Principal Preparation Effectiveness: A Program Evaluation Of The University Of Mississippi's Principal Preparation Programs

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PRINCIPAL PREPARATION EFFECTIVENESS: A PROGRAM EVALUATION OF THE

UNIVERSITY OF MISSISSIPPI'S PRINCIPAL PREPARATION PROGRAM

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ABSTRACT

Since the creation of the principal's position, the role of principal has evolved from building manager and disciplinarian to a multi-faceted role responsible for strategic planning, managing funds, ensuring legislative compliance, implementing reforms, and increasing student achievement. Past research contends principal leadership may be the second most influential factor in student achievement, surpassed only by the effect of the classroom teacher (Marzano, Waters, & McNulty, 2005; Joyce & Showers, 2002). The role of the university Principal Preparation Program (PPP) is to equip participants with effective leadership practices to face the demands of school leadership roles (Duncan et al., 2011; Hernandez et al., 2012); however, the consensus among stakeholders is principal preparation programs have failed to keep up with the changing principal's role (Reed & Kinsler, 2010; Miller, 2013; Zubnzycki, 2013).

The purpose of this quantitative study is to conduct a goal free program evaluation of the University of Mississippi's principal preparation programs: the Mississippi Principal Corps and the K-12 Educational Leadership Program. This study determines if a statistically significant difference in school Quality of Distribution Index (QDI) score differentials exists between the University of Mississippi educational leadership program graduates and the Mississippi Principal Corps graduates during their first, second, and third years on a leadership staff. This study also determines if a correlation exists between program admission requirements, academic performance, and standardized examination scores.

Using the independent samples *t* test, this study found no statistically significant difference in *M* QDI differentials between the University of Mississippi educational leadership program graduates and Principal Corps graduates. The Pearson product-moment correlation found a statistically significant correlation between both the GRE and GRE Writing assessments and the SLLA. No other statistically significant correlations between program variables were found. The findings of this study indicate, though few correlations exist between program variables, principals from both University of Mississippi principal preparation programs are making positive impacts on student achievement in Mississippi schools.

DEDICATION

The loving memory of my father
Arthur Stephen Pannell
my inspiration

Stephen Lane Pannell
my son and my world

Carrie R. Skelton
my best friend, my rock, and my greatest fan

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CHAPTER 1

Introduction

While most reformers and educators agree effective school leaders make a significant

impact on student achievement, one of the most highly debated topics in education is how to best

prepare leaders for a 21st century school. Educator licensure requirements vary from state to

state, wherein college and university educator preparation programs are charged with the

monumental task of preparing school leaders for today's demanding role of principal. Since the

creation of the principal's position, the role of principal has evolved from building manager and

disciplinarian to a multi-faceted role responsible for strategic planning, managing funds,

ensuring legislative compliance, implementing reforms, and increasing student achievement. It

is paramount preparation programs adapt their practices to effectively prepare principals to lead

in a 21st century learning environment.

During the early to mid twentieth century, the principal's role was separated from that of

the teacher, and the principal was likened to a mid-level manager in the business world. As the

supervisory role of principals increased, the prestige of the position increased and sharpened the

distinction between principal and teacher (Kafka, 2009). Formal educational leadership

programs were established to train school principals. Traditionally, college and university

programs offered classes, which teachers aspiring to become principals could take at night, to

learn to manage the day-to-day operations of a school building. Classes were often taught in

isolation and accompanied by little to no practice at the skills being taught.

This study will focus on the two University of Mississippi programs leading to school administrator licensure. The traditional part-time program offers classes at night and during the summer months. Candidates complete an internship in addition to completing assigned teaching duties. This program leads to a Master's or Specialist degree in educational leadership. Principal Corps candidates are removed from the classroom and simultaneously complete coursework and a two-semester, full-time practicum. Admission to both programs are dependent upon the applicant's undergraduate grade point average (GPA) and Graduate Record Examination (GRE) score. Upon completion of the coursework, practicum, and comprehensive exams, candidates must pass a certification examination to obtain licensure as a school administrator. Mississippi requires a passing score on the School Leaders Licensure Assessment (SLLA) to acquire administrator certification.

Education reform efforts brought about legislation transforming the principal's role into one of an instructional leader responsible for the achievement of all students. In 2001, Congress passed the No Child Left Behind (NCLB) Act increasing the role of the federal government in ensuring a quality public education for all students (Randolph & Wilson-Younger, 2012). More specifically, NCLB mandated states set standards for student performance and educator quality and held schools and school districts accountable for student achievement results for all students. To comply with the NCLB Act, Mississippi set standards to define "highly qualified" educators and developed a mandatory statewide testing program for grades three through eight and selected courses in high school (Mississippi Office of Student Assessment, n.d.). Mississippi's accountability model assigned students a label based on their assessment score and awarded schools and districts points for students scoring in the top three categories. Until the 2013-2014

school year (SY), schools and districts were assigned a Quality of Distribution Index (QDI) score and an accountability label based on the number of points earned.

Past research indicates training programs have failed to keep pace with the evolving principal's role (Levine, 2005; Fleck, 2008; Lashway, 1999; Zubnzycki, 2013; Butler, 2008; Miller, 2013; Lynch, 2012; Lashway, 2003; Hernandez, Roberts, & Menchaca, 2012; Duncan, Range, & Scherz, 2011; Reed & Kinsler, 2010); and perhaps more confusing than how to prepare principals has been how to effectively evaluate them. This highlighted discrepancy and increased accountability of the principal have forced colleges, universities, and departments of education to re-examine preparation practices and begin establishing effective methods of evaluating leadership and the preparation of those leaders.

Purpose Statement

The purpose of this quantitative study is to conduct a goal free program evaluation of the University of Mississippi's principal preparation programs: the Mississippi Principal Corps and the K-12 Educational Leadership Program. This study seeks to determine if a statistically significant difference in school Quality of Distribution Index (QDI) score differentials exists between the University of Mississippi educational leadership program graduates and the Mississippi Principal Corps graduates during their first, second, and third years on a leadership staff. The study examined and compared changes in school QDI scores in each of the program graduates' school years on the leadership staff. The previous school leadership team's QDI values will serve as the baseline data in each year for evaluation purposes. The comparisons were made in consecutive years beginning with the initial year of placement as a school administrator.

Admission to most educational leadership programs is largely dependent upon standardized test scores and GPAs, and graduates of these programs must pass a standardized test to obtain a license to practice. This study also seeks to determine if a correlation exists between the candidates' GRE scores and the candidates' program GPAs. Correlations were sought between the candidates' SLLA scores and both their GRE scores and their GRE Writing scores. Additionally, correlations were sought between candidates' SLLA scores and their program GPAs, candidates' undergraduate GPAs and their GRE scores, and candidates' undergraduate GPAs and their graduate program GPAs.

Significance of the Study

Past research contends principal leadership may be the second most influential factor in student achievement, surpassed only by the effect of the classroom teacher (Marzano, Waters, & McNulty, 2005; Joyce & Showers, 2002). According to Davis and Darling-Hammond (2012), principal leadership may explain as much as 25% of the variation in student learning attributed to school-related factors. With so much effect on student outcomes, it is essential principals possess the knowledge and skill to lead in a 21st century school. Joyce and Showers (2002) identify four key components of training: study of theory, demonstrations or modeling, practice, and peer coaching. The authors suggest all four training components are necessary for acquisition; however, they insist peer coaching has the most profound impact. A study of the effect of each component revealed peer coaching, when incorporated with the other three components, increased the attainment of knowledge and skill from 60 percent to 95 percent and the ability to implement from five percent to 95 percent (Joyce & Showers, 2002).

Principal preparation practices vary among colleges, universities, and departments of education. The University of Mississippi offers two principal preparation programs with

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differing practicum structures. Candidates in the traditional educational leadership program complete an internship in their current school while fulfilling their classroom teaching duties. Principal Corps candidates are provided a university mentor and placed in a full-time internship under an effective principal, usually in another school district. This study will be significant to the University of Mississippi faculty and staff as they prepare future school leaders through the two programs. Additionally, other colleges, universities, and departments of education could draw on this study as they evaluate and enhance current principal preparation programs or develop new ones. The study would also be significant to school districts and practicing administrators in Mississippi as they plan and participate in professional development for school leaders.

Research Questions

The following research questions and hypothesis will guide this research study:

1. Is there a statistically significant difference in mean QDI differentials between the University of Mississippi educational leadership program graduates and Mississippi Principal Corps graduates?

2. Is there a correlation between undergraduate GPAs and GRE scores of candidates?

3. Is there a correlation between undergraduate GPAs and the program GPAs of candidates?

4. Is there a correlation between GRE scores and the program GPAs of candidates?

5. Is there a correlation between SLLA scores and program GPAs of candidates?

6. Is there a correlation between GRE scores and SLLA scores of candidates?

7. Is there a correlation between GRE Writing scores and SLLA scores of candidates?

Research Hypothesis

H_{O1}: There is no statistically significant difference in mean QDI differentials between the University of Mississippi educational leadership program graduates and Mississippi Principal Corps graduates.

H_{O2}: There is no correlation between undergraduate GPAs and GRE scores of candidates.

H_{O3}: There is no correlation between undergraduate GPAs and the program GPAs of candidates.

H_{O4}: There is no correlation between GRE scores and the program GPAs of candidates.

H_{O5}: There is no correlation between SLLA scores and program GPAs of candidates.

H_{O6}: There is no correlation between GRE scores and SLLA scores of candidates.

H_{O7}: There is no correlation between GRE Writing scores and SLLA scores of candidates.

Limitations

There are several limitations in this study. Principal preparation is one of many contributing factors to student achievement. The study does not take into consideration school climates, school accountability levels, K-12 students' socioeconomic status or personal experiences, or available resources when using student achievement as a measure of effectiveness for the principal. The study does not consider the stability and experience of the staff, including retention rates of teachers and principals. The principals in the study serve in various school districts across the state, some of which provide mentorship and growth opportunities for their school leaders. This study does not consider whether or not the principal was provided additional professional development by the employing school district, nor does the

study consider the salary schedule for different districts, which might allow more affluent districts to attract higher quality candidates than less affluent districts. Further, the study does not take into account the declining population numbers as the years of experience increase.

Delimitations

In this study, the researcher used the Mississippi Statewide Accountability results from 2010 - 2012 to compare the effectiveness of Principal Corps graduates and the University of Mississippi K-12 Educational Leadership graduates in Mississippi schools. The researcher determined if correlations exist between admission requirements, academic performance, and standardized test scores of candidates. More specifically, the researcher determined if a correlation exists between the following: undergraduate GPAs and GRE scores of candidates; candidates' undergraduate GPAs and their program GPAs; candidates' GRE scores and their program GPAs; candidates' SLLA scores and their program GPAs; candidates' GRE scores and their SLLA scores; and lastly, candidates' GRE Writing scores and their SLLA scores.

Definition of Research Terms

The following operational definitions will assist the reader in the understanding of the terms applicable to the study.

A Nation At Risk – *A Nation At Risk* is the 1983 report commissioned by the Reagan administration to examine the quality of education in the United States and make recommendations for improvement (The National Commission on Excellence in Education, 1983).

Achievement Gap - The achievement gap refers to a gap in achievement separating economically disadvantaged students and students of color from less disadvantaged students and non-minorities respectively (Education Commission of the States, n.d.).

Circle Survey - A complimentary, secure, online tool provided by the Mississippi Department of Education for use by school administrators, their part- and full-time certified staff members, and their supervisors of record to provide perception data about the school administrator's leadership abilities (Mississippi Department of Education, 2014).

ESEA Flexibility – an initiative from the United States Department of Education to relieve states from No Child Left Behind requirements in exchange for rigorous and state-developed plans designed to improve educational outcomes for all students, close achievement gaps, increase equity, and improve the quality of instruction (United States Department of Education, 2004).

Grade Point Average (GPA) – the point average, on a 4.0 scale, of one's grades over all academic courses taken.

Graduate Record Examination (GRE) – an Educational Testing Service admissions exam measuring verbal and quantitative reasoning for graduate schools.

Interstate School Leaders Licensure Consortium (ISLLC) – a set of standards developed by the Council of Chief State School Officers in collaboration with the National Policy Board on Educational Administration to help strengthen preparation programs in school leadership (ISSLC Standards, n.d.).

Mississippi Curriculum Test, Second Edition (MCT2) – The MCT2 is a set of criterion-referenced language arts and mathematics assessments given annually to all Mississippi students in grades three through eight. These assessments allow Mississippi elementary and middle schools to be in compliance with the federal legislation No Child Left Behind Act of 2001 (Mississippi Office of Student Assessment, n.d.).

Mississippi Science Test (MST2) – The MST2 is a criterion-referenced science assessment given annually to all Mississippi public school students in grades five and eight. This assessment allows Mississippi elementary and middle schools to be in compliance with the federal legislation the No Child Left Behind Act of 2001 (Mississippi Office of Student Assessment, n.d.).

National Council for Accreditation of Teacher Education (NCATE) – a professional accrediting organization established in 1954 for schools, colleges, and departments of education to establish high quality teacher, specialist, and administrator preparation (National Council for Accreditation of Teacher Education, n.d.).

No Child Left Behind (NCLB) –NCLB is the Bush administration's 2001 education reform bill to ensure accountability of public schools, federal support for education, and highly qualified teachers in an effort to close achievement gaps and increase proficiency levels of all students. NCLB mandates all schools receiving federal funds must implement standardized testing for reading and math for all students in grades three through eight and once for students during their high school years (United States Department of Education, 2004).

Principal Corps – The University of Mississippi's comprehensive training program designed to transform classroom teachers into K-12 leaders who are equipped to guide children, teachers, and schools to success (The University of Mississippi, 2014)

Principal Preparation Program (PPP) – a college, university, or department of education program of study to prepare school administrators for professional practice and often leading to a degree in educational leadership.

Quality of Distribution Index (QDI) – QDI measures the distribution of student performance on state assessments around the cut points for Minimal, Basic, Proficient, and Advanced performance (Mississippi Department of Education, 2012).

School Leadership Licensure Assessment (SLLA) – an Educational Testing Service assessment used by eighteen states, the District of Columbia, and two U.S. Territories as part of the licensure process for principals, superintendents, and school leaders (Educational Testing Service, n.d.).

Southern Regional Education Board (SREB) - SREB is a nonprofit, nonpartisan organization headquartered in Atlanta. Member states are Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. SREB's work is funded by member appropriations and by grants and contracts from foundations and local, state, and federal agencies (Southern Regional Education Board, n.d.).

Student Growth Residual (GR) – Student growth is based on a multiple regression model used to predict scale score growth on MCT2 for each student based on the student's earlier MCT2 performance (Mississippi Department of Education, 2012).

Subject Area Testing Program (SATP2) - SATP2 is a set of four criterion-referenced assessments in Mississippi's mandatory statewide testing program given to Mississippi public high school students. SATP2 exams are given in English II, Algebra I, Biology I, and U.S. History, and students who take the course in a Mississippi public school must pass the exam to graduate from a Mississippi public high school. These assessments allow Mississippi high schools to be in compliance with the federal legislation No Child Left Behind Act of 2001 (Mississippi Office of Student Assessment, n.d.).

Structure of the Research Study

      This dissertation study contains five chapters. Chapter One provides a brief overview of school leadership and accountability as well as the purpose statement, the significance of the study, the research questions and hypotheses, limitations and delimitations of the study, definitions of terms, and the structure of the study. Chapter Two is a review of research and literature related to educational leadership and student achievement. The literature review for this study contains three areas of focus: (1) school leadership: roles and preparation, (2) public school accountability, and (3) measuring the effectiveness of leadership. Chapter Three highlights the rationale for the study, including the methods, description of the population, research design, instruments, procedures, statistical tests, and data analysis to be used for the study. Chapter Four provides an analysis of the data and a summary of the study findings. Lastly, Chapter Five offers the conclusions of the study, as well as implications and recommendations for future research based on this study's findings.

CHAPTER 2

Review of the Literature

This chapter presents a summary of the literature related to using standardized testing as a measurement of effectiveness of the Principal Corps program and the University of Mississippi K-12 Educational Leadership program. This chapter will review related research by exploring the following topics: historical and current perspectives of school leadership, including traditional and alternative educational leadership preparation programs; the impact of federal and state legislation and policies and the resulting standardized testing on educational leadership; and analysis of using standardized testing as a measure of principal effectiveness.

School Leadership

J. Alvin Wilbanks stated, "Leadership is the fundamental element that can drive an organization to phenomenal success, and lack of leadership can anchor it solidly in mediocrity, or worse" (Mendels & Mitgang, 2013, p. 8). Among school related influences, leadership is the second most influential factor on student learning, surpassed only by effective classroom teachers (Davis & Darling-Hammond, 2012; Lynch, 2012; Mendels & Mitgang, 2013; Miller 2013; Reames, 2010). Researchers and policy makers have recognized the importance of school leadership in improving student achievement and begun targeting leadership in reform efforts. Duncan et al. (2011) noted improving instructional leadership as a cost effective way to improve teaching and learning throughout the entire school. While the notion of school leadership often encompasses activities undertaken by teachers, community groups, and site-based teams, Kafka (2009) contends school leadership usually refers to the work of the principal.

Historical Perspectives of School Leadership. Given the significance of school

leadership in the development of modern schooling, it is surprising how little we know about it

(Rousmaniere, 2007). Rousmaniere (2007) noted the principal is missing from both the political

history of school administration and the social history of schools. She suggested three reasons

for such scant research on principals. One reason was histories of educational administration are

written primarily by scholars with limited historical training in order to frame prescriptive

guidance for contemporary school leaders. A second reason given by the author was historians

of education have tended to focus on policy development and management and lump

superintendents and principals in the same administrative category. Finally, the author suggested

historians of education have ignored principals because of a personal predilection against them

since many remember the principal for discipline encounters. Kafka (2009) offers a fourth

possible reason principals have been absent from literature. Most educational histories focus on

political or institutional history of schooling or the social history of those who went to school or

taught in them. Rousmaniere (2007) argued to fully understand the development of early schools

and school systems; we must first understand the changing role of the principal.

Thomas Jefferson proposed the first educational structure to create school districts and

different levels of schooling in the late 1700s. According to Tozer, Senese, and Violas (2009),

school leadership under Jefferson's model would be an overseer appointed by district alderman

who was responsible for hiring and dismissing teachers, examination of students, and supervision

of curriculum in approximately ten schools.

During the early nineteenth century, educational administration was not recognized as a

distinct profession in American public education (Lashway, 1999). According to Lashway

(1999), school leaders were learned authorities, with little or no training, whose insights into the

truth guided teachers, students, and the public. Rousmaniere (2007) describes early administrative school structures as a simplistic model consisting of a superintendent who oversaw district operations from afar, local school boards who exerted more immediate authority, and a teacher who managed the building and taught students in the building. The shift from one-room schoolhouses to graded schools where students were placed in separate classrooms based on age and achievement transformed the "principal teacher" position to a more authoritative role and additional responsibilities including organizing courses of study, administering discipline, and supervising the operation of all classes (Rousmaniere, 2007). Though reformers were making strides towards professionalizing educational administration, by the end of the century the principalship was still a poorly defined position with varying roles and responsibilities depending upon the school district. Rousmaniere (2013) asserts this uncertainty on two factors: the ignorance of American citizens about who should be in charge of schools and a lack of clarity on the nature or authority of such leadership work.

The early twentieth century brought about some separation of the principal and the teacher. Rousmaniere (2013) noted educational reformers of this time saw a professional improvement of the principal as a necessary task for the construction of a modern school system and developed four strategies to clarify and enhance the role of the principal. Reformers reshaped the regular responsibilities of the principal away from the classroom towards specific administrative work housed in a separate principal's office, reinforced the principal's authority as a supervisor of teachers, promoted a competitive credentialing process for the principalship through colleges and universities, and developed a campaign to increase the number of men in educational administration (Rousmaniere, 2013). According to Kafka (2009), principals joined reformers in the crusade for professionalization of the profession by fighting for authority and

establishing professional organizations such as the National Association of Secondary School

Principals (NASSP), the National Association of Elementary School Principals (NAESP), and

the National Education Association (NEA) to legitimize the idea that principals drew upon

specific knowledge and skills. By mid-twentieth century schools were increasingly replacing the

church as American society's central site of socialization, and as education became a more

important part of American life, principals became an even more important part of American life

(Kafka, 2009).   Duncan et al. (2011) noted by the 1940s, principals were expected to be

democratic leaders, and by the 1950s, principals took on the role of applying school law to

ensure equity and equality.

The latter part of the twentieth century would mark the beginning of another major shift

for the American public school principal. Research and policy studies began emerging which

would lead the shift from the principal as managers whose main focus was making sure the

school operated smoothly to instructional leaders who focused on student learning.

Current Perspectives of School Leadership. Times have changed for those becoming

principals. No longer do good management skills and a deep understanding of the school and

community equate to an effective principal. Fleck (2008) argued today's principals are expected

to be experts in all aspects of administration, leadership, and education. In several states,

principals of underperforming schools may even be removed from their jobs (Davis & Darling-

Hammond, 2012).

Leading the way in the shift in the role of the principal to an instructional leader was the

National Commission on Excellence in Education's (1983) report, *A Nation at Risk: The*

Imperative for Educational Reform and a growing body of research on effective schools. In

2001, the federal government passed the reauthorization of the Elementary and Secondary

Education Act, also known as the No Child Left Behind (NCLB) Act, and schools became increasingly accountable for student achievement. As research revealed the effects leadership could have on student achievement, lawmakers and policymakers gained an increasing interest in public education, and the principal's role began to evolve into the complex role of the 21st century principal.

Twenty-first century principals are charged with a substantial number of tasks. Duncan et al. (2011) asserted the principal position has expanded to encompass the roles of educational visionary, instructional and curriculum leader, assessment expert, disciplinarian, community builder, public relations and communication expert, budget analyst, facility manager, special programs administrator, as well as overseer of legal, contractual, and policy mandates. With the number and complexity of responsibilities bestowed on today's principals comes increased pressure to principals as well as the establishments who prepare them for the role. Kafka (2009) argues the call for principals to accomplish great things with little support may not be new, but the degree to which schools are expected to resolve society's social and educational inequalities in a market-based environment is a new concept.

Principal Preparation Programs

School leadership was once a vaguely defined profession requiring little or no training; however, Lashway (1999) noted the beginning of the twentieth century bought about the establishment of formal leadership programs at colleges and universities to prepare school principals. The increasing scrutiny schools and school systems are receiving from accountability measures and the increasing demands placed on administrators has made instructional leadership preparation the focus of much attention (Reames, 2010). According to Hernandez et al. (2012), researchers in the field of educational leadership have declared the quality of leadership provided

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by school and district leaders is highly dependent upon the quality of their leadership preparation experiences, and principal preparation programs have failed to prepare graduates for the role of instructional leader (Lynch, 2012; Miller, 2013).

Traditional Principal Preparation Programs. The role of the university Principal Preparation Program (PPP) is to equip participants with effective leadership practices to face the demands of school leadership roles (Duncan et al., 2011; Hernandez et al., 2012); however, the field of educational leadership preparation, views have changed faster than preparation programs can keep up (Reed & Kinsler, 2010; Miller, 2013; Zubnzycki, 2013).

The earliest principal preparation programs emphasized technical skills, with a strong flavoring of business efficiency (Lashway, 1999). For decades, pre-service training for principals looked something like this: while working as teachers, they took occasional courses at an educational school on such topics as school finance, law, and educational theory, and after a few years, they completed a culminating field assignment and applied for jobs in administration (Olson, 2007). During the latter part of the twentieth century, the "scientific era," theoretical ideas from the social sciences began to take precedence in PPPs and the make-up of faculties shifted from practitioners to discipline-focused specialists rooted in foundations and research (Lashway, 1999). As the role of the principal has changed, preparation programs have changed their focus and practices to try to keep up with school needs. Olson (2007) describes the shift in focus as one from creating efficient managers to preparing individuals who can lead a school to higher student achievement. In response to the growing concerns about principal preparation and effectiveness, state and national organizations began to develop professional standards for administrators (Davis & Darling-Hammond, 2012). The authors noted many states adopted or adapted licensure and accreditation policies developed by the Interstate School Leaders

Licensure Consortium (ISSLC), and every state receiving federal funds has established alternate pathways to administrative licensure in order to attract talented leaders from within and outside of education. In addition, Davis and Darling-Hammond (2012) pointed out efforts to study, revise, and improve principal preparation programs have paralleled the standards movement, and a growing number of innovative programs began to frame program elements around theories of adult and experiential learning by placing greater emphasis on hands-on internship experiences, thematically integrated curricula, problem-based instruction, and closer partnerships with school districts.

Despite the efforts in preparing leaders for 21st century schools, the overwhelming consensus from graduates, school leaders, and policymakers is graduates are not ready for the complex roles, and Lashway (1999) contends those who run the preparation programs are all too aware of the need for change. Levine (2005) asserts many of these programs are engaged in a counterproductive "race to the bottom." Lax admission standards often only require applicants to submit an application and payment to the college's graduate school and/or educational leadership program, undergraduate transcripts, and a competitive GRE score. The GRE was revised in 2011 and currently consists of two reasoning sections, a verbal and a quantitative, both scored on a 130-170 score scale, in one-point increments. The exam also has an analytical writing component scored on a 0-6 score scale, in half-point increments (Educational Testing Service, n. d.). In 2001, a review of 450 principal-certification programs found their admission criteria gave the most weight to GRE scores and undergraduate GPA (Lashway, 2003). According to Educational Testing Service data, education majors had lower GRE scores than majors in most other fields with educational administration candidates ranking near the bottom of, not only all education majors, but of all academe (Lashway, 2003; Levine, 2005). Levine

(2005) noted elementary and secondary level teaching applicants them on all three sections of the GRE, and while they score at the national average on the analytic portion of the GRE, their scores trail the national average by 46 points on the verbal portion of the exam and by 81 points on the quantitative section. Lashway (2003) argues entrance into most PPPs is determined by self-selection with half-hearted screening and little outreach to talented individuals, noting only 40 percent of programs listed teaching as an admission requirement and only six percent required a personal interview. Leniency in admission standards can be connected to enrollment targets, which could determine adequate funding for the program (Reames, 2010). Further, many universities treat educational leadership programs as "cash cows," using them to bring revenue in to other parts of the campus and denying them the resources that might enable them to improve (Levine, 2005). Current best-practice recommendations emphasize the need to connect admission practices with leadership standards (Lashway, 2003).

In addition to admission requirements, critics of PPPs denounce their curriculum and structure. According to Lashway (1999), university faculties pay too little attention to instruction, leadership programs are often isolated from other departments and the larger academic community, and graduates criticize coursework as irrelevant, insignificant, and uninspirational. Levine (2005) argues the faculty in many educational administration programs is inadequate, and therefore, cannot meet the needs of aspiring administrators. He contends the programs rely too heavily on adjunct faculty who lack expertise in the academic content they are supposed to teach and at the same time, employ too many full-time professors who have had little, if any, recent experience as practicing school administrators (Levine, 2005). Astonishingly, just six percent of all education faculty have been principals, and only two percent have been superintendents (Levine, 2005). Levine (2005) noted 89 percent of program

alumni surveyed said schools of education fail to adequately prepare their graduates to cope with job realities. Miller (2013) cited a tenuous connection between theory and practice as well as poorly designed internships as a critical weakness in program structure. Levine (2005) pointed out, although many aspiring administrators say they want opportunities to connect university study with practical experience in schools, meaningful clinical instruction is rare. The most prominent debate is pre-service principals are not equipped with the skills to apply theoretical knowledge to real life situations (Duncan et al., 2011). Current PPPs must find a systemic way to balance the transfer of knowledge through coursework with meaningful immersion in practice. While colleges and universities continue to talk about preparation, school districts are talking about readiness (Zubnzycki, 2013). Duncan et al. (2011) argued policymakers underscore the importance of PPPs in developing potential principals skilled in creating a positive school climate and closing achievement gaps their reform efforts.

In the mid-1990s, Mississippi and North Carolina were the first two states to take a hard look at their principal preparation programs (Hess & Kelly, 2005; T. Burnham, personal communication, December 3, 2014). Mississippi developed state standards for school administrators, which closely resembled standards developed by several national organizations, and mandated all programs within its borders develop reconceptualized administrator preparation programs (Gupton, 1998). In 1994, Mississippi's Superintendent of Education assembled a task force to conduct program reviews on existing Mississippi principal preparation programs (LaPointe, Davis, & Cohen, 2007; T. Burnham, personal communication, December 3, 2014). After completing the program reviews, the task force presented recommendations addressing a variety of program issues, including selection of candidates for programs, curricular guidelines, and development to rate student competence during and upon exit from programs in its report,

Improving the Preparation of Mississippi's School Leaders (Gupton, 1998; LaPointe et al.,

2007). Perhaps the most staggering outcome from the task force's recommendations was the

state's decision to close all administrator preparation programs and to require programs to re-

apply for accreditation under much more rigorous standards (LaPointe et al., 2007; T. Burnham,

personal communication, December 3, 2014). According to Burnham, former Mississippi

Superintendent of Education, and LaPointe et al. not a single program in the state earned

accreditation upon its first application. Colleges and universities in Mississippi continued reform

efforts to meet state accreditation standards, and currently eight institutions have state approved

school administrator preparation programs (Mississippi Department of Education, 2015).

Other states have followed Mississippi's efforts to improve the preparation of its school

leaders. In 2001, the SREB began work to produce sustainable changes in principal preparation

in its 16 member states (Southern Regional Education Board, 2009; Levine, 2005). The SREB

(2009) argues for principals to be effective instructional leaders they need to understand how to

inspire faculty to develop engaging instruction and engage faculty in maintaining a culture of

high expectations for all, and developing leaders with these characteristics requires a new

approach to their selection, initial preparation, and continuing support. In 2005, the SREB

partnered with the Tennessee State Board of Education and two universities in Tennessee to

redesign educational leadership preparation in the state, and the results of the pilot program in

two different universities and community settings indicate the critical components of the

redesigned leadership program can work in both a large urban district and small rural districts

and helped shape a statewide redesign of leadership preparation (Southern Regional Educational

Board, 2009). According to the SREB (2009), research identified several components of the

Tennessee redesign project as essential to effective principal preparation. A partnership between

universities and school districts is perhaps the most critical component of effective leader preparation and seemingly affects most other components of preparation practice. University-district partnerships allow districts to identify candidates with the potential to become the type of leaders needed to address educational deficits, and universities gain greater access to quality candidates and reduce wasted resources often associated with the self-selection process traditionally used in recruiting candidates (Southern Regional Education Board, 2009). The SREB (2009) contends these partnerships also allow for a more meaningful and authentic internship experience as the theories learned in the classroom are immediately tested against realities found in schools, and mentors and university faculty have the opportunity to work together to ensure field-based experiences are of high quality and include progressive opportunities to observe, participate in, and lead tasks relating to instructional improvement and school management. Other impactful components of effective principal preparation programs identified by the SREB (2009) are university courses focused on instructional leadership and cohort models to foster collaboration and provide support for aspiring leaders.

The collaborative efforts of the SREB, Tennessee State Board of Education, East Tennessee State University, the University of Memphis, and the program participants helped shape a statewide redesign of educational leadership preparation and a culminating result was significant legislative and policy changes aimed at better preparing new school principals, while giving all principals greater autonomy in their schools (Southern Regional Education Board, 2009). Tennessee developed a more flexible four-tiered licensing structure to better recognize varying levels of leadership expertise and eliminated salary increases for teachers who obtained a leadership degree but remained in the classroom. The SREB (2009) also noted Tennessee school administrator preparation programs are required to establish formal partnerships with school

districts and must provide extensive practical experience to candidates. Additionally, the

Commission assembled for the study developed the Tennessee Instructional Leadership

Standards (TILS), a new set of standards emphasizing the role of the principal as instructional

leaders and change leaders, and the Tennessee State Board of Education adopted TILS and

designed professional development and evaluation systems aligned to the standards (Southern

Regional Education Board, 2009).

Alternate Principal Preparation Programs. The disconnect between how principals

are trained and the realities of today's principalship is forcing colleges, universities, policy

makers, and school districts across the nation to reexamine leadership preparation programs. In

fact, two national surveys conducted in 2003 and 2006 revealed two-thirds of principals felt

current principal preparation programs are out of touch with today's realities and did not prepare

them to be effective instructional leaders (Butler, 2008; Hernandez et al., 2012; Lynch 2012),

and Levine (2005) conducted a separate study which found 89 percent of program alumni

surveyed said schools of education fail to adequately prepare their graduates. According to

Zubnzycki (2013), a growing number of principal-preparation initiatives are forsaking university

classrooms in favor of much more familiar training grounds: the schools and districts where

those aspiring leaders will end up working.

The University of Mississippi Principal Preparation Programs. The University of

Mississippi offers two traditional route programs leading to licensure in K-12 school

administration: the Master of Education in K-12 Leadership (M.Ed.) and the Educational

Specialist in K-12 Leadership (Ed.S.). Applicants to both traditional programs must have a 3.0

GPA and competitive scores on the GRE to be considered for admissions. Applicants must also

have three years successful teaching experience, exhibit proficient writing skills on Goals

Statement, provide evidence of leadership potential, submit two reference letters, and successfully complete a face-to-face interview to be considered for admission. Once admitted to either program, candidates begin an 18-month cohort program in June. Candidates take six hours of coursework each semester for a total of 30 coursework hours then complete a 400-hour administrative internship, which counts for six credit hours towards the required 36 credit hours. Internships for both traditional programs are completed during the entire length of the program, occur at the candidates' current school, and are in addition to contracted teaching responsibilities (The University of Mississippi, 2014).

The programs differ in two admission requirements, current teaching certificates and previous degree requirements. Applicants to the M.Ed. program must hold a Class A teacher's certificate, which requires a Bachelor's degree; however, Bachelor's degree is not listed as an admissions requirement. Applicants to the Ed.S. program must hold a Class AA teacher's certificate and a Master's degree in any field outside of educational leadership. Each program has a different licensure outcome as well. The M.Ed. program leads to a Class AA license in Education Administration, and the Ed.S. program leads to a Class AAA license in Education Administration (The University of Mississippi, 2014).

The University of Mississippi offers an alternate to their traditional preparation programs. The Principal Corps, a comprehensive training program founded in 2009 with a two million dollar planning grant from the Jim and Donna Barksdale Foundation, is a 13-month program that takes a parallel approach to transforming teachers into educational leaders. The Principal Corps program can lead to a Master of Education (M.Ed.) or Specialist in Education (Ed.S.) degree in educational leadership depending upon the candidates previously awarded degrees (The University of Mississippi, 2014).

Applicants to the Principal Corps must hold a current Mississippi teacher's license, have a minimum of three years teaching experience in K-12 education, and teach in a Mississippi school district. Applicants must also have a 3.0 or higher GPA in their last academic program and have a competitive GRE score to be considered for admission to the program. The Principal Corps encourages applicants to have the endorsement of their current school district superintendent since candidates often continue to receive salary and benefits while participating in the program (T. Burnham, personal communication, December 3, 2014).

Once admitted to the program, the Principal Corps candidates enroll in graduate coursework while simultaneously completing a full-time fall internship and a full-time spring internship under two different veteran principals at two schools. Candidates begin the cohort program the first week of June and complete a six-hour class along with attending several workshops during the month of June. Candidates report to their assigned school in July and take eighteen hours of coursework while completing two internships during the fall and spring semesters. Candidates work in a full-time administrative capacity in each school for a semester. They gain approximately 1,760 hours of practical experience during these two internships. The university awards six credit hours for completion of the two internships, and the 36-hour program concludes with a six-hour course taken during the second summer of enrollment. Principal Corps candidates are assigned two mentors, an Instructional Leader (IL) Mentor who serves as the designated school representative and the University Mentor (UM) who serves as the program liaison (The University of Mississippi, 2014).

Candidates selected for the Principal Corps program receive a scholarship covering the cost of tuition, textbooks, housing, and travel along with a stipend for each term. In addition, each candidate receives a laptop belonging to him or her upon completion of the program.

Candidates who complete the program and accept an assistant principal or principal position in a Mississippi public school receive a $10,000 signing bonus from the Barksdale Foundation (The University of Mississippi, 2014).

Public School Accountability

  No Child Left Behind. In 2001, the federal government passed the No Child Left Behind (NCLB) Act, which many consider the most sweeping education-reform legislation since the Elementary and Secondary Schools Act of 1965 (United States Department of Education, 2004). NCLB dramatically increased the federal government's role in in guaranteeing the quality of public education for all children in the United States, with an emphasis on increased funding for poor school districts, higher achievement for poor and minority students, and new measures to hold school districts accountable for their students' progress in an effort to close achievement gaps (Public Broadcasting Service, n.d.). No Child Left Behind accountability measures expanded the role of standardized testing in public schools by requiring any school receiving federal funds to test students in grades three through eight once each year in reading and math and once during high school. Federally funded schools must also test students in science once in elementary school, once in middle school, and once in high school (Burke, 2012). According to Burke (2012), NCLB required states to disaggregate the performance data on these assessments among subgroups of race, income level, English language learners, and students with disabilities; moreover, the law established a myriad of new federal sanctions to punish states failing to increase student achievement.

  Along with setting achievement standards for all students, NCLB mandated states to set standards for teacher quality (United States Department of Education, 2004). According to the United States Department of Education (2004), studies have shown teacher quality is the single

greatest effect on student achievement, so they developed a set of criteria for teachers to meet "highly qualified" status. Federal law states, to be highly qualified, a teacher must hold at least a Bachelor's degree, hold certification or licensure to teach in the state of his or her employment, and have proven knowledge of the subjects he or she teaches (United States Department of Education, 2004).

According to the Center on Policy Education (2012) at The George Washington University, in 2011, the Obama administration invited states to apply for waivers of key requirements of NCLB lasting through the 2013-2014 school year, with the possibility of extensions for future years. This waiver initiative allows states the flexibility to move away from stringent guidelines set by NCLB and allow them the freedom to set their own student-achievement goals and design their own interventions for failing schools (McNeil, Klein, & Cavanagh, 2011). However, these ESEA Flexibility Waivers are not without strings. In exchange for this flexibility, states are required to adopt standards for college and career readiness, focus improvement efforts on 15 percent of the most troubled schools and aggressive interventions on the lowest five percent, and develop teacher and principal evaluations based in part on student performance (McNeil et al., 2011).

Standardized Testing. To comply with NCLB assessment and accountability requirements, Mississippi developed a statewide, mandatory testing program for elementary, middle, and high schools. In grades three through eight, all students are required to take the Mississippi Curriculum Test, Second Edition (MCT2) each year. The Mississippi Science Test, Second Edition (MST2) is administered annually to students in fifth and eighth grade, and in high school, students are required to take four subject area assessments: English II, Algebra I, Biology I, and U.S. History. Students are also required to pass these Subject Area Testing

Program, Second Edition (SATP2) exams to be eligible for graduation from a Mississippi public high school. Student achievement is measured on a Quality of Distribution Index (QDI) scale and on a growth residual (GR) component to determine the school's state and federal accountability label. QDI assigns an achievement score and is unrelated to previous achievement levels. Students are assigned a label based upon the scale score achieved on the MCT2 and SATP2. The labels are, in ascending order, Minimal, Basic, Proficient, or Advanced. Growth on MCT2, on the other hand, measures student achievement based upon gains from the previous year, and growth on SATP2 is measured from students' eighth grade MCT2 scores Schools and districts receive a label from the Mississippi Department of Education based upon their students' scale scores, or QDI, and the range of positive and negative growth residuals among students.

Principal Effectiveness

While research substantiates the principal is the second most influential school-related factor in student achievement, and a wealth of research examining teacher effectiveness exists, little empirical research evaluating principal effectiveness exists (Fuller & Hollingsworth, 2014; Levine, 2005). Recent educational accountability reform has generated much interest in the effectiveness of school leadership, and "principal effectiveness" has been defined as the ability of the principal to affect changes in student test scores (Fuller & Hollingsworth, 2014). However, the authors argued principal evaluations should encompass more than a change in student test scores.

Historically, the principal's job rested on public perception and the accomplishments of the highest achieving students (Lynch, 2012), and according to Fuller and Hollingsworth (2014), as recently as 2010 few states had developed comprehensive evaluation systems for school administrators. In the past, federal policymakers haven't given school leadership much attention;

however, many states have developed performance-based evaluation systems for administrators to satisfy the requirement for waivers from certain requirements of NCLB (Fuller & Hollingsworth, 2014).

According to the Center for American Progress (2011), practitioners and researchers are continuing to learn about the best measures of effective leadership and next generation evaluation systems. Despite the abundance of high-quality studies on teacher effectiveness, little empirical research has examined methods of estimating principal effectiveness, particularly for evaluative purposes; policy makers simply assumed if teacher effectiveness could be estimated, then principal effectiveness could be estimated as well, despite the absence of research to validate such an assumption (Fuller & Hollingsworth, 2014). Principal evaluation policy is under scrutiny, and many have called for student achievement data to comprise part of the evaluation (Piro, Wiemers, & Shutt, 2011). Proponents of using student test scores in evaluating principal effectiveness champion the role of the principal as an instructional leader and often point to the emerging body of research identifying leadership as the second most influential school-based factor in student achievement (Davis & Darling-Hammond, 2012; Lynch, 2012; Mendels & Mitgang, 2013; Miller 2013; Reames, 2010; Mendels, 2012; Piro et al., 2011; Clifford & Ross, 2011). Opponents, however, argue student achievement test data is not a valid measure for principal evaluation. Fuller and Hollingsworth (2014) assert student test scores could provide an inaccurate measure of principal effectiveness because the tests were not designed for this purpose and variability in alignment among tests, curriculum, and what is taught might mean student learning is not accurately reflected in test scores. Moreover, Piro et al. (2011) cautions against using student achievement scores for principal evaluation since the evaluator does not control for the lack of random sampling. The authors of the 2011 study note

the importance of random sampling for generalization purposes, and since most student populations are made up of children from the same geographic area, often with similar income levels and ethnic groups, generalizability of the results is not feasible. Many state evaluation systems, prompted by accountability, have chosen student test scores as part of the formula for evaluating leaders, but a growing body of research demonstrates the assessment of leadership should concentrate on factors over which the leader has more direct control (Tredway, Stephens, Hedgspeth, Jimes, & Rubio, 2012).

Although school leadership does not directly impact student test scores, Mendels (2012) maintains the indirect workings of a principal have a significant impact on student achievement in their school. Past research has sought to identify behaviors and practices linked to increasing student achievement. According to Spiro (2013) and Mendels (2012), a report published in 2012 by The Wallace Foundation pinpointed five key practices of effective principals: shaping a vision of success for all students, creating a climate hospitable to education, cultivating leadership in others, working with teachers to improve instruction, and managing people, data, and processes to foster school improvement. Other organizations, such as New Leaders, SREB, and the University of California-Berkeley's Leadership Connection have identified additional behaviors and practices shared by successful leaders (Southern Regional Education Board, 2009; New Leaders, 2012; Tredway et al., 2012). In addition, a team of researchers from Vanderbilt University and the University of Pennsylvania created an assessment called the Vanderbilt Assessment of Leadership in Education (VAL-ED). VAL-ED is widely recognized as a fair and reliable assessment and places far greater weight than most other tools on leadership behaviors known to promote better instruction (Mendels & Mitgang, 2013).

Mississippi Principal Evaluation System. The Mississippi Department of Education (MDE) defines effective school principals as leaders who help ensure all students reach ambitious targets of performance (Mississippi Department of Education, 2012), and in 2012, MDE developed a comprehensive evaluation system, which includes the Val-Ed Assessment, to determine principal effectiveness as part of ESEA flexibility waiver. The Mississippi Principal Evaluation System (MPES) is an evaluation instrument based on the Mississippi Standards for School Leaders used to measure outcome data and leadership behaviors to evaluate principal effectiveness (Buckley, McNair, & Hart, n.d.). A leader's summative evaluation score under MPES is comprised of four components. Principals, in conjunction with their supervisors, set quantifiable goals based on the previous years achievement scores in two academic areas, language arts and mathematics. These collaborative goals count for a total of 50% of the summative evaluation score. A third component of MPES is based on two organizational goals targeting the school's areas of greatest need for improvement. The organizational goals may be established for staff and/or students and may not be identical to the language arts or mathematics goal. Each organizational goal comprises 10% of the summative score. The remaining 30% of the principal's summative evaluation score is determined by Circle Survey results. The Circle Survey is administered during December and/or January and collects data about the perception of the school administrator's performance from three respondent groups: the full- and part- time certified staff who report to the school administrator, the schools administrator's supervisor of record, and the administrator himself. Circle Survey topics include outreach and support, management and leadership, instruction, communication, school environment and climate, and professionalism. MPES requires five conferences between the principal and supervisor of record

throughout the year to set goals, monitor progress towards the goals, and determine strategies for improvement.

The Mississippi Principal Evaluation System was initially developed to evaluate traditional and alternative school principals as well as directors of career and technical education (CTE) centers, but in 2014, MDE decided assistant principals would be evaluated using the same instrument. The building principal will serve as the supervisor of record for assistant principals. Assistant principals share the same goals as the principal but receive their own Circle Survey results thus creating their own summative score.

CHAPTER 3

Methodology

The following chapter describes the research methods used in this quantitative study. The chapter examines the design of the study and provides a rationale for the research methods used in the study. Also included in the chapter are a description of the participants and procedures for data collection. The chapter concludes with a description of the statistical tests and data analysis procedures.

Purpose of the Study

The purpose of this quantitative study is to conduct a goal free program evaluation of the University of Mississippi's principal preparation programs: the K-12 Educational Leadership Program and the Mississippi Principal Corps. This study determined if a statistically significant difference in school Quality of Distribution Index (QDI) score differentials exists between the University of Mississippi educational leadership program graduates and the Mississippi Principal Corps graduates during their first, second, and third years on a leadership staff. The study examined and compared changes in school QDI scores in each of the program graduates' school years on the leadership staff. The preceding school leadership team's previous year QDI values served as the baseline data for each evaluation year. The comparisons were made in consecutive years beginning with the initial year of placement as a school administrator. This study also sought to determine if correlations exist between the following: undergraduate GPAs and GRE scores of candidates; candidates' undergraduate GPAs and their program GPAs; candidates' GRE scores and their program GPAs; candidates' SLLA scores and their program GPAs;

candidates' GRE scores and their SLLA scores; and lastly, candidates' GRE Writing scores and their SLLA scores. This study adds to existing research on effectiveness of principal preparation programs and has the potential to contribute to principal preparation program reform efforts, including admission requirements, course design, and internship practices. The study may also help guide professional development efforts of school districts as they cultivate principals to lead their schools.

Design of the Study

This quasi-experimental study investigates the relationship between the University of Mississippi's principal preparation programs and school QDI on Mississippi's designated standardized tests since school year (SY) 2010 - 2011. This research examines whether a statistically significant difference in school QDI differentials exists between principals who completed Principal Corps and principals who completed a K-12 Educational Leadership at the University of Mississippi.

This research also examines the relationship between other variables related to admission to and successful completion of the University of Mississippi's principal preparation programs to determine if a correlation exists. The study determines if a correlation exists between the following variables: undergraduate GPAs and GRE scores of candidates; candidates' undergraduate GPAs and their program GPAs; candidates' GRE scores and their program GPAs; candidates' SLLA scores and their program GPAs; candidates' GRE scores and their SLLA scores; and lastly, candidates' GRE Writing scores and their SLLA scores.

Population, Sample, and Participants

The target population for this study consists of graduates of the University of Mississippi's traditional principal preparation program and Principal Corps. Due to the

manageable size of the population and availability of data, no sample was chosen. The statistical

tests were conducted on the entire population. Participants in the study were chosen based upon

their principal preparation program and placement as a Mississippi public school principal or

assistant principal between SY2010 – 2011 through SY2012 - 2013. Graduates of either

program who have not held a principal or assistant principal role in a Mississippi public school

are excluded from the study.

Research Questions

The following research questions and hypothesis will guide this research study:

1. Is there a statistically significant difference in mean QDI differentials between the
   University of Mississippi educational leadership program graduates and Mississippi
   Principal Corps graduates?

2. Is there a correlation between undergraduate GPAs and GRE scores of candidates?

3. Is there a correlation between undergraduate GPAs and the program GPAs of
   candidates?

4. Is there a correlation between GRE scores and the program GPAs of candidates?

5. Is there a correlation between SLLA scores and program GPAs of candidates?

6. Is there a correlation between GRE scores and SLLA scores of candidates?

7. Is there a correlation between GRE Writing scores and SLLA scores of candidates?

Research Hypothesis

H_{O1}: There is no statistically significant difference in mean QDI differentials between

the University of Mississippi educational leadership program graduates and Mississippi

Principal Corps graduates.

H_{O2}: There is no correlation between undergraduate GPAs and GRE scores of

candidates.

H_{O3}: There is no correlation between undergraduate GPAs and the program GPAs of

candidates.

H_{O4}: There is no correlation between GRE scores and the program GPAs of candidates.

H_{O5}: There is no correlation between SLLA scores and program GPAs of candidates.

H_{O6}: There is no correlation between GRE scores and SLLA scores of candidates.

H_{O7}: There is no correlation between GRE Writing scores and SLLA scores of

candidates.

Procedure

Permission was first sought from the dissertation committee at the University of

Mississippi to conduct the research study. Second, permission was sought from the University of

Mississippi's Institutional Review Board (IRB) to conduct the study and from the program

graduates to use information in their student record in the study. Once the necessary approvals

were granted, the researcher identified the graduates of the University of Mississippi's traditional

educational leadership program and the University of Mississippi's Principal Corps from 2010 to

2012. The graduates were assigned to one of two groups depending upon which program they

completed. Graduates of the traditional program comprised one group and the second group

consisted of graduates of the Principal Corps. The researcher requested a list of principals and

assistant principals in Mississippi public schools from SY2010-2011 to SY2012-2013 from the

Mississippi Department of Education (MDE) to identify which graduates obtained positions

relevant to the study. Graduates who were not on any MDE list were tracked through the

University of Mississippi School of Education. Due to the sensitive nature of the data needed for

the correlational hypotheses, permission to use their student record data was sought from each eligible participant. An authorization survey was developed in Qualtrix to allow participants to grant or deny permission to use their student record data electronically. An informed consent and authorization form to access student record data was sent as an email attachment (see Appendix A) to the 66 eligible participant in the study. A follow-up email was sent to the eligible participants who had not responded after one week. Phone calls were made to each participant who had not responded to neither of the email requests. The email requests generated a 71.2% response rate, with 46 respondents granting permission for their student record data to be included in the study. One respondent denied permission to include their data in the study. The researcher retrieved GRE scores, SLLA scores, and both undergraduate and graduate GPA information on each consenting participant from the University of Mississippi's educational leadership department. Quality of Distribution Index data for the participants' schools is public record and was retrieved on all 66 participants from the "public reports" section of the Mississippi Department of Education website.

Confidentiality was maintained for participants. No personal names were used in analysis and reporting. A coding system identifying programs and numerically identifying graduates was used to ensure anonymity of all study participants.

Statistical Tests and Data Analysis

For research questions one, an independent samples *t* test was performed using Statistical Package for the Social Sciences 22 (SPSS). This test was used to analyze the data because it is the appropriate test when comparing two means (Gall, Gall, & Borg, 2007). For the null hypothesis, the dependent variable is school QDI differentials, and the two levels of the independent variable are the University of Mississippi's educational leadership program and the

Principal Corps. Both hypotheses were tested at the .05 alpha level. If the *p*-value was greater than the level of significance for either hypothesis, the researcher failed to reject the null hypothesis.

For research questions two through seven, a Pearson product-moment correlation coefficient was performed using SPSS to determine if a correlation exists between the following variables: undergraduate GPAs and GRE scores of candidates; candidates' undergraduate GPAs and their program GPAs; candidates' GRE scores and their program GPAs; candidates' SLLA scores and their program GPAs; candidates' GRE scores and their SLLA scores; and lastly, candidates' GRE Writing scores and their SLLA scores. This test was used because it is the appropriate test to determine the magnitude of a relationship between two or more variables (Gall, Gall, & Borg, 2007). The ETS concordance table to relate scores on the previous GRE to scores on the revised edition was not needed to ensure equality in the data because all reported GRE scores were on the same scale. Each hypothesis two through seven was examined for strong or moderately strong correlations for the purpose of program evaluation. If the *p*-value was greater than the level of significance for any hypothesis, the researcher failed to reject that null hypothesis.

CHAPTER 4

Research Findings

This research project was designed to conduct a goal free evaluation on the University of Mississippi's principal preparation programs by examining the impact of graduates from both programs on student achievement in Mississippi public schools, as measured by Quality of Distribution Index (QDI) scores. Additionally, the study examined relationships between certain University of Mississippi Educational Leadership programs admission requirements and standardized examinations. The chapter begins with a description of the participants in the study. Next, this chapter presents the findings and interpretations of the statistical measures utilized to determine if a statistically significant difference exists in QDI scores with the addition of a University of Mississippi principal preparation program graduate to the school's leadership staff. Further, the chapter presents the findings and interpretations of the statistical measures utilized to determine whether a correlation exists between GRE scores and program GPAs, GRE scores and SLLA scores, SLLA scores and program GPAs, undergraduate GPAs and GRE scores, and undergraduate GPAs and graduate program GPAs. Once the data has been presented, the results for all hypotheses will be explained.

Participants

The University of Mississippi offers two distinct programs to prepare school leaders, a traditional educational leadership program and the Mississippi Principal Corps. Many students in the traditional program attend classes part-time at night and during the summer while they work in a school setting during the day. For this study, the traditional educational leadership

program is referred to as the Part-Time (PT) program. In 2009, the Principal Corps (PC) was established on the University of Mississippi campus as an enhanced alternative to traditional route principal preparation programs. During the time Principal Corps was established, the Mississippi Department of Education measured student achievement of Mississippi public schools on a QDI point scale and a student growth residual. In school year (SY) 2013-2014, under an ESEA flexibility waiver, Mississippi redesigned their accountability model and moved away from QDI points as a measure of student achievement. Due to the change in accountability model, the study is limited to SY2010-2011 through SY 2012-2013.

Participants in the study were chosen based upon their principal preparation program and placement as a Mississippi public school principal or assistant principal between SY2010-2011 and SY2012-2013. Of the 135 graduates of the PT program from 2009 – 2011, 39% ($N = 53$) currently serve as a district or school level administrator in a Mississippi public school district while 97% ($N = 28$) of the 29 PC graduates serve in a district or school level leadership capacity. There are no PC graduates serving as a classroom teacher, but 42% ($N = 57$) of PT graduates chose to remain in the classroom. Seven percent ($N = 9$) of PT graduates are working outside K-12 public education compared to three percent ($N = 1$) of PC graduates. Further, all of the PC graduates are accounted for while nine percent ($N = 12$) of the PT graduates could not be tracked. Table 1 provides a breakdown of graduates' roles after completing their respective program. The "other" category for each program is inclusive of guidance counselors, higher education employees, graduates working outside of K-12 public education, and graduates who could not be located.

Table 1

Overview of UM Principal Preparation Graduates Roles for SY2014-2015

Program	N = Count	District Leader	School Leader	Teacher	Other
PT Program	135	7	46	57	24
Principal Corps	29	2	26	0	1

As previously mentioned, pre-requisite requirements for the two participant groups include completing a University of Mississippi principal preparation program and serving as a principal or assistant principal in a Mississippi public school in SY2010-2011, SY2011-2012, SY2012-2013, or any combination of these school years. Graduates of either program who did not hold a principal or assistant principal role in a Mississippi public school during the relevant years were excluded from the study. The participant group in this study, highlighted in Table 2, is comprised of 41 graduates of the PT program and 25 graduates of the PC for a total of 66 participants. Due to the manageable size of the population and availability of the data, no sample was chosen for this study. The statistical tests were run on the entire population.

Table 2

Overview of Participants

Program	Number of Graduates	Number of Eligible Participants
Part-Time Program	135	41
Principal Corps	29	25

Once the participants were identified, their school placements for the relevant school years were identified from lists of Mississippi public school principals for SY2010 – 2011, SY2011 – 2012, and SY2012 – 2013 supplied by the Mississippi Department of Education and

graduate tracking data supplied by the University of Mississippi School of Education. The

school QDI data for each participant's related years was collected from the public reports section

of the Mississippi Department of Education website to test hypothesis one. Relevant data to this

portion of the study includes the school QDI under the previous leadership team, which serves as

a baseline score, and the school QDI score for each year the participant was employed as a

principal or assistant principal at the school within the study timeframe. Due to the sensitive

nature of the data needed for hypotheses three through seven, an email was sent to each

participant requesting permission to use their GRE score, undergraduate GPA, program GPA,

and SLLA score in the study. The email attachment (see Appendix A) included a consent and

authorization form with a link to grant or deny permission electronically. Participants were

assigned an ID number and data was collected for respondents who granted permission to use

their student records data for correlational analysis (see Appendix B). Neither names, nor school

names were used to ensure anonymity and maintain confidentiality.

Assumptions and Related Statistical Analysis

The statistical analyses and assumptions are briefly reviewed prior to the report of the

results presented in this chapter. The independent samples *t* test and the Pearson product-

moment correlation coefficient (*r*) were used to analyze the data.

An independent samples *t test* is utilized to determine whether two unrelated groups

differ on one dependent variable. According to Gall, Gall, & Borg, 2007, the use of an

independent samples *t* test in causal-comparative research depends on six assumptions about the

obtained scores. The first assumption is one dependent variable is measured at the continuous

level. The second assumption is there is one independent variable with two categorical,

independent groups. The third assumption is there is no relationship between observations in

each group of the independent variable or between the groups themselves. The fourth assumption states there should be no significant outliers in the two groups of independent variables. Outliers are detected by examination of boxplots generated by SPSS. Any data points 1.5 box-lengths away from the edge of their box are considered outliers, and any data point three box-length away from the edge of their box is considered an extreme outlier. Outliers can have varying degrees of influence on the study outcomes, so the researcher must decide whether to remove or include the outliers in the data. The fifth assumption is the scores in the populations under study are normally distributed. Normality is assessed using the Shapiro-Wilk test of normality. In the results of the Shapiro-Wilk test, any p-value measuring less than the test significance level is considered to be statistically significant, thus violating the assumption of normality for the particular group; however, the independent samples t test is generally considered robust enough to account for violations of normality. Groups with a p-value greater than the test significance level meet the assumption of normality. The sixth assumption is the score variances for the population under study are equal. This equality of variances is referred to as homogeneity of variance and is tested by Levene's test for equality of variance. Levene's test for equality of variance reports significance levels for equal variances and a significance level appropriate when the assumption is equal variances is violated.

The second statistical analysis conducted in this study is the Pearson product-moment correlation coefficient (r). Pearson r is utilized to determine the magnitude of relationship between two or more measures and explore linear relationship between the quantitative variables; however, correlations obtained cannot establish a cause-and-effect relationship between the correlated variables (Gall et al., 2007). The use of this parametric test in a causal relationship study is only appropriate if the two variables have a linear relationship. To increase

reliability of the Pearson r, data should contain no extreme outliers. A scatterplot is used to determine whether the relationship between the two variables is linear and to determine if the data contains outliers. As previously mentioned, outliers can have varying degrees of influence on the dependent variable, so, if outliers are detected, the researcher must determine whether to leave them in the study or remove them from the data. Bivariate normality is recommended to assess the statistical significance of Pearson's correlation coefficient; however, Pearson r is considered robust enough to overcome violations of normality. For the purpose of this study, correlation coefficients were calculated to examine the relationship between candidates' principal program admission components, their undergraduate and graduate academic performance, and their performance on Mississippi's school administrator licensure examination.

Data Analysis

Seven major hypotheses were the subject of the data analyses of this study. For statistical testing purposes, participants were divided into two groups based on their principal preparation program. The following sections present an analysis of the results (SPSS) used in testing each of the hypotheses.

Hypothesis one. Null hypothesis one predicted there would be no statistically significant difference in school QDI differentials between Principal Corps graduates and the University of Mississippi educational leadership graduates. Using SPSS, a series of independent samples t tests were conducted to determine if a mean (M) difference in QDI score differentials exists between principal preparation programs in any of the first three years on a leadership team based on student achievement results from the Mississippi Curriculum Test II (MCT2) and the Subject Area Testing Program II (SATP2). The school QDI under the previous leadership team was used as a baseline score, and QDI differentials were calculated for the participant's first, second, and

third years on a leadership staff (See Appendix C and Appendix D). Not all participants had served on a leadership staff for three consecutive years, so it is important to note participants were tested on each of the applicable years. It is also important to note QDI differentials focus on growth rather than the actual school QDIs; therefore, participant measurements focused on positive and negative gains exclusive of the current school accountability label.

Assumptions testing. Participants who changed schools during the timeframe of the study were treated as a separate participant. The changing population were assigned a baseline QDI for each school and measured on the number of years spent at each school individually. There were 69 QDI differential scores used for the 66 participants in determining year one school QDI impact, 34 QDI differentials used in determining participants' year two school QDI impact, and 12 QDI differentials used in determining participants' year three impact on school QDI. An inspection of boxplots (see Appendix E) revealed two outliers for each participant group in the year one measurements, five total outliers in year two measurements, and one extreme outlier in year three measurements. All outliers were included in the statistical analysis as they were considered an accurate representation of the participants' impact on school QDI. Results of the Shapiro-Wilk test for normality (see Table 3) revealed the QDI differentials were normally distributed for each principal preparation program in five of the six groups.

Table 3

Shapiro-Wilk Test of Normality Results for QDI Differentials

	Principal Preparation Program	Shapiro-Wilk		
		Statistic	df	Sig.
YR1 QDI Differential	PT Program	.979	42	.616
	Principal Corps	.926	27	.056
YR2 QDI Differential	PT Program	.926	21	.114
	Principal Corps	.928	13	.324
YR3 QDI Differential	PT Program	.965	7	.857
	Principal Corps	.667	5	.004*

Note: * indicates significance resulting in violation of normality

Using SPSS 22, homogeneity of variance for the two groups was assessed at the .05 significance level using Levene's test for equality of variances. Results of the Levene's test for equality of variances suggested the homogeneity of variance assumption was met in participants' first, second, and third years on a leadership staff. The results of Levene's test are presented in Table 4 below.

Table 4

Levene's Test for Equality of Variances in QDI Differentials Results

		Levene's Test for Equality of Variances	
		F	Sig
YR1 QDI Differentials	Equal variances assumed	.872	.354
YR2 QDI Differentials	Equal variances assumed	1.574	.219
YR3 QDI Differentials	Equal variances assumed	.941	.588

Note: .05 significance level

Descriptive statistics. A total of 66 participants from the two University of Mississippi principal preparation programs were included in this study. Participants were divided into groups based on which of the two programs they completed. Tables 5 and 6 present an overview of the mean (*M)* QDI differentials for PT graduates and PC graduates, respectively, for each year in the study timeframe.

Table 5

Part-Time Program QDI Differentials

PT Program	*N*	*M*	SD	SE
YR 1	42	7.667	14.487	2.235
YR 2	21	7.095	19.136	4.176
YR 3	7	15.286	18.319	6.924

Table 6

Principal Corps QDI Differentials

Principal Corps	*N*	*M*	*SD*	*SE*
YR 1	27	3.778	12.055	2.320
YR 2	13	5.615	12.920	3.583
YR 3	5	9.600	13.353	5.972

For first year measurements in QDI differentials, there were 42 PT participants and 27 PC participants. First year PT principals had the largest range of scores, with the largest negative impact on school QDI of -35 QDI points, and a maximum gain of +42 QDI points. A first year PC graduate's largest negative impact on QDI score was -29 QDI points while the greatest gain was +27 QDI points. As indicated in Tables 3 and 4, the mean (*M*) Year 1 QDI differential for

the PT program was 7.667 with a standard deviation (*SD*) of 14.487, while the Year 1 *M* QDI differential for PC was 3.778 with a *SD* of 12.055. Part-time program *M* QDI differentials (*M* = 7.667, *SD* = 14.487) were higher than PC QDI differentials (*M* = 3.778, *SD* = 12.055) in their initial year on a leadership staff.

Of the 69 participants with first year measurements, 21 PT participants and 13 PC participants served on the same leadership staff for a second consecutive year. During their second consecutive year on a leadership staff, the largest negative impact on school QDI for a PT graduate was -39 QDI points while the largest gain in QDI score was +36 QDI points. The largest second year negative impact on school QDI for a PC graduate was -21 QDI points, and the largest positive impact was +29 QDI points. The Year 2 *M* QDI differential for the PT program was 7.095 with a *SD* of 19.136, and the Year 2 *M* QDI differential for PC was 5.615 with a *SD* of 12.920. Part-time program QDI differentials (*M* = 7.095, *SD* = 19.136) were higher than PC QDI differentials (*M* = 5.615, *SD* = 12.920) in their second consecutive year on a leadership staff.

Seven PT participants and five PC participants remained on the same leadership staff for a third consecutive year. For the participants' third year measurements, the maximum negative impact on school QDI for a PT graduate in their third consecutive year on a leadership staff was -8 QDI points. On the other hand, the greatest gain yielded by a PT graduate in their third consecutive year on a leadership staff was +45 QDI points. The smallest range of scores was seen in PC graduates third consecutive year on a leadership staff. The minimum QDI differential for PC graduates' third consecutive year was -14 QDI points, and the maximum increase was 17 QDI points. The Year 3 *M* QDI differential for the PT program was 15.286 with a *SD* of 18.319, and the Year 3 *M* QDI differential for PC was 9.600 with a *SD* of 13.353. Part-time program

QDI differentials (*M* = 15.286, *SD* = 18.319) were higher than PC QDI differentials (*M* = 9.600, *SD* = 13.353) in their third consecutive year on a leadership staff.

  Independent samples t test. The first independent samples *t* test was conducted to determine if a statistically significant difference exists in the *M* QDI differential between Principal Corps graduates and the University of Mississippi educational leadership graduates in their initial year on a leadership staff. Quality of Distribution Index score differentials for each level of principal preparation program were normally distributed, as assessed by Shapiro-Wilk test (*p* > .05), and there was homogeneity of variance, as assessed by Levene's test for equality of variances (*p* = .354). Results from the independent samples *t* test revealed the PT program *M* QDI differential was 3.889 (*SE* = 3.354) points higher than the PC *M* QDI differential in the first year on a leadership staff. Despite the difference, there is no statistically significant difference in the *M* QDI differential at the significance level of .05. The results are shown in Table 7.

Table 7

Independent t Test Results for Year 1 QDI Differential

QDI Differential	*t*	*df*	Sig.	Mean Difference	Std. Error Difference	95% CI Lower Bound	95% CI Upper Bound
Equal Variances Assumed	1.160	67	.250	3.887	3.354	-2.805	10.582

Note: The mean difference is significant at the .05 level

  The next independent samples *t* test was conducted to determine if a statistically significant difference exists in the *M* QDI differential between Principal Corps graduates and the University of Mississippi educational leadership graduates in their second consecutive year on a leadership staff. Quality of Distribution score differentials for each level of principal preparation program were normally distributed, as assessed by Shapiro-Wilk test (*p* > .05). The homogeneity of variance assumption was met, as assessed by Levene's test for equality of

variances (p = .219). Results from the independent samples t test indicated the PT program M

QDI differential was 1.480 (SE = 6.025) points higher than the PC M QDI differential in their

second year on a leadership staff. Though the M QDI differential is higher for the PT program

compared to PC, there is no statistically significant difference in the M QDI differential at the

significance level of .05. The results for the second independent samples t test are presented

below in Table 8.

Table 8

Independent t Test Results for Year 2 QDI Differential

QDI Differential	t	df	Sig.	Mean Difference	Std. Error Difference	95% CI Lower Bound	95% CI Upper Bound
Equal Variances Assumed	.246	32	.808	1.480	6.025	-10.793	13.752

Note: The mean difference is significant at the .05 level

   The last independent samples t test was conducted to determine if a statistically

significant difference exists in the M QDI differential between Principal Corps graduates and the

University of Mississippi educational leadership graduates in their third consecutive year on a

leadership staff. Quality of Distribution score differentials for the PT program were normally

distributed, as assessed by Shapiro-Wilk test (p > .05), and there was homogeneity of variance

between the groups, as assessed by Levene's test for equality of variances (p = .355). The

assumption of normality was violated for the Principal Corps, but the independent samples t test

was conducted because it is generally considered robust enough to overcome violations of

normality. Results from the independent samples t test indicated the PT program M QDI

differential was 5.686 (SE = 9.669) points higher than the PC M QDI differential in their third

consecutive year on a leadership staff. Despite the higher M QDI differential for the PT program

compared to PC, there is no statistically significant difference in the *M* QDI differential at the .05

alpha level. Table 9 presents the results for the second independent samples *t* test.

Table 9

Independent t test Results for Year 3 QDI Differential

QDI Differential	*t*	*df*	Sig.	Mean Difference	Std. Error Difference	95% CI Lower Bound	95% CI Upper Bound
Equal Variances Assumed	.588	10	.570	5.686	9.669	-15.858	27.229

Note: The mean difference is significant at the .05 level

In summary, analysis of the three independent samples *t* tests conducted to determine if a

statistically significant difference exists in *M* QDI differentials between Principal Corps

graduates and the University of Mississippi educational leadership program graduates in their

first, second, and third years on a leadership staff revealed the PT program *M* QDI differentials

were higher than PC *M* QDI differentials in all three years. Though PT *M* QDI differentials were

higher than *M* PC differentials in each year, there is no statistically significant difference at the

.05 alpha level in *M* QDI differentials between Principal Corps graduates and the University of

Mississippi PT program graduates in any year; therefore, the null hypothesis cannot be rejected.

Hypotheses two through seven. According to previous research (Lashway, 2003),

principal preparation programs often give the most weight to GRE scores and undergraduate

GPAs when considering applicants for admission. The Mississippi Department of Education

requires completion of an approved principal certification program and a score of 169 or above

on the School Leadership Licensure Assessment for school administrator licensure. The six

correlational hypotheses contained in this study examine relationships between program

admissions components, academic performance, and Mississippi Department of Education

school administrator licensure requirements. Using SPSS, a series of Pearson product-moment

correlation coefficients (*r*) were used to determine whether relationships exist between undergraduate GPAs, principal preparation program GPAs, GRE scores, and SLLA scores of the graduates.

  Assumptions testing. Participants' undergraduate GPAs, program GPAs, GRE scores, GRE Writing scores, and SLLA scores were plotted on a graph for each relevant relationship. The scatterplots for each hypothesis being tested were examined to determine if there was a linear relationship between the two variables and if any outliers were present in the data being analyzed. An inspection of the scatterplots (see Appendix F) indicated a linear relationship in each correlation, confirming a Pearson *r* could be used to test the magnitude of relationship between the variables. Further analysis of the scatterplots also suggested some variables contained outliers. In an effort to not manipulate test results, all outliers were included in the data analysis. Normality was assessed for each variable using Shapiro-Wilk tests of normality. Analysis of the results revealed not all variables were normally distributed; however, since the Pearson *r* is considered robust enough to account for violations of normality, the correlations were conducted. The results of normality testing are presented in Table 10.

Table 10

Shapiro-Wilk Test of Normality Results for Correlation Variables

Variable	Shapiro-Wilk		
	Statistic	Df	Sig.
Undergraduate GPA	.932	44	.012*
Program GPA	.653	46	.000*
GRE Score	.958	47	.088
GRE Writing Score	.933	47	.010*
SLLA Score	.875	39	.000*

Note: * indicates significance resulting in violation of normality

Descriptive statistics. The correlations in this study seek to determine the magnitude of relationship between three categories of variables: admission component variables, academic performance variables, and Mississippi school administrator licensure variables. Three major components for principal preparation program admission considerations are undergraduate GPAs, GRE scores, and GRE Writing scores. Program GPAs indicate the level of students' academic performance in their respective principal preparation program, and SLLA scores represent the candidates' scores on Mississippi's required examination for school administrator licensure. Permission to use protected student record data for the correlations was sought through emails. Participants were asked to complete an electronic survey and indicate whether they would grant or deny necessary permission. The survey returned a response rate of 71.2% (N = 47), with 46 authorizations and one denial. Despite multiple attempts to garner a response, nineteen subjects responded neither to emails nor phone calls. Student records data used in the correlations can be found in Appendix G.

Pearson product-moment correlation coefficient. A series of Pearson product-moment correlation coefficients were conducted to determine the magnitude of relationship between undergraduate GPAs and GRE scores, undergraduate GPAs and program GPAs, GRE scores and program GPAs, program GPAs and SLLA scores, GRE scores and SLLA scores, and GRE Writing scores and SLLA scores of study participants. An overview of the Pearson *r* results is presented in Table 11.

Table 11

Overview of Pearson r Correlations Between Variables

	Program GPA	SLLA	Undergraduate GPA
Undergraduate GPA	.241	.319	1
Program GPA	1	.166	.241
GRE Writing Score	.179	.629**	.197
GRE Score	.069	.559**	.186

** Indicates significance at .01 alpha level

Hypothesis two. The second null hypothesis stated there would be no relationship between candidates' undergraduate GPAs and their GRE scores. The first Pearson *r* analysis was used to determine if a relationship exists between undergraduate GPAs and GRE scores. The results indicated there is no statistically significant relationship between the two variables, but a weak positive correlation exists between undergraduate GPAs and GRE scores, ($r = .186$). Because the *p*-value of .226 is greater than the .05 significance level, the null hypothesis cannot be rejected.

Hypothesis three. Null hypothesis three expected there would be no correlation between candidates' undergraduate GPAs and program GPAs. The next Pearson *r* explored the relationship between undergraduate GPAs and University of Mississippi principal preparation

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program GPAs. Analysis of the results of this Pearson r revealed a weak positive with no statistical significance between the GPAs ($r = .241$), leading the researcher to fail to reject the null hypothesis. Because the p-value of .119 is greater than the .05 significance level, the null hypothesis cannot be rejected.

Hypothesis four. The fourth null hypothesis stated there would be no relationship between candidates' GRE scores and program GPAs. A Pearson r was used to determine if a correlation exists between the candidates' admission examination scores and their academic performance in the program. Results for this hypothesis indicated a slight positive correlation with no statistical significance between the candidates' GRE scores and their earned GPAs in their respective principal preparation program, ($r = .069$). Because the p-value of .647 is greater than the .05 significance level, the null hypothesis cannot be rejected.

Hypothesis five. Null hypothesis five expected there would be no correlation between candidates' program GPAs and their SLLA scores. Examination of the results for the Pearson r used to determine the relationship between candidates' program GPAs and how they performed on the SLLA suggested there was no statistically significant relationship and a weak positive correlation between the two variables, ($r = .166$). Because the p-value of .312 is greater than the .05 significance level, the null hypothesis cannot be rejected.

Hypothesis six. The sixth null hypothesis stated there would be no correlation between GRE scores and SLLA scores. Results for the Pearson r for hypothesis six revealed a statistically significant strong positive correlation between candidates' GRE scores and their SLLA scores, ($r = .559$). Because the $p < .0005$ value falls far below the .05 significance level, the null hypothesis is rejected.

Hypothesis seven. Null hypothesis seven held there would be no relationship between scores on the writing portion of the GRE and SLLA scores. Analysis of the results of the study's final Pearson *r* indicated there was a strong positive statistically significant correlation between candidates' GRE Writing scores and their SLLA scores, ($r = .629$). Because the $p < .0005$ value falls far below the .05 significance level, the null hypothesis is rejected.

In summary, a series of Pearson product-moment correlations were conducted to investigate relationships between certain University of Mississippi principal preparation program admission components, candidates' academic performance, and candidates' performance on the examination required for Mississippi K-12 school administration licensure. The results indicated there was no evidence of a statistically significant correlations between undergraduate GPAs and any other variables. There was a moderate positive relationship between undergraduate GPAs and SLLA scores. Despite the positive relationships between undergraduate GPAs with all other variables, none were statistically significant at the .05 alpha level. Similarly, the results revealed weak positive correlations between program GPAs and GRE scores, GRE Writing scores, and SLLA scores; however, there was no evidence of a statistically significant correlation between program GPAs and any other variable. Pearson *r* results did, however, indicate statistically significant relationships between examination scores analyzed in the study. Both GRE scores and GRE Writing scores were found to have a statistically significant strong positive correlation with SLLA scores.

Summary of Chapter

Chapter 4 offers important findings about the effectiveness of the University of Mississippi's principal preparation programs. No statistically significant difference in QDI differentials was found between the PT program and Principal Corps. Such findings resulted in

failing to reject the null hypothesis. Additionally, positive correlations were found between undergraduate GPAs and all other variables, but none were statistically significant. Likewise, positive correlations were found between program GPAs and all other variables, but none were statistically significant. Such findings prohibit rejecting all null hypotheses associated with undergraduate and graduate GPAs. Statistically significant positive relationships were found between both GRE scores and GRE Writing scores with SLLA scores. Such findings result in rejecting null hypotheses six and seven.

Chapter 5 will offer conclusions on the results of this study. Recommendations and implications for further studies related to the topics of principal preparation and the impact of school leaders on student achievement will also be presented.

CHAPTER 5

Research Summary, Conclusions, and Implications for Further Research

This chapter presents a summary of the study and a description of the participants

followed by conclusions based on the data analysis in Chapter 4. Finally, the researcher's

implications and recommendations for future research will summarize the study.

Summary of the Study

The purpose of the quantitative study was to conduct a goal free program evaluation on

the University of Mississippi's principal preparation programs. The researcher was interested in

investigating the program graduates' impact on student achievement in Mississippi public

schools and determining whether correlations exist between certain program admissions

requirements, academic performance, and standardized examination scores. More specifically,

the researcher wanted to determine if correlations exist between the candidates' GRE scores and

the candidates' program GPAs, and similarly, the candidates' GRE scores and their SLLA

scores. Additionally, correlations were sought between candidates' SLLA scores and their

program GPAs, candidates' undergraduate GPAs and their GRE scores, and candidates'

undergraduate GPAs and their graduate program GPAs.

Null hypothesis one predicted there was no statistically significant difference in the mean

(M) QDI differential between University of Mississippi educational leadership program

graduates and Mississippi Principal Corps graduates. The study examined the changes in school

QDI scores during the first, second, and third years of a graduate's placement as a principal or

assistant principal on a leadership staff in a Mississippi public school. The school QDI score

under the previous leadership team was used as a baseline score for all measurements. Due to changes in the Mississippi public school accountability model, the study was limited to SY2010-2011 through SY2012-2013. In regard to the findings of Lashway (1999), an analysis of program graduates' job placement data revealed fewer PT program graduates move into educational leadership roles than remain in the classroom. This was the case in Lashway's research as well. Many candidates go through the program to attain the step increase in the salary schedule associated with the advanced degree. Thirty-nine percent of PT graduates during the study timeframe are currently serving in a K-12 public education district or school leadership role while 42% have remained classroom teachers. Comparatively, 97% of PC graduates are currently working as a district or school leader in the state, and none have remained in the classroom. There were 41 PT program graduates and 25 PC graduates in the participant group for hypothesis one. The population size decreased for the second and third years of measurement because some graduates had not been serving in principal or assistant principal roles on the same leadership team for multiple consecutive years. The decrease in eligible participants for the second and third consecutive years can be attributed to two factors: administrator turnover and the lack of years as a licensed school administrator during the span of the study. Administrator turnover refers to a participant leaving their current job and being replaced by another principal or assistant principal. An independent samples *t test* was conducted to determine if a statistically significant difference exists in the *M* QDI differential of the participant groups for the applicable years on a leadership staff. Results revealed PT program graduates *M* QDI differentials were higher than PC graduates in each of the three experiential years. In their initial year on a leadership staff, the PT *M* QDI differential (*M* = 7.667, *SD* = 14.487) was 3.889 points higher than the PC *M* QDI differential value. Second year measurements indicated the PT *M* QDI

differential (*M* = 7.095, *SD* = 19.136) was 1.480 points higher than the PC *M* QDI differential (*M* = 5.615, *SD* = 12.920). Lastly, PT graduates who remained on the same leadership staff for a third consecutive year had a *M* QDI differential (*M* = 15.286, *SD* = 18.319) 5.686 points higher than PC graduates (*M* = 9.600, *SD* = 13.353) who completed three consecutive years on the same leadership staff. Further analysis of the results indicated, though the PT *M* QDI differential was higher for each experiential year, there is no statistically significant difference at the .05 alpha level in any year.

Null hypotheses two through seven were correlational hypotheses dealing with relationships between admissions requirements, academic performance, and standardized examination scores. Of the 66 original participants surveyed, forty-seven participants granted permission for their protected student record data to be used to examine the magnitude of relationship between the aforementioned variables. More specifically, null hypotheses two and three expected there would be no statistically significant relationship between undergraduate GPAs and GRE scores or program GPAs, respectively. Null hypotheses four and five held there would be no statistically significant correlation between candidates' program GPAs and their GRE score, which is a required program admissions component, or their SLLA score, required for Mississippi school administrator licensure, respectively. Further, null hypotheses six and seven stated there would be no statistically significant relationship between candidates' SLLA scores and neither the combined verbal and quantitative GRE score nor the GRE writing score. A series of Pearson product-moment correlation coefficients (*r*) were conducted to examine the magnitude of relationships in the aforementioned hypotheses. Analysis of the results of each Pearson *r* revealed all of the examined correlations indicated varying degrees of positive relationships between the designated variables; however, the only statistically significant

correlations in the study exist between standardized examination scores. Specifically, strong positive statistically significant correlations exist between the GRE writing score and the SLLA score ($r = .629$) and between the GRE scores and SLLA scores ($r = .559$).

Conclusions

The results of this study for hypothesis one suggest there is no evidence the University of Mississippi educational leadership graduates differ from Mississippi Principal Corps graduates concerning their impact on student achievement in Mississippi's public schools. Despite no emerging statistically significant difference, it is essential to note the results garner practical implications for the University of Mississippi and Mississippi school leaders. A limitation of the study is the declining population numbers in the second and third year measurements. Such small populations could under power the study when searching for statistical significance or cause outliers to have a crucial impact on the statistical findings. However, lack of statistical significance is not always indicative of lack of importance. Study outcomes could still be clinically important and warrant further consideration. In this study, when considering the sheer number of QDI differentials, both programs produced nearly triple the gain scores than the number of losses in each of the three years. In their first, second, and third years on a leadership staff, PT program graduates yielded 52, 25, and nine QDI gain scores, respectively. In the corresponding years, PC graduates produced only 17, eight, and three negative gain scores. The gain and loss scores are shown in Table 12.

Table 12

Gain and Loss Scores by Program

Year +/-	PT N=	PC N=	PT Avg.	PC Avg.	UM EDLD Combined	Overall Gain
YR1 Gain	32	20	+13.6	+9.6	+12.1	
YR1 Loss	10	7	-11.4	-13.7	-11.8	+6.2
YR2 Gain	15	10	+16.2	+11.0	+14.1	
YR2 Loss	5	3	-23.5	-12.3	-16.4	+6.5
YR3 Gain	5	4	+23.4	+15.0	+19.0	
YR3 Loss	2	1	-5.0	-14.0	-8.0	+12.9

Notes: Averages are of gain scores or loss scores exclusively for the designated year. Overall gain is inclusive of +/- QDI differentials. Of the 115 QDI differentials measured, one PT measurement in the second year of the study showed no change in QDI score.

The above results indicate the University of Mississippi can anticipate a steady, incremental increase in QDI scores from both of their principal preparation programs. The overall gain scores in Table 14 represents the average yearly gain of all University of Mississippi graduates for the relevant year and is inclusive of positive and negative QDI differentials. From a practical standpoint, it is important to note the trends in QDI gains and losses. All QDI gains trended upward each year and QDI losses bottomed out year three for the comparisons. The average of PT program graduates gain scores increased by 2.6 points and 7.2 points in years two and three, respectively. In addition, average gain scores of PC graduates increased by 1.4 points in year two and four points in year three. Average gain scores of both principal preparation programs combined increased by two points in year two and 4.9 points in the third year on a leadership staff. When combining gains and losses to examine the overall gains in student achievement,

University of Mississippi prepared principals show an increase of .3 points in year two on a leadership staff. Principals who remain with a leadership staff for three consecutive years produce a notable increase of 6.4 point in student achievement. Leading school change is a process often spanning multiple years, so immediate changes in student achievement could likely be attributed to a variety of factors and less likely to be primarily dependent upon leadership.

The results of this study for the six correlational hypotheses suggest there are varying degrees of relationship between program admission requirements, academic performance, and standardized exams. Two critical elements for graduate school admission are the applicant's undergraduate GPA and their GRE scores. Undergraduate GPAs are a measure of the student's academic performance across an extended time period and provides information about the applicant's knowledge across a variety of content areas. The GRE score is a vastly different assessment tool. It provides an assessment of verbal and quantitative knowledge from one point in time. Since no significant correlation was found between the two variables, it seems practical to continue using both components when evaluating candidates.

Candidates' academic performance in their respective graduate program was not significantly correlated with either of the two program admission components. Graduate program GPAs showed a weak correlation ($r = .186$) with undergraduate GPAs and almost no correlation at all ($r = .069$) with GRE scores. Though no hypothesis was written for the relationship between GRE writing scores and program GPAs, the University of Mississippi educational leadership program does consider applicant's writing score for program admission. The Pearson r results also revealed no significant correlation ($r = 179$) between the two variables. University personnel could be using invalid criteria for admission standards, or admission selection committees could possibly be using the variables for general associations

rather than actual statistical significance when evaluating candidates. No significant relationship was found between program GPAs and SLLA ($r = .166$) scores. The lack of relationship between program GPAs with the other variables could simply be indicative of grade inflation sometimes prevalent in graduate studies.

The only statistically significant correlations found in the study were between standardized examination scores. The SLLA scores were significantly correlated with both the GRE composite score and the GRE writing score. The GRE composite score measures verbal and quantitative reasoning, and the GRE writing score measures critical thinking and analytical writing skills. The SLLA measures the application of standards-relevant knowledge and reasoning skills. All of these variables are created and scored by an external entity. These findings combined with the findings for hypotheses two through five, suggest external assessments have a significant relationship with each other, yet the assessments do not have a significant relationship with academic performance.

Implications of the Research Study

The role of the principal in U.S. public schools has changed dramatically over the past few decades. The primary role of today's principal is to be an instructional leader for the school rather than a building manager, as they once were. Past research contends principal leadership may be the second most influential factor in student achievement, surpassed only by the effect of the classroom teacher (Marzano, Waters, & McNulty, 2005; Joyce & Showers, 2002; Davis & Darling-Hammond, 2012; Lynch, 2012; Mendels & Mitgang, 2013; Miller 2013; Reames, 2010). With so much effect on student learning outcomes, it is imperative for principals to be knowledgeable of sound instructional practices and well equipped to balance a wide array of tasks and still maintain focus on teaching and learning. Past research indicates training programs

have failed to keep pace with the evolving principal's role (Levine, 2005; Fleck, 2008; Lashway, 1999; Zubnzycki, 2013; Butler, 2008; Miller, 2013; Lynch, 2012; Lashway, 2003; Hernandez, Roberts, & Menchaca, 2012; Duncan, Range, & Scherz, 2011; Reed & Kinsler, 2010), and the debate concerning the design of principal preparation programs is expected to continue well beyond this study. Because of recent critiques, there are unsupported perceptions that traditional principal preparation programs are ineffective and need to be redesigned or eliminated altogether (Levine, 2005). The findings of this quantitative study reveal both of the University of Mississippi principal preparation programs showed positive gains in student achievement. The traditional route principals averaged slightly higher student achievement gains than their Principal Corps counterparts in each of their first three years on a leadership staff. However, there was no statistically significant difference in the impact on student achievement between the University of Mississippi's traditional educational leadership program and the campus based alternative program. Therefore, it is reasonable to conclude both programs are effective and have a positive impact on student achievement.

Critics of traditional principal preparation programs denounce their admission standards, as well as their curriculum and structure. Lax admission standards often only require applicants to submit an application and payment to the college's graduate school and/or educational leadership program, undergraduate transcripts, and a competitive GRE score. According to Lashway (1999), university faculties pay too little attention to instruction, and many do not have principal experience (Levine, 2005). Graduates often criticize coursework as irrelevant, insignificant, and uninspirational. This study found no statistically significant correlations between the admissions requirements and student academic performance of either University of Mississippi's principal preparation programs. Though no significant relationships were found

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between admission requirements and academic performance, the study cannot conclude the admission process is deficient because the principals being produced by the program are positively impacting student achievement in Mississippi's schools.

Recommendations for Further Research

Research has establish a strong connection between school leadership and student achievement in our nation's schools, and because our schools are not performing at expected levels, principal preparation programs have come under fire from critics and policymakers. The results of this study, however, indicate both University of Mississippi principal preparation programs are positively impacting student achievement in the state. Nevertheless, a focus on improvement efforts could result in the production of higher quality school leaders and an even greater impact on student achievement. Recommendations for future research to assist the University of Mississippi in preparing effective school leaders include continued evaluation of both principal preparation programs for continual improvement purposes. Research efforts could build upon this study to identify the performance levels of schools contained in the study and gain more insight on the impacts on student achievement. A qualitative follow-up to this study could also help gain insight into the impacts on student achievement and various components of both principal preparation programs. Multiple regression application to this study has the potential to reveal valuable predictive information about standardized test performance. Lastly, reform efforts should focus on connecting principal preparation program evaluations to their program outcomes, which is the impact of their graduates on student achievement.

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Appendices

APPENDIX A

Participant Consent/Authorization Form

APPENDIX A

You are invited to participate in a research study to evaluate the effectiveness of the University of Mississippi's principal preparation programs. The study is being conducted by Summer Pannell, Ph.D. candidate, under the direction of Dr. Dennis Bunch, professor in the University of Mississippi's Educational Leadership program. You were selected as a possible participant because you are a graduate of the University of Mississippi's Educational Leadership Program or Principal Corps.

PRINCIPAL INVESTIGATOR
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What will be involved if you participate? If you decide to participate in this research study, you will be asked for your permission to collect your undergraduate GPA, graduate GPA, GRE score, and SLLA score from the University of Mississippi Department of Leadership and Counselor Education.

Are there any risks or discomforts? The proposed study is a program evaluation on the University of Mississippi's principal preparation programs. The study investigates relationships between graduates' GRE scores and program GPA, GRE scores and SLLA scores, SLLA scores and program GPA, undergraduate GPA and GRE scores, and undergraduate GPA and program GPA. The study will also examine the impact of UM graduates on school QDIs. Minimal risk is foreseen; however, loss of confidentiality remains a risk. Every effort will be made by the researcher to maintain confidentiality for each participant. To guard against such risk, all identifiable information will be replaced with a code number. All data presented from analysis will include just the code number so individuals cannot be identified. The code list will be kept separate from the data.

Are there any benefits to yourself or others? This study will add to existing research on effectiveness of principal preparation programs and has the potential to contribute to principal preparation program reform efforts, including admission requirements, course design, and internship practices. This research will benefit the University of Mississippi as well as other colleges and universities providing education and training in educational leadership. The study could also help guide professional development efforts of school districts and practicing school administrators as they plan and participate in professional development for school leaders.

Will you receive any compensation for participating? Are there any costs? No compensation or costs are associated with this study.

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign an electronic consent form. After you sign the consent form, you are still free to withdraw at any time and without giving a reason. Your decision about whether or not to participate or to stop participating will not jeopardize future relations with the University of Mississippi or the Department of Leadership and Counselor Education. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed.

Your privacy will be protected. Any information obtained in connection with this study will remain confidential. Information obtained through your participation may be used to fulfill an educational requirement, published in a professional journal and/or presented at a professional meeting.

If you have questions about this study, please contact the researcher or faculty advisor whose contact information is provided on the first page.

If you have questions about your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Investigator, please contact the Institutional Review Board at (662) 915-7842 or irb@olemiss.edu.

I have read and understand the provided information and have had the opportunity to ask questions. I understand my participation is voluntary, and I am free to withdraw at any time, without giving a reason and without cost.

Please click on the link below and indicate whether or not you grant electronic authorization for your student records to be used in this study. You may print a copy of this letter and the authorization form.

http://uofmississippi.qualtrics.com/SE/?SID=SV_bOgEW4yjeGFgH7D

Investigator's signature _____   Date _____

APPENDIX B

Participant Student Record Data

Participant Student Records Data

Participant ID	Undergrad GPA	Program GPA	GRE Combined	GRE Writing	SLLA
1	3.29	3.71	380	3	170
2	3.53	4	445	3	172
3	2.3	--	380	3.5	--
4	3.72	4	420	4	183
5	3.66	4	490	4.5	182
6	3.51	4	400	4	176
7	2.9	3.69	340	3	173
8	--	4	355	4	--
9	--	3.76	375	3	171
10	3.22	3.81	370	3	175
11	2.91	4	410	4	174
12	2.81	3.81	460	3.5	169
13	2.81	3.9	560	3	175
14	3.56	3.95	445	3.5	171
15	2.6	4	525	2.5	173
16	3.55	4	395	3	182
17	2.88	4	520	4	175
18	3.67	3.6	350	2.5	--
19	3.62	3.4	380	2.5	171
20	3.37	3.53	515	3	173
21	3.51	3.9	570	3	175

22	2.47	3.8	430	4.5	--
23	3.04	4	525	3	174
24	2.29	4	395	3	174
25	2.91	3.8	445	3.5	--
26	3.82	4	560	4	189
27	3.48	4	440	4	171
28	3.42	3.8	400	3.5	174
29	3.48	4	330	2.5	175
30	2.68	4	490	3	176
31	3.96	4	575	5	186
32	2.59	2.87	545	4	181
33	3.95	4	490	4.5	188
34	3.53	4	430	3.5	179
35	--	3.69	640	5	183
36	3.71	4	485	4	--
37	3.19	3.66	480	3.5	180
38	3.93	4	665	4	188
39	2.58	4	495	4.5	188
40	3.87	3.9	535	3.5	175
41	4	4	505	3.5	--
42	3.4	3.9	500	4	171
43	3.93	4	420	4.5	--
44	3.25	3.8	530	5	173

45	3.57	3.8	445	3	172
46	3.62	4	735	5.5	193
47	3.55	4	540	4	174

APPENDIX C

PT Program QDI Score Increases and Decreases by Year

PT Program QDI Score Increases and Decreases by Year

Participant ID	Baseline QDI	YR1 QDI	YR1 QDI +/-.	YR2 QDI	YR2 QDI +/-	YR3 QDI	YR3 QDI +/-
1101	179	203	24	182	3	177	-2
1104	198	201	3	206	8	203	5
1105	128	134	6	146	18	155	27
1106	146	155	9	--	--	--	--
1107	158	194	36	185	27	179	21
1108	159	185	26	195	36	204	45
1109	143	170	27	135	-8	135	-8
1110	179	183	4	173	-6	198	19
1111	173	186	13	--	--	--	--
1112	200	195	-5	--	--	--	--
1113	148	164	16	--	--	--	--
1114	135	156	21	129	-6	--	--
1115	131	144	13	--	--	--	--
1116	183	189	6	203	20	--	--
1117	220	223	3	220	0	--	--
1118	165	182	17	188	23	--	--
1119	145	154	9	177	32	--	--
1120	181	204	23	--	--	--	--
1121	186	183	-3	190	4	--	--
1122	182	188	6	--	--	--	--
1123	164	155	-9	167	3	--	--

1201	126	114	-12	--	--	--	--
1202	171	177	6	193	22	--	--
1204	170	135	-35	135	-35	--	--
1206	197	180	-17	--	--	--	--
1207	197	188	-9	--	--	--	--
1208	166	150	-16	127	-39	--	--
1209	151	148	-3	--	--	--	--
1210	153	148	-5	164	11	--	--
1211	194	196	2	201	7	--	--
1212	206	213	7	224	18	--	--
1213	187	194	7	198	11	--	--
1301	185	204	19	--	--	--	--
1302	175	182	7	--	--	--	--
1303	120	162	42	--	--	--	--
1304	172	187	15	--	--	--	--
1305	143	161	18	--	--	--	--
1306	182	185	3	--	--	--	--
1307	136	151	15	--	--	--	--
1308	189	203	14	--	--	--	--
1309	200	206	6	--	--	--	--
1310	149	162	13	--	--	--	--

Note: QDI +/- is equivalent to the increases in QDI scores from the Baseline QDI score
-- indicates the participant has no score for the relevant year

APPENDIX D

Principal Corps QDI Score Increases and Decreases by Year

Principal Corps QDI Score Increases and Decreases by Year

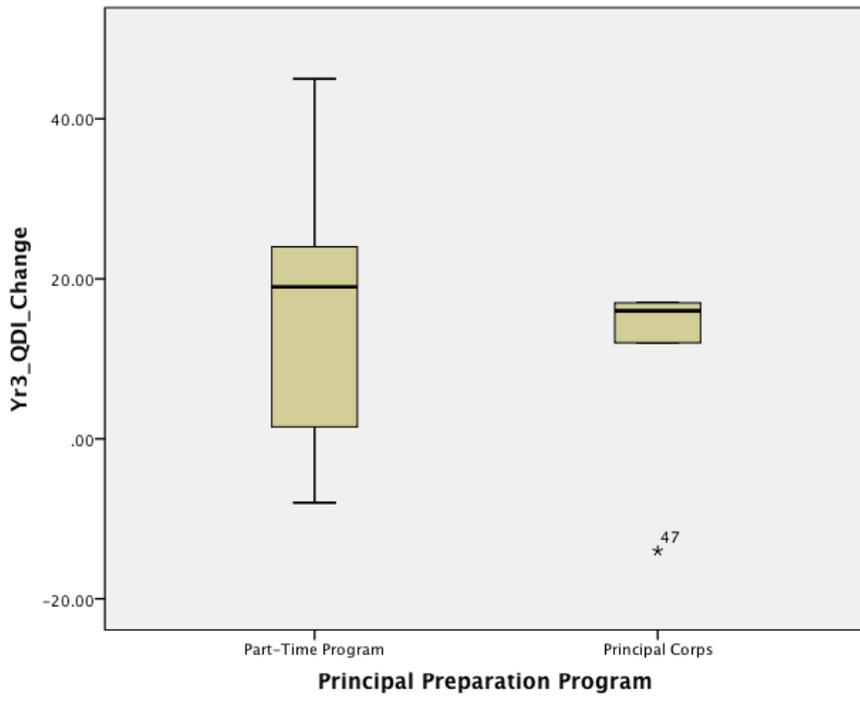| Participant ID	Baseline QDI	YR1 QDI	YR1 QDI +/-.	YR2 QDI	YR2 QDI +/-	YR3 QDI	YR3 QDI +/-
2101	158	161	3	166	8	174	16
2102	198	184	-14	201	3	210	12
2103	174	184	10	185	11	--	--
2104	205	215	10	--	--	--	--
2105	146	117	-29	125	-21	132	-14
2106	130	125	-5	129	-1	147	17
2107	203	196	-7	188	-15	--	--
2108	175	182	7	--	--	--	--
2109	108	124	16	114	6	125	17
2201	183	190	7	186	3	--	--
2202	206	209	3	--	--	--	--
2203	159	186	27	--	--	--	--
2204	138	150	12	167	29	--	--
2205	177	180	3	195	18	--	--
2206	153	148	-5	164	11	--	--
2207	221	225	4	232	11	--	--
2208	172	187	15	--	--	--	--
2209	185	197	12	--	--	--	--
2210	118	124	6	--	--	--	--
2211	174	169	-5	184	10	--	--
2301	137	153	16	--	--	--	--

2302	100	112	12	--	--	--	--
2303	148	152	4	--	--	--	--
2304	118	122	4	--	--	--	--
2305	172	176	4	--	--	--	--
2306	161	139	-22	--	--	--	--
2307	119	133	14	--	--	--	--

Note: QDI +/- is equivalent to the increases in QDI scores from the Baseline QDI score
-- indicates the participant has no score for the relevant year

APPENDIX E
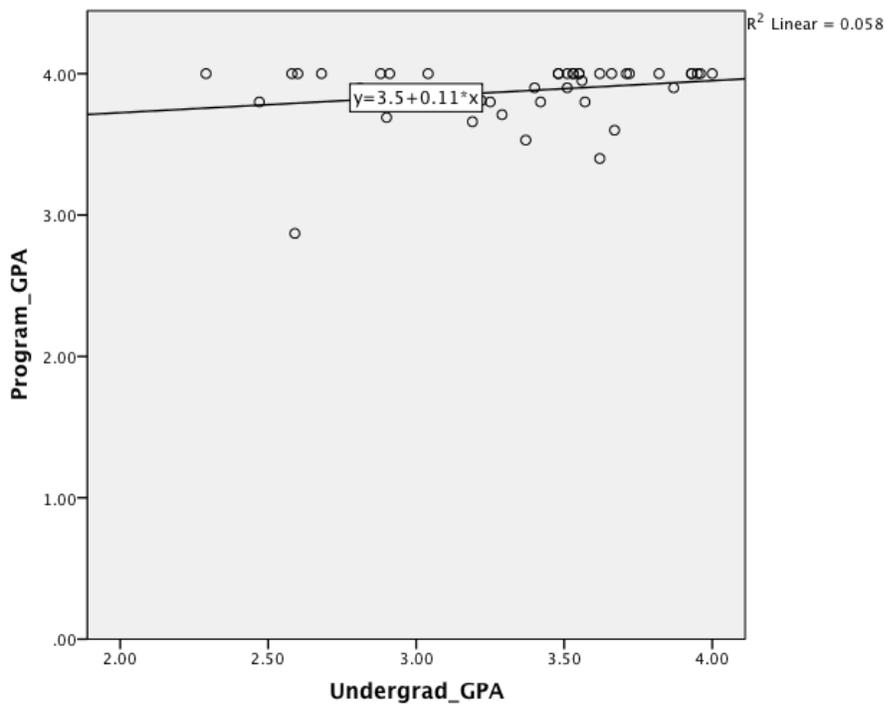
Boxplots
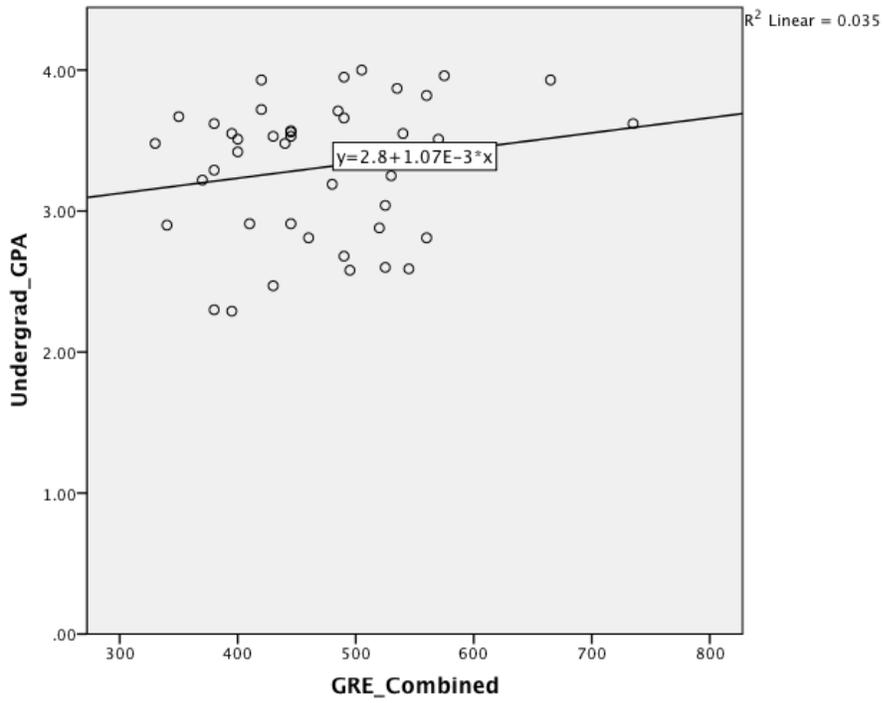
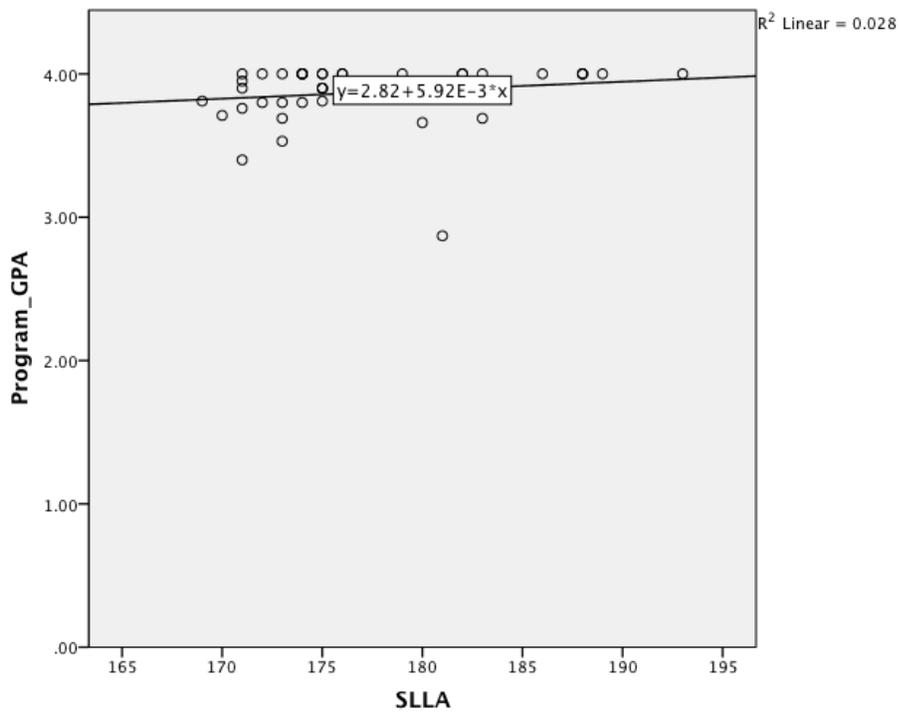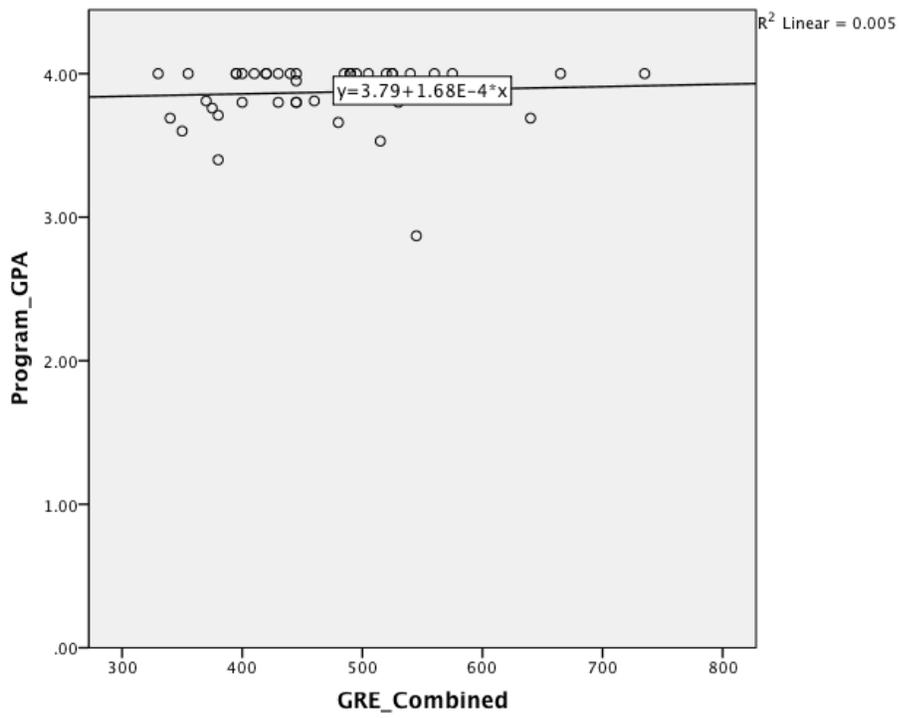*Boxplots to Determine YR1 Outliers*

Yr3_QDI_Change

40.00

20.00

.00

-20.00

47
*

Part-Time Program   Principal Corps

Principal Preparation Program
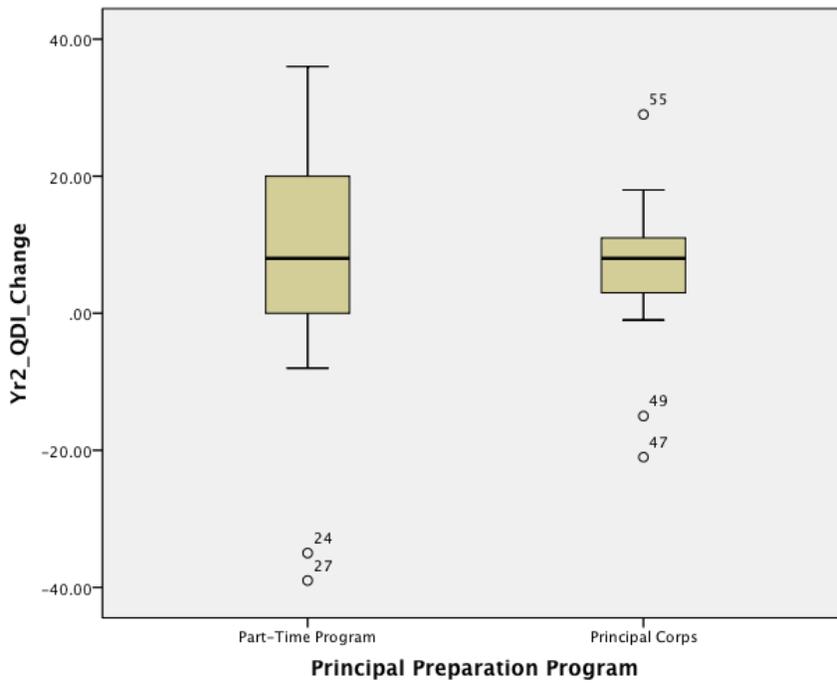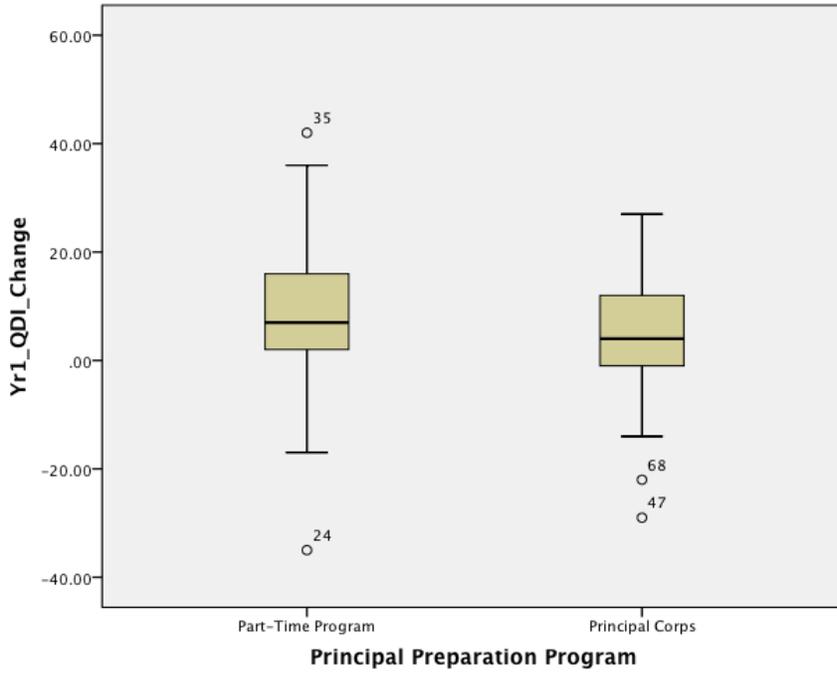
APPENDIX F

Scatterplots

Scatterplots to Determine Linearity of Variables and Outliers

The scatter plot shows Program_GPA versus GRE_Combined with regression line y=3.79+1.68E-4*x and R^2 Linear = 0.005.

The scatter plot shows Program_GPA versus SLLA with regression line y=2.82+5.92E-3*x and R^2 Linear = 0.028.

R^2 Linear = 0.312

$y=-9.43E2+8.04*x$

R^2 Linear = 0.396

$y=-9.94+0.08*x$
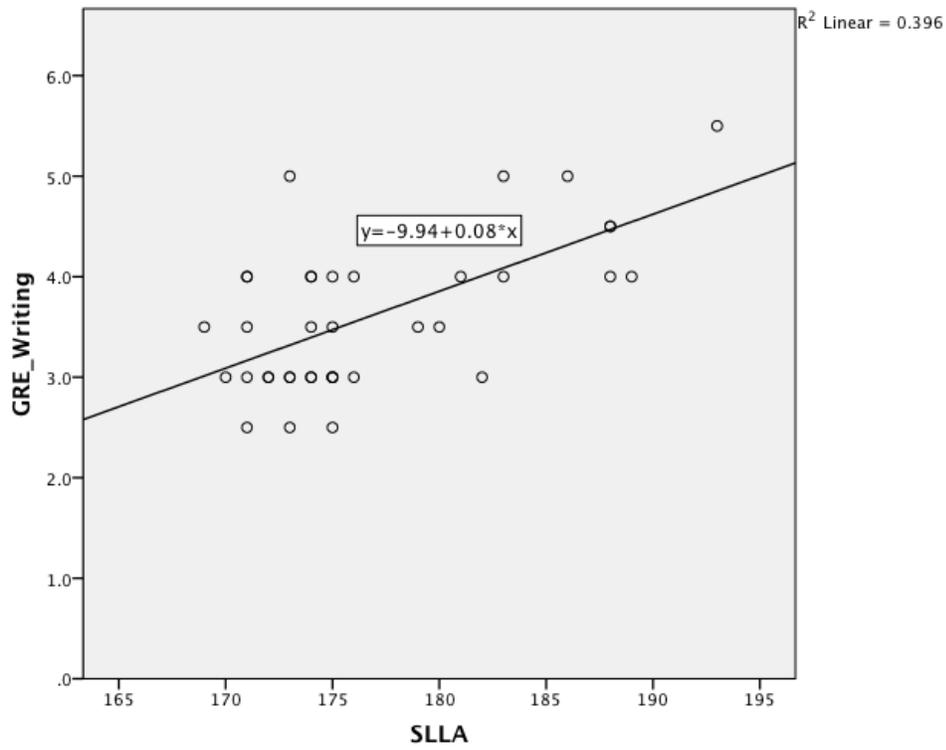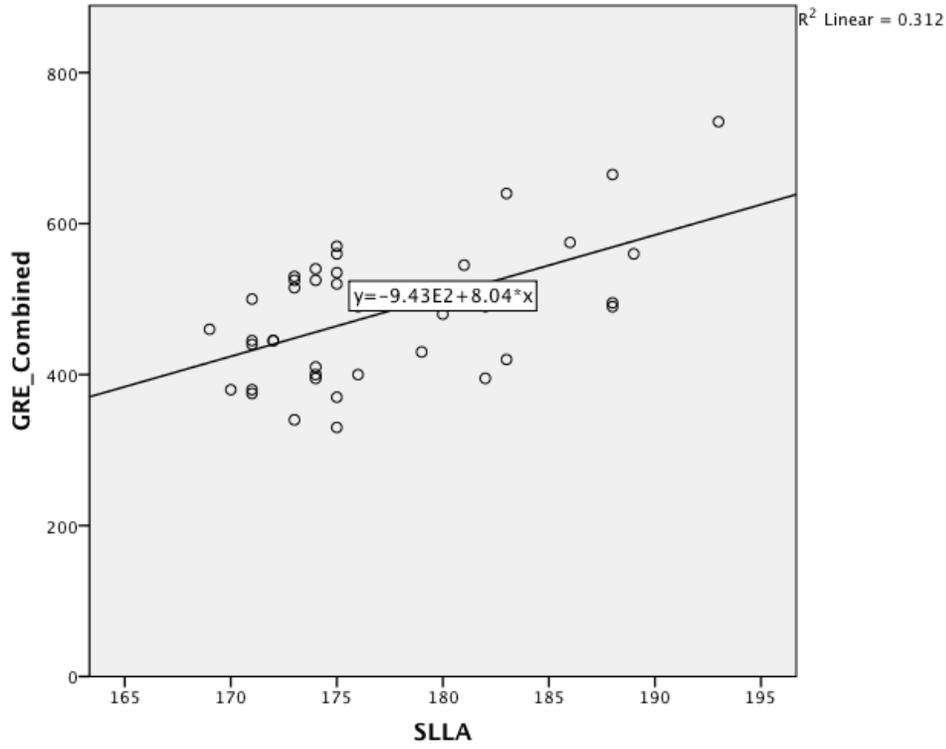
APPENDIX G

Correlation Table

Pearson r Correlation Table

Correlations

		Undergrad_ GPA	Program_ GPA	GRE_ Combined	GRE_ Writing	SLLA
Undergrad_ GPA	Pearson Correlation	1	.241	.186	.197	.319
	Sig. (2-tailed)		.119	.226	.201	.055
	N	44	43	44	44	37
Program_ GPA	Pearson Correlation	.241	1	.069	.179	.166
	Sig. (2-tailed)	.119		.647	.234	.312
	N	43	46	46	46	39
GRE_ Combined	Pearson Correlation	.186	.069	1	.524**	.559**
	Sig. (2-tailed)	.226	.647		.000	.000
	N	44	46	47	47	39
GRE_ Writing	Pearson Correlation	.197	.179	.524**	1	.629**
	Sig. (2-tailed)	.201	.234	.000		.000
	N	44	46	47	47	39
SLLA	Pearson Correlation	.319	.166	.559**	.629**	1
	Sig. (2-tailed)	.055	.312	.000	.000	
	N	37	39	39	39	39

** Correlation is significant at the 0.01 level (2-tailed).

VITA

Summer S. Pannell

Education

| 2008 | **Union University** | **M.Ed.** |
Major: Curriculum & Instruction

| 2001 | **Delta State University** | **B.S.E.** |
Major: Health, Physical Education & Recreation

Certifications

Arkansas Educator Licensure in the following areas:
Building Level Administrator; Physical Education (K-12); General Sciences (7-12); Biology (7-12); English (7-12); Special Education (K-12)

Mississippi Educator Licensure in the following areas:
Career Level Administrator; Mild/Mod Disabilities (K-12); Physical Education (K-12); General Sciences (7-12); Biology (7-12); English (7-12)

National Institute for School Leadership (NISL)

National Interscholastic Athletic Administrators Association (NIAAA)
Certified Athletic Administrator (CAA)
Classes:
LTC 501
LTC 502
LTC 504
LTC 506

Tennessee Educator Licensure in the following areas:
Beginning Administrator (PreK-12); English (7-12); Biology (7-12); Physical Education (K-12); Special Education Modified (K-12)

Texas Educator Licensure in the following areas:
Superintendent (EC-12); Principal (EC-12); Special Education (EC-12); Physical Education (EC-12); English Language Arts and Reading (7-12); Life Science (7-12); Science (7-12)

Professional Experience

Marshall County School District; Holly Springs, MS
Principal July 2012 – Present
- Serve as instructional leader of the school
- Supervise certified and non-certified staff including teachers, assistants, bus drivers, cafeteria staff, custodial staff, and school office staff
- Monitor and ensure compliance with all state and federal laws and regulations
- Develop budgets and monitor expenditures of local budgets and funds associated with federal grants
- Monitor and ensure safety of students and staff
- Chair committees and foster relationships among all stakeholder groups in the school community
- Serve as liaison between the school district and a variety of stakeholder groups
- Supervise the student body
- Served as a mentor for three Union University Principal Program candidates

Mississippi Department of Education/Mississippi State University Research & Curriculum Unit April 2013
- Served on Mississippi Statewide Teacher Appraisal Rubric (MSTAR) focus group

Marshall County School District Strategic Planning Committee Member August 2012 – Present
- Served on district level committee to write the Marshall County School District Five Year Strategic Plan

Assistant Principal/Instructional Facilitator July 2009 – June 2012
- Monitored and assessed the instructional program
- Supervised and mentored 35 teachers
- Supervised and mentored 10 coaches
- Analyzed school and district level data
- Supervised the student body

Federal Programs Coordinator July 2009 – June 2012
- Monitored compliance with federal laws regarding the United States Department of Education Office of Federal Programs
- Wrote grants to secure federal funds
- Developed budgets and monitored expenditures of funds associated with federal grants

Parental Involvement Coordinator July 2009 – June 2012
- Worked with a variety of stakeholder groups to ensure cooperation in working towards a common vision
- Coordinated parent and community involvement events
- Communicated with parents/guardians regarding their child's academic progress and school events

School Test Coordinator July 2009 – June 2012
- Assisted with the administration of required standardized testing to maintain the integrity of the testing programs
- Ensured compliance with state and federal laws regarding Mississippi's required standardized testing programs

Advanced Placement Coordinator July 2010 – June 2012
- Coordinated the Advanced Placement academic program in the school curriculum
- Coordinated and administered Advanced Placement Exams to students

American College Test (ACT) Prep Coordinator July 2010 – June 2012
- Implemented and monitored ACT Prep classes in the curriculum
- Analyzed and assessed student ACT data to identify and address areas of strengths and weakness

Athletic Director August 2004 – June 2012
- Monitored and assessed all aspects of athletic programs
- Ensured athletic compliance with local, state, and national regulations
- Supervised and monitored academic progress of student-athletes

Bus Driver August 2005 – July 2012
- Transported students to and from school
- Supervised students to ensure safety

Teacher August 2002 – July 2008
- Taught the following Language Arts classes:
  - English I
  - English IV
- Taught the following Science classes:
  - Introduction to Biology
  - Anatomy & Physiology
  - Botany
  - Environmental Science
  - Microbiology

Head Coach August 2002 – July 2008
- Taught girls' basketball, fastpitch softball, slowpitch softball, and volleyball skills
- Supervised and monitored academic progress of student-athletes
- Instilled concepts of effective teamwork in student-athletes

National Literacy Professional Development Consortium; Pearland, TX
Data & Accountability Specialist/Secondary Education Consultant October 2011 – July 2013

Pontotoc High School; Pontotoc, MS
Teacher January 2002 – July 2002
- Taught the following science classes

- o Honors Biology
  - o Biology
  - o Physical Science
- National Beta Club sponsor

Research, Publications

Pannell, S., Skelton, C., Bailey, J., & Lewis, L. (2007). *Implementing nutritional strategies in the secondary classroom*. (Master's Action Research Project). Union University, Tennessee.

Professional Presentations

Pannell, S. and Haynes-Mays, I. (2011). Engaging students in rich vocabulary instruction to enhance comprehension. *National Black Child Development Institute*. Nashville, TN.

Pannell, S. and Haynes-Mays, I. (2011). Creating opportunities to learn: Bridging the culture and education gap. *National Black Child Development Institute*. Nashville, TN.

Grants

Mississippi Department of Education, 1003A School Improvement Grant, Byhalia Middle School, 2009 – 2010. $144, 728.80

Mississippi Department of Education, 1003A School Improvement Grant, Byhalia High School, 2010 – 2011. $139, 260.66

Mississippi Department of Education, 1003G School Improvement Grant, Byhalia High School, 2010 – 2011. $79, 920.00

Mississippi Department of Education, 1003A School Improvement Grant, Byhalia High School, 2011 – 2012. $57, 951.23

Accomplishments & Leadership Skills

Extensive teaching and leadership experience in high-minority and low socio-economic educational settings

Leadership experience in academics and athletics at a variety of educational levels including: elementary school, middle school, and high school

Under my instructional leadership, H.W. Byers Elementary School received a Champion of Change award from the Mississippi Department of Education for high gains in closing the achievement gap in 2014.

H.W. Byers Middle School's achievement increased 13 points on the Mississippi Department of Education Statewide Accountability Model under my instructional leadership in 2013

Guided Byhalia High School academic program out of school improvement sanctions for underperforming schools in 2012

Assisted in raising Byhalia High School's achievement 24 points on the Mississippi Department of Education Statewide Accountability Model in 2011

Assisted in raising Byhalia Middle School's achievement 26 points on the Mississippi Department of Education Statewide Accountability Model in 2012

Byhalia High School added a softball field, scoreboards to the baseball and softball fields, lights to the baseball and softball fields, rubberized the track, and added facilities for track field events during my tenure as Athletic Director

Coached the first ever scholar athlete award winning team at Byhalia High School (girls basketball) in 2006

District 2 – 3A Girls' Basketball Coach of the Year in 2005 and 2006

Coached the Byhalia High School girls' basketball team to the school's first ever District Championship, North State Championship, and Mississippi High School Activities Association State Tournament appearance in 2006

Professional Organizations

Association for Supervision and Curriculum Development (ASCD)
Mississippi Professional Educators (MPE)
National Interscholastic Athletic Administrators Association (NIAAA)
Mississippi Athletic Administrators Association (MAAA)
American Educational Research Association (AERA)