to learn.

Overall, I feel my students trusted me to be the caring teacher and do what was in their best interest. During a conversation with Mrs. Stubbs the mother figure for many of

my students, she challenged me to be like a father to these students because many of these students did not have a positive male role model in their life. At the end of the year in Julie's final journal entry, she wrote, "At school you are like a family and Mr. Lamb is good father material."

## **Engaging Activities**

Using math manipulatives helped my students build a greater concrete understanding of the mathematics they were being taught. My students and administrators both agree that these hands-on activities increased my students' mathematical understanding. One activity with the 7<sup>th</sup> grade math students used math manipulatives during the measurement unit of the curriculum. This activity required my students to work in pairs, and construct as many squares and rectangles as they could using 25 small plastic square manipulatives. The students were given an activity worksheet to record their results. At the end of the activity worksheet, the students answered questions pertaining to the area and its correlation to the number of square tiles used to create these rectangles.

Most students remembered the formula for finding the area of a rectangle. The students also could generate a list of the square numbers by multiplying a number times itself. Their procedural knowledge was adequate for the objective to calculate the area of rectangles and generated square numbers. However, when I asked questions regarding their understanding of the content, no student could describe for me the reason why length times width provides the area of a rectangle or why square numbers were called

"square" numbers. Therefore, I decided to conduct this activity to help bridge the gap between my students' procedural knowledge and their missing conceptual knowledge.

One part of this activity had my students generate squares using the math manipulatives. They were to find all the possible geometric square constructions one could create using only 25 square tiles. The day before the activity, my students multiplied the first 15 numbers times themselves and created a list of the first 15 square numbers. Based on their computations, I was confident my students knew the process of finding square numbers.

During this activity, I was happy to find some students were able to build their conceptual knowledge of square numbers through a little guided instruction as they worked cooperatively with fellow students. Two students inquired about the creation of squares using the math manipulatives, so I knelt down next to Sue and Kyle's desks and our conversation follows:

Sue – Mr. Lamb we need help.

Lamb – Okay, show me a square.

Sue – Right here. [She pointed to one of the tiles]

Lamb – Now show me the next biggest square. Start adding tiles until you make a square.

Sue – It's going be four I guess.

Lamb – Okay, ... and then it took four of these [tiles] to make [the square]. [I took four tiles and demonstrated how they fit together making a square with each side equal to two]

Sue – Oh, then four ... but it can't make nothing else to work in it.

Lamb – Well, start adding some tiles and see. [Sue then proceeded to add one tile to the right extending the topside of the square and one tile to the bottom extending the left side of the square]

Sue – That's three, three. Like this [She then filled in the square]

Kyle – Aw man I'm screwed.

Lamb – Alright Kyle, there's a square, right? [I placed a 2x2 square on his desk]

Kyle – Yep two by two...

Lamb – Add some tiles to make the next biggest one. Instead of a length side two, we want to make a length side three. [I demonstrate this action] So it's got three on this side, so it's got to have three on that side.

Kyle – Oh like this. [He added the tiles]

Lamb – And so now it's three by three, and then how many tiles did it take?

Sue – Nine...so the next is gonna be four by four, 16 and the next ones goin' to be five by five, 25.

By the end of this guided practice, Sue and Kyle were able to construct a square using square tiles and relate that construction the square numbers of 4, 9, 16, and 25. As Sue demonstrated, she understood that the only possible squares that could be created using 25 square tiles would be the ones having dimensions 2×2, 3×3, 4×4, and 5×5. I was satisfied Sue and Kyle understood the concept of square numbers and I continued to move around the room aiding students who needed some guidance.

One pair of students, Tanessa and LaKisha, was having trouble creating rectangles. These two students needed some guidance to spark their understanding. Our conversation follows:

Tanessa – Mr. Lamb, I need some more help with my rectangles

Lamb – (I constructed a 2×1 rectangle on her desk) Alright, that's a rectangle, and that's the one we wrote earlier. ... What's the length?

Tanessa – Two

Lamb – What's the width?

Tanessa – One

Lamb – Now make another rectangle. [Tanessa added one tile to the end creating a 3×1 rectangle] So there's one, what's the length?

Tanessa – Three

Lamb – What's the width?

Tanessa – One...oh so this a rectangle, [she added a tile], this a rectangle [she added another tile]

Lamb – Now ... you could go all the way down till it's  $1\times25$ . ... What if we went two? [I constructed a  $2\times3$  rectangle on her desk]

Tanessa – I already got that one

Lamb – You got that one, 3×2. So make another one. Add another tile here and see if you can make it a rectangle. Then add some more tiles and keep making rectangles. [Tanessa then added two new tiles to create a 2×4 rectangle]

Tanessa – That's a lot. You could to this one. We could do this one LeKisha.

Tanessa realized she could continue to add these square tiles for quite some time. Once she began to understand the construction of rectangles, she and her partner proceeded to construct rectangles and record their results without any assistance. I then moved from their desks and watched as students engaged in their learning while building a better understanding of area and square numbers.

My Algebra I students also used math manipulatives to help generate a better conceptual understanding of certain mathematical topics. Algebra Tiles <sup>TM</sup> were used to help students understand the many aspects of polynomials. From modeling second-degree polynomials to factoring trinomials, my Algebra I students used Algebra Tiles <sup>TM</sup> as a bridge between their conceptual and procedural knowledge.

The Algebra Tiles  $^{TM}$  consisted of three different shapes: one large blue square, one thin green rectangle, and one small yellow square. There were two ways I could label the dimensions of these rectangles to define their areas. First, the blue square's dimensions were x by x, the green rectangle's dimensions were x by 1, and the yellow square's dimension's were 1 by 1, Second, the dimensions of the blue square were x by x, the dimensions of the green rectangle were x by y, and the dimensions of the yellow square were y by y. When tiles were used to model polynomials, their areas represented their names. Thus using the first method of labeling, the blue tile would be the  $x^2$  tile, the green tile would be the x tile, and the yellow tile would be the 1 tile. The second method of labeling resulted in the blue tile being  $x^2$ , the green tile being xy, and the yellow tile being  $y^2$ . Each tile had a positive side pertaining to the above-mentioned colors and a negative side all being red. Therefore, when a student needed to model subtraction or a

negative term, they would use the red side of their tile. Using the Algebra Tiles  $^{TM}$  my students were able to model monomials, binomials, and trinomials with coefficients of a, b, and c as large as  $ax^2 \pm bx \pm c$  with the first labeling method and  $ax^2 \pm bxy \pm y^2$  with the second labeling method.

The first day I introduced polynomials, I lead a discussion pertaining to the definitions of monomials, binomials, trinomials, and polynomials. I noted that the building blocks to these polynomials were their "terms" defined as any number, variable, or product of numbers and variables. A monomial had one term. A binomial had two terms, and a trinomial had three terms. Polynomials were the combination, through addition and subtraction, of one or more terms. Most of my Algebra I students were able to quickly grasp these definitions and the conceptual understanding of polynomials. However, several students struggled to understand what a term was and how one might manipulate it.

LeShondra was one student whom I worried about constantly. She did her work, participated in class, and never complained about her troubles. After my lesson on polynomials that extended to the combination of like terms, LeShondra asked if I could stay after school to provide her with some extra help. I agreed, and during that after school meeting, I realized LeShondra needed a visual and physical reference to the procedures of combining like terms. I therefore handed her a set of Algebra Tiles TM and demonstrated how they could be used to model monomials, binomials, and trinomials. We then worked examples that required LeShondra to add and subtract like terms. Through the use of the manipulatives, LeShondra was able to understand that only the

blue tiles could be added or subtracted from the blue tiles creating a bridge between the procedural summation of  $x^2$  terms and the understanding that these are like terms because they have equal area.

After that afternoon session with LeShondra, I planned an activity with Algebra Tiles TM that required my students to model, add, and subtract polynomials using these manipulatives. My Algebra I students later expanded this concept to multiplying binomials and factoring trinomials. My students appreciated the connections these manipulatives made to their procedural computations. However, some students did not benefit as much as others from the activities.

After my students had participated in building their conceptual knowledge through the use of Algebra Tiles <sup>TM</sup> I asked them to answer a few questions in their journals. One question asked students if Algebra Tiles <sup>TM</sup> were helpful to them. Many made comments like Sharyl who wrote, "Algebra tiles help some students because everybody can't catch on to work like other students so we use the tiles like (hands-on) for some students to be able to grasp and understand." Others made comments like LeShondra who wrote, "It can help them visualize the tiles as they worked the problem." Both of these descriptions show how my student appreciated how the math manipulatives could help students better understand the concept of polynomials.

Another question asked students if the Algebra Tiles ™ aided them on their assessment. Several students wrote positive comments like LeShondra who said, "Yes, because as I was taking my test it helped me visualize the tiles as I worked the problems." Other students wrote negative comments like Keshon who said, "No, because I didn't get

Algebra tiles." Still other students felt the Algebra Tiles <sup>TM</sup> were helpful, but as Jaisa wrote, "They were not there [during the test] for me to use and get the problems right when I was confused." My students illustrated that Algebra Tiles <sup>TM</sup> were helpful for some and not so helpful for others.

I used math manipulatives so that every child could have an opportunity to learn the mathematical topics. There were some more advanced students like Jaisa who did not need to have the concrete model to help her understand most of the math concepts.

However, there were other students like LeShondra who greatly benefited from their implementation. In one of the final journal entries regarding my students' relationships with mathematics, LeShondra wrote,

I got along with Algebra I most of the time ... if my teacher ask me question out loud and give me something that I can see it with. Like for example Mr. Lamb gave me some block so that I can see how to work the problem out. It is very easy when I look at it.

Like my Algebra I students, the 7<sup>th</sup> grade students also provided their perceptions regarding the usage of these math manipulatives. Many of my 7<sup>th</sup> grade students believed the usage of math manipulatives was beneficial to their understanding of mathematics.

Julie said,

It was helpful to me because like you weren't just up there explaining 'This is what you got to do' or showing us some formula where we plug into. We put our hands on it and see what we're going to get.

In a conversation following the earlier described squares activity, Tykira stated, "It really made me ... learn more about trying to ... find area and perimeter ... and... it helped me to ... remember the formulas to ... find area to the shapes." These two students believed they benefited from their usage of math manipulatives during the school year. Their implementation, though not as welcomed by the older more advanced students, helped many of my students gain a greater conceptual knowledge of their mathematics leading to a better understanding of the procedures utilized so often throughout the school year.

These 7<sup>th</sup> grade and Algebra I students were also engaged in their learning through activities that utilized technology. One such activity took place at the beginning of the school year where both subject areas used linear regression to predict the outcome of that year's United States Presidential election. Both classes searched the Internet and found poll data results they used to create linear regression lines and equations to predict the next election results. Students worked for four days collecting, displaying, and analyzing data they found via the Internet. Computer software was also used to aid students in generating their scatter plots, regression lines, and regression equations.

All of the students, both 7<sup>th</sup> grade and Algebra I, practiced the procedural knowledge of creating a scatterplot of data values and constructing a line of best fit through that data. Technology was used in the collection of data and display of that data, which aided in many students analysis of that data. At the end of this project, students were asked about their perceptions of this activity and its incorporation of technology. Many students agreed that the technology took away from their understanding of the mathematics involved in the creation of the linear regression equation. Talena stated,

When we did that project you didn't just show us how to graph lines. We were just typing it in, and the computer was averaging it for itself and then putting on the points. ... The computer was doing it for us.

However, when I asked my students if we should have computed the results using paper and pencil, Steve stated, "It wouldn't have been as fun." He and others enjoyed being able to input their data into a spreadsheet, and decorate the scatterplot and regression line using various colors and designs. Steve realized that one use of this technology was to capture the student interest in the activity by making it fun. This fun fostered interest in the activity leading students to analyze results by which the computer provided. Talena felt the technology did not show them how to work the problems and create the graphs, and she was correct. In this activity and in many of my activities where technology was used, I did not use the technology to teach the concepts and procedures. I merely wanted students to be interested in the topic, and as Steve pointed out, the technology made the activity fun and desirable to complete.

On top of the engagement of my learners and the incorporation of technology, I also provided activities like these to help students see that mathematics can be used in their everyday lives. By showing how scatterplots and regression lines are acceptable prediction models, my students could see a benefit in learning the mathematical topics covered in the classroom. Jaisa stated,

[Math is] to help us throughout life. I mean like in math class, you'll give us a problem, but you'll compare it with like a real life situation. Like a word problem.

It's dealing with just math, but you'll put it in a way that it's dealing with real life, a real life situation so we can better understand it.

I wanted my students to see a benefit in learning the mathematics covered and with real life examples and incorporating technology with manipulative, the students revealed that their understanding of mathematics increased through their experiences this past year in my mathematics class.

The administrators also felt my instructional methods were beneficial to my students. Mr. Jack stated,

The 7<sup>th</sup> ... graders are probably ... used to your teaching. It's probably like they had when they were in elementary. You do more activities; more hands-on; more get out of your seat; more moving around; and they like that. It's not much different than what they had in elementary. What happens, as they get older there's more lecturing. ... You allow them to kind of exert some of that energy they need to exert. Your classes are...organized chaos. It seems like everything's going on, but it's teaching. It's learning. ... It just sounds loud. I'll look in the doors and see that everybody's learning. I'm fine with it ... as long as the door's closed and they're working.

Mrs. Prince also commented on the way my students were engaged in the classroom through the usage of technology and class discussion. During a lesson on calculating the point of intersection for two linear functions, Mrs. Prince stopped at my door and watched as I projected my calculator screen onto the board as my students followed along

with their graphing calculators. After the lesson, I went to Mrs. Prince and asked what she observed during her time at my window. She stated,

Today as I was going around making my rounds ... I peaked into your classroom [and] ... I observed you sitting there and interacting with the kids. And then I observed the kids were working on something, but then they were discussing and they were talking ... and dialoging with each other. ... For kids who are auditory learners, that was valuable.

Mrs. Prince was very interested in the way my learners were interacting with their peers and me, their teacher, more than the technology they used. This calculator activity and other engaging activities were all conducted to provide all students with opportunities to learn at their learning preference. Naketta, a 7<sup>th</sup> grader, stated, "I'm a hands-on person. I learn by touching it and stuff ... that makes me learn more." Whether they are auditory learners as Mrs. Prince suggested or tactile like Naketta, the activities using manipulative and technology throughout the school year were beneficial to my students understanding of the mathematics they learned.

As mentioned earlier, the teachers and administrators perceived monetary issues hindered the education of the students in this school. These manipulatives and technological equipment, however, was available to my students. During my first year of teaching in WSHS, I started with an empty supply closet and moldy desks. However, I did have around \$1,200 in classroom supply money, Gear Up funds, and Title I money available to purchase needed materials. With my classroom money, I purchased a new projection screen, a number of manipulative sets, and a storage unit for the manipulatives.

I did not have enough Algebra Tiles TM so the Gear Up coordinator helped me purchase a class set during my second year at WSHS because my Freshman Algebra I students were in the Gear Up cohort group. Gear Up also furnished my students with a GPS handheld device, math software, and supplies to help utilize this math software. Technological difficulties occurred during the use of this math software preventing its implementation in the school year. Title I funds were used to purchase more advanced graphing calculators along with the test preparation workbooks used by both of my tested math classes. I found money to buy the things I needed to engage my learners. However, some improvisation occurred when needed materials were not available. For example, the rectangle and square activity used with my 7<sup>th</sup> graders required approximately 250 squares. I only had about 100 blue squares with my new Algebra Tiles TM set and 50 blue squares from an older set of tiles. I did have 100 squares from another set of manipulatives I purchased my first year thus giving me the needed number of squares to complete the activity. I found money to buy manipulatives and technology when needed, but there were many more activities that could have been implemented had more manipulatives been available.

### Cooperative Learning and Competition

Whether my students were manipulating algorithms or searching for Internet data, they often worked with a partner or in a group with two or more of their peers.

Manouchehri and Goodman (1998) discussed how students should have active cooperation during their mathematical problem solving. My students revealed to me that working in groups can be both a positive and negative experience depending on the age

of the student and their achievement level. Group work presented many challenges that my students and I both perceived.

One of my average performing Algebra I students responded to group work in my classroom as being beneficial. Following an activity, Steve said, "I think that if I were not in the group, I wouldn't have gotten my work done. ... So I think working in a group is very effective." Grouping allowed this student to feed off of other students' strengths and limited his weaknesses. Another average performing Algebra I student stated, "What I learned is that I have to work with people. Even if I don't like them I still have to." One 7th grader who performed close to the mean on every test stated, "Sometimes I like to work [in] all of the groups. It is fun to be around all of your friends. Also if we cooperate together we can get good grades." Working with other students allowed these students to build greater social relationships and help each other teach one another topics they may not understand.

As for the students with above average ability in mathematics based on their performances in class and on the end-of-the-year assessment, group work tended to be more of a chore and an abuse of their talents. Talena, an Algebra I student, said,

I like working by myself. If you work with a group, some people don't want to work and others do, and it's hard to get work done when one person don't want to and the other one's trying to do it by herself.

Another Algebra I student had similar feelings regarding the group work but tried to place somewhat of a positive spin in her response. Jaisa stated,

I think working in groups had some advantages and some disadvantages. The advantages was that you didn't have to do a lot of work or whatever. The disadvantages was like when some people wasn't there or some people didn't feel like doing work, you had a lot of work to do yourself.

My advanced 7<sup>th</sup> graders also felt there was added pressure to cover for students in their groups so that the project would be finished. Tykira stated, "I like working alone to concentrate better." I notice that many of the lower achieving seventh graders would pester her for answers or allow her to do most of the work when the students had group projects to complete. I assigned individual and group grades when students worked cooperatively. However, as Tykira and the other Algebra I students revealed, they would have preferred to work alone. One vocal and outspoken 7<sup>th</sup> grader, Christopher, stated he did not like to be placed in a group with "stupid people." Christopher also stated,

A smaller group is better where like can't no students can come over there and mess with you and y'all do y'all's work together and help each other, but don't tell the answer. Show them how to do it.

Christopher wanted to work independently or with one other student so that the work could be evenly distributed and the accountability is equal.

My 7<sup>th</sup> graders also consistently referenced the selection process as something I needed to address. Some students wanted groups that included their closest friends while others admitted that working in groups with their friends negatively affected their attention to the objectives of the activity. Jala stated, "When you're with your friends you talk a lot and you don't really get to work. So what I'm saying is it's really best to be in a

group that people you really don't talk to." However, other students like LeKisha stated, "We cooperate better when we are with our friends." Sue stated, "I don't like [doing math] by myself. I like to have people like Tanessa and Julie in my group, because when we're in a group together, we get much more done." Other male 7<sup>th</sup> graders felt friends should not be in the groups together. William stated, "Well, you need to put them with a person they don't like because is you put them with a person they do like, They going to start getting loud and stuff." Tykira then responded,

Either way it goes, you still goin' to be loud. Cause if you can't stand the person y'all goin' to end up arguing. So it don't really matter. ... Most of the time if you with your friends you can get calmed down.

None of my Algebra I students had discussions regarding group compositions based on friendship. They merely complained about students not doing their work as opposed to potential student tiffs between them centered around adolescent feelings. The maturity level of the students greatly affected the implementation of many group activities. One such activity was my competitive group review exercises that took place in more of my Algebra I classes than my 7<sup>th</sup> grade math classes. This was because of the maturity of my students.

My competitive group review games took place during a day or two before an upcoming assessment. I learned early in my teaching career that students do not get motivated during review days prior to examinations. I searched for alternative review practices and found that mixing the procedural review with a competitive game helped capture my students attention long enough to provide them with an adequate review. I

played these games so that the attention level of my students would not become extinct.

As Latrice, an Algebra I student, stated, "I really like doing review like that. It interested me and it make the kids learn more and not get sleepy."

One of my more popular games was a spin off of the popular game show Wheel of Fortune. My classes separated into their cooperative groups, work problems, and earned spins on the wheel with every correct solution. Jaisa stated, "When we play the games, I worked hard to get the correct answers, and working hard helped me to understand it better." In a journal entry, Cathy wrote, "Mr. Lamb plays a game that makes you want to learn more in his class...In the end, math was really fun to do because we played the games along with it." My students enjoyed the competition. I had many students working problems just so they could win the reward at the end of class. Christopher summed up the reason for the perceived effectiveness of the games by stating, "Our students liked the competition of the groups."

This competition, however, eliminated many review game opportunities for my 7<sup>th</sup> graders because they would not act appropriately during the game. Their excitement and immaturity created an environment that was not conducive to learning. One of the 7<sup>th</sup> graders, Gerald, stated, "When we was playing wheel of fortune, everyone didn't do right because they didn't like the group they were in." Christopher also provided a description of how this discontent lead to unwanted bickering and an uncontrollable volume level while playing the review game. He said,

You tried to let us play games, but...we wasn't listening and stuff and you was like 'forget it.' You know like that time we tried to play wheel of fortune like the

whole period, and we only got two questions done cause everybody was talking and you was disciplining us and stuff.

My seventh graders did not make it easy to implement these review games. Most of my review games took place during my Algebra I class time. However, there was one motivating competitive implementation that worked well for both classes, especially the 7<sup>th</sup> grade students.

I implemented a reward ladder with both of my classes that attempted to motivate students toward greater classroom participation. Each class had between three and five groups, which earned fake money known as "Lamb Loot" for participating and performing well during the classroom. I rewarded individual students with Lamb Loot when they answered a verbal question correctly or performed an act above and beyond their regular student obligations. When individual students earned their rewards, they deposited their Lamb Loot into their group's box, and each group earned rewards based on the number of fake dollars they were awarded between each examination. Mrs. Prince discussed this reward system with the other faculty members during a meeting stating, "I really like what Mr. Lamb is doing with this Lamb's Loot...It works with these kids."

I asked the students their perceptions of this reward system, and Christopher stated, "Everybody liked the Lamb Loot...everybody be raising their hand to get the Lamb Loots...People were answering the questions that I didn't think knew the answers, with the Lamb Loot." Another 7<sup>th</sup> grader, Montavious, stated, "Folks be egging to answer questions so they can win Lamb Loot." My classroom participation seemed to increase

two-fold every time I would begin handing students Lamb Loot as they correctly explained their thought processes when working a math problem.

After the winter break, I began to present fewer and fewer students with a Lamb Loot until I quit altogether. I do not know why I quit presenting my students with these rewards, but my change in motivation was obvious to many students. Several students asked about my Lamb Loot and there were many times when a student would answer a question in class and say, "I think I deserve a Lamb Loot for that." I would either laugh with the rest of the students or run to my desk and begin handing out Lamb Loot. The truth of the matter was that I had other obligations pressing on my agenda, and I tended to forget the little things I did that helped students participate better in class. Christopher summed everything up by stating, "Now they don't answer the questions no more." At that time I felt I needed to be spending more time on the preparation for the upcoming state assessment than keeping up with a reward system. I failed to see, even with the constant reminders by students, that the reward system was getting more students involved and providing them with a greater chance at performing well on the state assessment. I overlooked this beneficial motivational technique because of my attention was focused on other important aspects of my profession.

# Classroom Management

Improving student achievement through engaging activities and entertaining methodologies helped to prepare my students for life's mathematical challenges. Other life lessons were implemented through the establishment of classroom policies and procedures. Crawford (2004) noted that effective instruction is directly related to

effective classroom management. Crawford provided three dimensions of effective classroom management that required teachers to be affective instructors, engage learners in appropriate cognitive activities, and be effective managers of the physical environment of the classroom.

## Affective and Cognitive Elements

As illustrated in the earlier section, my classrooms were, generally, engaging and cognitively stimulating to the students. Just as Angier and Povey (1999) found, my students found the cognitive activities were fun and enjoyable. As Tramere illustrated,

I like you because you get down into it, how you be explaining it. Then you explain it in a fun way and make everybody want to yell out the answers and all that kind of crap. Well all that kind of answers. See, when you start expressing the way you do, people just want to yell all kind of answers out.

My usage of cooperative learning coupled with the caring, trustworthy, and entertaining characteristic my students described about my instruction illustrated the affective element of classroom management.

Toward the end of the school year, I discussed my caring ethic with Mrs. Prince and Mr. Jack finding they observed many of the traits my students illustrated. Mr. Jack said,

They know that you care about them. They know you relate to them. That's the main thing that you are able to relate to them. They get you and you get them. You do a very good job, and they know what you are teaching them. You really care. You're passionate about what you are teaching. They can feel that, and they

can see that in a person like that. ... You are working hard to get them to understand what they need to understand.

Both of my administrators saw that my students believed I cared about their successes both in my classroom and outside. The management of my classroom was effective from the aspect of the cognitive and affective components.

## **Physical Elements**

Unlike my perceived effective classroom management based on the cognitive and affective components, I struggled to be as effective in the physical component of classroom management. Jala illustrated my difficulties saying,

I think that you are way too nice. Cause Ms Lyte would have snapped on us as soon as we said one word, you do, you sit there for about ten minutes you do all this. She would have been snapped on us. I'm talking about extremely way too nice. I thought I was nice. You are to the extreme, I mean you are just too, too, too nice, you take way too much stuff.

I presented these remarks from my students to my administrators and Mrs. Prince stated,

The nice that [the students] are referring to is that we take our time to talk to them
to let them know where they are and then we try to ... meet them where they are
and work through what they don't understand. That's the nice I think they are
talking about.

Even though these words from Mrs. Prince were comforting, that was not what my students defined "too nice." The hard truth was that I allowed too many students to get away with disruptive behavior, and my students and I both knew it. As earlier

examples illustrated, my students, especially my 7<sup>th</sup> graders were behavior problems. When my students fought, I immediately sent them to the office. When my students cursed, I referred them to the office. I did not have trouble following the disciplinary ladder for major offences like those. However, the first step of the districts disciplinary ladder for minor offences was teacher intervention and I was lax in my administration of this disciplinary step.

As illustrated earlier, I seldom referred my students to the office for punishment. Part of the reason was my dissatisfaction with the inconsistency of our ISS system. The other reason I seldom referred students was because of my own inconsistency. I had a disciplinary ladder for my classroom to meet the requirements of teacher interventions:

- 1. Warning
- 2. 150 lines
- 3. 300 lines and Parent contact
- 4. School consequences

My first step usually took the longest. I had students make it to the second, third, and fourth step of my ladder, but most of my students who needed to have greater consequences than just warnings simply were not punished for their behavior. I told myself throughout the school year that I had to be more consistent with my discipline, but I continued to believe my hallway conversations and overly caring nature would modify the misbehavior of my students. However, halfway through the second semester, I realized my students did paid attention to the many managerial lapses of my teaching and believed I needed to not be as nice to my disruptive students. Montavious stated,

The kids, they just talk while you're trying to teach. Like I talk, too. Then you have to holler a little bit for me to have to stop, but it just goes...in one ear out the other. ... We take advantage of you because you don't discipline as much as our other teachers. ... Like in your class, you give us 50 chances but in our other classes we get about two or three.

As Paul, my most disruptive student said, "Sometimes I take advantage of that more than one chance."

Many of my students, like Montavious said, were given multiple warnings during the course of a class. I did have a tolerance level that was crossed on occasion. Telsa illustrated this event writing in her journal,

I would say that Mr. Lamb is very easy with discipline. I would say this because he hardly ever punish students who act up in class. Before he discipline anyone he would look at that person/persons and crack a smile. Mr. lamb is the type of person who puts up with so much and all of a sudden, BOOM, he explodes with anger. I think he is a nice person and easy to get along with, but 'Acting comes Chastening!'

This explosion would come in the form of a loud order to either close their mouths or step out into the hall. Samantha stated, "You haven't written anybody up. You haven't sent people to ISS. It's like you let the younger kids run over you. But when the older ones come, its like you explode at the smallest thing." I didn't always scream when I reached my point of tolerance, but it usually resulted with some student writing lines or having an individual conference with me in the hall.

Jaisa wrote in her journal,

Mr. Lamb handles discipline in his own little way. For example he isn't too strict like Mrs. Stubbs and he isn't too [lenient] like Mrs. Reed. He lets us joke, but he lets us know that there is a time for play and work time is not that time. ... He keeps us on task and still has time for play.

This form of discipline was adequate for the more mature Algebra I students. These students understood when a teacher had had enough of their misbehavior. They would understand my frustration and resume their work. Cathy stated, "No one does anything for him to really discipline anyone." This was true. There were some cases when certain students would become too unruly and I would have a conversation with them in the hall, which would quell the misbehavior. However, my 7<sup>th</sup> graders took full advantage of inconsistencies.

These 7<sup>th</sup> graders were used to teachers who would raise their voices and sternly tell them to close their mouths. Susan wrote, "[Mr. Lamb] will just say be quiet and get back to work. He won't say nothing out loud like 'Be quiet set down! Do your work!" Christopher told me, "You got to get real loud for us to be quiet." I did not like raising my voice, but there were so many times when I felt I needed to raise my voice and I simply ignored the behavior.

One illustration of this came during a group activity in early January. I had students separated in groups of two or three, and they answered a few questions pertaining to the calculation of area and circumference of a circle. The students worked on their problems as I made my way around the room helping groups, as they needed. As

I listened to my recording, I realized that I was unaware, or chose to ignore, a lot of undesirable behavior. As I helped various groups, the other groups would have conversations unrelated to the activity. I know I heard the talking, because the recorder was able to make out certain details of students conversations from across the room. One such conversation was between Paul and Montavious in response to events that took place the previous night, quite unrelated to the area and circumference of a circle.

I allowed too much talking in the groups I was not helping. I should have addressed the volume level and removed some of the talkers from the class. There should have been disciplinary action that would have quelled much of this distracting behavior, but I simply ignored it. I made random reminders to the class regarding the completion of their work. As the class period came to an end, I realized my students would not finish the assignment. Instead of having my students turn in their work and grading their work, which would reflect the lack of participation from many of my students, I gave them an extra day to complete the assignment. I wrote in my journal "I need to stop trying to just do activities with these seventh graders and just work problems. I just tried a group activity and it just went down the commode." The reason for its failure was my inconsistency with discipline.

When I discussed my lack of discipline with my administrators, neither felt I was as lax as my students and I felt. Mr. Jack commented,

Yeah, I think the term I use is firm but fair. When you need to be firm you're firm and you're fair with them, but they do know that 'Hey, what you're doing is going

to cause me to not get what I'm trying to get over to you. Then I'll put you out.'

(Mimicking me speaking to a student). They usually have to push you to a limit. I was firm when I needed to be and fair most of the time. However I was a doormat for a lot of students to walk over when it came to simple disruptive behavior. In my mind I was providing my students with opportunities to stay in the classroom, learn, and not have their instructional time lost because of their suspension. However, the non-disruptive students were the ones I needed to protect the most and did not.

### **Testing Culture**

Mr. Jack said, "It's the sign of the times...Testing is here and probably won't be going anywhere." There were no truer words said all year long. During the District Convocation, our superintendent stood next to the podium and reworded Vince Lombardy's motivational quote saying, "Student achievement is not everything, Student achievement is the only thing." The teachers of Spike County were made well aware that our number one goal was to improve student achievement through improved performances on state assessments. Dr. Casey stated, "High stakes tests [are] ... here to stay. ... We must adapt, migrate, or die." The way my administration adapted was to require practice tests throughout the school year.

Each instructor of a tested course had to administer, score, record, and analyze four state assessment practice exams before the exam weeks began at the end of April. Our assistant superintendent provided each teacher with a practice exam schedule outlining the dates of administration and submission of scores. These dates were spread out to ensure an accurate picture of student improvement throughout the course of the

school year. Dr. Jefferies stated, "We have to play the game. ... We need to prepare these kids for test taking. ... Memorization is a tool." Our school district superintendents wanted to make sure that every teacher understood the importance of state assessment results and to make sure students were given opportunities to experience taking the test before the official date. Mrs. Prince told her faculty members early in the school year,

Practice tests are crucial for our kid's success. ... Some kids get bombed out in taking a test so repeated practice is essential. ... It's not that we're teaching the test, but we are showing them how to take the test.

In a later conversation, Mrs. Prince summed up the reason for test preparation stating, "A lot can be said about building an understanding of the test."

Teachers, students, and administrators understood the importance of performing well on the state assessments. In a discussion about the students and their motivation toward the state assessments, Mrs. Prince said,

[The students have] bought into [state assessment] ... this is the way of the world right now, and this is the way we're rated. ... I really think...the fact that they achieved last year, and they saw that it could be ... I think that impacted them more than anything to realize ... we've got to do it ... we've got to prove ourselves ... we got to show our stuff.

Our school was in a position to be proud of our accomplishments. Based on the five levels of school accountability, our school was academically a Level 3 (Successful) and because we showed exemplary growth in our student's achievement, we were officially a Level 4 (Exemplary) school. One student said, "It made me feel very proud of

this school and proud of the teachers." Another student was also proud of this school's accomplishment stating. "Now we went up two levels. So that makes me feel good." Mr. Jack commented, "They're really buying into it...we've sold them...on testing and how big the scores are." Our students definitely felt pride when discussing their level of accomplishment.

Two weeks before the state assessments were administered, the students from our school competed in an academic competition against the other secondary school in the district. Because of our status as being a Level 4 school, our student felt confident in beating their district counterparts in a mind vs. mind battle. One of my Algebra I students told the newspaper reporter "Competition will be stiff, but Mr. Lamb is a good teacher. He's got us ready for it." Our students lost this competition and they realized the end-of-the-year state assessment would not be as easy as they expected, motivating them to do better on the real test. Mr. Jack compared their enthusiasm toward the academic competition to that of a much-anticipated athletic event. He stated,

They were just so upset ... that they lost. You could see that same passion in they eyes about a football or a basketball game. 'Man we lost that game. They cheated, man. They cheated.' And they was just as exited about the testing. ... I'm glad you're fired up and everything, so that means you need to prove it on that test if you thought you was done wrong here. ... That same fire and desire about academics is good to see, because they get excited about sports and make a big fuss about sports. Lets make a big fuss about academics, and you get them just as motivated about academics, you can't help but win. Cause I mean they are going

to put forth the effort. They are excited about testing. Excited about doing it and showing them...yeah, we got out did in the competition, but we made level four though. They are proud of that. That's something to be proud of. They wear that badge of honor. I'm hoping we can do better and do just as good or even better this year.

This school year focused a lot on testing. From administrators saying student achievement is everything to students competing for academic bragging rights, students and teachers were participating in a test-driven environment.

# Test-Based Accountability's Effect on Instruction

Preparing my students to be better mathematical thinkers was a large focus of my instruction. Using the math manipulatives, technology, group work, and competition all played a role in building a greater mathematical understanding. Paul explained, "You're trying to see if we know how to break it down." Montavious added, "You're trying to see if [the students] really do know." I did want my students to understand the mathematics being taught. With these techniques, some students better understood and still some did not, but as a mathematics teacher during accountability time, I needed to provide my students with other instructional techniques that would prepare them to do well on the end-of-the-year state assessment. Therefore, a large amount of my instructional time was spent conducting drill and practice methods aimed at building within my students a greater procedural knowledge like that to be tested. Joshua stated,

We constantly work problems. It's like there wasn't a day we don't work math problems. Even when you gone, you leave a worksheet full of math problems. I'm

thinking the day you gone; we need to chill out a little bit, break a little bit. There is no break in here. There's a whole sheet of math problems, and some day's you'll leave two sheets of math problems.

I continually adhered to my administrators' suggestions that practicing these test problems would lead to their success on the state assessment.

During the school year, I provided each of my tested students with a workbook aligned with each of the state assessments. This curriculum alignment was described as teaching to the test (Bushweller, 1997). I not only wanted my students to have mastery of the state standards, but I wanted my students to be familiar with the questioning formats and the best test taking skills prior to their day of assessment. I not only taught to the standards, but I taught to the test and the test format.

My Algebra I students received the *Mississippi SATP Algebra I Student Review Guide* by Jerald D. Duncan (2004), and the 7<sup>th</sup> graders received the *Mississippi MCT Mathematics Coach, Grade 7* by Jerome D. Kaplan (2003). Both of these resources were purchased using Title I funds and each resource provided sample test questions for each of the objectives outlined in the state standards.

The 7<sup>th</sup> grade workbook (Kaplan, 2003) consisted of 31 individual lessons covering the five tested strands: (a) Patterns/Algebraic Thinking, (b) Geometry, (c) Measurement, (d) Data Analysis/Prediction, and (e) Number Sense. Each lesson provided several Example problems complete with the strategy for solving the problem and the solution to the problem. Following the examples, a number of sample test questions were

presented in multiple-choice format. At the end of each strand, open-ended questions were also given.

The Algebra I workbook (Duncan, 2004) was more like a textbook which aligned sample test questions with various Algebra I topics. Duncan's review guide consisted of 25 sections. Each of the first 24 sections had subcategories, which addressed a mathematical concept. Many subcategories had sample test questions that followed the lesson and practice problems. However, some subcategories were combined with others before a set of sample test items were presented. A pre and post-test was imbedded in the guide and two sample tests accompanied the workbook. My students worked many of the subcategories, both of the sample tests, and used this workbook as a studying tool prior to the state assessment.

Providing my students with these materials helped my students become more familiar with their state assessment. Just as teachers in Winkler's (2002) study felt aligning the curriculum to the test was justified, I, too, felt it was beneficial for my students to have my teaching coincide with the state assessment. Becoming familiar with tested items and allowing the curriculum to align with these items is how my classroom and other classrooms at my school were organized. When I asked my students about the longevity of my test preparation, I received many perceptions. Steve stated, "[We] spread it out and then we crammed it in the end. ... When we got to the last day you just ...beat me up, cram." Steve was one of my Algebra I students, and his statements coincided with other statements made by his classmates and many of the 7<sup>th</sup> graders. Paul said, "When you came from spring break, it's like you're drilling the math and stuff in

our head. Right now you're trying to get this in our heads so we'll understand more when the test come." These students outlined how my test preparation was continuous through out the school year and increased during the few weeks prior to the state assessments. Their perceptions were accurate. I used the workbooks and practice exams to familiarize my students with the test questions, while mathematical topics were being taught. Then, close to the test, my students were given an extensive review over the school year, which left many students dumfounded. Monte stated, "At the end, like when we would come in here ... I'm like in another world. ... Talena and them were like 'Yeah you know' ... and I still didn't understand it." LeShondra agree with Monte saying, "Half of that stuff we went over first of the school year, I forgot it too." Both of these students modeled responses made by students in Lattimore's (2003) study stating that the cram sessions were too overwhelming.

Even with students feeling the cram session was too much and they were being "beat up" with problems, many of my students, especially the students who passed, felt like the work paid off. Joshua was asked to describe his reaction when I called to tell him the good news of his passing the Algebra I test. He said,

I was so overjoyed. I was happy, I was really happy. I was relieved because all that studying that led up to the state assessment. All those math problems. I almost did 500 math problems in one week. Problem after problem, I was copying it down trying to take it all in, just problem after problem. I was like go' lee. And then we spent two hours in here three hours in here after school was out. That

was, hoo, a lot of math problems. And then at the end though it all paid off because I passed the state assessment.

My students needed the cram session. The students were tested on the entire course of Algebra I and 7<sup>th</sup> grade mathematics, but they did not have the entire school year to learn the material. The school year ended at the end of May and the tests were administered at the last week of April and first week in May. Therefore, I needed to have these cram sessions to at least expose the students to some topics we did not cover. With time not being on my side or the students, I limited my curriculum in order to present most of the material that was covered on the test. Winkler (2002) found teachers were disgusted with the reality of their curriculum being limited due to these state assessments, and I found myself doing that very thing. I found certain mathematical topics having less emphasis placed on them based on my experience and perusal of released test items. Therefore, I would spend less time on those topics and more on the heavily weighted state objectives.

One such example of limiting the curriculum occurred during my Algebra I section on solving systems of equations. This objective required that students be able to solve a system of equations with two unknowns through substitution, elimination, and graphing. Most of the practice questions for the state assessment dealing with systems of equations can be solved using a calculator and calculating the point of intersection of two linear equations. I mainly taught systems of equations through this method and technique of using the graphing calculator. If a problem needed to be solved using substitution or elimination, I would spend limited time with the students discussing this method because

one maybe two problems on the test would test this knowledge. Therefore, my students simply learned to solve systems of equations using their calculators and calculating the point of intersection. This unit takes one week to complete and saves my students and myself time to cover topics having greater emphasis on the test.

Picking and choosing which topics will be taught and to what degree they will be taught had it advantages and disadvantages. One of the disadvantages came when students were tested on problems they had never seen. Harold, one of my 7<sup>th</sup> graders, explained, "Some of them problems on there I couldn't understand. Some of them you prepared us for but some of them I couldn't never remember." Another 7<sup>th</sup> grader. Thomas, stated, "Some of the stuff Mr. Lamb was teaching was not on the MCT." Most of my Algebra I students felt we had covered the material and they simply needed to take their time and they were able to work the problems. Samantha said, "Some of the questions I got to were fairly easy, and I knew how to answer them right off the bat. But some of them was kind of hard and it took me a while to answer." There is no way to tell if the limited curriculum was to blame for students not recognizing questions or taking a considerable amount of time to find a solution. After the test was complete, some students asked me about problems, which confused them during the test, and these problems were similar to ones I taught during the school year. Without access to the test and the opportunity to match my instructional content to the items on the test, I will never know if my limited curriculum caused students to struggle with certain test items or was it simply caused by limited retention of my students.

Whether I worried about limiting my curriculum or overemphasizing last minute preparation, I experienced many moments of self-doubt causing me to question my effectiveness as a teacher. I wanted desperately for all of my students to perform well on the state assessment just as any teacher would. I wanted each student to have that moment and feeling of success. I also wanted the students to do well because I felt pressure to maintain the success I acquired the previous year in Algebra I, and overcome the difficulties my previous 7<sup>th</sup> graders experienced. NCLB (2002) and AYP compare schools year-to-year scores based on passing percentages acquired in each subgroup each school year. I was coming from a school year where 100% of my Algebra I students passed and only 40% of my 7<sup>th</sup> graders passed. I felt pressure to maintain my high achievement with my Algebra I students and drastically improve the achievement of my 7<sup>th</sup> graders. The pressure I felt came from the fact that each 7<sup>th</sup> grader was worth 4.5%, and each Algebra I student counted 6.25% of the overall class passing percentage. Even with students, teachers, and administrators telling me and showing me they respected my instructional abilities, I constantly questioned the effectiveness of my techniques.

One morning I was standing outside my classroom door and Dr. Jefferies stated, "We're counting on you to pull up those 7<sup>th</sup> grade scores." I further inquired about his meaning and he reflected on our need to improve from the last school year's dismal results. He said this with a smile, and his intentions were not filled with doubt. He simply wanted me to know that they had confidence in my ability to improve on the dismal performance from the last school year. At the end of the school year, I addressed my worries about the future test results from my students with Mrs. Prince, and she said,

I know you have ... presented the material. You have gone over the material. They've heard it. They have seen it. So they have been through the process. So you have to believe that some of that, somewhere ... attached itself to them and they are going to produce what they are supposed to produce.

I had full support from my administration that my students would perform well on their assessments and overall they did (See Table 4.2). The 7<sup>th</sup> grade mathematics students improved in both the percentage of students scoring basic or above and proficient or above. The Algebra I students lowered their percentage students scoring basic or above while improving their percentage of proficient or above. However, before the assessments were administered I still constantly worried about my students' future performances.

Table 4.2 State Assessment Improvements

	7 <sup>th</sup> G	rade MCT	Algebra I SATP		
	First Year	Second Year	First Year	Second Year	
≥ Basic	39	64	100	81	
≥ Proficient	28	32	36	50	

Notes: These values are percentages of students at or above the Basic and Proficient levels of their respective assessments and reported based on my first and second years of teaching in this school. Values were obtained through the Mississippi Assessment and Accountability Reporting System.

I mostly worried about my 7<sup>th</sup> grade students. With their disruptive behavior, and observed laissez-faire attitude toward the test, I knew they would not meet the desired outcomes desired by my administration and me. After my students completed their state assessment, I went to Mrs. Prince and discussed my observation. I reported how my students entered the testing room and were not compliant, wanted to have conversations on topics other than the test, and seemed to not care that they were about to take their state assessment that I had so diligently prepared for them to take. Mrs. Prince said,

You still got to look at the mentality too. What they think and what's important to them. Junior High kids are just so different. They haven't sunk into their brains to really recognize that this test is important not just for me but for my teacher and for my school and for my school district. They can't see that far. They're still in their 'I need my' mode. You know what I'm saying. That's where they are and so they can't see past that right now ... so I've got to believe. Now this is my hope, that those kids, with you putting in the time and ... hammering the material and

thinking about it, those kids who it really mattered to. Where they would have been those kids who scored in those other basic levels you know that they moved up to the next level.

After discussing my frustrations with Mrs. Prince, she suggested I speak with the students. I did and many of the students recognized my worrying and frustration prior to the examination. Naketta stated,

Okay, Mr. Lamb you were kind of concerned about our behavior at first because ... I could tell by the way you were looking. You were kind of worried about how we were going to make on the test. But I had confidence in myself, and everybody else should have confidence in their self.

Tanessa remarked, "You were acting mad because you was ... concerned about us. How we going to make on the test." Montavious said, "You was scared cause we wasn't focused cause we was laughing and stuff, but that might have been our way to get focused so we wouldn't be worried about the test or nothing." Listening to their comments, I realized that my preconceived idea of a student preparing for a test was different than their methods. I wanted them to come into the room, sit down, and stay quiet until the test was complete. When the opposite occurred, I resorted to a panic mode and became worried my students were not taking the test seriously. It turned out that six of my students failed to pass the benchmarks for the 7<sup>th</sup> grade mathematics test increasing the 40% pass rate from my first year in WSHS to 61% this year. This improvement was noted in NCLB AYP report for my school after the test results were released to the

public. I was happy that the percentage of failures was reduced, but I was still disappointed that more students did not pass.

When examining the students who failed to meet the benchmarks in 7<sup>th</sup> grade, no student passed my class and failed the state assessment (See Table 4.3). This meant that all 7<sup>th</sup> grade students who passed my class were prepared to pass the state assessment. However, I did have two students fail my class and manage to pass the state assessment (See Table 4.3). This could be explained in many ways. I was able to speak with one of those students after the test results were released to the schools and Harold simply stated, "I guess the test was kind of easier than what you'd been given us." Harold did not fail my class by very many percentage points, but he did do very well on the state assessment. I was proud of him and the many other 7<sup>th</sup> graders for what they had accomplished in passing the state assessment.

Table 4.3 Student Yearly Average and State Test Results

	7 <sup>th</sup> Grade			Algebra I		
Student	Yearly	State Test	Student	Yearly	State Test	
	Average	Result		Average	Result	
Christopher	82	613	Bobby	83	318	
Damontae	77	549	Cathy	88	352	
Demarkes	86	609	Jaisa	98	400	
Gerald	42	518	Jamon	70	302	
Harold	67	564	Jazmine	84	344	
Jala	72	541	Joshua	92	244	
Julie	71	568	Keshon	78	329	
Keith	84	597	Latrice	70	302	
Kyle	71	557	LeShondra	72	290	
Lamar	53	557	Monte	75	318	
LeKisha	58	518	Samantha	78	318	
Montavious	75	575	Saul	90	395	
Naketta	74	557	Shameka	61	282	
Paul	55	507	Sharyl	94	363	
Sue	83	564	Steve	73	318	
Susan	55	465	Talena	100	413	
Tanessa	72	568	Telsa	99	395	
Thomas	55	486				
Tramere	88	553				
Tykira	89	618				
William	62	501				
$\mu^a$	70.05	551.67	$\mu^a$	82.65	340.18	

Note. The yearly average is a percentage score with a passing value of 70%. The state test results are scaled scores provided by the Mississippi state department of education. The passing score for the 7<sup>th</sup> grade state test is 534. The passing score for Algebra I state test is 300.

<sup>&</sup>lt;sup>a</sup>Average score for each course.

When my Algebra I students entered the testing classroom, they sat quietly and were eager and ready to take their test. This Algebra I class had a higher percentage of advanced students than my previous class my first year in WSHS. I was confident they would perform well on this test. This confidence, however, was not always present during the school year. When my Algebra I students were asked about their perception of my feelings toward the state assessment, Telsa said, "I think you worry about people flunking the state assessment." Talena added,

You know I can tell when you worry about us passing the state assessment and something. You remember that day when you was at the door when ... you was looking like you was about to cry. I knew what you was worried about. I was like 'Mr. Lamb what you worried about? What's wrong with you today?' You worried about us passing the state assessment. You can tell if you doing a problem up there and you think we ain't going to get it. ... You be like just looking like you about to cry, teary eyed.

I could be read like a proverbial book when it came to my feelings regarding the success of my students. There were many days when I did not have confidence in my students performing well on their assessment. In a conversation with Mrs. Prince, she said,

I know it frustrates you as a teacher and an instructor cause it would me too. You know cause you feel like you've been spinning your wheels and you're not getting anywhere with them, but you've got to trust what you're doing enough.

And this is a day-to-day thing.

These worries lasted until the test results were released to the schools, and I was able to view my students' results. I was unable to acquire the same perfect score from the year before as two of my students did not pass this year's Algebra I subject area test (See Table 4.3). One of these students, Shameka, had missed 42 days of school prior to the assessment because of medical and personal reasons. She was 8 months pregnant the day she worked those 65 problems. As any teacher hates to admit, I did not expect Shameka to pass the test because of her unique situation and my inability to provide her with an adequate amount of instructional time she had missed due to this pregnancy. I constantly reminded her to attend after school sessions and come by to ask me questions, but she never attended any tutoring sessions and ended up performing well below the passing scaled score of 300.

I was able to speak with LeShondra, the other student who did not pass the state assessment, and she vented, "I am mad, cause I waste a lot of time trying to study for that test and I still failed." LeShondra struggled the entire school year, but continued to work hard and seek assistance when she needed it. She attended the after school tutoring sessions and work diligently in class. LeShondra simply had to work hard to perform well in Algebra I. She failed the state assessment after barely passing my class, and her frustration was justified. She scored a 290 out of the needed 300 scale points required to pass needing to have correctly worked only a few missed problems on the test in order to have passed.

With LeShondra and Shameka not passing the state assessment, my Algebra I pass rate was 87.5%, below the 100% goal achieved the previous school year. The

decline in Algebra I students passing scores resulted in a drop in pass rate. With each student being 6.25% of the class, it was not hard for the percentages to change so drastically. Just as Tyler (2003) stated, being in a rural school means the test results are not statistically reliable from year to year. With each student having so much of an effect on the accountability of our school, I worried more than what the students observed.

There were multiple days when I would go to my principal for advice regarding my students. Many of these visits were to explain a situation that occurred in class or to discuss alternative teaching strategies. These conversations eventually exposed my worries about my students' success on the state assessment. I continually worried that my teaching techniques were being judged as well as the student achievement and school's AYP. Mrs. Prince said,

You're taking it as an evaluation of yourself and your teaching. ... That's good, but by the same token, when you know that you have done everything that you are supposed to do and you've put everything out there. You've got to trust the fact that those kids got what they needed and they can apply it.

I felt pressure from the administration to improve the 7<sup>th</sup> grade scores and maintain the Algebra I perfect pass rate. I added to these pressures by continually monitoring my instruction and making sure every student was ready for the assessment. These pressures led to more individualized instruction, extensive practice testing, and constant individual evaluations of the effectiveness of my instruction. When my students did not do well on a test, I would provide time to re-teach and re-test to make sure the material was mastered.

I would also take the numerous practice exams and use them as a determinate as to what material I had covered and covered effectively.

Mrs. Prince stated,

I think you need to look at ... one plus for testing. Because now it breaks it down so ... you can see what specific object certain kids did not master. And I think that's the role where you'd have to step in and say 'Okay, let me see here ... Maybe I wasn't in tune right here in this particular area. ... Most of the kids got it but this particular kid didn't. What's something that I could do different in presenting this type of material to this ... type of learner.'

Mrs. Prince was confident that the number of practice tests we provided our students was beneficial to their achievement because the results could be used to identify problem areas and the teacher could attack these areas with remedial techniques. I not only provided remedial work based on the practice test results, but I used my teacher generated tests to help determine my students level of understanding. When a large majority of my students performed poorly on my tests, I would re-teach and re-test that topic. Christopher stated,

You have done everything [in your] will power to help [your 7<sup>th</sup> graders] pass.

You done helped gave will power for the whole class to pass your class, cause you give us second chances on tests and stuff. Like, if we do bad on a test, you'll give us another test to take in place of that if we do better and stuff.

I had a reputation as a successful teacher I thought I had to defend. I taught 38 students representing two-thirds of the tested mathematics group, and I felt my teaching

was highly represented on these state assessments. I tried to do everything in my power to help these students achieve for their sake and for mine. The testing culture made me think more about the effectiveness of my instruction, plan more test preparation activities, and worry about my students' success and my reputation. Some of these effects were beneficial to my students and me; however, some of the effects simply made my teaching experience miserable. I would rather remediate and instruct students because I simply want them to become better thinkers than to remediate and instruct because I want them to do well on a test. Mrs. Prince summed up my feelings regarding the pressures I face as a teacher having such a large percentage of tested students on my shoulders. She stated,

I know it frustrates you as a teacher and an instructor cause it would me too, you know? Cause you feel like you've been spinning your wheels and you're not getting anywhere. ... This is a day-to-day thing, and that's why it's so important too, that we don't just look at one particular day, one particular time out of 187 days. We don't just look at this set of hours and say that this showed exactly what's being done all year. We can't really do that. But of course the state does. They evaluate the entire year on these two hours. And really, that's not fair. But that's the way it works, and that's the ghost we have to deal with right now.

I was not alone in seeing how the accountability standards created pressure on teachers. Teachers like Mr. Peppers claimed, "I get incredible pressure. Well, I feel incredible pressure to show a consistency with the alignment of the test." Mrs. Reed said,

I felt good that my students desire achievement. I am afraid that I haven't taught the depth of the material to the point where they can use it. They can manipulate it I know, but I don't know if they can use it to problem solve.

My students also perceived how teachers in classrooms with tested subjects had more pressure, obligations, and taught differently than teachers in non-tested courses. Joshua stated, "You guys teach way harder all through the year." Steve said,

They got a bigger responsibility. They got ... a teacher exam, that's what the state assessment is to me, an exam for the teachers. They have big responsibilities. The other teachers they don't really have that type of responsibility. I mean they don't really have to teach, to tell the truth. They don't really have to teach, but people with state assessments they really have to put heart into it to teach.

Harold illustrated how one of his MCT teachers worried so much about the state assessment that their worrying caused him to worry also. He stated,

The people who didn't have the state assessment, they didn't worry about that state assessment. ... The other classes, they just give you tests and you take them and you pass the nine weeks test then you pass that class. But like Ms Lyte, she always worried ... about this state assessment and everything, which put that pressure on us when we took it.

A teacher's worry can sometimes turn into a student's worry as Harold discussed. My students knew what was expected of them on the state assessment. I covered the logistics of the state accountability process early in the school year. I wanted my students to know how the tests were scored and how these results were used. My explanations

discussed promotion and graduation accountability for students as well as school identifications based on their students achievement and growth levels. When I asked my students whom they felt was held accountable for the test results and they either said the student or the teacher. No one commented how the school or school district, as defined by the United States Department of Education (2004), was held accountable for the test results. Some students made comments like Steve describing the exam as an evaluation of teacher effectiveness. Tramere commented, "I think [state assessment] is a good thing for students because you can see what the teacher is teaching. ... The state assessment probably proves if the teacher is teaching or not." Other students felt the teachers and the students were held accountable. Talena stated,

It's you and the teacher. I'm saying it helps because you ... see if the teacher taught you or have you learned anything throughout the year. ... It's also about the student learning. A teacher can be up there teaching and a student just ain't paying no attention.

In a conversation with a 7<sup>th</sup> grader pertaining to the disciplinary problems I faced with them, Montavious stated,

I'm nervous because we got like 5 or 6 weeks [before the state assessment] and it all will fall back on our class and you when they find out that like 60% of the whole class failed. ... It's going to look bad on the class and the teacher.

Montavious had earlier described how about 60% of my 7<sup>th</sup> grade students did not pay attention in class, which accounted for the increased number of students struggling to

achieve. This worried him because he did not want the poor state assessment results to portray a negative image on the class and me, his teacher.

It was interesting to see how most of my students believed the state assessments were a reflection of the teacher's ability to teach effectively. In Beckner (2003), the researchers asked the USDOE to answer questions regarding teacher accountability on these assessments. The USDOE replied "There is nothing in NCLB that dictates holding teachers accountable for student achievement. All accountability is directed at the school and school district levels" (p. 8). With these student responses, teachers and students feel teachers are being held accountable along with the schools and school districts based on these state assessments.

# Test-Based Accountability's Effect on Students

During the school year, I had many conversations with students pertaining to their perceptions of the state assessment system. Just as teachers agree and disagreed with standardized testing (Public Agenda, 2002), my students also saw positive and negative results stemming from taking a single test at the end of the year. Harold said,

[The state] should have a test every grade, and if you passed that test you should go on to ... like if I pass the 7<sup>th</sup> grade test I go to the 8<sup>th</sup> grade then take a test there and go to 9<sup>th</sup> grade and stuff like that. ... Well, to me, that test gives you all a bunch of problems what you been learnt that year. And see if you can't pass that test, then you ain't learnt nothing during the year.

Like Harold, Joshua felt the state assessments were a good judge of a students understanding of the content. Joshua's also felt the state assessment provided him with motivation to do better in the classroom. He said,

They help me in the long run. See like if you don't have a state assessment, then you might not try as hard. Then you might not learn all you can learn in class. But like if you have state assessment in there, you are going to study really, really hard unless you don't care, and then you like 'oh well.' But if you really care like I care and my mom care, awe yeah, you going to study. You going to get all you can out of this class.

These comments were similar to the comments expressed in Lattimore's (2003) study. However, unlike Lattimore's students, my students had a little more to say about the accountability system they experienced.

Other students felt the test was not needed. These students believed the state assessment was just a repetition of the teacher-generated assessments taken through the course of the year. Monte commented,

Well I think that we shouldn't have [these tests] because ... everybody's not on the same level. If one person fails and everybody else passes, that doesn't ... determine that that person is not achieving at the same abilities. ... I would tell [the state officials] that we should try other methods of learning than these, than these state assessments ... because I don't think that it's right that you have to have all these tests just to graduate. ... I mean you are in the class and you are

learning this stuff if you pass the class. Don't you think you should have the knowledge?

Steve added to Monte's statement saying,

I think that state assessments shouldn't be important because the final exam is almost the same thing as the state assessment. ... They are both testing you on the same thing. ... They all testing you on the criteria that you learned throughout the year. ... I think you should only be able to have to pass one. ... They both have the same equality. ... If they pass the state assessment, that should be the same thing as passing the class.

One test was not supported as being an adequate judge of student achievement (Public Agenda, 2002). Steve agreed saying, "I mean ... the state, if they really wanted to see how you were doing ... one test can't really tell you about a student." My students saw pros and cons of cumulative assessments at the end of the year.

As discussed earlier, my students felt the teachers were held to the same, if not greater, accountability standards as the students. Students also discussed how they faced a considerable amount of pressure to perform well on these tests. As Harold pointed out, many teachers transferred their worries onto the students causing them to be anxious about the test. Other students simply understood the stakes that were attached to the test, which build anxiety and pressure to perform well. In conversations and in journal entries, students voiced these worries. Shameka wrote in her journal, "This year for me in Algebra I became very challenge because I had to put my mind to the work. ... I was also worried about the Algebra I state assessment." Joshua stated,

There is so much emphasis on [the state assessment]. It's like at the beginning of the year, in our biology class; [Which is also a state test] ... Coach already told us he wanted 400 on them state assessment. There was so much pressure leading up to the test that like if you can't handle stress these tests aren't for you. You'll crack up really bad.

Two 7<sup>th</sup> graders argued about the effectiveness of state assessment, especially the amount of practice testing that occurred throughout the school year. The conversation follows:

Tramere – I think that it's cool to test because that helps you. It really do helps you.

Kyle – Naw, we don't need to test all the time.

Tramere – Yes we do Kyle.

Kyle – No we don't...That test is too much, too much pressure, man

Tramere – Then when you just take your test and ... you get your paper back,
then ... if you don't know what none of them questions that you didn't do, you
can ask the teacher and learn how to do it. Then the next time you get your test
you probably ace it.

Kyle – Yeah but you've GOT to pass. I can't be passin' all the time. ... If we done a worksheet all the time and then ... done like you talking about and didn't have to worry about getting a bad grade or good grade or nothing like that, it'd be cool.

Just as teachers in Pedulla (2003) and Jones et al. (1999) found, my students were anxious about taking the state assessment.

This anxiety extended past the testing date as well. Several of my students discussed how they became anxious about receiving their test scores well after the tests were completed. Steve stated, "You can't get a good summer in." Monte noted, "That night after your test, I mean I couldn't even sleep sometimes wondering like if I passed my Biology test; if I passed the Algebra I. Am I going to be able to graduate this year?" My students, especially my Algebra I students, worried about their test results to the point where some of them contemplated crying if the test scores came back negatively with Jazmine stating, "I was steady praying, 'Lord please, please, please, please. Lord if I fail this I'll cry, cry, cry."

To students like LeShondra, who failed the state assessment in Algebra I, emotions like anger and disappointment overcame her, resulting in tears. During my last conversation with LeShondra, after she valiantly agreed to be interviewed after the test results were released, I stated, "When I found out it was you that didn't pass, I was so upset." LeShondra responded, "Okay, you. I really don't want to talk about it anymore. Whew. I swear, man, I studied hard for that test." She gave a quiet laugh and started to cry. I put my hand on her shoulder as we walked to the front steps and she said, "Okay we got to leave that alone, I've had enough for today." She retreated to the restroom to dry her eyes and I sat with her on the front steps of the school until her parent picked her up. We discussed how she would need to seek tutoring before she retested, and I was informed that her mother had already scheduled some sessions with an area tutor.

Students' have a lot at stake, and LeShondra was one student I felt deserved to pass the exam based on the effort and participation she gave in my class throughout the

school year. LeShondra stated, "There's a lot of pressure with [the state assessment]. ... If I didn't really have that much pressure up on me, I probably wouldn't have studied like I did." In her case, the pressure helped her to prepare for the test, but even with her preparation, she was unable to pass the exam.

Listening to my students, I found that that accountability testing caused students to be anxious and experience pressure to do well on these examinations. These pressures led to better study habits for some and discouragement for others. Mrs. Prince observed,

It seemed like every two weeks it was testing. ... It can be mind-boggling and I

hate to think about what it could do to the kids. ... They've accepted it pretty well. And I say that because I didn't hear a lot of balking from the kids. ... It could have been very strenuous on their mind and stressful, but I didn't really hear that where it was stressful for them even though we did have a lot of testing.

From her vantage point as the administrator, she felt the students were accepting the testing without much stress. I, on the other hand, found that many of my students felt there was too much testing and that one needed to be able to handle the pressure in order to perform well on the state assessment.

... They seem to be embracing it.

Even with the pressures my student faced, the reactions to the test were priceless. Of the students I was able to speak with after their test results were released, I received statements of relief from students like Joshua who scored proficient on the Algebra I test, to sorrowful reactions from LeShondra who failed the test by 10 scaled points. I did have

students who were not expected to pass, but did. One of my 7<sup>th</sup> grade special education students, Tramere, passed the mathematics portion of his MCT and commented,

It made me feel a little bit better than what I was because some people told me they don't think I was going to make a good score on the test. ... Those kids in the class was telling me 'you ain't gonna pass that test.' I proved they point. I passed it for 'em.

Tramere passed without many students (and teachers) giving him a chance. His test results made him proud and illustrated to him and to me that despite his disability, with hard work and determination, he could perform as well as any of the regular education students.

My Algebra I special education student, Latrice, also passed the test. I asked her what her motivation was and she replied,

I thought about you. I thought about what you had wrote. That I was a hard worker, so ... I just didn't want to write anything and just give it to the teacher. And then I was thinking about the rest of the kids. You know they'll get mad at me for bringing their score down, so I just tried my best on it.

It is important to note that Latrice did not have to pass the Algebra I test in order to graduate. She was one of the last students who had to pass the old exit exam known as the Functional Literacy Examination (FLE). However, she was motivated to perform well and did.

#### **Discussion**

This study investigated my experiences as a rural Mississippi secondary mathematics teacher. The culture surrounding standardized testing and rural education as well as student perceptions of my mathematics instruction and classroom management were investigated. The voices of students, colleagues, and administrators helped to build an understanding of teaching and learning mathematics in this rural school.

The students in my study were predominately African American with low socioeconomic status providing a unique demographic worth investigating. As Lattimore (2003, 2005) noted, these student voices needed to be heard on both the testing environment and the teaching of mathematics. Through this case study, I sought to increase the limited research surrounding student perceptions and rural mathematics instruction while establishing a foundation for later research.

# Teaching Mathematics in Rural Mississippi

Multiple themes emerged while answering the first research question: What are my experiences as a rural mathematics instructor? There were three parts to this question pertaining to administrative, student, and testing influences on my instruction. Within each of these subcategories, results agreed and disagreed with current research.

### Administrative Influences

Research points to the strong influence administrators have on the instructional climate of the school (See for example, Hart, 1993; Bossert et al., 1982; and Glascock, 2003). Winkler (2002) found administrators created teaching pressures associated with

accountability testing. Costigan (2002) noted administrators strictly governed the methods and materials used in the classroom to meet their expectations of effectively preparing students for end-of-the-year assessments. In this study, my administrators were outspoken in their requirements to improve student achievement and test results, but they mainly just spoke. The instructional climate of my classroom was riddled with comments regarding improving test results, but as for their influence on the instruction, other teachers and I mainly taught in our classroom islands without much regulation. Other than requiring weekly lesson plans, there was no accountability system to govern what and how material was presented in the classroom.

My administrators did not formally evaluate me as a teacher or officially critique my teaching methods or lesson planning. I was required to turn in lesson plans, but I was never given any lesson plans back with administrative suggestions. Unlike Glascock (2003) who found some administrators constricted teacher's classroom curriculum, my administrators allowed me to teach what and how I wanted to teach. Blanton and Harmon (2005) discussed how very few of the rural schools in their study had curriculum specialists who could effectively provide content specific mentoring to teachers. This could explain the reason for the limited observations since the building principal had a background in elementary teaching and may have reservations in providing feedback to content specific secondary teachers. However, the provided explanation centered on a less obtrusive method of student questioning and periodic observations through the classroom door windows. Effective feedback of instruction was not available to me as a

teacher, but I did believe my administrators had confidence in my instructional techniques.

My administrators' confidence and supportive nature established a comfortable work environment. I had instructional autonomy in my classroom unlike Rapp (2002) discovered in his study. I did find other colleagues who believed their instructional autonomy was jeopardized creating an instructional climate filled with discomfort.

The instructional climate of my classroom was negatively affected by certain organizational inconsistencies and elements of micromanagement that were not apparent in my review of related literature. Instructional time was lost due to these inconsistencies and teacher authority was jeopardized by this micromanagement. Hart (1993) noted that negative effects on the instructional climate were often unintentional. Such is the case with these inconsistencies and management styles of my administration. Just as one teacher noted, these administrators were new to their positions and certain difficulties could be explained by their inexperience.

# **Student Influences**

Students also affected the instructional climate of my classroom through intentional and unintentional means. I found McLeod and Shanahan's (1996) connection between generational poverty and antisocial behavior to be true in my classrooms. I taught many students living with a long history of poverty. Many of these students were misbehaved. By no means was this a generalizable result, but there was a connection in my results between the economic difficulties of my students and their chronic misbehavior.

The misbehavior of my students greatly effected my classroom instruction. The most prominent way was through the loss of instructional time. Like Ennis (1996) illustrated, disruptive behavior affects instructional time as teachers become stressed and sacrifice teaching and planning. However, the instructional time lost in my classroom was only partly due to stress. Constant reminders to students of their inappropriate classroom behavior coupled with multiple hallway conferences prevented teaching and instructional time was lost. My constant attention to managing problem behavior prevented teaching from consistently being taught. This could explain the low course average for the 7<sup>th</sup> grade mathematics students whose misbehavior was more distracting than my older Algebra I students. Student misbehavior could be one variable in academic success, but other variables could explain the academic achievement of my students.

Graziel (1997) found a connection between poverty and student achievement while Montoya and Brown (1990) did not. If the results of Graziel's (1997) study are generalizable, then because almost 90% of my students are economically disadvantaged, then my students should perform at or around the same academic performance. This was not the case for my students. I had highly motivated students who were successful academically, while less motivated students were not. This supports the work conducted by Fyans and Maehr (1990) who found a connection between minority students' motivation and their academic achievement.

My students were from high poverty, minority backgrounds creating instructional situations dissimilar to my cultural upbringing. Hollins (1996) discussed how these cultural differences created challenges in instruction. Milner (2003) presented evidence

of how racial minorities and their unique cultures should be embraced by racially different teachers. Lattimore (2005) noted that knowing the culture of the students helped provide effective instructional techniques. My students had cultural mannerisms unlike mine that presented challenges in my teaching. I found understanding and embracing the many cultural differences to be beneficial in creating a more effective teaching and learning environment.

# **Testing Influences**

Teachers and administrators tended to accept the testing culture with some disagreements. Like Bushweller (1997) illustrated, curriculum alignment with tested items was heavily stressed resulting in an instructional environment close to teaching to the test. Jones et al (1999) illustrated how a large percentage of teachers believed they spent a great deal of instructional time practicing for tests. Manouchehri and Goodman (1998) pointed out how some teachers limited their implementation of perceived effective teaching methods in order to prepare for standardized tests. My instructional time was limited due to the emphasis placed on test preparation. Like teachers from the study by Jones et al. (1999), I believe over 60% of my classroom instructional time was used to prepare for the end-of-the-year assessment. From required implementations of practice examinations to voluntary usage of classroom time to perform extensive drill and practice exercises prior to the state assessment, the state testing influenced my teaching by absorbing my instructional time.

The teachers in this school were also faced with pressures to cover all required state objectives prior to the state assessment, while not leaving slower students behind

and preventing advanced students from enriching their learning. The students in this study were very perceptive to the teacher pressures associated with making sure every student learned the material. Costigan (2002) found administrators made teachers believe they were to blame for student failures on state assessments. I found myself worrying about the possible failure of my students on their state assessments mainly because of the reflection it would have on my teaching ability, but my administrators did not instill this mindset in me. My administrators agreed that this single test was not a good reflection of a year's worth of material and teaching just as teachers in the study conducted by Public Agenda (2002). I, however, did believe the test was a reflection of my teaching and this caused worry and pressure when students were not performing to my acceptable levels.

These pressures were exacerbated in that each student in this study counted for such a large percentage of the school's accountability. It would be sufficient to state that the results of this study add to the growing concern that using rural test scores as the sole determining factor of accountability is statistically unreliable (Tyler, 2003).

### Learning Mathematics in Rural Mississippi

Student perceptions encompassed a large portion of this study when answering the second research question: What are the essential experiences of the students in my rural mathematics classroom? These experiences focused on student perceptions related to instructional techniques, managerial strategies, and accountability testing. The results add to the limited amount of research available.

## Student Perceptions of Instruction

Instructional techniques to prepare students for their state assessments were coupled with engaging, entertaining, and challenging activities students believed were effective in their understanding of mathematics. Angier and Povey (1999) provided student input regarding the effectiveness of engaging instruction. Powell (2000) illustrated how students preferred teachers who truly cared about their success. Lattimore (2005) found students learned more from teachers who presented instruction in enthusiastic and competitive means. All of these methods were utilized during the course of the school year finding students positively commented on their effectiveness. Using math manipulatives, competitive games, and reward systems were perceived beneficial to most students. Some students perceived certain cooperative learning activities and technological implementations to be less effective.

In addition to the finding from my review of related research, I found many students preferred my teaching at a slower pace. These students were not as advanced as others and found the pace of instruction allowed for greater understanding. My advanced students believed this pace was too slow at times, holding them back from gaining a deeper understanding of the information.

One aspect of my instruction that gained an overall positive report from students was the implementation of competitive games and a reward system. African American males were found to benefit from competition in a mathematics classroom (Lattimore, 2005). However, Ames and Ames (1984) illustrated how the learning of content was often sacrificed with the motivation to perform being heightened. My students did

participate and perform better during these competitions. Students noted the increase in participation of greater than they had experienced during their history with certain classmates. This study did not investigate any learning or performance gains associated with these teaching techniques, but based on the students perceptions, these techniques increased participation that could lead to higher achievement.

# Student Perceptions of Classroom Management

This inquiry revealed my classroom management was ineffective toward my 7<sup>th</sup> grade students, but not as negative with my more mature students. Crawford (2004) illustrated three dimensions of classroom management: (a) physical, (b) affective, and (c) cognitive. I was successful in meeting the affective and cognitive domains of Crawford's model. The students perceived me as a caring and trustworthy teacher supporting results by Powell (2000). These traits and the actions associated with them helped build a classroom well managed through the affective domain. Incorporating the engaging activities and teaching at a slow pace helped to support the cognitive domain. However, I was ineffective in managing many of the physical aspects associated with classroom management for adolescent children illustrated by Levin and Nolan (2000). My students and I perceived my management of the physical domain to be too lax allowing, as Levin and Nolan illustrated, too many problem behaviors to ripple through the classroom without being managed. As my students noted, I was too nice and allowed too much of Powell's (2000) caring ethic to replace the needed strictness of many effective teachers.

## Student Perceptions of Accountability Testing

Like Lattimore (2003), my student believed the required assessments caused them to study more and work harder in class; however, these students experienced just as much, if not more, pressure than teachers in studies like Public Agenda (2002). Several students in this study benefited from the pressures associated with the state assessments. The students were motivated to do well so they may graduate or be promoted. Some students also strived for success on these assessments so the school and its teachers may not fail in their accountability. However, some students in this study have so much pressure from these assessments that they become anxious and so afraid of failure they lose sleep or doubt the reliability of their hard work in class. These results support findings from Pedulla (2003).

Students experienced pressures to succeed as much as teachers and administrators experience pressure to guide their students toward this success. My students were both motivated by these end-of-the-year assessments as well as negatively affected by the high stakes associated with one single assessment. Public Agenda (2002) found teachers believed one single assessment should not be the determining factor in accountability. Like these teachers, my students revealed achievement should have standardized test results as one form of measurement, but other aspects of school teaching and learning shown through course assignments and grades should also be used in the accountability model of this school. One student in my study illustrated how test scores can be unreliable by saying that some students need more than just one year to learn all objectives covered in a course, but these state tests are given at the end of one year.

Information was gained with regard to student perceptions of instruction, classroom management, accountability testing. Results agreed and disagreed with available research warranting further investigation.

## The Culture of This Rural School

Results from this study supported many rural issues developed in the review of related research. The themes that evolved in this study, different from the testing culture illustrated through the above influences on instruction and students, were the increased interpersonal relationships, lack of Carnegie units, and lack of monetary support.

Ralph (2002) provided insight into the advantages and disadvantages of teaching in a rural school. Of these advantages, Ralph found rural teachers had a very supportive atmosphere filled with fewer discipline problems than larger urban schools. Some teachers and I found the atmosphere to be very supportive with regards to administrative influences. This atmosphere was filled with students and teachers having very close-knit relationships. However, unlike Ralph, I found more discipline problems. I may have had close interpersonal relationships with my colleagues and students, but the constant threat of violence and misbehavior was not representative of Ralph's findings. As illustrated by Blake and Swartz (2002), these cultural challenges created difficulties to meet accountability standards. With small class sizes, I could provide individualized instruction, but with small class sizes having large percentages of disruptive students, covering all objectives was a challenge.

Additionally, the low enrollment caused limited course offerings as illustrated by Ralph (2002). There were not enough Carnegie units to efficiently provide students with

a holistic education incorporating both academic and fine arts courses. Teachers, students, and administrators believed their education was limited because of the size and location of this school. Advanced students were unable to challenge themselves and artistically gifted students had no outlet for their talents. Limited courses were one byproduct of low enrollment in this school. Other challenges were associated with monetary issues.

As Hodges (2002) noted, transportation costs for rural schools can be quite cumbersome. Hodges was concerned that sanctions from NCLB would add to the already high transportation costs of rural schools whereas this study did not see this as a problem because other governmental funds like Gear Up Mississippi helped lesson transportation costs for this rural school by furnishing transportation following extended day tutorial services and during many field trips made by the Freshmen class. Without Gear Up, this school would have financial difficulties in providing transportation for students living in this 220 square mile area.

The results of this study coincided with much of the literature available. From students to administrators to teachers, my rural school experiences were consistent with challenges associated with school size and testing. A vast amount of information was compiled to present these findings. Many other events and situations occurred during the school year that were not suited to this research study. Rural education has many unique situations that should be added to the growing body of research surrounding this topic of interest.

### CHAPTER V

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

### **Summary**

Accountability testing has become in recent years one of the most influential aspects of public education. From the time Sputnik I was launched in 1957, our American schools have attempted to raise the standards of public education to compete academically with other nations. From the passage of the Elementary and Secondary Education Act of 1965 (ESEA) to No Child Left Behind Act of 2001 (NCLB), attempts have been made to strengthen academic standards and, more recently, hold schools accountable for meeting those standards.

Today, all 3<sup>rd</sup> through 8<sup>th</sup> grade public school students must meet their state's academic benchmark standards in language arts and reading, mathematics, and science. When schools do not meet adequate yearly progress (AYP) in their student's achievement, there are national sanctions that these schools incur in order to have access to federal funding. If, after five years, a school has not achieved AYP with each disaggregated subgroup of students, then the school could be closed or completely restructured. Under NCLB, states can choose to use federal funding to provide incentives for schools and school districts that consistently meet and exceed their desirable AYP. However, there are few states that actually provide financial incentives to schools and teachers for their success in obtaining AYP.

ESEA originally provided money for low-income schools. Standardized testing was later used to hold the low-income schools accountable for the money they received under Title I. In the mid 1990s, Improving America's School Act of 1994 (IASA) was enacted. This amendment to Title I of ESEA required states to create state standards and to test students in schools receiving Title I funds. President George W. Bush proposed another amendment to Title I of ESEA, NCLB (2002), which required all schools to be held accountable for student achievement. Title I now not only is to help low-income schools, it also provides funds to help improve all schools when AYP is not obtained.

Even with the perceived benefits of more money being added to the national educational process, research shows many teachers believe testing has a negative effect on teachers and students. Many teachers believe pressure to align their curriculum to the state assessments is prevalent. These teachers believe they are teaching to the test and have lost a certain amount of autonomy in their classrooms. Other teachers believe the organization of set standards and objectives has a more positive effect allowing them to justify their teaching and have more collaboration with colleagues. Some teachers believe their students have too much pressure placed on them to be successful on one standardized test at the end of the school year, while other teachers feel students should have to take standardized assessments. These teachers who believe standardized testing is adequate also believe less emphasis should be placed on the results of these tests. The teachers voice in research pertaining to accountability testing and state models is extensive, but the students voice is limited.

Some students have voiced their opinions of state testing with research showing these assessments to be motivating factors for many students to perform well in class. Some research illustrates how students believe teachers should modify the way they prepare for the assessments. Students believe there is too much last-minute preparation that prevents them from adequately performing on their state assessments because of the short amount of time and vast amount of information presented to them prior to the examination. Teachers and students have provided perceptions of state assessments, but another educational entity without a well-documented voice in today's accountability culture is the rural school.

When schools do not meet AYP, certain sanctions are implemented to help these schools and school districts improve their student achievement. Several of the sanctions require extra funding to transport students across the district and provide tutorial services to low-income students when their students do not make AYP. Generally, rural school districts cannot afford to fund these sanctions because these rural school districts have to bus students across great distances on already low budgets. Rural schools not only face financial difficulties with NCLB, but they are also held to statistically unreliable standards. Under NCLB, schools must show AYP by comparing one year's statistical results to the previous year's student achievement. Because rural schools have small numbers of students, comparing two consecutive school years is like comparing apples to oranges. Research has shown that, nationally, rural schools produce higher achievement results than their larger, urban counterparts. However, this same research shows that rural schools are not identical across state lines.

In addition to NCLB woes, the culture of rural schools also places challenges on teachers and students unlike many larger and more metropolitan schools. Urban, suburban, and rural schools all have students who live in low socioeconomic (SES) households. Research has shown that low SES students have greater motivation and achievement in smaller, more rural schools. Despite this apparent positive effect rural schools have on low SES students, research has shown that poverty can result in behavior problems influencing the school climate. Teachers must also be aware of the academic and behavioral effects poverty has on student achievement and classroom behavior.

Other factors teachers must understand in their classrooms are the ethnic and cultural diversities of their students. Research illustrates how teachers must be aware of effective teaching methodologies to teach these multicultural classrooms often quite different from their own. Understanding the multicultural diversities of students helps to provide effective teaching methods that promote maximized student achievement.

Research has shown that students of various cultural backgrounds prefer a mathematics teacher who is engaging, entertaining, and challenging. Mathematics teachers must use common teaching methods that challenge students cognitively as well as motivate students affectively. Today's mathematics teachers are not called to be more traditional, textbook driven instructors. They are to build on students' contextual knowledge, while providing classroom experiences that help build connections to the real world.

I was a secondary mathematics teacher in a low SES rural Mississippi school. I taught 7<sup>th</sup> grade mathematics, Algebra I, Pre-Algebra, Compensatory Math, and

Advanced Mathematics. The state of Mississippi requires that all 7<sup>th</sup> Grade, 8<sup>th</sup> Grade, and Algebra I students take an end-of-the-year assessment to determine promotion and graduation. The results from these state assessments are also used in the accountability model for the school and school district. I taught the only 7<sup>th</sup> Grade Mathematics and Algebra I courses in this rural school. These two mathematics courses made up two thirds of the mathematics courses required during accountability testing. This unique opportunity to investigate my experiences as a rural mathematics teacher during test-based accountability was ideal. Every student in my two tested courses participated in the study allowing them an opportunity to give their perceptions of testing and preferred teaching practices as rural, low-income, and predominately African American students.

This study sought to answer three main questions:

- 1. What are my experiences as a rural mathematics instructor?
- 2. What are the essential experiences of the students in my rural mathematics classroom?
- 3. What is the culture of my rural secondary school during test-based accountability?

Within the first question, administrative, student, and testing influences on instruction were researched. The second question provided insight into student perceptions of mathematics instruction, classroom management, and testing. The third question investigated the culture of the school as it pertained to the testing environment and its effect on teaching and learning.

The design of this study was a basic interpretive case study that used semi-structured informal and formal interviews, participant observations, and written documents to gain a holistic view into the phenomenon teaching mathematics in one rural school during test-based accountability. Through triangulation of data using simultaneous data analysis, administrators, co-workers, and students' perceptions with regard to the research questions painted a descriptive picture of teaching and learning in this rural school.

West Spike High School (WSHS) was a 7<sup>th</sup> through 12<sup>th</sup> grade school located in a rural community serving students from within a 220 square mile area. All of the students in my 7<sup>th</sup> Grade Mathematics and Algebra I classroom participated in this study. Nearly 90% of the students were of low socioeconomic status and over 85% were African American. There were 17 total teachers (including myself) and two administrators. All of these teachers and administrators participated in this study.

WSHS was very small and rural. WSHS's size created close-knit interpersonal relationships between the teacher and student populations. Teachers and students agreed the classroom instruction was more individualized. The teachers were more aware of student's individual needs. The students believed the size of the school allowed them to be closer to other students in the school and not be invisible as they would be in a school with a larger population. The rural environment of this school also provided students with a limited number of advanced academic courses and fine arts electives. Some courses were limited to one section because there were not enough teachers to teach any more

sections. These rural students gain from smaller classes and caring teachers, but have fewer academic choices.

Along with the interpersonal relationships and limited course offering, WSHS perceived funding as a limiting factor in overall effectiveness. Classroom desks were old and small. Textbooks were not available in some classrooms, and technology was not upto-date. One administrator felt students should be given more opportunities to visit external locations so to enlighten these students who have never been outside of their county or even city in which they live. Limited facilities and opportunities due to lack of resources creates a learning environment riddled with difficulties for both the teacher and the student.

Administrators, students, and test-based accountability influenced mathematics instruction in both positive and negative ways. Administrators were influential in establishing confidence in instruction through encouraging words. They allowed certain levels of autonomy in the classroom. The administrators, however, discouraged and usurped the authority of teachers by micromanaging classrooms and by portraying some teachers as incompetent. Administrators also utilized classroom instructional time through poor planning and classroom interruptions. Consistent interruptions due to spoken announcements of the school's intercom were also influential in absorbing classroom instructional time.

The students in this study also influenced instruction. Students' disruptive behavior, threats of violence, and violent acts absorbed instructional time better utilized in teaching a lesson. Various mannerisms in speech and behavior also influenced how

instruction was presented and how classroom lessons were paced. Students in this study were found to be influential in providing me with information pertaining to best teaching practices from which they benefited. By asking students their opinions and suggestions and observing the positive results, I found ways to present material best suited for my students.

The instruction was also affected by the culture of standardized testing.

Throughout the school year, administrators required four practice assessments to be conducted during class instructional time to document growth. These assessments not only had to be planned around, but they also required eight class periods to administer. Constant administrative reminders about student achievement on state assessments established pressures in teachers to sacrifice instructional time to practice test items and prepare students to effectively take a test. Test preparation during the school year, especially the three weeks prior to the examinations, was largely a result of these pressures to improve student achievement on state assessments. Such improvement was emphasized by administrators and prioritized by teachers who believed their teaching skills were assessed along with student achievement.

The students in this study provided insight into their perceptions of effective and ineffective teaching techniques and classroom management. With regard to my instruction, these students believed my slower pace allowed students to understand the material they may not have otherwise understood. My constant checking for understanding presented students with opportunities to clarify their difficulties and gain a better understanding of the material. Even though many students believed I consistently

attended to each of their individual needs, some students indicated inconsistencies in attending to all of my students and in failing to continue using instructional techniques deemed effective by students and administrators.

## **Implications**

This school year was a success in many ways. Test results for my 7<sup>th</sup> grade students during this second year of teaching in WSHS increased from the previous year's results in percentages of students scoring basic or above and proficient or above. My Algebra I students during this second year of teaching increased in the percentage of students scoring proficient or above but fell in the percentage of students scoring basic or above. I did not break up any fights in my classroom, and my students believed they learned a lot from my instruction. However, there are implications of this study that overshadow these successful results. These implications include lost instructional time, inconsistencies in administration and teaching, and lack of teacher preparedness for cultural differences between the students and me.

### Instructional Time Lost

A teacher has a certain amount of time each day to teach. This instructional time is precious to the teacher and vital for students' achievement. Instructional time is compromised in many ways throughout a school year with many of those circumstances avoidable. There were three implications of this study corresponding to the loss of instructional time. Poor planning, student misbehavior and ineffective classroom

management, and the testing culture impacted the effective usage of my classrooms' instructional time.

First, instructional time was limited by poor planning from both my administration and myself. This administration planned oral announcements within each day's schedule, but there was no specific time allotted to make these announcements other than some time during the first and last class period. Therefore, teachers could not effectively plan around these announcements because these announcements may occur at differing times during the scheduled class period, creating classroom interruptions and instructional time being lost. When a routine time for announcements is not followed, teacher instruction is often interrupted and absorbed during inopportune times. If oral announcements are to be made, administrators need to follow an organized schedule for morning and afternoon announcements so teachers can plan around the announcements. This preplanning helps teachers adequately plan their lessons around scheduled classroom interruptions.

The school schedule was also organized so that time allotted for class periods was not equal from first to seventh period. First, second, third, fifth, and sixth periods had 50 minutes of instructional time. Fourth period had an extra 22 minutes when the activity period was not used. Seventh period had an extra 13 minutes of instructional time compared to the 50 minutes in other periods.

Classroom instructional time was also lost to school-wide, and grade-specific assemblies and field trips. Teachers were rarely given an adequate amount of advanced warning for these events. The poor planning by the administration typically allowed

teachers one calendar day to plan around this instructional time lost by the students' absences. There were many days when these events were first announced the morning of the students' absence. Communication between the administration and teachers is important for making effective usage of available instructional time.

I also was guilty of poor planning. Many lessons throughout the school year did not receive an adequate amount of planning prior to their implementation. As the school year progressed closer to the testing dates, I planned fewer instructional lessons focused on engaging activities with more lessons planned around drill and practice exercises. There were many days when lessons were not planned in advance resulting in class periods full of multiple practice problems. Instructional preparation is important to being effective in the classroom. Even though many instructional lessons did not occur as I had originally planned, planning helped me create more engaging activities. Teachers can be more effective with their instructional time if they plan ahead. Instructional time can be best utilized if teachers plan what and how they will present the material. Even though learning may not take place in the planned amount of time or other events such as fighting and disruptive behavior may occur, if the lesson is not planned, then a teacher does not know how much learning may take place during a lesson.

Second, student misbehavior was commonplace in this poor rural Mississippi secondary school. Seventh grade students had more behavior problems affecting instructional time than did Algebra I students. From distractions related to adolescent behavior to violent, abusive behaviors, these 7<sup>th</sup> graders disrupted class more often than the older Algebra I students. Their misbehavior led to teacher and administrative

punishments taking these students out of the classroom resulting in additional instructional time lost. Teachers and administrators believed the lack of maturity of 7<sup>th</sup> graders caused the increased number of misbehaviors. Another explanation focused on the more stringent accountability standards placed on Algebra I students preventing them from graduating high school if they do not perform well in class. A third explanation is that I am less capable of managing the younger 7<sup>th</sup> graders because their behaviors and mannerisms were more closely related to elementary school students, which is not my academic specialty. Either way, the younger 7<sup>th</sup> graders had a greater propensity to misbehave. The misbehaving student not only limits their instructional learning time but those students around them as well. Knowing how to effectively manage this behavior is essential.

I found 7<sup>th</sup> grade students took advantage of my less stringent managerial style more often than the older Algebra I students. My students knew how much misbehavior they could get away with before I implemented any punishment. There was a proverbial line of tolerance for disruptive behavior that if crossed would result in behavior modifications. My 7<sup>th</sup> grade students knew my line, but they also knew they could get away with many more misbehaviors in my classroom as opposed to some of their other teachers. This lack of effective classroom management led to consistent student interruptions resulting in lost instructional time. Effectively managing the problem behaviors of my students, especially the 7<sup>th</sup> graders, takes experience and patience. Misbehaving students compromise learning for all students, and ineffective management

of this behavior is detrimental to the student and to their classmates, and results in lost instructional time.

Additional instructional time was lost when an administrator entered a teachers' classroom and addressed dress code or behavioral violations. These actions resulted in teachers losing perceived authority over the students' behavior. The relationship between the teacher and administrator is one of respect where the administrator allows discipline to be administrated by the teacher in the classroom and any perceived difficulties of the teacher by the administrator in managing that behavior should be addressed outside of the classroom. If the administrator expects to effectively manage the school's discipline, then teachers must believe their students and especially their administrators respect their authority in the classroom. Micromanaging school discipline creates a short-term effect on behavior modification because students tend to attach punishments with one source, the administration. While the administrator intended for his actions to increase, school discipline, they actually resulted in a loss of school discipline with teachers losing their authority.

Third, preparation for standardized testing affects the amount of instructional time spent conducting lessons deemed effective by these students. These students believed engaging activities coupled with small cooperative groups incorporating competition and rewards were more beneficial to their learning than the more traditional drill and practice exercises. Many of these students believed they learned more with a mathematics teacher who spent extra time making sure all students understood a topic before moving to the next. However, when the state assessment dates drew near, the remaining uncovered

objectives did not receive the detailed and slowly paced attention as earlier topics did using activities, cooperative learning groups, and in class remediation. The instructional system changed having a higher short-term effect on the student's achievement but losing the long-term effects of understanding the material.

Every lesson in a state tested classroom is considered test preparation. However, specific tasks like reviewing state released test items and multiple-choice test-taking skills are specific to test preparation, and not necessarily part of normal classroom instruction. I found that over half of my classroom instruction was spent covering practice items for the state test. This type of test preparation took precedence by having teachers and students work and rework state test released items throughout the school year. I also found that the three weeks of instruction prior to the state assessment was predominately spent practicing test taking skills and emphasizing drill and practice exercises covering state released test items contradictory to the preferred engaging activities. Therefore the instructional time the students believe pertinent to their learning was lost to the memorization of commonly used test items, thus lowering the depth of knowledge of the students in this school.

Instructional time is valuable to student achievement. Too often this instructional time is lost because of preventable situations. Poor planning by teachers and administrators can affect the amount of instructional time students have to learn.

Instruction time is also lost because of student misbehaviors, which take teachers away from their instruction and distract obedient and disobedient students. Standardized test preparation also absorbs a great amount of instructional time. The ideal classroom would

have students actively engaged in a well planned lesson with no student misbehaviors having limited amounts of instructional time allocated for standardized test preparations. However, this utopian classroom is not realistic and classroom instructional time is lost because of many, sometimes uncontrollable, events and actions by teachers, administrators, and students.

#### Inconsistencies

Along with the instructional time being lost in the classroom, sometimes the instruction and management of these rural students is not as effective due to inconsistencies from the teacher and administration. Students need structure to learn. They need to be consistently held accountable for their actions and learning. There are three implications of this study associated with inconsistencies. Inconsistencies in punishments, in instruction, and in instructional leadership hindered teaching and learning in WSHS.

First, punishments in this school were not as effective as they might have been due to inconsistent administration of consequences. The student handbook stated that when a student spent three days In School Suspension (ISS), they should receive Out of School Suspension (OSS). The handbook also stated that when a student received more than three terms in OSS, they might be referred to alternative school or for expulsion. In certain cases, the administration did not adhere to the guidelines set forth in the student handbook and certain compulsively disruptive students remained in the school. Students believed a suspension was time away from the classroom without any consequences.

They rarely made up work during their suspensions and many students felt the school

rules did not apply to them, especially when they were on school grounds but in ISS. As a result of inconsistent administrative punishments and many inconsistent teacher punishments, student misbehavior was many times overwhelming for me the teacher.

WSHS needed a consistent and effective punishment system for their students. The student offense ladder of punishment was not effective or consistently implemented. In order for student discipline to be effective, punishments needed to be consistent in and outside of the classroom. Consistently abiding by the regulations set forth by the administration and classroom teacher is essential in maintaining appropriate students discipline.

Second, instructional techniques were not consistently implemented in my classroom. I had students, teachers, and administrators reveal to me that certain reward systems and competitive games were effective in promoting classroom participation and learning. However, I did not continue or consistently use these methods toward the end of the school year. I failed to continue with many of these teaching strategies because I determined too much time was needed toward the end of the school year to cover state objectives in the quickest methods of drill and practice. I realize now the more engaging methods worked for these students, and being consistent with these reward and competitive methods benefited my students.

Third, inconsistencies in instructional leadership leave teachers with feelings of isolation in their instruction lacking security in their effectiveness as an instructor. In this school I had to approach my administrators for feedback on my instruction because I was not formally evaluated. When an administrator does not observe a teacher teaching, that

administrator cannot effectively evaluate the performance of the teacher. The administrators in this school believed student comments and inconsistent window observations were acceptable forms of teacher evaluations. Simply relying on a student's comment or a minute snapshot of a classroom lesson does not provide an overall critique of a teacher's effectiveness. I sought out my administrator's perceptions and attempted to gain their evaluation of my effectiveness. However, because they were not available in the classroom to observe the many aspects of my teaching, I was not provided adequate feedback on teaching and managerial strategies useful for the students in my school. I was provided feedback, but my feedback was not supported.

Inconsistencies in school are detrimental to teachers and especially students. In this school, the school discipline plan was not consistently implemented. Students were not punished in manners consistent to the school policy. Inconsistencies by the administration also occurred through the instructional leadership. Teachers were not provided adequate feedback on instructional methods, which could have provided improvements in instructional methods and student achievement. Finally, my personal teaching techniques were not always consistent, especially when implementing engaging activities and motivational reward systems. My administrators and I were inconsistent in many of our educational duties.

## Teacher Preparedness

In order to be an effective teacher in this school, an incoming teacher must be prepared. This preparation has to do with knowledge of this rural school and its students. My formal education and previous teaching experience did not prepare me to be as

effective as I could be with my students in this school. There were cultural differences between my students and me that created difficulties in the classroom. My inexperience with rural school organization and its infrastructure was one hurdle I overcame. I also found listening to my students provided insight into my teaching, my management, and the state accountability system that was not evident in my preservice teacher preparation. A teacher working in this school needs to be informed of the rural effects on this school, the behavioral mannerisms of its students, and the perceptive nature of its students prior to and during their employment in this school.

In my higher education courses, I had learned that small class sizes were considered ideal because of the opportunities to individualize instruction. What were not taught in any of my educational settings courses were the close-knit interpersonal relationships these rural students and teachers experienced. The teachers could know all of the students in the school. The students could know all of their classmates. Teachers in this school know almost every student on a fairly personal level. These relationships allow students and teachers feel more comfortable with their learning environment, giving them confidence and trust toward their teachers.

Another implication of this rural school unknown to me was the effect small enrollment has on course offerings. I had believed every school should offer a diverse curriculum. My experience as a student and teacher had been in schools that offered a diverse assortment of classes and electives ranging from advanced placement mathematics and science courses to opportunities in choral music and band. However, lower numbers of students in this school equals fewer teachers, which limited course

offerings. This school did not offer courses geared toward exposing students to fine arts, advanced courses (e.g., advanced placements courses), and many college preparatory courses like foreign languages. My advanced students in my Algebra I class were on track to take this schools highest level of mathematics, Trigonometry/Pre-Calculus. However, these students were capable of enrolling and succeeding in an Advanced Placement Calculus course their senior year, which was not offered in this school. The size of this school created infrastructure difficulties unlike larger schools with complete course offerings. There are not enough teachers to offer all needed and desirable courses. The low student enrollment compromised the students' education.

Additionally, my culturally different history in education did not prepare me for many of the student behaviors of the students in this school. The students in WSHS were loud, distracting, hard to comprehend, and abusive to one another in and outside of the classroom. These behavioral mannerisms were often construed as behavior problems, and when these students fought, cursed, constantly disrupted class, and committed other similar offences, these behaviors were punishable. However, many of the speech and behavioral mannerisms of these students were merely culturally different from my perception of acceptable behavior. These students in this school spoke in volumes much louder than I. These students physically and verbally abused classmates during casual conversations and interactions unlike anything I had ever experienced. These students also used terms and phrases unknown or incoherent to me.

Being informed of these types of cultural actions prior to and during the beginning of a teacher's employment is important. Training in the management of these

types of behaviors is also deemed necessary. Teachers and administrators in this school often have cultural backgrounds different than these students. Being able to recognize the cultural differences between the teacher or administrator and their students is not difficult but understanding how to manage or instruction these students effectively is important to all student enrolled in a higher education classroom management course.

Finally, another aspect of needed teacher preparation in this school was illustrated through the competency of students to provide accurate depictions of teacher instruction, classroom management, and the testing culture. The students in this school were able to provide accurate accounts of effective instructional and managerial techniques utilized in this school's mathematics courses. The students in this school were very perceptive of the instructional differences between engaging activities and teaching methods geared toward the procedural understanding of mathematical topics covered in state released test items. These students believed the test preparation strategies of constantly working and reworking test item problems was quite cumbersome in the weeks leading up to the state assessment. The students in this school fostered positive perceptions toward the more engaging activities and usage of math manipulative during the classroom. The students did not reveal which method of instruction they believed was more effective in their learning, but the students did believe my instruction, whether utilizing engaging strategies or drill and practice techniques, was slowly paced building a learning environment better suited for a deeper understanding of the material.

#### Recommendations

Instructional time is lost due to students, administrators, teachers, and the testing culture in this school. As Palonsky (1986) illustrated in his title, teachers only have "900 shows a year" (five classes a day for 180 days) for teaching. This school is filled with instruction and management issues reducing this number considerably. There were many inconsistencies that were detrimental to students and teachers in this school.

Administrators were inconsistent in their punishments of students as well as observations of teachers, and effective instructional techniques were not consistently implemented.

Becoming more consistent in these key aspects of administration and instruction is important to improving the student achievement of this school's students. Students benefit from knowing and respecting the consequences of their actions in a school.

Additionally, teacher preparedness for rural cultures that surrounded this school affected the way classrooms were instructed and managed. The rural effects of student enrollment and course offerings improved relationships in this school while diminishing the opportunities for students to challenge or enlighten their knowledge and experiences with rigorous courses coupled with non-academic opportunities. Teachers working in this school could greatly benefit from better preparations dealing with managerial and instructional techniques best suited for its student population. Knowing how students in this school act and how the students learn best is important to each teacher, especially if their culture is different than that of their students. One way to find out effective teaching techniques is for teachers in this school to listen to their students. The teachers in this school can prepare their instruction and management styles best suited for their students

if the listen to students and their feedback. This feedback can be most beneficial in understanding best teaching practices as well as revealing the pros and cons of testing for accountability reasons.

One of the purposes of research in schools is to create ideas for future research and expand the conceptual understanding of how today's educational system is working. The implications of this study yield themselves to several recommendations for WSHS, teacher education programs, the Mississippi state department of education, and future research.

# For West Spike High School

With instructional time lost, inconsistencies with teachers and administrators, and culturally unprepared teachers, WSHS may benefit from adding or adjusting various aspects of this school's structure as they relate to organizational, administrative, and teaching aspects. Time allocations, school discipline, evaluation procedures, and curriculum enhancements are in need of structural change.

First, teachers in tested courses may benefit from more time allocated to planning and teaching the course objectives. With school accountability having such weight placed on student test results, teachers of these courses need extended periods of time to prepare for the objectives of the course. This planning time can be in addition to the required planning time designated for the other subjects taught. I had experience teaching in a school that limited the number of duty responsibilities for teachers in these tested courses so these teachers had additional planning time. Extended instructional time in tested courses may also provide opportunities for the teacher and students to meet all required

objectives. Extended time in class periods for oral announcements may prevent instructional time from being lost as well. By allocating a specified time for announcements and providing an additional 5 to 10 minutes for spoken announcements, instructional time in the class periods experiencing announcements may not be lost. If student achievement in these tested courses are desirable, then additional time for teacher planning and instruction may help counteract the instructional and planning time lost because of other institutional and student causes.

Second, some losses in instructional time came from an inadequate school discipline plan. The only administrative punishments included ISS, OSS, alternative school, and expulsion taking students away from instructional time after committing both major and minor offenses. I propose WSHS add two other forms of administrative punishments that may help quell much of the discipline and keep students in class when minor offenses are committed. Add sentence about keeping students in class. Having an after school detention and Saturday detention for minor offenses may keep more students in class and hopefully deter many student infractions from occurring.

School discipline can also be improved if teachers provide consistent consequences for student misbehaviors. Teachers in this school could benefit from a greater sense of awareness toward their personal responsibility to be effective classroom managers and obligation to seek effective management styles appropriate for their students. Many students can benefit from a teacher who cares about them enough that the teacher is not afraid to contact a parent, refer a student to the office, or hold the student accountable for their actions. Showing "tough love" toward students in not easy for many

teachers, but if this is not shown, then the teacher enables the misbehavior. Having classroom policies that are effective in managing troubled students and consistently implemented with an undertone of "tough love" will reduce the amount of instructional time lost for the misbehaving child and the other well-behaved children in the classroom. In addition to creating an effective management plan, a working relationship between the administration and reachers regarding this plan can give teachers confidence in modifying problem behaviors. If administrators provide teachers the freedom to manage their classrooms while maintaining their level of authority over the school's discipline, then a long-term positive effect on student behavior will occur.

Third, teachers may learn more about their teaching and administrators if a better teacher appraisal system were implemented. I greatly benefited from my first school's appraisal system that evaluated teachers based on four observations. Three of these observations occurred unannounced and gained an understanding of the teacher's beginning, middle, and end of their instruction. One planned formal observation evaluated an entire class period providing a complete understanding of the areas a teacher was both effective and ineffective. A teacher evaluation model in this school that is consistently implemented is recommended.

Last, subject specific curriculum specialists made available for teachers throughout the school and the school district can benefit classroom instruction. These curriculum specialists do not have to be solely employed by this school district. Other rural districts in this region of Mississippi could share them. The secondary curriculum assistant superintendent for this school district was very thorough and in tune with the

statistical trends of the state assessment results. His specialty was science and even though he attempted to provide me with informative mathematics materials, I needed a math curriculum specialist to provide pedagogical suggestions and critiques of many classroom ideas.

In addition to employing curriculum specialists, finding funding to increase the number of Carnegie Units is desirable. The students do not benefit from taking the minimally required courses to graduate. They are not expanding their experiences in life by not having extracurricular activities to explore their talents or advanced courses to be cognitively challenged. More funding may increase course offerings, but the low enrollment of WSHS may prevent additional funds. Therefore, the most cost effective move for the state and school district may be to consolidate.

This consolidation may result in teachers losing jobs and students losing the beneficial close relationships with teachers and peers by consolidating with a larger school district. The alternative may be for the district to build a centrally located high school, which may combine their students from the two current high schools. Currently the students are not being adequately prepared for success.

## For Teacher Educators

Many teachers are following the alternative route in becoming a classroom teacher by first earning a bachelors degree in some specialization other than education only to later take courses leading to certification. Other teachers earned degrees in education and take courses in classroom management and pedagogical methods before they become teachers. Whichever avenue a teacher takes, the recommendations for future

teacher educators deals with better preparing mathematics teachers in classroom management and in mathematics instruction.

Investigating and learning about the effects of poverty in the community, home, and especially in the classroom can be helpful to future teachers. Future teachers, may benefit from teacher preparation courses that conduct investigations into the best teaching practices for differing ethnicities and cultures of students. Frequently, teachers and students do not have the same ethnic or cultural backgrounds. Teacher preparation courses focusing on these differences administrators and teachers face may improve the instruction of every student.

In addition to supplemented course requirements, future teachers may also benefit from field experiences in rural school settings as well as a larger school setting before embarking on employment opportunities. Beginning teachers armed with the experiences in various school settings may make a decision about their first teaching position based on their experiences in one of these two settings. Some future educators may find with their field experience that they prefer a smaller more rural environment offering greater opportunities for interpersonal relationships or the teacher may choose to work in a more urban school. Students, administrators, and teachers may benefit from teachers working in school settings knowing the challenges they may face based on their experiences.

For the Mississippi State Department of Education

State testing was heavily emphasized in this rural school and throughout the state of Mississippi. Students experiencing the procedures and requirements of state testing find advantages and disadvantages to the accountability model using these test results.

Several of these students believed their hard work in the classroom should account for something and not have the one end-of-the-year assessment be the sole determining factor of their competence, and the school and teacher's effectiveness. I recommend the state department of education find a way to incorporate students' final course grades into the accountability model for each school and student. These accountability models may also be improved by determining yearly growth of individual students as opposed to yearly growth between two separate groups of students as outlined by NCLB.

NCLB has good intentions and has motivated many students in this school to academically perform better in the classroom. However, NCLB has created a culture in this school that heavily emphasizes an increase in student achievement through continual practice of state released test items limiting the depth and rigor of the curriculum. If the accountability systems for states mandated by NCLB continue to place such weight on the results from standardized tests, then schools, especially poor performing rural schools, will resort to "memorizing" the types of test items and minimizing their cognitive development of some students. State and national education departments may consider revising their accountability models to allow all students and schools an equal opportunity to become successful.

## For Future Research

This study revealed many specific implications for both the individual school and the accountability system governing the school. Future research may provide more definitive solutions for improving the educational systems in this local level to the United States Department of Education. Investigating this small rural school over a longer period

of time may provide more structural changes or the positive effects of structural changes on teaching in learning in this school's setting. Similar studies in other rural Mississippi schools may provide more generalizable data, which could be used to improve the educational system governing the 70% of Mississippi schools known to be rural. Continual research needs to be conducted pertaining to student input as it pertains to the instruction and management styles of effective teachers, especially teachers of mathematics. With students playing such a vital role in today's accountability systems, their voices need to be heard and utilized in any structural changes at both the national and local educational levels.

Rural education was a challenge for me. I learned a great deal about my teaching—shortcomings and all. Future research into rural teaching experiences provides insight into the unique lives of these teachers and students that, when utilized, can empower positive change in today's educational system.

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## APPENDIX A CURRICULUM VITAE

#### John Hamilton Lamb

#### **EDUCATIONAL BACKGROUND**

**Ph.D.**, Mississippi State University, MSU, Mississippi

(Anticipated) May 2006

Major: Secondary Education (Mathematics)

GPA: 4.0

M.Ed., Mississippi College, Clinton, Mississippi

May 2002

Major: Mathematics

GPA: 3.80

**B.S**., Mississippi College. Clinton, Mississippi

August 2000

Major: Mathematics

Minor: Secondary Education

GPA: 3.81

#### TEACHING EXPERIENCE

**Lecturer,** *University of Texas at Tyler, Tyler, Texas* 

August 2006 – Present

- Duties include teaching elementary and middle school mathematics method and coordinating and supervising elementary preservice teacher's practicum experiences.
- Responsible for maintaining high levels of scholarship through national and regional presentations, publications, and/or grant writing.
- Responsible for maintaining a high level of service to the university and community school districts.
- Responsible for maintaining a high level of collegiality.

Co-Teacher, Mississippi State University, MSU, Mississippi January – May 2005

- Duties include co-teaching Experiences in Early Childhood Education, a graduate Elementary Education course
- Responsible for teaching five intensive weeks of technology implementations within the elementary mathematics curriculum

**Teacher,** West Spike High School, Talon, Mississippi

August 2003-May 2005

- Duties include teaching Seventh grade math, Pre-Algebra, Algebra I, and Advanced Mathematics
- Responsible for preparing all Algebra I and 7<sup>th</sup> grade mathematics students for state-wide subject area testing
- Solely responsible for taking all year book pictures, designing the yearbook, and submitting it for publication
- Lead district-wide staff development exercising emphasizing mathematics standards for accountability testing mathematics subjects

**Teacher & Coach**, Oyster High School, Oyster, Mississippi August 2000-May 2003

• Duties include teaching Honors Algebra II, Algebra I, and Pre-Algebra to 150 students a year while maintaining and keeping accurate records for state tests, creating and implementing weekly lesson plans, and staff development

• Head coach for the 9<sup>th</sup> grade Boy's Basketball team for 2000, the 9<sup>th</sup> grade Girl's Basketball team for 2001-2003, and the Varsity Girls 2003 Volleyball team. Assistant coach for each of the High School teams during these years.

#### **TEACHING COMPTENCIES**

- Mathematical methods for elementary and secondary pre-service and in-service instructors
- Problems in secondary education
- Secondary school curriculum
- Advanced technological methods in secondary education
- Student-teacher supervision
- Research Methods in Education

#### FIELD OF SPECIALIZATION

• I am competent in innovative reform methodologies as they pertain to elementary and secondary mathematics instruction. Through my experience I have gained a working knowledge of implementing technology, using cooperative learning strategies, utilizing constructivist techniques, and managing the classroom environment in both the middle and high school environments. I am competent in multiple elementary mathematics methodologies, and have instructed in-service teachers in the implementation of these techniques.

#### **CURRENT RESEARCH**

- Dissertation Title: "The Experiences of a Rural Mathematics Teacher in Mississippi: A Case Study." Data collection and analysis in ongoing.
- "Who Will Win? Predicting the Presidential Election Using Linear Regression." Research investigates students' experiences during a problem solving activity utilizing technology in an Algebra I and 7<sup>th</sup> Grade mathematics classroom. Manuscript submitted and accepted contingent upon revision to *Mathematics Teacher*. June 2005.

#### PROFESSIONAL PRESENTATION

• Facilitated a district-wide staff development conference on the topic of teaching secondary mathematics during accountability times. Analysis of district statistical data was reviewed along with discussions pertaining to innovative instructional methodologies August 2004.

#### PROFESSIONAL PRESENTATION

• "Implementing Technology in the Mathematics Curriculum: Experiences of Inservice Elementary Teachers." Co-Author: Dana Franz. Presented to the national conference for the Association of Mathematics Teacher Educators (AMTE) January 2006

"Who will win? Understanding though linear regression." Proposal accepted to present in the National Council of Teachers of Mathematics (NCTM) 2006 regional and conference in Atlantic City October 2006

#### PROFESSIONAL AFFILIATIONS

- Association of Mathematics Teacher Educators
- National Council for Teachers of Mathematics

#### **COMPUTER SKILLS**

- Microsoft Excel, Works, Word, Publisher
- Adobe PageMaker and Photoshop
- PowerPoint Presentations
- SPSS Statistical software

#### **LICENSURE**

Mississippi Department of Education AA Licensure Mathematics Secondary Education (7-12)

#### **DISTINCTIONS**

- President's List and Dean's List Scholar 1997-2002
- Golden Key National Honor Society
- Alpha Lambda Delta Academic Honor Society
- Phi Eta Epsilon
- Eagle Scout, Boy Scouts of America
- Misticos Scholar
- "Teacher of the Month" October 2004

#### **SERVICE**

- Guest speaker for Mu Alpha Theta
- Class sponsor
- Organizer of District-wide Academic Competition in Spike School District (2005)
   Organized mathematics competition for 32 4<sup>th</sup> and 5<sup>th</sup> grade student teams for the East Texas State Fair.

# APPENDIX B INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



July 29, 2004

John Lamb

Re: IRB Docket #04-189: The experiences of a rural Mississippi mathematics teacher: A case Study.

Dear Mr. Lamb:

The above referenced project was reviewed and approved via expedited review for a period of July 27, 2004 through July 15, 2005 in accordance with 45 CFR 46.110 #7. Please note the expiration date for approval of this project is July 15, 2005. If additional time is needed to complete the project, you will need to submit a Continuing Review Request form 30 days prior to the date of expiration. Any modifications made to this project must be submitted for approval prior to implementation. Forms for both Continuing Review and Modifications are located on our website at http://www.msstate.edu/dept/compliance.

Any failure to adhere to the approved protocol could result in suspension or termination of your project. Please note that the IRB reserves the right, at anytime, to observe you and any associated researchers as they conduct the project and audit research records associated with this project.

Please refer to your docket number (#04-189) when contacting our office regarding this project.

We wish you the very best of luck in your research and look forward to working with you again. If you have questions or concerns, please contact me at 325-3294 or at tarwood@research.msstate.edu.

Sincerely,

Tracy S. Arwood

Regulatory Compliance Officer

cc: Dwight Hare

### APPENDIX C STUDENT SURVEY

### Student Questionnaire 2004-2005

We would like to know how you feel about your MATHEMATICS classroom. Please fill in only one circle per statement.

STRONGLY DISAGREE - SD DISAGREE - D NEUTRAL (AVERAGE) - N AGREE - A STRONGLY AGREE - SA

	SD	D	N	A	S
My teacher gives me <b>TOO MUCH</b> class work.	0	0	0	0	A
My teacher <b>DOES NOT</b> give me enough class work.	0	0	0	0	0
My teacher gives me TOO MUCH homework.	0	0	0	0	0
My teacher <b>DOES NOT</b> give me enough homework.	0	0	0	0	0
My teacher gives hard tests.	0	0	0	0	0
My teacher is smart.	0	0	0	0	0
My teacher makes me feel smart.	0	0	0	0	0
My teacher makes me feel like I CANNOT do my work.	0	0	0	0	0
My teacher makes sure I understand a topic before moving to the next one.	0	0	0	0	0
My teacher starts new topics before I have learned the current one.	0	0	0	0	0
I pay attention during class.	0	0	0	0	0
I talk a lot in class.	0	0	0	0	0
I misbehave more than most students.	0	0	0	0	0
My teacher asks me to stop talking each day.	0	0	0	0	0
My teacher controls trouble makers.	0	0	0	0	0
My teacher allows too much talking in class.	0	0	0	0	0
My teacher corrects students without disrupting others.	0	0	0	0	0
I respect my teacher.	0	0	0	0	0
I DO NOT respect my teacher.	0	0	0	0	0
My teacher respects me.	0	0	0	0	0
My teacher <b>DOES NOT</b> respect me.	0	0	0	0	0

	SD	D	N	A	S A
I feel comfortable asking questions during class because of the teacher.	0	0	0	0	0
I am afraid to ask questions during class because of the teacher.	0	0	0	0	0
My teacher embarrasses me during class.	0	0	0	0	0
My teacher answers questions before students have time to work the problem.	0	0	0	0	0
My teacher gives me time to answer questions before giving the answer.	0	0	0	0	0
My teacher lets me work problems by myself during class.	0	0	0	0	0
My teacher comes to my desk to help.	0	0	0	0	0
My teacher has control over my class.	0	0	0	0	0
My teacher <b>DOES NOT</b> allow talking during class.	0	0	0	0	0
All I do in class is copy problems my teacher works on the board.	0	0	0	0	0
My teacher lets students work on the board.	0	0	0	0	0
My teacher lets students work with each other.	0	0	0	0	0
My teacher uses group activities throughout the school year.	0	0	0	0	0
My teacher uses the white board every day.	0	0	0	0	0
My teacher uses the overhead projector every day.	0	0	0	0	0
My teacher uses the computer to teach.	0	0	0	0	0
My teacher lets me use a calculator every day.	0	0	0	0	0
I use computer in class.	0	0	0	0	0
We work in groups.	0	0	0	0	0
Students do not get in trouble during class.	0	0	0	0	0
My teacher is firm with managing student misbehavior.	0	0	0	0	0
My teacher walks around the room a lot.	0	0	0	0	0
My teacher is enthusiastic and exciting when teaching.	0	0	0	0	0
My teacher expects every student to achieve.	0	0	0	0	0
My teacher believes every student can be successful.	0	0	0	0	0
I feel like I can learn in class.	0	0	0	0	0
My teacher is one of the best I have had.	0	0	0	0	0
My teacher respects my opinion.	0	0	0	0	0
My grades come only from tests, homework, and class work.	0	0	0	0	0

	SD	D	N	A	S
My teacher grades me during group work.	0	0	0	0	A
My participation in class is graded.	0	0	$\circ$	$\circ$	0
My teacher worries about the state test.	0	0	0	0	0
My teacher gives state test practice questions throughout the	0	0	0	0	0
school year.					
I practice for the state test throughout the school year.	0	0	0	0	0
My teacher teaches me how to take multiple choice tests.	0	0	0	0	0
My teacher shows me how to guess on multiple choice tests.	0	0	0	0	0
I am worried about the state test.	0	0	0	0	0
I am not prepared for the state test.	0	0	0	0	0
All I do 3-4 weeks before the state test is work practice tests.	0	0	0	0	0
I feel there is too much emphasis placed on state tests.	0	0	0	0	0
My teacher <b>DOES NOT</b> prepare us for the state test.	0	0	0	0	0
My teacher feels my class will pass the state test.	0	0	0	0	0
My teacher tries hard to get me ready for the state test.	0	0	0	0	0
I am worried about the state test.	0	0	0	0	0
My teacher is organized.	0	0	0	0	0
My teacher plans well for each class.	0	0	0	0	0
My teacher asks <b>more</b> YES/NO questions than WHY? WHAT? questions.	0	0	0	0	0
All we do is practice for the state test.	0	0	0	0	0
I have to work hard in this class.	0	0	0	0	0
My teacher uses games to review.	0	0	0	0	0
We compete in class for rewards.	0	0	0	0	0
We only review by watching the teacher work problems.	0	0	0	0	0
My teacher rewards more than punishes.	0	0	0	0	0
I have fun in class.	0	0	0	0	0
My teacher requires me to write what I am thinking.	0	0	0	0	0
My teacher has prepared me for my state test.	0	0	0	0	0
I trust my teacher to do what is best for me.	0	0	0	0	0
My teacher cares about me.	0	0	0	0	0
My teacher uses journals in the classroom.	0	0	0	0	0
My teacher believes his students will do well on the state test.	0	0	0	0	0

	SD	D	N	A	S
My teacher makes me feel like I can do any thing.	0	0	0	0	A
My teacher <b>DOES NOT</b> care if I pass or fail.	0	0	0	0	0
My parents help me with my homework.	0	0	0	0	0
My principal and assistant principal make sure my teacher is teaching.	0	0	0	0	0
My assistant principal makes sure students follow the rules.	0	0	0	0	0
My principal makes sure students follow the rules.	0	0	0	0	0
My principal makes a lot of announcements during my class.	0	0	0	0	0
I use computers outside of school for school work.	0	0	0	0	0
My principal comes to my class to watch my teacher.	0	0	0	0	0
My principal thinks my teacher is doing a good job.	0	0	0	0	0
My assistant-principal thinks my teacher is doing a good job.	0	0	0	0	0
I liked the academic bowl.	0	0	0	0	0
I am going to do well on the state test.	0	0	0	0	0
My teacher could do more to get me ready for the state test.	0	0	0	0	0
My teacher is prepared for class each day.	0	0	0	0	0
My teacher grades my tests on time.	0	0	0	0	0
My teacher comes to my desk when I have a question.	0	0	0	0	0
My classmates are very loud in the classroom.	0	0	0	0	0
My teacher lets me know how well I am doing in the class.	0	0	0	0	0
I am proud to go to this school.	0	0	0	0	0
I like <b>NOT</b> having a lot of students at my school.	0	0	0	0	0
I would rather go to another school.	0	0	0	0	0
I could learn math better from another teacher.	0	0	0	0	0
I like it best when the teacher works problems and I just copy.	0	0	0	0	0
My teacher is not like other math teachers.	0	0	0	0	0
Most of my classmates will go to college.	0	0	0	0	0
Overall, I am satisfied with the quality of this class.	0	0	0	0	0

Please list the most important things about this class that helped you to learn and explain why each was important to you. Use the back of this page if you need more room.
Please list things about this class that could be improved and explain why these changes would help you to learn. Use the back of this page if you need more room.
Please describe a typical day for you. Certain hours are listed to help describe your day.
5:00 – 8:00 am
8:00 am – 3:00 pm
3:00 pm – 6:00 pm
6:00 pm – 12:00 pm

## APPENDIX D TEACHER SURVEY

### Teacher Questionnaire 2004-2005

### We would like to know how you feel about your SCHOOL. Please fill in only one circle per statement.

STRONGLY DISAGREE - SD DISAGREE - D NEUTRAL (AVERAGE) - N AGREE - A STRONGLY AGREE - SA

	SD	D	N	A	S
		0	0	0	A
My students respect me	0				
My students do their homework	0	0	0	0	0
I enjoy working at my school	0	0	0	0	0
I would rather teach somewhere else	0	0	0	0	0
Administrators support your teaching	0	0	0	0	0
Administrators provide feedback regarding my instruction	0	0	0	0	0
I have the necessary materials to teach	0	0	0	0	0
I have the technology to be an effective teacher	0	0	0	0	0
My students are prepared for class.	0	0	0	0	0
My students have supportive parents.	0	0	0	0	0
My administrators are instructional leaders.	0	0	0	0	0
My administrators are disciplinarians	0	0	0	0	0
My students are well behaved and respectful.	0	0	0	0	0
I have parental support.	0	0	0	0	0
We deserve our level of achievement	0	0	0	0	0
My administrators observe me teaching.	0	0	0	0	0
My students plan on attending college.	0	0	0	0	0
My students are absent <b>TOO</b> much.	0	0	0	0	0
Field Trips benefit my students.	0	0	0	0	0
Teacher moral is very high.	0	0	0	0	0
My administrators help raise teacher moral.	0	0	0	0	0
My administrators are <b>TOO</b> involved with my instruction.	0	0	0	0	0
My administrators are <b>TOO</b> involved with my discipline.	0	0	0	0	0

	SD	D	N	A	S A
Staff development has improved my teaching.	0	0	0	0	O
All students can learn	0	0	0	0	0
My administrators emphasize state testing in meetings and memos	0	0	0	0	0
State testing is fair for all schools.	0	0	0	0	0
I am proud to teach here.	0	0	0	0	0
All teachers are treated fairly by administrators.	0	0	0	0	0
Race is not an issue at this school.	0	0	0	0	0
Please list the most important things about teaching here at this each was important to you. Use the back of this page if you					vhy

Please list things about this school that could be improved and explain why these changes would help you to teach. Use the back of this page if you need more room.