Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

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INFLUENCE OF TEACHER QUALIFICATIONS, EXPERIENCE, INSTRUCTIONAL
METHODS, AND PROFESSIONAL DEVELOPMENT ON STUDENT
ACHIEVEMENT ON THE MISSISSIPPI WRITING
ASSESSMENT IN GRADES FOUR AND SEVEN

by

Stacy Kihneman Garcia

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

December 2012
ABSTRACT

INFLUENCE OF TEACHER QUALIFICATIONS, EXPERIENCE, INSTRUCTIONAL METHODS, AND PROFESSIONAL DEVELOPMENT ON STUDENT ACHIEVEMENT ON THE MISSISSIPPI WRITING ASSESSMENT IN GRADES FOUR AND SEVEN

by Stacy Kihneman Garcia

December 2012

The purpose of this study was to determine if teacher qualifications, experience, instructional methods, and professional development influenced student achievement on the Mississippi Writing Assessment in grades four and seven. The study was conducted in the three coastal counties of southern Mississippi. Participants were fourth or seventh grade teachers who taught in one of the eight school districts that were included in the study.

Participants were asked to provide information regarding their qualifications, amount of classroom experience, preferred instructional methods, and feelings on professional development. Also requested from each teacher was his/her classroom average on the Mississippi Writing Assessment from the 2010–2011 school year. This information from each teacher was analyzed to determine which, if any, of the factors had any impact on classroom averages.

The researcher looked closely at the descriptive statistics, frequencies, correlation tables, regressions and their relationship(s) with classroom averages. An ANOVA was used to determine if the level of degree, type of certification and/or number of Language
Arts hours impacted classroom averages on the writing assessment. Results of this study indicate that alternate route teachers had lower averages, and teachers who had a higher number of Language Arts semester hours had higher classroom averages. The Pearson Correlation indicated that teacher experience was not strongly correlated with classroom averages. Although instructional methods and implementation of professional development were not strongly correlated to classroom averages, they are significant predictor variables.

These results could be beneficial to school districts and administrators when selecting and placing teachers, especially those who hold alternate route certification. Administrators could take note of teachers with higher averages and carefully observe instructional methods practiced daily, encouraging others to use methods considered to be effective. Administrators could also use these results when making decisions regarding professional development for writing instruction.
INFLUENCE OF TEACHER QUALIFICATIONS, EXPERIENCE, INSTRUCTIONAL METHODS, AND PROFESSIONAL DEVELOPMENT ON STUDENT ACHIEVEMENT ON THE MISSISSIPPI WRITING ASSESSMENT IN GRADES FOUR AND SEVEN

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A Dissertation
Submitted to the Graduate School of The University of Southern Mississippi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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CHAPTER I
INTRODUCTION

Overall educational success is not the result of one person or thing; rather it is a combination of many different factors. In the mid-1980s, educational research focused primarily on factors that were controlled at the school-level, without considering the impact that individual, teacher-level factors can have on student achievement. When looking at individual student achievement, the classroom teacher has an unprecedented independent impact on student learning. According to Robert Marzano (2003), “the act of teaching is a holistic endeavor. Effective teachers employ effective instructional strategies, classroom management techniques, and classroom curricular design in a fluent, seamless fashion” (p. 77). In past decades, the nation’s education system suffered from significant variations of delivered instruction, resulting in large gaps in student achievement.

In 2001, President George W. Bush proposed the No Child Left Behind Act (NCLB) “to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind” (NCLB, 2002). Over the course of the past decade, school districts across the country have worked diligently to ensure that all students within their school system were mastering required objectives and performing to the best of their abilities on standardized tests. Although some feel that NCLB has several shortcomings, many believe that the focus on accountability has encouraged school districts to look more closely on the quality of instruction in the classroom. In A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act, President Barack Obama continues to reinforce the notion that the teacher in the classroom is the most
important factor in a student’s success (U.S. Department of Education, 2012). Research suggests that it is critical for classrooms to be filled with highly qualified and effective teachers. As stated in NCLB, to be highly qualified a teacher needs to be fully certified and/or licensed by the state, hold at least a bachelor's degree from a four-year institution, and demonstrate competence in each core academic subject area in which the teacher teaches. According to the Mississippi Department of Education, school districts within the state are encouraged to have at least ninety-five percent of its employees highly qualified. Unfortunately, even with the most recent rating of 94% of the state’s teachers being *highly qualified*, Mississippi continues to nationally rank toward the bottom in education compared to the other states (Mississippi Department of Education, 2012).

Recently, Mississippi has taken the initiative to increase student achievement by encouraging school districts to voluntarily implement the Common Core Standards Initiative, which focuses on common goals that rigorously prepare students for college or career readiness (House & Green, 2011). “In addition to content coverage, the Standards require that students systematically acquire knowledge in literature and other disciplines through reading, writing, speaking, and listening” (Common Core State Standards Initiative, 2011, p. 1). Students of tomorrow will continue to be challenged to meet not only national standards, but global standards as well. Mississippi has taken the first step in beginning the process of providing its students with a challenging curriculum that will ensure future academic success. Individual school districts in every county in Mississippi are encouraged to implement this initiative for student growth by making sound decisions regarding the recruitment, placement, and retention of qualified, effective teachers. Focusing on the new Common Core Standards will ensure student achievement by
providing students with not only rigorous instruction, but also the deep understanding of required concepts at every grade level (Common Core State Standards Initiative, 2010).

Statement of the Problem

According to the National Assessment for Educational Progress (NAEP), Mississippi ranked last in the 2007 administration of the national writing assessment, which is administered to students in the eighth grade. Although Mississippi is ranked at the bottom, the results of this writing assessment show an improvement in Mississippi students’ writing abilities compared to the 1998 administration. The number of eighth grade students scoring proficient more than doubled from 11% to 29% between the years 1998 and 2007. This data suggests possible changes in one or more factors influencing writing instruction (National Center for Education Statistics, 2011). Because the ability to write well is a critical life skill and also a major foundation to the development of other reading and language skills, the teaching of writing is a very important factor in education. The 2006 Mississippi Curriculum Frameworks for both grades four and seven include direct instruction of the writing process and writing as a form of expression (Mississippi Department of Education, 2012). Likewise, the new Common Core Standards Initiative encourages the use of writing as a means of expressing ideas, demonstrating student reflection and displaying ownership of gained knowledge (Common Core State Standards Initiative, 2010). As writing is a necessary element in student learning and development, it is crucial that writing begins to be an integral part of every aspect in classroom instruction. According to the Common Core State Standards Initiative (2010), writing involves three purposes: “writing to persuade, to explain, and to convey real or imagined experience” (p. 5). As students get older, the emphasis shifts
from personal writing to more specific writing, such as expository and persuasive writing (Common Core State Standards Initiative, 2010). Teachers are required by the state of Mississippi to be highly qualified in their area of certification and are encouraged and expected to have expertise in the subject matter in which they teach. For students to receive quality writing instruction, teachers should be knowledgeable in both writing content and pedagogy. Teachers should employ a variety of instructional methods in ongoing efforts to reach students of all learning styles. Training and professional development in specific areas such as writing can help teachers turn good writing instruction into great writing instruction. (CCSSI, 2010)

Do any of these factors contribute to student success? Is there a relationship between teachers’ qualifications, experience, instructional methods, professional development in writing instruction, and/or student achievement on The Mississippi Writing Assessment in grades four and seven? The researcher’s intention for this study was to look closely at teacher responses on these factors and compare them with classroom averages from the 2010-2011 writing assessment. This information has been made available and was retrieved from the Mississippi Department of Education website (MDE, 2012).

Research Questions

This research was guided by the following research questions examined in the study:

Research Question 1: Do teacher qualifications influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?
Research Question 2: Does teaching experience influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

Research Question 3: Do instructional methods influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

Research Question 4: Does participation in professional development for writing instruction influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

Definitions

The following definitions are included to clarify any uncertainty as to the meaning of educational terms used in this study. These terms will be described briefly and will include any acronyms used in this study.

*Advanced Degree*- An advanced degree is a university degree (such as a master’s or doctor’s degree) higher than a bachelor’s degree (MDE, 2012).

*Alternate Certification*- Teaching certification can be obtained by prospective teachers who hold a bachelor’s degree in an area other than education. In Mississippi, teachers can be alternately certified after completing one of the following approved programs: Master of Arts in Teaching (MAT), Mississippi Alternate Path to Quality Teachers (MAPQT), Teach Mississippi Institute (TMI), the American Board Certification for Teacher Excellence (ABCTE), passing the Praxis I and II, and completing a one-year teaching internship (MDE, 2012).

*Certification*- Teacher certification can be obtained by passing the Praxis II Principals of Learning and Teaching, Specialty Area assessments, and completing a state-
approved or National Council of Accreditation of Teacher Education, approved program from a regionally or nationally accredited institution (MDE, 2012).

Common Core State Standards- The Common Core State Standards Initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The standards were developed in collaboration with teachers, school administrators, and experts, to provide a clear and consistent framework to prepare our children for college and for work (CCSSI, 2010).

Experience- For the purpose of this study, experience is described as the number of years the teacher has taught fourth or seventh grade writing (CCSSI, 2010).

Highly Qualified Teacher- According to No Child Left Behind, a highly qualified teacher is one who is fully certified and/or licensed by the state, holds at least a bachelor’s degree from a 4 year institution, and demonstrates a high level of competency in each of the core academic subjects in which the teacher teaches (No Child Left Behind Act, 2002, SEC. 9101, 23).

Mississippi Writing Assessment- The Mississippi Writing Assessment is an annual writing assessment that is given each spring to fourth, seventh, and tenth grade public school students in the state of Mississippi. The results of this assessment are used to improve writing instruction and accelerate student achievement (MDE, 2010).

National Assessment for Educational Progress- The National Assessment of Educational Progress (NAEP) is the largest nationally representative and continuing assessment of what America's students know and can do in various subject areas (http://www.nces.ed.gov) (National Center for Education Statistics [NAEP], 2011).
*National Writing Project*- The National Writing Project (NWP) is a nationwide network of educators working together to improve the teaching of writing in the nation's schools (Pritchard & Marshall, 2002).

*No Child Left Behind* – No Child Left Behind (NCLB) is a program designed to increase accountability and ensure that all children are successful by having all public schools follow national standards (No Child Left Behind Act of 2001, 2002).

*Professional Development*- According to the National Council for Staff Development, the term *professional development* is a comprehensive, sustained, and intensive approach to improving teachers’ and principals’ effectiveness in raising student achievement (Learning Forward, 2011).

*Six + 1 Trait Writing Model*- The Six + 1 Trait Writing Model is a system that is designed to teach and assess the craft and quality of writing. It is the use of a specific, shared vocabulary between the teacher and the student to identify various elements of writing. The system is structured around six traits (ideas, organization, voice, word choice, sentence fluency, conventions) + 1 (the presentation), all of which supply a framework in which teachers can provide focused, detailed feedback and instruction (Culham, 2003).

*Teacher Content Knowledge*- Teacher content knowledge has been defined as how teachers need to know a subject in order to teach it to others (Phelps & Schilling, 2004).

**Assumptions**

The researcher assumed that all teachers’ responses, especially those regarding classroom averages on the Mississippi Writing Assessment, were both honest and
accurate. The classroom averages provided by the teachers within the study were used as
the dependent variable in the study. Teacher participation was voluntary and anonymous.
Teachers were reassured that the researcher intended to use the information to determine
if teacher qualifications, experience, instructional methods, and/or professional
development influenced student achievement on the writing assessment. The intentions
for the research were made clear by the researcher to all participants in the study. All
items on the questionnaire were reviewed and fully explained by researcher when hand
delivered to the principals in each school. Questionnaires were also sent by mail and
email to participating schools. Every effort was made by the researcher to ensure a high
level of participation by teachers taking part in the study. A return rate of 80.6% was
reported.

Delimitations

Although this study was conducted with an adequate number of teachers being
surveyed, the results came primarily from the coastal region of Mississippi. The
researcher intended to identify school districts with the largest numbers of fourth and
seventh grade teachers. All fourth and seventh grade teachers in the selected school
districts were given the opportunity to anonymously participate in the study. However,
only the fourth and seventh grade teachers who taught the same grade the previous year
were considered for data analysis. The researcher surveyed a larger number of school
districts than were actually needed in order to obtain an extensive representation of
teacher qualifications, experience, instructional methods, and professional development
experiences.
Justification

The results of this study identified which, if any, of these factors impacted student achievement. If it could be determined which teachers perform at the highest level and are most influential towards student achievement, teachers could easily be targeted for leadership positions and the retention of these teachers could be a priority of the employing school district. These results could also provide school districts with information that could recruit and place teachers in specific teaching assignments, identify teachers that would be most beneficial in mentoring roles for new and novice teachers, determine if writing-specific professional development would positively impact writing instruction and if certain methods of writing instruction impact student achievement. If results indicate particular factors that do impact student achievement significantly, teachers with positively correlated qualifications could be assigned to grades that administer the writing assessment. These teachers, if given leadership roles in the school system, could contribute to current writing programs.

School districts could also benefit from these teachers by having them coach and/or mentor other teachers specifically in writing instructional methods to increase student achievement in writing. If certain types of instructional methods prove to be more influential in the classroom, schools and school districts could encourage or even require teachers to participate in training and implement such methods in their teaching of the writing process. Likewise, school districts can better utilize and/or require certain types of professional development and teacher training, along with the implementation of material gained, if this study finds any significance between specific writing training and student achievement on the writing assessment.
Summary

Chapter I identifies the background and the purpose for this study. This chapter also includes the researcher’s intended research questions, assumptions and any delimitations that were expected throughout the course of the study. Also included in this chapter are any content terms and their definitions. The researcher also includes the justification and purpose for the conducted study. The next chapter, Chapter II, will be made up of a review of the literature on which the study is based. The research literature presented here will highlight previous studies and other pertinent background information on teacher qualifications, experience, instructional methods, professional development and their possible relationships to student achievement.
CHAPTER II

REVIEW OF THE LITERATURE

The theoretical framework and relevant literature pertaining to the study is presented in this chapter. The background information for both the intended independent variables and the dependent variable will be provided. This review of literature is divided into the following subsections pertaining to the study: the theoretical framework, qualifications, experience, instructional methods, and professional development. Teacher qualifications are subdivided into teachers’ degree level, level of certification, and subject area competence and qualified/highly qualified status. The link between the framework and previous research conducted is identified as the foundation of the study.

Theoretical Framework

Supporting literature is based on a theoretical framework that can be related back to the great philosopher of education (Dewey, 1938/1997). His philosophy introduced progressive education, which focuses primarily on pedagogy and the importance of the teacher in the classroom. Progressive education differs from traditional education in that the new education encourages teaching methods such as the implementing of hands on learning and allowing the students to learn by doing, or learning to write by writing. This is a major shift from traditional education, in which active participation from the students is highly discouraged. Dewey also believed that traditional methods of teaching focused on educating mature students. These methods used to teach subject matter were beyond what younger students could cognitively learn. He also implied that there was little or no opportunity for interaction between the student and the material being learned. Most importantly, Dewey believed in the value of the teacher in the classroom. As stated in
“Experience and Education,” “Books, especially textbooks, are the chief representatives of the lore and wisdom of the past, while teachers are the organs through which pupils are brought into effective connection with the material. Teachers are the agents through which knowledge and skills are communicated and rules of conduct enforced” (Dewey, 1938/1997, p.18).

Dewey is known as a continued supporter of the notion that teachers are the factors that make the difference in the classroom. He questioned students who were taught with traditional methods, such as automatic drills, and their abilities to adapt or apply their knowledge into new situations. Being an active participant in the process of learning helps students to make connections to other situations and encourages new learning and future experiences. Although students throughout time have been taught similar content and subject matter, the “quality of the experience” is what can and does make the difference in student academic success (Dewey, 1938/1997, p. 27). Teachers play an unprecedented role in the learning process. It is widely known that teachers have the responsibility to teach and personally connect with every student in the classroom to ensure their success. Even John Dewey in the early 1900s believed:

It is his/her (the teacher) business to be on the alert to see what attitudes and habitual tendencies are being created. In this direction he must, if he is an educator, be able to judge what attitudes are actually conducive to continued growth and what are detrimental. He must, in addition, have that sympathetic understanding of individuals as individuals which gives him an idea of what is actually going on the minds of those who are learning. (Dewey, 1938/1997, p. 39)

How do the beliefs of John Dewey relate to present day education? Currently, just as in the past, students show greater gains when they are given the opportunity to be
active in their learning and have teachers who are effective. Teachers who use a variety of methods are more likely to appeal to more student learning styles. Educators in the twenty-first century also see the importance of teaching subject matter in ways to ensure that connections can be made to each student in the classroom. Teaching content in isolation depends on the same setting and/or the same environment every time to have the best chances of retrieval. However, when content is taught through interactive learning, students are able to develop a deep understanding of not only the material, but the overall concept as well. They have the ability to apply the knowledge to other situations and experiences and apply what they have learned. Present day educational philosophies are very similar in nature, placing high importance on pedagogy, teacher effectiveness, accountability and the success of all students (Dewey, 1938/1997).

According to Douglas Reeves (2005), “the four elements of No Child Left Behind—standards, accountability, testing, and choice—are very likely to remain” as part of our education system (p. 1). Reeves believes that for instruction to be effective and meaningful, accountability has to focus on more than test scores. Although some research suggests that data-driven decision making is beneficial, Reeves implies that some test results are quite possibly not the end result of persistent test preparations and drilling of specific skills, but rather the “increase in nonfiction writing, editing, rewriting, and collaborative scoring by teachers” (Reeves, 2005, p. 3).

Teachers should be held accountable for how and what they are teaching because it is in the best interest of his/her students, not because there is a government mandate requiring them to do so. As with writing, most states have established standards for writing instruction. These standards usually require students to express themselves
through expository and persuasive writing by using standard conventions of English grammar, spelling and punctuation (Reeves, 2005). Along with the teaching of the conventional writing process, which includes outlines, drafts, revisions and teacher feedback, students should also be writing to establish a desire to write to make real life connections with gained knowledge along with self expression (Reeves, 2005).

Also implied by Reeves is the importance of effective communication regarding accountability between all stakeholders. Teachers, students, parents, and administrators should all be on the same page when it comes to accountability. Communication between all those involved should address individual student performance, teaching methods, effectiveness of the school system as a whole, and the effectiveness of programs used by the teacher (Reeves, 2005). To communicate effectively and ensure accountability on all levels, students deserve to have daily access to their progress and grades and parents should be allowed information about individual students, the school as a whole, and information about specific programs. Likewise, teachers and administrators should provide clear, accurate, comprehensive information regarding expectations and accountability (Reeves, 2005).

In his quest to determine how standards and assessments effected student achievement, Douglas Reeves conducted a four year long study that looked closely at students in different school settings, both elementary and high school. The schools involved in the studies maintained detailed records indicating the types of instructional practices and strategies that were being used on a daily basis. The findings of the study indicated “some consistent associations between some classroom strategies (for example, performance assessments that require writing) and student achievement in a wide variety
of tests and subjects” (Reeves, 2005, p. 185). He found that there were five characteristics that were common to all of the high achieving schools that were involved in the study. These characteristics were:

1. A focus on academic achievement
2. Clear curriculum choices
3. Frequent assessment of student progress and multiple opportunities for improvement
4. An emphasis on nonfiction writing
5. Collaborative scoring of student work (Reeves, 2005, p. 187).

Reeves identified the schools in his study as being 90/90/90 schools. To be considered a 90/90/90 school, “more than 90% of the students are eligible for free and reduced lunch, more than 90% of the students are from ethnic minorities, and more than 90% of the students met or achieved high academic standards, according to independently conducted tests of academic achievement” (Reeves, 2005, p.186). This was of major importance in the study, because most often poverty, ethnicity and student achievement are considered to be related.

In many cases, low performing schools, where good teachers are needed, are filled with teachers who are likely to be not as qualified as teachers who are placed in better performing schools. Reeves’ study contradicts the notion that students student success is determined by poverty and minority enrollment in schools and implies that the teacher and instructional strategies and methods used in the classroom can truly make a difference. This study coincides with the notion that good, strong, effective teachers should be placed in needy schools. By focusing on the five characteristics that were
common in the 90/90/90 schools, schools across the country can see strong, positive instruction and student success (Reeves, 2005).

Over the past decade or so, numerous research studies have been conducted with mixed results regarding factors impacting student learning (Chingos & Peterson, 2011; Clotfelter, Ladd, & Vigdor, 2007b; Croninger, Rice, Rathbun, & Nishio, 2007; Darling-Hammond, 2000; Darling-Hammond, Berry, & Thoreson, 2001; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005; Garet, Porter, Desimone, Birman, & Yoon, 2001; Goldhaber & Brewer, 2000; Kane, Rockoff, & Staiger, 2008; Swain, Graves, & Morse, 2005a, 2005b, 2006, 2007) each study focuses on different factors impacting student achievement, they consistently identify one of the most important factors in student success as the effectiveness of the teacher delivering instruction in the classroom. According to Rivers and Sanders (2002), “differences in teacher ability are substantial, and if students are assigned to consecutive ineffective teachers, the impact on student achievement in the short and long terms can be devastating” (p. 13). In order for school districts to avoid students being assigned to ineffective teachers consecutively, it is necessary to be aware of the qualities that make an effective teacher.

Teacher effectiveness can be defined in different ways. In a National Comprehensive Center for Teacher Quality research synthesis compiled in 2008, Goe, Bell, and Little provide a five-point definition of teacher effectiveness. The following five points were developed to provide a clear, concise meaning for measuring teacher effectiveness.
1. Effective teachers have high expectations for all students and help students learn, as measured by value-added or other test-based growth measures, or by alternative measures.

2. Effective teachers contribute to positive academic, attitudinal, and social outcomes for students such as regular attendance, on-time promotion to the next grade, on-time graduation, self-efficacy, and cooperative behavior.

3. Effective teachers use diverse resources to plan and structure engaging learning opportunities; monitor student progress formatively, adapt instruction as needed; and evaluate learning using multiple sources of evidence.

4. Effective teachers contribute to the development of classrooms and schools that value diversity and civic-mindedness.

5. Effective teachers collaborate with other teachers, administrators, parents, and education professionals to ensure student success, particularly the success of students with special needs and those at high risk for failure. (p. 8)

Goe et al. (2008) imply that it is a combination of qualities that teachers possess that contributes to their effectiveness. However, teachers are often classified as being effective by the success of their students’ achievement based on how well they perform when testing. The Marzano Research Laboratory (2009) states that “a teacher who is classified as ‘most effective’ (i.e., at the 98th percentile in terms of his or her pedagogical skill) will be expected to produce student achievement that is 54 percentile points higher than the achievement produced by a teacher who is classified as ‘least effective’ (i.e., at the second percentile in terms of his or her pedagogical skill)” (p. 3).
There is a plethora of research examining effective teachers, teacher variables and student achievement. In the second chapter of *On Excellence and Teaching*, Thomas Good describes his experiences with four decades of educational research and the attempt to identify the progress of education (Good, 2010). Good (2010) describes how research in the late sixties focused primarily on who the teachers were rather than what they were actually doing in the classroom. Other studies in the late sixties and late seventies (Coleman et al., 1966; Heath & Neilson, 1974; Jensen, 1973) focused on factors outside of the classroom such as home circumstances and heredity to imply that the impact of teaching was exceedingly small.

Over the course of the next decade, several researchers began to study the actual effects of teachers and their impact on student achievement (Anderson, Evertson, & Brophy, 1979; Good & Grouws, 1979; Stallings, Cory, Fairweather & Needels, 1978). The results of four decades of educational studies do indeed imply that teachers make a difference in the classroom. Good and Grouws (1977, 1979) studies focused on mathematics and student achievement. By looking closely at teachers’ methods of delivering math instruction, specifically whole group or individualized instruction, they determined that the way students received mathematical content from their teacher impacted how much they learned. During the study, teachers focused on the meaning of math and presented ideas in a direct, clear, and coherent fashion. They involved students actively in discussing math (Good & Grouws, 1979). This supports the philosophy of John Dewey in that students who are engaged in their learning get more out of what they are being taught. In the 1980s, Stigler, Lee and Stevenson (1987) studied the differences between the education of children in America and the education of children in Japan and
China. They looked closely at types of instructional methods, the amount of time that was spent on instruction and the levels of engagement of the students at the three sites. The authors’ study concluded:

American children fail to receive sufficient instruction for the following reasons: They spend less time in school each year, less time each day in classes, less time in the school day in mathematics classes, and less time in each class receiving instruction. The classes were organized so that American children were frequently left to work alone at their seats on material in mathematics that they apparently did not understand well, they engaged in many irrelevant activities, and they spent large amounts of time in transition from one activity to another. (Stigler et al., 1987, pp. 1284-1285)

This study identifies again the importance of the teacher in the classroom. The impact of how the teacher delivers instruction as well as other variables can and does influence student achievement. According to the National Partnership for Teaching in At-Risk Schools (2005), teachers must possess a wide variety of effective teaching methods, a firm grasp on subject area knowledge, and deep understanding of how students learn in order to be considered effective in the classroom.

Domains for Teacher Responsibility

In Enhancing Professional Practice: A Framework for Teaching, Charlotte Danielson (1996) describes how the framework discussed in her book identifies “teacher’s responsibilities that have been documented through empirical studies and theoretical research as promoting improved student learning” (p. 1). Danielson explains how those in other professions, such as attorneys and physicians, consider their place of
business as their practices. Educators should also consider their work in the classroom as a practice. Both novice and veteran teachers, have the ability to follow procedures and practice various instructional methods in different ways each day to reach all students. Frameworks encourage structured conversations between educators and allow productive collaboration to guide new teachers and enhance veteran teachers’ instruction. Having a set framework and following specific “procedures are the public’s guarantee that the members of a profession hold themselves and their colleagues to the highest standards” (Danielson, 1996, p. 2).

Danielson’s framework for professional practice in teaching includes twenty-two components, which are grouped into four domains of teaching responsibility: planning and preparation, classroom environment, instruction, and professional responsibilities (Danielson, 1996).

Domain one contains components that identify the organization of the content that is to be taught by the teacher, more specifically, how the teacher intends to deliver instruction. The six components in this domain include the following: (1) Demonstrating Knowledge of Content and Pedagogy, (2) Demonstrating Knowledge of students, (3) Selecting Instructional Goals, (4) Demonstrating Knowledge of Resources, (5) Designing Coherent Instruction, and (6) Assessing Student Learning (Danielson, 1996). When developing lessons, teachers should consider all six components of Domain One when planning instruction to ensure students’ success.

Domain Two focuses on the classroom environment and all interactions that happen within the classroom. Danielson (1996) explains that even though all classroom interactions are not instructional, they all are important and impact the culture of learning.
within each school day. Danielson (1996) also includes that “when students remember their teachers years later, it is often for the teacher’s skill in Domain Two. Students recall the warmth and caring their favorite teachers demonstrated, the high expectations for achievement, and the teacher’s commitment to their students” (Danielson, 1996, p. 31). Like Domain One, Domain Two includes several components. These five components include: (1) Creating an Environment of Respect and Rapport, (2) Establishing a Culture for Learning, (3) Managing Classroom Procedures, (4) Managing Student Behavior, and (5) Organizing Physical Space (Danielson, 1996).

Domain Three, instruction, is considered the heart of teaching. The focus of this domain is the mission of all educational practices, which is to increase student learning. Domain Three also has five components that help improve classroom instruction. These five components include: (1) Communicating Clearly and Accurately, (2) Using Questioning and Discussion Techniques, (3) Engaging Students in Learning, (4) Providing Feedback to Students, and (5) Demonstrating Flexibility and Responsiveness (Danielson, 1996). Teachers who are considered strong in Domain Three exhibit qualities that highlight their excitement for learning and the importance of what they are teaching. Students of these teachers “are engaged in meaningful work, which carries significance beyond the next test and which can provide skills and knowledge necessary for answering important questions or contributing to important projects” (Danielson, 1996, p. 32). These teachers are very encouraging and enthusiastic about what is being taught and content is important to both the teacher and his/her students.

The final domain, Domain Four, examines the role of the teacher as a professional. Professional Responsibilities of an educator often go beyond the walls of
the classroom. Parents and the community look at the professionalism of an educator based on not only what happens during the school day, but also how the teacher presents himself/herself outside of school and in the surrounding community. Danielson (1996) states that teachers who exhibit strong professional qualities are often “highly regarded by colleagues and parents” (p. 32). The six components of this domain also identify qualities of professional educators. Components of Domain Four include: (1) Reflecting on Teaching, (2) Maintaining Accurate Records, (3) Communicating with Families, (4) Contributing to the School and District, (5) Growing and Developing Professionally, and (6) Showing Professionalism (Danielson, 1996).

As described by Danielson (1996), strong effective teachers exhibit qualities from all four domains. The components within each domain are intermittently connected. Teachers cannot utilize only one domain and be as effective in the classroom as if he/she were to use all four. Danielson gives the example that “a teacher cannot demonstrate the highest level of skill in questioning and discussion techniques (Component 3b) if students do not feel the classroom environment is safe for taking risks and is one where their ideas will be respected (Component 2a)” (p. 30).

What is it that makes a good, effective teacher? Good and Brophy (2008) believe that effective teaching consists of a combination of variables that include, but are not limited to, expectations, opportunities, proactive classrooms, and task involvement. In fact, the mentioned research over the course of four decades implies that, “no single variable relates to student achievement independent of other instructional variables. Thus, the quality of teaching is necessarily determined by the relationships of among variables” (Good, 2010, p. 52). Could there be a specific variable or combination of
variables of Mississippi fourth and seventh grade teachers that impact student learning and/or student writing achievement the most? Good implies that for students to achieve at their best ability there needs to be a combination or a relationship among variables, rather than one single variable. It is the researcher’s intentions to determine if a teacher’s qualifications, experience, methods of instruction, and professional development impact the writing achievement of his/her students. The following is a summary of the literature pertaining to the stated variables and how they could possibly impact student achievement in writing.

Qualifications

Degree Level

Teachers today are under tremendous pressure to not only produce high scores on state standardized testing, but to show individual growth for each student. With increasingly high expectations and rigor in all aspects of education, teachers are often encouraged to teach across disciplines, actively engage students throughout the school day, and at the same time increase student test scores. To maintain the use of new ideas for instruction meaningful and exciting, teachers often return to the classroom. By enrolling in graduate school classes, teachers have the opportunity to collaborate with other educators, gain new pedagogical knowledge and at the same time gain an advanced degree. In an attempt to have more teachers continue their education and improve classroom instruction, school districts provide financial incentives once the advanced degree program is complete. While the intention is to have teachers to continuously improve their instruction from year to year, research shows that without some sort of
incentive, only a small amount of teachers practice efforts to improve their performance once it has reached an acceptable level (Ericsson & Charness, 1994).

Although teachers gain professional collaboration and new, innovative methods during this process, school districts that are faced with budget concerns may begin to rethink this allocation of funds, especially if research consistently finds degree levels to have no impact on student performance. Do these newly gained advanced degrees consequently impact student outcomes? Much research has been conducted over the past decade studying the effects of teacher qualifications on student achievement (Clotfelter, Ladd & Vigdor, 2007a; Croninger et al., 2007; Darling-Hammond et al., 2001; Goldhaber & Brewer, 2000; Harris & Sass, 2011; Rice, 2003).

Examining the effects of teachers who hold a master’s degree or higher has had mixed results. In the middle to late nineties, Dan Goldhaber and Dominic Brewer (2000) examined the effect of teacher degree levels on student achievement. Their studies focused on school-level variables, teacher characteristic variables, class level variables and teacher degree variables. The data used was derived from the National Educational Longitudinal Study between the years 1988 and 1990 (Goldhaber & Brewer, 1996). According to the data, approximately 24,000 eighth graders were tested in 1998 and later 18,000 of them were retested in 1990. They were tested in basic subject areas including math, science, English, and history. Overall, their sample size consisted of 5,113 students in math, 4,357 students in science, 6,196 students in English and 2,943 students in history. Teachers’ degree levels, basic demographic information, as well as school variables were analyzed. The results of the study identify that “few of the school, teacher, or class coefficients are statistically significant in the expected direction”
(Goldhaber & Brewer, 1996, p. 205). Their findings indicate that “the percentage of teachers with at least a master’s degree is statistically insignificant in all four subject areas” (Goldhaber & Brewer, 1996, p. 205). Likewise, Goldhaber and Brewer’s 1998 study found “no evidence that a teacher with an advanced degree in a subject other than the one he or she teaches was any more effective than a teacher without an advanced degree” (p. 137).

While Goldhaber and Brewer’s (1996, 1998, 1999, 2000) studies focus on teacher qualification effects in secondary schools, a similar longitudinal study examines the effects of elementary aged students. In 2007, Croninger et al. conducted a study using data from the Early Childhood Longitudinal Study (ECLS), which looked closely at teacher qualifications, the effects on elementary students over the course of four years as well as other factors. The study began with approximately 23,000 kindergarten students and ended with a sample size of 5,167 students, 1,342 teachers, and 452 elementary schools at the end of the four year period. The researchers intended to determine the variance between students taught by specific teachers, variance between teachers at specific schools, and variance between schools (Croninger et al., 2007).

The first component of the study focused on the achievement of each individual student, the second component examined the effects of teacher quality, including degrees and certification type, and the third component looked at teacher qualifications and the school in which he/she taught. The researchers modeled their study closely to that of Goldhaber and Brewer’s studies (1996, 1999), which emphasized the effects on elementary students’ achievement rather than high school students. The differences noted during the study were that teachers in elementary schools typically did not hold
subject area degrees and their certification areas were divided into one of two categories, early childhood or elementary education. Their overall findings indicate those teacher qualifications, specifically course work taken and the type of degree, do impact elementary students’ achievement (Croninger et al., 2007). Like Goldhaber and Brewer’s studies, effects of advanced degrees in this particular study also indicate no significance in either reading or mathematics achievement. However, these results do indicate a relationship between first-grade student achievement and specific teacher qualifications (Croninger et al., 2007).

The mentioned studies indicate a positive influence for teacher education criteria, emphasizing either specific coursework or an emphasis in a specific subject area that is taught. It is true that being more knowledgeable in the subject area being taught is helpful in delivering instruction. However, teachers who also possess strong pedagogical content knowledge are more effective than those with content knowledge alone (Goodwin, 2010). Teachers are often very effective when they not only know what needs to be taught, but also how it needs to be taught. Possessing both of these qualities enables teachers to be more effective in the classroom. Above all, these teachers are considered to be highly qualified in their area of the education field. According to NCLB, a teacher is highly qualified if he/she holds at least a bachelor’s degree from a credited institution, being fully certified and/or licensed by the state, excluding any emergency or provisional certificates, and demonstrating competence in core subject areas taught (Goodwin, 2010). In 2003, Betts, Zau, and Rice conducted a study that closely examined The San Diego Unified School District. They focused on data from 1998-2000 to determine if school, student and teacher characteristics impacted student achievement.
Looking at qualifications such as experience, education level, teacher credentials and subject content area knowledge, their findings were both expected and in some ways surprising. For example, they found that students who had English teachers who held doctorate degrees in English and math teachers who held at least a master’s degree in math had higher student gains in those subjects. Surprisingly, they found some instances where students who were taught by either emergency certificated teachers or teachers who had very little experience actually out performed others who had teachers with more than a decade of experience and held full, traditional certificates (Betts et al., 2003, p. xv). Similar to the research on the effects of advanced degree levels and teacher education and preparation, many studies have been conducted regarding teacher certification and the effect on student achievement.

Certification

Do teachers who go through a traditional education training program and hold a regular educator’s license have more student success than those who enter the teaching profession through alternative certification? Teachers, who hold regular licensure after completing a set number of hours in education classes in a university and have passed state exams, typically have higher student achievement. Teachers are often very effective when they know both what needs to be taught as well as how it needs to be taught.

According to Clotfelter et al. (2007b), teachers who “operate under a lateral entry license exhibit a statistically significant negative effect on student achievement” (p. 677). In the state of North Carolina, lateral entry or alternative certification, “licenses are issued to individuals who hold at least a bachelor’s degree with a minimum of 2.5 GPA and the equivalent college major in the area in which they are assigned to teach” (p. 677).
In 2000, Dan Goldhaber and Dominic Brewer conducted a study that examined how teachers’ training related to student achievement. The study focused on how different types of teacher certification affected student performance and whether state-by-state differences in licensure requirements affected student achievement. Data was drawn from the National Educational Longitudinal Study of 1988 (Goldhaber & Brewer, 1996). The students were first surveyed in 1988, when they were in the eighth grade and later resurveyed in 1992, when they were in the twelfth grade. This data provided the researchers with detailed teacher information as well as class level information that related the teachers directly to the students by subject. The student sample included 3,786 mathematics students and 2,524 science students. The teacher sample consisted of 2,098 math teachers and 1,371 science teachers. The teachers indicated whether their certification was standard, probationary or emergency, private school, or if they were not certified at all. The researchers found that over 86% of the teachers surveyed held at least standard certification (Goldhaber & Brewer, 2000). As for licensure requirements for each state, the NELS: 88 data could not provide complete information due to the lack of the year and state each teacher obtained their licensure (Goldhaber & Brewer, 2000).

Overall, findings indicate that the “certification a teacher holds is an important determinant of student outcomes” (Goldhaber & Brewer, 2000, p. 142). Specifically, students performed better if their teacher held a standard, probationary, or emergency certification in math. Likewise, students who had teachers that were private school certified or not certified in science performed negatively. Surprisingly, students of teachers who held emergency certification in mathematics did no worse than students of teachers who held standard certification.
The researchers found little evidence that student achievement is effected by state-to-state licensure requirements. However, the possibility of a relationship implies “that states that have these (higher certification requirements) should have teachers whose students perform better” (Goldhaber & Brewer, 2000, p. 140). In fact, some evidence suggests that states that have admission testing for teachers have probationary certificated teachers with student scores that outperform teachers with standard certification. Findings also indicate that teachers of both math and science that held a PhD did not have higher test scores than those who held lesser degrees. However, just as in Goldhaber and Brewer’s previous study, “math students who have teachers with Bachelors or Masters degrees in mathematics are found to have higher test scores relative to those whose teachers have out-of-subject degrees” (Goldhaber & Brewer, 2000, p. 141). In addition, this study indicates that teachers’ selection and amount of subject-specific coursework can and does impact student achievement.

Overall, in agreement with previous studies conducted in 1997, “teachers with subject-specific training (a mathematics degree or certification) outperform those without subject-matter preparation. Students of teachers who are certified out of field (in math) do worse than students whose teachers have standard credentials” (Goldhaber & Brewer, 2000, p. 141). These results also imply that teachers with certification in the area in which they teach produce higher student achievement.

Subject Area Competence

It is critical for teachers to be experts in the subject matter in which they are teaching. In 2007, Linda Darling-Hammond stated that “expert teachers were the most important and the most inequitably distributed school resource for improved student
performance” (p. 256). Now, more than ever, with the guidelines of NCLB, it is critical for teachers to be competent in their subject areas. Many studies have been conducted to examine if teacher subject area knowledge impacts student achievement (Goldhaber & Brewer, 1996, 1999; Heck, 2007; Hill, Rowan, & Ball, 2005). Most of these studies focus on middle school mathematics and science, with few examining elementary school students in other subject areas. In a study conducted by Hill et al. (2005), teachers’ content knowledge in mathematics was closely examined to determine if a relationship exists between this teacher quality and student mathematics achievement. The study looks closely at the work it takes to adequately teach mathematics effectively. The researchers define the work of teaching mathematics as the “explaining of terms and concepts to students, interpreting students’ statements and solutions, judging and correcting textbook treatments of particular topics, using representation accurately in the classroom, and providing students with examples of mathematical concepts, algorithms or proofs” (Hill et al., 2005, p. 373).

The results of the study indicated that teachers’ content knowledge, pedagogical content knowledge and curriculum knowledge together positively impacted student gains in mathematics achievement for students in grades one and three (Hill et al., 2005). In 1999, Goldhaber and Brewer conducted another study that examined teacher qualifications such as their type of certification and their subject area qualifications. Surprisingly, they found that regardless of the type of certification a teacher held, if they held a degree in their subject area, especially in math, their students outperformed others who had teachers without subject area degrees (Goldhaber & Brewer, 1999). Likewise, Wayne and Youngs (2003) found positive results regarding mathematics knowledge of
teachers and the mathematics achievement of their students. They found that teachers who held degrees in math and had completed coursework specifically in mathematics positively impacts students’ mathematics scores.

Louisa Moats and Barbara Foorman (2003) conducted a four-year, longitudinal study in which they examined the effects of teacher knowledge and teacher competency on student achievement in reading. The teachers involved in the study had experience ranging from zero to thirty years of teaching time in a classroom. Moats and Foorman (2003) focused on kindergarten to second, second and third, and then third and fourth grade teachers to “document their understanding of reading instruction and language concepts critical for explicit reading instruction” (p. 36). Their findings indicate that approximately twenty percent of the teachers that were surveyed “demonstrated very limited knowledge of information that would seem required for elementary certification” (Moats & Foorman, 2003, p. 36).

Moats and Foorman’s (2003) results support the notion that teachers who possess a strong hold on their content or subject area knowledge are more prepared to deliver effective instruction in that area. Moats and Foorman also indicate that “instruction of reading, spelling, and writing depends on a specialized content knowledge base that distinguishes it from other academic domains” (p. 25). Also indicated in this study is the positive correlation between subject-specific professional development and higher student achievement. Likewise, Phelps and Shilling (2004) define teacher content knowledge and how it differs from pedagogical content knowledge. Their work focuses on how reading is taught in the elementary classroom. “Just as teachers of mathematics must have knowledge of place value to teach students to add, teachers of reading need
knowledge of letters and sounds to teach students to decode words” (p. 5). Their results indicate that teachers who teach reading and language arts require “specialized knowledge of content” (p. 20).

Qualified/Highly Qualified

According to NCLB, it is the nation’s intention to have a teacher who is not only qualified to teach, but highly qualified to do so in every classroom. Although the ideas and goals of NCLB, more recently known as BESA, are fairly recent, the notion of making sure all children are educated to the highest potential has been part of the educational system of the United States for many years. Some of the qualifications that now are necessary for teachers to be considered highly qualified through NCLB have been factors determining teacher quality since the early 1800s. According to Outlaw, Clement, and Clement (2007), “the degree level of qualification was determined through various means, ranging from an examination by a minister to ascertain the candidate’s soundness in the faith to written examination in subject areas” (p. 27). Sadly, in education’s earliest times, a person who simply showed interest in teaching or a knowing of a vacant position could have been the primary criteria for obtaining a teaching job. While the criterion for teaching has changed drastically over the years, the focus for education has remained the same. As stated by Outlaw et al., (2007) “no matter the student demographics or the curriculum, the bottom line is the same—an effective teacher who meets students’ needs has been and will be the critical factor in schools” (p. 29). As previously stated, much research has been conducted on the impact of specific teacher qualities, such as the degree level, type of certification, and/or subject area knowledge of the teacher (Outlaw et al., 2007). While many of these studies indicate
positive impacts on student achievement, inconsistencies remain on the influence these qualities have on student growth (Carr, 2006; Darling-Hammond, 2000; Goldhaber, 2002; Goldhaber & Brewer, 1996; Hanushek, 1997; Heck, 2007).

More recently, Ronald Heck (2007) conducted a study examining the relationship between teacher quality and student achievement growth rates. His longitudinal study focused primarily on 14,000 students’ growth in reading and math over a period of time. The findings of this study support the notion that the quality of the teacher is positively related to achievement levels in both reading and math (Heck, 2007). Heck (2007) also notes in his study that “higher teacher quality was associated with reduced gaps in student learning rates” (p. 420), which is the primary focus of No Child Left Behind (2002).

While most studies thus far have examined the effects of highly qualified teachers and high school student achievement, Phillips’ (2010) longitudinal study focuses on the characteristics of highly qualified teachers and their effects on first grade students. The study focuses on data from the Early Childhood Longitudinal Study (ECLS-K), which began with students who were kindergarten in 1998 and ended with a sample of students ending their first grade school year in 2000. All of the students in the sample were pretested and retested in reading and mathematics periodically throughout the course of the study. The first important findings of the study indicate a negative relationship between teachers who held full or advanced certification and student achievement in mathematics. Phillips suggests this is related to the difference in the training of elementary, middle, and high school teachers (Phillips, 2010).

According to Phillips, “elementary teachers are trained differently and have essentially different jobs than middle and high school teachers” (p. 484). Elementary
teachers teach all subjects each day, where middle and high school teachers teach their specific subject for a set amount of time. Also, early grade teachers, especially first grade, are responsible for the teaching of reading and basic language arts concepts (Phillips, 2010). This being said, a highly qualified first grade teacher, will spend the majority of his/her day teaching reading and language art skills (Rock & Stenner, 2005). It is for this reason that student gains in mathematics would be expected to be lower than gains in reading (Phillips, 2010).

Secondly, Phillips’ study indicates a positive relationship between highly qualified teachers who held subject-specific graduate degrees. This supports the 1997 and 2000 research of Goldhaber and Brewer, which also indentifies that subject-specific degrees impact student achievement. Phillips’ study concludes “while this finding demonstrates that teacher quality measures can indeed influence elementary students’ achievement gains, current education policy motioning for highly qualified teachers in every classroom does not mandate graduate degrees, let alone subject-specific graduate degrees” (Phillips, 2010, p. 485).

Experience

Although some studies involving teachers’ degree level and certification have been considered to be inconclusive, studies designed to examine the effect of teacher experience on student achievement indicate that classroom experience does matter. Several studies conducted over the course of the past decade have indicated that students do benefit from teachers who have more time in the classroom (Clotfelter, Ladd, & Vigdor, 2006, 2007a; Gordon et al., 2006; Grissmer, Flanagan, Kawata, & Williamson, 2000; Harris & Sass, 2011; Kane et al., 2008; Rice, 2003; Rivers & Sanders, 2002).
According to many of these studies, the largest increase in student growth is between teachers’ first and second year of teaching. Gordon et al. (2006) agree that teachers have “no substantial improvement after the third year in the classroom” (p. 27). Likewise, Douglas Harris and Tim Sass (2011) state that teachers have the largest gains from experience in the first few years and gradual, continuous gains in years after the fifth year of teaching (Harris & Sass, 2011).

Clotfelter et al. (2007a, 2007b) analyzed teachers from North Carolina who had twenty plus years of experience. Although the teachers continued to have growth from year to year, the highest levels of growth “occurred during the first few years of teaching” (p. 676). This is believed to be due to novice teachers becoming more familiar with the job in general and teachers “learning by doing” (p. 676). Clotfelter et al. (2007b) found “clear evidence that teachers with more experience are more effective in raising student achievement than those with less experience” (p. 676). Another factor that is considered when looking at new teachers’ effectiveness in the classroom is the focus they have on their job as a whole. Most new teachers spend many extra hours before and after school, with little concern regarding other commitments. As teachers continue to improve their teaching by enhancing lessons the second, third, or fourth time they are taught, another factor becomes influential in the delivery of their instruction (Clotfelter et al., 2006, 2007a, 2007b).

Instructional Methods

While state frameworks, and now more recently Common Core State Standards (CCSS) determine what should be taught in each grade level, teachers ultimately make the decision how material is delivered to his/her students. This is considered each
teacher’s method of instruction. Studies indicate that instructional methods can vary greatly across districts, schools and even grade levels (CCSS, 2010).

Is there a specific method, combination of methods, or type of instruction that is known to positively impact student learning more than others? Bruce and Salzman (2002) state that when combining multi-sensory, phonics based instruction techniques with guided reading strategies, teachers and instructional methods can and do have a positive impact on early literacy learning.

Likewise, developers of the AIMS Education Foundation believe that students should be actively, physically, engaged when learning math and science concepts. In staying with the parameters of CCSS, learning and lessons are encouraged to include several disciplines and integrate subject areas whenever possible. By using creative, innovative, and/or systematic strategies in the classroom to teach all subjects, especially writing, teachers can offer students valuable tools to use application in all of their learning. School districts across the country have taken these suggestions and greatly invested time, funds, and resources to aid in teaching students the big picture (Bruce & Salzman, 2002).

One way to ensure students are receiving engaging instruction is for teachers to have ample opportunities to learn from professional development sessions that are specifically designed for the teacher and students’ needs. Teachers who are involved in programs designed with student achievement in mind are more likely to use new strategies and methods in his or her classroom (Bruce & Salzman, 2002; AIMS Foundation, 2012).
Marzano’s Essential Nine

Marzano, Pickering, and Pollock’s (2001b) Classroom Instruction that Works: Research-Based Strategies for Increasing Student Achievement, examines research conducted on the instructional strategies used by thousands of teachers in K-12 classrooms over a variety subject areas. As a result of the many studies analyzed throughout the book, the authors give nine essential categories of instructional strategies that are proven to improve student achievement. These nine categories of effective instructional strategies are as follows:

1. Identifying similarities and differences
2. Summarizing and note taking
3. Reinforcing effort and providing recognition
4. Homework and practice
5. Representing knowledge
6. Learning groups
7. Setting objectives and providing feedback
8. Generating and testing hypotheses
9. Cues, questions, and advance organizers (Marzano et al., 2001b)

Research suggests that students require explicit structure when they are first taught to identify similarities and differences. According to Marzano, Norwood, Paynter, Pickering, & Gaddy (2001a), comparing, classifying, creating metaphors, and creating analogies are all included in the first instructional strategy category, Identifying Similarities and Differences (Marzano et al., 2001b). Students can better understand these strategies when teachers use graphic organizers and symbolic representations as
part of their instruction. In *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*, recommendations for effective classroom practice include giving students models to compare information, using familiar content, giving students graphic organizers, guiding students as needed, and assessing the impact on students by using rubrics (Marzano et al., 2001b).

The second instructional strategy category, Summarizing and Note Taking, encourages teachers to help students determine which part of the presented material is important, which is less important, and which is reoccurring (Marzano et al., 2001b). “Research tells us that effective summaries involve deleting, substituting, and keeping some information, and that to carry out these processes well, students must analyze the information they are working with in a complex way” (Marzano et al., 2001a, p. 55). Teachers are encouraged to guide students in “reciprocal teaching” by teaching them to summarize what has been read by pointing out important areas, use questioning techniques to review the material, clarify any areas that are unclear, and predict what will happen in the next portion of the text (Marzano et al., 2001a).

Reinforcing Effort and Providing Recognition, which is also the third instructional strategy category, helps teachers to reach their students by truly focusing on student motivation. Although most teachers believe that an increase in student motivation parallels with an increase of student success, research has recently “demonstrated the roles reinforcing effort and providing recognition have in the process of motivating students” (Marzano et al., 2001a, p. 95). Likewise, research suggests that student motivation and rewards are most effective when they are linked with an expected level of student performance. In this third category of instructional strategies, teachers
are given a variety of strategies that can be used to increase both student enthusiasm and effort in the classroom. Students who understand the importance of their efforts are typically more likely to put forth more effort on daily classroom tasks, therefore more likely to be successful. Marzano et al., (2001a) encourages teachers to chart student effort and achievement so students can “readily see the relationship between their effort and achievement” (p. 99).

The fourth category of instructional strategies, Homework and Practice, are necessary for students of all ages. Homework allows students to practice topics and concepts that are being taught in the classroom. Teachers should, however, assign lower grades less homework than upper grades, make sure that parents are involved minimally, help students understand the reason for assignments, remember that students need adequate practice to master newly learned skills (Marzano et al., 2001a, p. 117). Teachers are encouraged to establish and communicate their homework policies to both students and their parents, clarify the purpose of the homework assignment, determine a procedure for students to record homework assignments, and check and/or comment on all homework assigned and completed by students (Marzano et al., 2001a).

Teaching students to Represent Knowledge can be the most important part of an educator’s job. This fifth category of instructional strategies identifies the two ways that information is presented in the classroom. Marzano et al., (2001a) describe instruction as being either linguistically or nonlinguistically. Research suggests that most instruction is delivered by means of the teacher talking to his/her students to share information or by having students read to obtain new information. Unfortunately, “students are commonly left to their own devices to generate nonlinguistic representations for new knowledge.
However when teachers help students in this endeavor, the effects on achievement are strong” (Marzano et al., 2001a, p. 143). It is recommended by Marzano and his co-authors that teachers use the following five classroom strategies to help students understand how to represent learned knowledge:

1. Graphic organizers
2. Pictographic representations
3. Mental images
4. Physical models, and
5. Kinesthetic representations (Marzano et al., 2001a, p. 143)

The use of Learning Groups, which is also the sixth recommended instructional strategy, has been used by teachers for quite some time. Much research has been conducted regarding the effects of grouping students into various groups. These studies “indicate that students who work in cooperative groups consistently outperform students who don’t” (Marzano et al., 2001b, p. 87). There are five elements of grouping students into cooperative groups that can help make learning more successful. According to Johnson and Johnson (1999), these five elements include positive interdependence, face-to-face promotive interaction, individual and group accountability, interpersonal and small group skills, and group processing. It is also recommended that teachers use various methods for grouping students, to encourage students to work with different classmates (Johnson & Johnson, 1999; Marzano et al., 2001a).

The seventh category of instructional strategies is Setting Objectives and Providing Feedback. Research shows that student achievement increases when clear, obtainable, and flexible goals are set by classroom teachers. Providing students with
feedback regarding their progress on meeting goals allows them to reflect and think about what and why they are learning. According to Marzano et al., (2001a) “students learn most efficiently when they know the goals or objectives of a specific lesson or learning activity” (p. 175). Knowing the goals or objectives for lessons provides students with a greater sense of control over their learning.

Research on Generating and Testing Hypotheses, the eighth category of instructional strategies, can be defined as the “application of knowledge” (Marzano et al., 2001b, p. 104). Teachers are encouraged to use a variety of structured tasks in the classroom to help students develop the ability to use both inductive and deductive reasoning when generating and testing hypotheses. Marzano et al., (2001a) suggest teachers use the following six types of tasks in the classroom to promote “generating and testing of hypotheses: systems analysis, problem solving, decision making, historical investigation, experimental inquiry, and invention” (p. 197). Simply asking students to explain their thinking can help them enhance their understanding of concepts, while forming hypotheses, and later testing them.

The ninth and final category of instructional strategies, Cues, Questions, and Advance Organizers, provides teachers with techniques that help students retrieve what they already know about a topic (Marzano et al., 2001b). Research suggests that using cues and questions helps students focus on what is important. Teachers are encouraged to focus on important information, use explicit cues during instruction, ask inferential questions, and to ask higher-level, analytic questions. Researchers explain (Marzano et al., 2001b) how the use of advance organizers, such as expository, narrative, graphic, and
skimming materials, can help students to easily connect their background knowledge with new material and concepts (Marzano et al., 2001a; 2001b).

Research suggests that teachers who implement and support a variety of strategies to teach writing are likely to impact student success. This allows all students’ learning styles to be addressed. According to Swain et al. (2007), the National Writing Project’s top ten suggested teacher strategies positively influencing student writing include the following:

1. Student choice in the selection of topics for writing
2. Emphasis on reading-writing connections
3. Time devoted to prewriting activities or brainstorming activities
4. Opportunities to read one’s writing aloud to peers
5. Teacher-student conferences to discuss writing in process
6. Mini-lessons to teach directly to specific student’s need and interest
7. Encouragement to revise or try out several approaches to a certain topic
8. Close editing for diction, mechanics, and syntax
9. Publishing student writing in various outlets and venues beyond the classroom
10. Modeling examples of good writing (Swain et al., 2007, p. 41)

6 + 1 Traits Writing Model

The students who participated in the 2007 National Writing Project study were pretested prior to their teachers’ participation in the professional development and post-tested at the end. The method of evaluating the writing samples was developed by using a rubric from the 6 + 1 Traits Writing model (Culham, 2003), with a few minor
modifications. “The 6 + 1 Traits Writing model includes the following seven traits: Ideas, Organization, Voice, Word Choice, Sentence Fluency, Conventions, and Presentation” (Kozlow & Bellamy, 2004, p. 4). The revised rubric used for analyzing the student writing, the NWP Analytic Writing Continuum, thoroughly assessed content, structure, stance, sentence fluency, dictation or language, and conventions. The results of the study indicate that the practices and methods of classroom writing instruction do impact student achievement in writing. (Culham, 2003; Kozlow & Bellamy, 2004).

Teachers who actively implemented the ten suggested strategies had significant gains compared to the teachers who did not. In fact, “the comparison students, who presumably did not receive similar writing instruction and practice opportunities, showed changes from pre to post writing assessment that were close to nil” (Swain et al., 2007, p. 24). According to Kozlow and Bellamy (2004), teachers who implement the 6+1 Trait Writing model and follow the suggestion of consistency will have student gains in writing. The introduction of each trait should involve the following procedure:

1. Definition of the trait
2. Activity involving the trait (e.g., read aloud, video tape)
3. Group practice using the trait, involving reading sample papers and orally suggesting feedback based on trait criteria, and scoring the trait to compare with the group and official score
4. Individual practice in scoring and providing feedback, using sample papers with a partner (the emphasis is on effective feedback specific to the trait and specific to the paper)
5. Whole-group comparison of scores to introduce the concept of scoring consistency (Kozlow & Bellamy, 2004, p. 6)

The implementation of the 6 + 1 Trait Writing Model uses feedback and assessment throughout the writing process. These two instructional methods are included in several lists of effective teaching strategies that Robert Marzano believes help to increase student achievement in various areas (Marzano, 2003).

Recently, the National Center for Educational Evaluation and Regional Assistance released a publication examining the impact of the implementation of the 6 + 1 Trait model in fifth grade classrooms in 74 Oregon schools (Coe, Hanita, Nishoka, & Smiley, 2011). The researchers were extremely careful to ensure that the study was valid, unlike the two prior studies focusing on the 6 + 1 Trait model (Arter, Spandel, Cullum, & Pollard, 1994; Coe et al., 2011; Kozlow & Bellamy, 2004). They hoped to eliminate any flaws that would misrepresent the effectiveness of the model. The sample size included 102 teachers and 2,230 students in the treatment group and 94 teachers and 1,931 students in the control group (Coe et al., 2011, p. 23). All of these students completed a pretest and posttest. The teachers in the treatment group participated in a three day, 6 + 1 Trait model training the summer prior to the school year and completed a survey three different times throughout the study. The teachers in the control group taught writing with their preferred type of writing instruction, which did not include any Trait model characteristics. The results of the study indicate the use of the 6 + 1 Trait model significantly impacted student writing scores for the students who were taught by the treatment group teachers. The “estimated average score of students in the treatment
group was 0.109 standard deviations higher \((p=.023)\) than the estimated average score of students in the control group” (Coe et al., 2011, p. xiii).

**Professional Development**

Does professional development impact student learning? Could an increase of subject-area content knowledge and new, effective instructional methods gained during teacher trainings increase student and teacher engagement in the classroom? It is the intention of this study to determine if the type, participation, implementation and/or amount of professional development aid in effective writing instruction, thus increasing student achievement on the state writing assessment. Of the seven teacher characteristics cited by the U.S. Department of Education as contributing to increasing student achievement, participation in professional development that is focused on academic content and curriculum was second only to a teacher’s cognitive ability.

**Standards for Professional Learning**

According to Learning Forward (2011) (formerly the National Staff Development Council), having set standards for professional learning can help with the development of knowledge, skills, practices, and dispositions to help students perform at high levels. Standards can also help guide teachers in the design, implementation, and evaluation of professional learning. The following seven standards “define the conditions, attributes, and essential content for effective professional learning, with the primary focus on educator learning that leads to successful student learning” (Learning Forward, 2011, p. 3).

1. Learning Communities: Professional learning that increases educator effectiveness and results for all students occurs within learning
communities committed to continuous improvement, collective responsibility, and goal alignment.

2. Leadership: Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

3. Resources: Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

4. Data: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

5. Learning Designs: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

6. Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long term change.

7. Outcomes: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards (Learning Forward, 2011, p. 3).
According to the standards, teachers who are not seeing the results they desire should evaluate their practices in the classroom and determine what changes are necessary. They should identify what knowledge, skills, and dispositions are needed to make the changes. Once teachers are aware of what needs to be adjusted and what is essential for the changes to take place then they should look closely how to imply the standards to reach the desired student results (Learning Forward, 2011, p. 3).

There are countless studies on professional development, including those focused on professional development related to the employment of a specific curriculum (Beatty-O’Ferrall & Johnson, 2010; Corcoran & McDiarmid, 2000; Garet et al., 2001; Gordon et al., 2006; Harris & Sass, 2007; Kozlow & Bellamy, 2004; Shulman & Sparks, 1992; Swain et al., 2005a, 2005b, 2006, 2007; Tienken, 2003; Weiss & Pasley, 2006).

Many of the studies, however, rely on teachers’ perceptions of the value of the training they received and do not validate the effectiveness of that training on the basis of the improvement of students’ classroom performance (National Partnership for Teaching in At-Risk Schools, 2005). According to Beaty-O’Ferrall & Johnson (2010), professional development and collaboration have positive impacts on student learning, when teachers are given the opportunity to work together collaboratively to raise student achievement.

Likewise, as stated in a special report sponsored by the James B. Hunt Jr. Institute for Educational Leadership and Policy (2011), professional development is considered one of the main factors that will contribute to the success of the Common Core State Standards Initiative. It states that in order for the 2014-2015 goals to be reached, changes to “teacher pre-service preparation, professional development, instructional materials, new assessments, and curriculum and instruction alignment” (p. 2) need to be in place.
During the 2011-2012 school years, teachers should undergo training and meaningful professional development to help with the transition from implementation of basic state frameworks to the in-depth, rigorous standards of CCSS (James B. Hunt, Jr. Institute for Educational Leadership and Policy, 2011; CCSS, 2010).

Studies designed to determine if professional development impacts student achievement have been conducted over the course of the past two decades. In the mid 1980s, educators launched efforts to improve education by creating a fundamental shift in what children learn and how they are taught (Garet et al., 2001).

Even then, these early studies identify that “shifting to a more balanced approach to teaching, which places more emphasis on understanding subject matter, means that teachers must learn more about the subjects they teach and how students learn these subjects. The continual deepening of knowledge and skills is an integral part of any profession, and teaching is no exception” (Garet et al., 2001, p. 916).

During this time period, a national study including over one thousand math and science teachers examined the relationship between factors involving professional development and the teachers’ self efficacy relating to their classroom teaching practices and their knowledge on the subject matter (Garet et al., 2001). Professional development in this study was broken into three distinct features. The first feature studied was the form or the type of the activity the teachers were engaged in during the trainings. The second feature was the duration of the activity, which included both the number of contact hours and the amount of time the activity lasted. The final feature was the amount of collective participation the participants were involved during the activity. Findings of this study indicate that “sustained and intensive professional development is
more likely to have an impact, as reported by teachers,” than is shorter professional development (Garet et al., 2001, p. 935).

Additionally, in a study examining the effects of teacher fixed effects, Harris and Sass (2007) compared nearly one million Florida public school students directly with their teachers over the course of two different school years. Their data implies that for teachers who participate in professional development specifically focused on particular content, have student achievement increases in that specific subject content. In fact, they also state that the greatest gains of professional development actually begin three years after the teachers participate in the training (Harris & Sass, 2007).

It is believed that teachers who use both the material gained along with the experiences in the classroom reach a greater understanding of implementation. Unfortunately, even with “higher-stakes accountability systems, most professional development opportunities remain fragmented, poorly aligned with curricula, and inadequate to meet teachers’ needs” (Weiss & Pasley, 2006, p. 1). It is critical for teachers to receive not just training opportunities, but for the opportunities to be of high quality. According to Weiss and Pasley (2006), “high-quality professional development programs are grounded in research and clinical knowledge of teaching and learning” (p. 2).

These programs are aligned with a school’s curriculum. They facilitate teachers’ collaboration both within and across schools, they use existing teacher expertise to plan activities and cultivate leaders, and they include mechanisms for garnering principal support. High quality professional development programs both model and explicitly discuss methods of good practice and provide teachers with active learning opportunities.
These programs aim to build teachers’ content knowledge and pedagogical skills. They are intensive, sustained over time to allow for integration of new knowledge into practice, and include follow-up support (Weiss & Pasley, 2006).

These findings highlight the importance of professional development and the effectiveness of the teachers involved. However, what does that mean for the students in the classroom? The main focus of the CCSS is to increase student achievement and the deep understanding of skills and concepts. Can professional development aid in preparing teachers to teach on these higher levels, which should increase student achievement? The National Center for Educational Evaluation and Regional Assistance reviewed over 1,300 studies that have been conducted on professional development. Of the 1,300 studies, only nine of these met the “What Works Clearinghouse evidence standards, attesting to the paucity of rigorous studies that directly examine the effect of in-service teacher professional development on student achievement in the three core academic subjects” (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007, p. 6).

The amount of time teachers spend in training and the duration of the process, including follow up support, positively effects how much the students learn. Overall, Yoon et al. (2007) find that “teachers who receive substantial professional development—an average of 49 hours in the nine studies-can boost their students’ achievement by about 21 percentile points” (p. i). The study concludes that professional development followed by how much teachers know about the subject matter and how they deliver instruction can positively impact student achievement (Yoon et al., 2007).

Likewise, a study examining the effects of professional development on New Jersey fourth graders’ scores on their state writing assessment also found a positive
relationship between students who were taught by teachers who had significant professional development opportunities. The researcher of this study, Christopher Tienken (2003) found that the teachers involved in the trainings had altered their teaching styles to better instruct their students. The use of rubrics by both the teachers and students also impacted the students’ success (Tienken, 2003).

In addition, a study conducted to determine the effects of the National Writing Project professional development on students’ writing, findings indicate that “the teaching practices of teachers participating in the writing project professional development were more process-based and student-centered than those of teachers who were in the comparison group,” which positively influenced student writing abilities (Swain et al., 2007, p. 4). This study compares teachers of third, fourth and fifth graders who participated in content specific professional development held over the course of the 2005-2006 school year with post training follow up and mentoring. The professional development focused on three main factors, which included a large number of intense contact hours with the teachers, particular measurable features of student writing, and a program specifically designed to meet students’ needs. The findings of this study indicate that “through intensive and appropriate professional development, teachers can learn to teach young writers to enrich their writing through strategies that lead to more complete content, meaningful structure and organization, sophisticated sentences forms, and improved word choice and diction” (Swain et al., 2007, p. 39).

According to the National Commission on Writing (2003), “universities should advance common expectations by requiring all prospective teachers to take courses in how to teach writing. Teachers need to understand writing as a complex (and enjoyable)
form of learning and discovery, both for themselves and their students. Faculty in all disciplines should have access to professional development opportunities to help them improve student writing” (National Commission on Writing, 2003, p. 5).

In 2004, Michael Kozlow and Peter Bellamy examined the effects of professional development designed specifically for teachers using the 6 + 1 Trait Writing Model. The study was conducted over the course of the 2003-2004 school year in fourth and sixth grades. The teachers involved in the study participated in a two day workshop that taught them how to teach writing in the classroom. The study “examined the fidelity of implementation through a teacher survey on classroom practices to determine the extent to which teachers implemented the desired strategies and to describe differences between classroom practices of teachers in the treatment group and those of teachers in the control group” (Kozlow & Bellamy, 2004, p. 1).

The researchers determined the level of student achievement by looking at writing samples taken from the teachers’ students before and after the professional development occurred. Their findings indicated that some teachers who were in the treatment group implemented the 6 + 1 Trait Model and some did not implement it in its entirety. The teachers who were in the control group did implement the model extensively. The observation portion of the study “showed considerable variation in the extent of implementation by teachers in the treatment groups, as well as substantial implementation of similar practices in the control group” (Coe et al., 2011, p. 10). The results of the study did not determine that the professional development impacted student achievement significantly. The researchers identify a limitation that could have affected the outcome
of the study negatively as the lack of follow-up sessions after the training took place (Kozlow & Bellamy, 2004).

The State of Mississippi is currently on the right track in its effort to improve writing scores on the Mississippi Writing Assessment. Recently, The Mississippi Department of Education agreed on a twenty-nine million dollar contract with the Educational Measurement group of Pearson to “create and manage its new writing assessment program. The company will work closely with the Mississippi Writing/Thinking Institute (MWTI) at Mississippi State University and state department of education leaders on the development and delivery of this innovative assessment” (Pearson, 2012, p. 1). According to the findings of Swain et al. (2007), professional development can and does play an important role in teacher effectiveness, thus increasing student performance. Mississippi teachers spent over 129,598 contact hours in the National Writing Project professional development program in 2007 and continue to do so each year (Mississippi Writing/Thinking Institute, 2007). It is anticipated that student scores of teachers who participated will be impacted positively.

Summary

Chapter II focuses on the literature and prior studies relating to teacher qualifications, experience, instructional methods and professional development and how they relate to student achievement. According to the research presented in this chapter, there are mixed results regarding teacher qualifications and their impact on student achievement. Earlier studies agree that there is little, if any, impact of teacher degree level on student gains in both mathematics and reading (Croninger et al., 2007; Goldhaber & Brewer, 2000). According to the presented research, the type of
certification a teacher holds does influence student achievement. Lateral or alternative certification is found to have a negative impact on student gains (Clotfelter et al., 2007a), unless the certification the teacher holds is subject specific (Goldhaber & Brewer, 2000). Clotfelter et al. (2007b) conclude “that a variety of teacher credentials matter for student achievement and that the effects are particularly large for achievement in math” (p. 681).

Teachers who have great levels of content area knowledge, especially those who hold a degree or certification in that subject, are more likely to have greater gains in the success of their students than their counterparts (Goldhaber & Brewer, 2000; Heck, 2007; Hill et al., 2005; Moats & Foorman, 2003; Wayne & Youngs, 2003). Although some studies negate the effectiveness of teachers during their first few years of teaching (Yoon et al., 2007), most studies examining the effects of experience on student achievement identify the first few years of teaching to show the highest level of growth and then the leveling off to a continuous level after the fifth year (Clotfelter et al., 2007a, 2007b; Gordon et al., 2006; Grissmer et al., 2000; Harris & Sass, 2011; Kane et al., 2008; Rice, 2003; Rivers & Sanders, 2002). The research mentioned regarding instructional methods agrees that the practices and methods teachers use in the classroom do impact student achievement, especially in writing instruction (Bruce & Salzman, 2002; Swain et al., 2007).

Professional development can also impact student achievement under certain circumstances. Teachers must not only actively participate in the sessions of training, but also implement the new material in their classrooms regularly for student growth to occur (Beaty-O’Ferrall & Johnson, 2010; Tienken, 2003; Yoon et al., 2007). The length of the professional development as well as consistent follow-up can also impact the
effectiveness of the implementation by the teachers (Coe et al., 2011; Garet et al., 2001; Kozlow & Bellamy, 2004; Weiss & Pasley, 2006).

Are fourth and seventh grade students and teachers in south Mississippi similar to those included in the mentioned studies? It is the researcher’s desire to explore these teachers and students in the southern counties, which include 11 school districts and a large number of elementary and middle schools to determine which, if any, factors impact student achievement in writing. The next chapter on Methodology will focus on the data collection procedure as well as the analysis of data. Chapter III will also present the results of present information relating to the variables and methods used to analyze the data that has been collected and analyzed throughout the study.
CHAPTER III
METHODOLOGY

Overview

Chapter III discusses the research questions for this study. This chapter also identifies the dependent and independent variables. Included are the description of the design of the study, the selection of participants, the means in which the researcher obtained data, and the process that the data was analyzed.

The researcher presented an application to the Institutional Review Board (IRB) at The University of Southern Mississippi for the purpose of acquiring written approval for the research (Appendix A). This IRB application consisted of the following: a letter to participants explaining all procedures and methods for gathering data (Appendix B), written consent from all school districts taking part in the study (Appendix C through Appendix J), a copy of the survey instrument intended for data collection (Appendix K), an Adult Consent for Research Form (Appendix L), and evidence of successful completion of Collaborative Institutional Training Initiative (CITI) courses (Appendix M). The approval was received by the researcher and the study was conducted.

This section also includes methods for obtaining consent from superintendents and building principals respectively. Methods and procedures for analyzing collected data are explained along with the purpose for the type of statistical procedure used for analysis. The researcher’s intent was to determine if inputs such as teacher qualifications, experience, instructional methods, and professional development influence the output, student performance of student achievement on the Mississippi Writing Assessment. Any limitations to the study, including any issues with the validity of the independent variables, will be discussed in this section.
The purpose of this study was to determine if teacher qualifications, experience, instructional methods, and professional development significantly impacted the performance of fourth and seventh grade students on the Mississippi Writing Assessment. This study examined the relationship between teacher qualifications, finding the teachers either *highly qualified* or not *highly qualified*. Factors that were analyzed to determine qualification status were the following: (a) the type of degree the teacher held, (b) the type of certification held by the teacher; (c) the successful completion of required testing; (d) the endorsements held by the teacher; and (e) the number of graduate or undergraduate semester hours completed in language arts.

The researcher intended to investigate the following research questions.

1. Do teacher qualifications influence achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

2. Does teaching experience influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

3. Do instructional methods influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

4. Does participation in professional development for writing instruction Influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?

Research Design

The researcher conducted this study to determine if any correlation(s) existed between specific teacher variables and student achievement on the Mississippi Writing Assessment in grades four and seven. The independent variables for this study are
teacher qualifications, teacher experience teaching grades four and seven, instructional methods used in the classroom and professional development relating to writing instruction. The variable for teacher qualification status was obtained by analyzing teacher responses on the questionnaire to determine if the teachers’ qualifications indicated that they are considered *highly qualified*. The dependent variable was each teacher’s classroom average on the 2010-2011 administration of the Mississippi Writing Assessment. Each of the four research questions was analyzed using SPSS to see if the independent variables, either alone or in conjunction with one another, affected student performance on the writing assessment.

**Participants**

Fourth and seventh grade teachers in eight coastal Mississippi school districts were the participants for this study. The researcher’s intention was to have a sample size of approximately 150 between both grade levels. All teachers participating were from elementary and middle schools in south Mississippi. After receiving permission from the Institutional Review Board and superintendents to conduct the study in each district, building administrators were contacted and permission was requested for the researcher to administer the questionnaires and personally collect them.

Building administrators were asked to notify teachers as to the purpose of the survey so they could collect their writing assessment averages prior to meeting with the researcher. These teachers were given a questionnaire relating to the independent variables. Teachers were surveyed based on their teaching of fourth or seventh grade writing during the 2010–2011 school years. The study excluded teachers who did not administer the Mississippi Writing Assessment the previous year. All teacher
participants remained anonymous, with the exception of their school and district, and participation was voluntary. Teachers’ responses remained confidential and used only by the researcher for the purpose of data collection in attempting to answer the research questions.

Instrumentation

Teacher’s responses on the questionnaire provided the independent variables for the study. Based on collected responses, the survey instrument determined each teacher’s qualifications, the total amount of experience each teacher had and number of years they had taught fourth or seventh grade writing, which instructional methods each teacher used in the classroom on a regular basis, the types and amounts of professional development pertaining to writing each teacher implements regularly and their impact on classroom averages on the Mississippi Writing Assessment.

Questions numbered 1, 2, 3, 4, and 6 on the questionnaire addressed teacher qualifications. Fourth grade teachers who took the survey were considered highly qualified if they answered number one with the answer B.A. or B.S., M.Ed or M.S., Ed.S, or Ph.D or Ed.D and number two with either Elementary Education (K-6) or Alternate Route Certification. Seventh grade teachers who took the survey were considered highly qualified if they answered number one with the answer B.A. or B.S., M.Ed or M.S., Ed.S, or Ph.D or Ed.D and number two with Middle/Junior High School Education (7-8) or Alternate Route Certification. Because middle school teachers who did not hold “highly qualified” status during the previous school year could be placed on an Individual Teacher Plan for Achieving Highly Qualified Status from the Mississippi Department of Education, teachers who answered number three with the answer yes, number four with
the answer *yes*, or number six with either *16-21 hours* or *More than 21 hours* were also considered *highly qualified* for the purpose of this study. The remaining independent variables were considered subtests. The *teacher experience* subtest was determined by examining questions seven and eight on the questionnaire, adding the responses together and obtaining an average. Information regarding the instructional methods of each teacher was gathered from questions 9, 10, 14, 16, and 18, which was also added together and averaged to create a subtest. During data analysis, the researcher determined number 13 as being misleading and chose to eliminate it from the subtest. Questions pertaining to the *professional development* subtest were 11, 12, 15, 17, and 19. These responses were also added together to obtain an average. The dependent variable, each teacher’s classroom average on the 2010–2011 administration of the Mississippi Writing Assessment, was obtained from each teacher’s responses to question number 23 on the teacher questionnaire.

Although the remaining questions on the survey instrument were not used for data analysis through SPSS the researcher used the open-ended responses regarding instructional methods used by the teachers to further analyze each teacher’s responses and their classroom averages.

The researcher intended to establish the validity of the instrument prior to administering it to teachers in the schools. To do this, the researcher obtained a small number of educators considered to be experts in the education field. This group included one elementary school administrator, one curriculum specialist, and two teachers who had previously taught either fourth or seventh grade writing. Once this group was selected, they completed the survey and noted any issues that needed to be addressed by
the researcher. Upon receiving necessary corrections, the adjustments were made by the researcher. Following successful completion of administration of the instrument to the panel of experts, a group of ten fourth and ten seventh grade teachers were given the survey to determine if the instrument was both reliable and able to answer the study’s research questions. The results from the pilot study were analyzed using SPSS to determine reliability of the instrument. Initially, Cronbach’s Alpha was .730 for questions nine through 19, excluding question 13. This was attributed to the small sample size included in the pilot study. As completed surveys were collected, the researcher assigned each completed questionnaire an identification code based on the school, school district of the teacher and the order in which the surveys are collected. After the collection of data, analysis of the data and completion of the study, all teacher responses will be destroyed.

Procedures

The survey was designed according to the researcher’s intended research questions. Once the instrument was designed, edited and revised, it was submitted to the Institutional Review Board (IRB) to verify that all required criteria had been met. After receiving approval from the IRB, the researcher’s panel of experts was given the survey to determine its validity. After receiving feedback from the panel of experts, the researcher made minor adjustments to the instrument and then began the pilot study. Upon completion of the pilot study, each school district’s superintendent was presented with a letter of consent. After receiving consent from each school district’s superintendent, building principals were contacted by the researcher by means of telephone, email and written letters. It was the researcher’s intention to visit each school
personally, meet with teachers to administer the surveys and collect them upon completion. After contacting each administrator, teachers received surveys by means of the United States Postal Service mail, fax, and email, depending on the administrator’s request. The researcher collected surveys in person, by fax, email and postal mail. Once the desired number of surveys was received, the researcher coded and input all data collected and used SPSS software to determine if any correlations exist between the intended independent variables and the classroom averages.

Analysis

The researcher entered all data, ran descriptive statistics for all variables, and did not identify any outliers or data that was out of the ordinary. The descriptive statistics did, however, allow the researcher to identify question 13, which was a reversal on the survey instrument, as misleading and remove it from data analysis. Also obtained from the descriptive statistics was information which identified all teachers surveyed as being “highly qualified” and allowed the researcher to look more closely at items in the subset. For research question number one, an ANOVA was conducted and concluded that teacher qualifications non-significantly impacted classroom averages on the Mississippi Writing Assessment. Research question number two was answered by looking closely at a Pearson Correlation model, which identified teacher experience as non-significantly impacting classroom averages. Although teacher qualifications and teacher experience were both found to be non-significant to classroom averages, they both identified areas that could be looked into by future studies. Research Questions three and four were also answered by running a Pearson Correlation model that determined that both instructional methods and professional development significantly impact classroom averages on the
Mississippi Writing Assessment. The education field should benefit from future research focusing on a larger sample size and a broader geographical area.

Summary

The purpose of Chapter III was to determine whether teacher qualifications, teacher experience, instructional methods, and professional development significantly impacted classroom averages on the Mississippi Writing Assessment in grades four and seven. This study examined the relationship between the factors of teacher qualifications, experience, instructional methods and professional development. Chapter III explained the design of the study, information regarding the sample selection, the chosen participants, data collection method, and the procedures in which the researcher conducted the study. Also discussed in this Chapter was the survey instrument, how it was constructed, tested, administered, and collected. Further explanations of data collected and specifics of data analysis will be explained in Chapter IV.
CHAPTER IV

RESULTS

Chapter IV identifies and distinguishes the results of the data analysis. It includes the descriptive statistics of the data, statistical analysis of the data and the ancillary findings of the study.

It was the researcher’s intention to determine if significant relationships exist between teacher qualifications, teacher experience, instructional methods, professional development and classroom averages on the Mississippi Writing Assessment in grades four and seven. The researcher’s self-made survey instrument served as the basis for this research study. Eight south Mississippi school districts participated in the study, with a total of one hundred and fifty-four teachers completing the survey questionnaire. Each of the participants taught either fourth or seventh grade during the 2010–2011 school year.

The independent variables for the study included (a) teacher qualifications, (b) teacher experience; (c) instructional methods, and (d) professional development. Each teacher’s classroom average representing the 2011 administration of the Mississippi Writing Assessment was used as the dependent variable for the purpose of the study. The study focused on fourth and seventh grade writing instruction in three coastal counties in south Mississippi. Eight of the 10 school districts on the coast participated in the study, with a total of 54 schools represented. Superintendent consent was not obtained from the remaining two school districts that were missing from the study. Of the 191 surveys administered at both the elementary and middle schools, 154 were returned completed for an 80.6% return rate. The sample of the study included 122 fourth grade teachers and 32 seventh grade teachers, for a total of 154 teachers.
Participating teachers were asked to provide school district and school information along with the grade they taught during the 2010–2011 school year. This information was requested by the researcher for organizational purposes only. The survey instrument (Appendix K) had a total of 29 questions. The questionnaire included seven open-ended questions and 22 multiple choice questions. The open-ended question responses were not used for data analysis. However, they were examined by the researcher to determine if any instructional trends exist among the teachers who participated in the study. Question 13, which was considered a reversal on the survey, was eliminated from data analysis because of possible misunderstanding of the question by the participants.

Over the course of the study, the researcher closely examined trends in student achievement on the Mississippi Writing Assessment and possible factors that could contribute to higher or lower classroom averages. This study further investigated the following research questions:

1. Do teacher qualifications influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?
2. Does teaching experience influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?
3. Do instructional methods influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?
4. Does participation in professional development for writing instruction influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?
Descriptive Data

Research question number one examines teacher qualifications and any possible effects on student writing achievement. Teachers were asked to provide information regarding their highest level of education. Of the 154 participants, 76 (49.4%) teachers identified themselves as holding a M.Ed or M.S degree, which represented the majority of teachers surveyed. Six teachers claimed to hold only an A.A. or A.S. degree, which was surprising due to the fact that teachers are required to hold at least a bachelor’s degree to obtain a teaching position. Table 1 displays the degree information for the participating teachers.

Table 1

<table>
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<th>Degree Level Information for Participating Teachers</th>
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<tr>
<td>Frequency</td>
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<tr>
<td>B.A. or B.S.</td>
</tr>
<tr>
<td>M.Ed or M.S.</td>
</tr>
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<td>Ed.S.</td>
</tr>
<tr>
<td>Ph.D or Ed.D</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

The second portion of teacher qualifications identified in the study was the certification level of each teacher. Teachers were asked to disclose the type of teaching certification they held during the 2010–2011 school year. The majority of teachers (53.9%) held only an Elementary Education (K-6) certification, followed by 26.1% of the
participants who held more than one type of certification. Table 2 provides information pertaining to the certification level(s) of the participating teachers.

Table 2

*Certification Levels*

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<th>Certification Level</th>
<th>Frequency</th>
<th>Percent</th>
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</thead>
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<td>Elementary Education (K-6)</td>
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<td>53.9</td>
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<tr>
<td>Middle/Junior High School Education (7-8)</td>
<td>5</td>
<td>3.2</td>
</tr>
<tr>
<td>Secondary Reading/Language Arts</td>
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<td>5.8</td>
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<tr>
<td>Alternate Route Certification</td>
<td>17</td>
<td>11.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>154</strong></td>
<td><strong>100</strong></td>
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</tbody>
</table>

In addition to degree and certification levels, teachers were asked to identify the number of Language Arts semester hours they had completed in either undergraduate or graduate courses. More than one half of the 154 teachers surveyed for the study (57.1%), reported to have had more than 21 hours of Language Arts course work. Table 3 identifies the number of Language Arts, either undergraduate or graduate, each teacher completed.
Table 3

*Language Arts Semester Hours Completed*

<table>
<thead>
<tr>
<th>Hours Completed</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 9 hours</td>
<td>19</td>
<td>12.3</td>
</tr>
<tr>
<td>9-15 hours</td>
<td>26</td>
<td>16.9</td>
</tr>
<tr>
<td>16-21 hours</td>
<td>19</td>
<td>12.3</td>
</tr>
<tr>
<td>More than 21 hours</td>
<td>88</td>
<td>57.1</td>
</tr>
<tr>
<td>Total</td>
<td>152</td>
<td>98.7</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100</td>
</tr>
</tbody>
</table>

The second research question examined each teacher’s total classroom experience, as well as the amount of time spent teaching either fourth or seventh grade and any effects on student achievement. For total classroom experience, most of the teachers (28.6%) identified themselves as having “0-5 years” experience, closely followed by (27.3%) as having “6-10 years” experience. Table 4 identifies the total number of years of experience each teacher has in the classroom.

Table 4

*Total Number of Years Experience*

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>44</td>
<td>28.6</td>
</tr>
<tr>
<td>6-10 years</td>
<td>42</td>
<td>27.3</td>
</tr>
<tr>
<td>11-15 years</td>
<td>36</td>
<td>23.4</td>
</tr>
</tbody>
</table>
In addition to providing the total number of year’s experience they had in the classroom, teachers were also asked to provide the number of years they had spent actually teaching either fourth or seventh grade writing. The majority of the teachers surveyed (59.1%), responded that they had “0-5 years” experience in either fourth or seventh grade. Table 5 shows the number of years each teacher has spent teaching either fourth or seventh grade.

Table 5

Fourth or Seventh Grade Experience

<table>
<thead>
<tr>
<th>Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>91</td>
<td>59.1</td>
</tr>
<tr>
<td>6-10 years</td>
<td>35</td>
<td>22.7</td>
</tr>
<tr>
<td>11-15 years</td>
<td>17</td>
<td>11.0</td>
</tr>
<tr>
<td>16-20 years</td>
<td>5</td>
<td>3.2</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>6</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>154</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The third research question asked if instructional methods used by the teacher influenced student achievement on the Mississippi Writing Assessment. Table 6 shows
the number of participants, mean and standard deviation for all items on the survey that questioned teachers about their preferred instructional methods.

Table 6

Statistics for Instructional Methods (N= 149)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of Teaching each Step of the Writing Process</td>
<td>3.91</td>
<td>1.18</td>
</tr>
<tr>
<td>Integrating Writing into Other Subjects is Beneficial</td>
<td>4.49</td>
<td>.81</td>
</tr>
<tr>
<td>Frequency of 6 + 1 Trait Model for Writing Used in the Classroom</td>
<td>2.76</td>
<td>1.26</td>
</tr>
<tr>
<td>Time Spent Daily Delivering Writing Instruction</td>
<td>2.74</td>
<td>1.16</td>
</tr>
<tr>
<td>Use of Multisensory Instruction</td>
<td>4.27</td>
<td>.86</td>
</tr>
</tbody>
</table>

For the items indicating the importance of instructional methods, teachers’ responses indicate that integrating writing into other subjects is very beneficial, with a mean of 4.27 and standard deviation of .81. Teachers also feel strongly that the use of multisensory methods in the classroom is beneficial, with a mean of 4.27 and a standard deviation of .86. Surprisingly, the amount of time teachers spend delivering writing instruction during the day averages about one half hour, indicated by a mean of 2.74 and a standard deviation of 1.16. This could imply that teachers who teach writing effectively
integrate writing instruction throughout the day using a variety of methods, thus eliminating the need for a large amount of time to deliver direct writing instruction.

The fourth and final research question examined how participation in professional development impacted the way teachers delivered writing instruction, therefore influencing student writing. Table 7 shows the number of participants, mean and standard deviation for all questions on teachers’ responses regarding professional development.

Table 7

*Statistics for Professional Development (N= 144)*

<table>
<thead>
<tr>
<th>Frequency of Professional Development Methods/Information used in the classroom</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Training in Writing Instruction Impacts Student Achievement</td>
<td>4.22</td>
<td>.79</td>
</tr>
<tr>
<td>District Support for Writing Training</td>
<td>4.01</td>
<td>.93</td>
</tr>
<tr>
<td>Number of Hours for Professional Development for Writing Instruction</td>
<td>3.26</td>
<td>1.49</td>
</tr>
<tr>
<td>Use of Professional Development Methods/Information in the classroom</td>
<td>4.13</td>
<td>.99</td>
</tr>
</tbody>
</table>

Professional development statistics indicate that teachers feel strongly that participation in a formal training for writing instruction can impact student achievement, with a mean of 4.22 and a standard deviation of .79. This is followed closely by the teachers’ responses that they do, in fact, use methods obtained through professional
development in their classrooms, with a mean of 4.13 and a standard deviation of .99. Unfortunately, these same teachers indicated a low level of frequency of implementing instructional methods obtained from professional development, with a mean of 3.11 and a standard deviation of 1.45. This data indicates that teachers value professional development and implement new methods and professional practices obtained through formal training in the classroom, even if they do not do so very frequently.

Statistical Data

Data was collected from fourth and seventh grade teachers across three coastal counties of south Mississippi to determine which, if any, teacher factors impacted Mississippi Writing Assessment classroom averages. The researcher used four independent variables (teacher qualifications, teacher experience, instructional methods, and professional development) and the dependent variable (classroom averages on the Mississippi Writing Assessment) to see if any correlations exist either alone or in conjunction with one another.

Research question number one was “Do teacher qualifications influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven?” An ANOVA was used to determine if the level of degree, type of certification, and/or number of Language Arts hours impacted classroom averages on the writing assessment. The results of the ANOVA were significant with $F(9,136) = 2.205, p = .025$, with significance levels set at $\alpha = .05$. The model for research question one was found to significantly predict if teacher qualifications impacted student achievement on the writing assessment. The R-squared is .127, which indicates that approximately 13% of the variance of all degree levels, all certification levels, and the number of Language
Arts hours is accounted for by the model. According to the model, teachers with alternate route certification (b=-.22) is significant (p=.005), and the coefficient is negative which would indicate that teachers who obtained certification through an alternate route have lower classroom averages on the Mississippi Writing Assessment. Also noted in the model, the number of semester hours of Language Arts (b=.04) is significant (p=.04), and the coefficient is positive which would indicate that teachers who have a higher number of Language Arts semester hours have a higher classroom average on the Mississippi Writing Assessment. This correlation seems likely, because teachers who go through alternate route certification are not required to obtain a certain number of Language Arts hours to complete the certification process and teachers who have a stronger sense of subject content knowledge are likely to deliver instruction more effectively. Teachers with alternate route certification had the largest Beta coefficient (β = -.24) and both teachers with secondary Reading/Language Arts certification (β = -.002) and teachers who hold a Doctorate degree (β = .002) had the smallest Beta coefficients. Thus, a one standard deviation increase in alternate route certification leads to a .24 decrease in predicted writing assessment scores, with all other variables held constant.

Table 8

*Coefficients for Certification Levels, Degree Levels, and Language Arts Semester Hours*

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.21</td>
<td>.08</td>
</tr>
<tr>
<td>Middle/Junior High School Education (7-8)</td>
<td>-.03</td>
<td>.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-.02</td>
</tr>
<tr>
<td></td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td>(Constant)</td>
<td>28.81</td>
<td>.00</td>
</tr>
<tr>
<td>Middle/Junior High School Education (7-8)</td>
<td>-.23</td>
<td>.82</td>
</tr>
</tbody>
</table>
Research question two, “Does teaching experience influence student achievement on classroom averages of the Mississippi Writing Assessment?” was addressed by questions seven and eight on the survey instrument. The researcher was interested in seeing if any correlations existed between the amount of experience a teacher had in the classroom and his/her classroom averages on the Mississippi Writing Assessment. The researcher used the Pearson Correlation to determine if teacher experience was strongly correlated with classroom averages. Teacher experience is not strongly correlated with the classroom averages on the Mississippi Writing Assessment ($r (146) = .139, p = .094$).

Research question three, “Do instructional methods influence student achievement on classroom averages on the Mississippi Writing Assessment in grades four and seven?” was addressed by questions 9, 10, 14, 16, and 18. It was the
researcher’s intention to determine if the method of instruction the teacher used in the classroom impacted classroom averages on the writing assessment. Instructional methods are moderately correlated with classroom averages on the Mississippi Writing Assessment \(r(146) = .324, p < .001\). This correlation is both positive and significant.

Research question four, “Does participation in professional development influence student achievement on classroom averages on the Mississippi Writing Assessment in grades four and seven?” was addressed by questions 11, 12, 15, 17, and 19. The Pearson Correlation indicates that participation in professional development is not strongly correlated with classroom averages of the Mississippi Writing Assessment \(r(146) = .251, p = .002\). The correlation is both positive and significant.

Although instructional methods and professional development are not strongly correlated to classroom averages on the Mississippi Writing Assessment, they are significant predictor variables in the regression model. The use of instructional methods used by teachers in the classroom has a slightly higher correlation to student writing achievement than participation in professional development. When analyzing the model as a whole, the total scale shows \(r(146) = .292, p < .001\). This indicates that both the use of instructional methods and participation in professional development are significant, but not strongly correlated to classroom averages on the Mississippi Writing Assessment.

Summary

Chapter IV describes the results of teacher qualifications, teacher experience, instructional methods, and professional development being tested against classroom averages of the Mississippi Writing Assessment. Of the four research questions, only two of the independent variables were considered significant to classroom averages.
Teacher qualifications and teacher experience did not indicate any significance or effect on student success. However, the data did indicate that teachers who are alternately certified are more likely to have lower classroom averages and that teachers who have taken a greater number of Language Arts hours are more likely to have higher classroom averages. Interestingly, the type of instructional methods used by teachers and participation in professional development both produced significantly significant results in relation to classroom averages on the writing assessment.
CHAPTER V

DISCUSSION

Conclusions and Discussion

Throughout the history of education, the importance of writing instruction has changed drastically. In the past, teachers waited until students were in upper grades before receiving formal writing instruction, unlike teachers of today who are encouraged to incorporate direct writing instruction in several lessons throughout each school day for students of all ages. Education has been considered to be the result of several factors contributing to student success. Teachers who have strong qualifications are assets to school districts looking to place highly qualified teachers in needy classrooms. Likewise, teachers who have effective classroom experience consistently incorporate a variety of instructional strategies in the classroom, and embrace professional development are also beneficial to student learning.

The purpose of this study was to determine if teacher qualifications, experience, instructional methods and professional development had any impact on student achievement on the Mississippi Writing Assessment in grades four and seven. Teachers who participated in the study were asked to provide their classroom averages on the writing assessment from the 2010–2011 school year. Other questions on the instrument referred to degree levels, type of certification, experience, types of instructional methods used in the classroom and how teachers regarded the participation and implementation of professional development. The time frame for this study was one year from the approval from the Internal Review Board. It is the researcher’s hope that the findings of this study can be used by school districts to help increase student achievement in writing.
Eight coastal school districts were included in this study. A total of 154 teachers completed the survey instrument, which represented 122 fourth grade teachers and 32 seventh grade teachers. The descriptive data indicated that of the 154 teachers participating in the study, the majority (49.4%) held a Master’s degree. This coincides with research indicating that teachers are returning to the classroom to obtain a higher degree, resulting in collaboration, gained knowledge, and salary increase.

Teachers also indicated on the survey that over half (53.9%) were certified in Elementary Education (K-6). This is likely to be highest percentage because of the large number of fourth grade teachers who completed the survey. Looking over the teachers’ responses regarding qualifications, it was interesting to see that all of the teachers who participated were considered to be high\textit{ly qualified} by No Child Left Behind requirements. These results indicate that school districts on the Mississippi Gulf Coast are doing what they can to ensure qualified teachers in every classroom.

When asked about the number of Language Arts hours completed, more than half (57.1%) of the participants indicated that they had completed more than twenty-one hours of Language Arts in either undergraduate or graduate course work. Research suggests that teachers are more likely to produce positive student results when they are comfortable and familiar with the subject material they are teaching. These results indicate that the majority of fourth and seventh grade teachers are moderately familiar with the content they are teaching.

Teachers were also asked to provide information regarding the amount of experience they had both in their entire teaching careers, as well as their time in either a fourth or seventh grade classroom. More than half of the teachers indicated that they had
been in the classroom for 10 years or less, which implies they are still in the process of both learning and implementing the curriculum and putting preferred practices in place. More importantly, an astounding 59.1% of the participants have taught fourth or seventh grade for five years or less. This information indicates that the majority of teachers surveyed are fairly new at implementing direct writing instruction.

Findings

Each of the study’s four research questions and their findings will be addressed in the following paragraphs. All questions were answered by looking closely at each factor and how it impacted classroom averages on the Mississippi Writing Assessment. The researcher looked closely at frequencies, descriptive statistics, correlations and regression tables to determine if any levels of significance existed.

Research Questions

*Research Question One*

Do teacher qualifications influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven? As previously stated, all teachers surveyed were considered *highly qualified*. To answer this first research question, an ANOVA was used to determine if either degree level, certification type and/or the number of Language Arts semester hours had any significant impact on classroom averages on the writing assessment. The data indicated that the degree level of teachers did not significantly impact student writing achievement, which coincides with Croninger et al. (2007). Their study also found that a teacher’s degree level had no significant relationship to reading or math achievement.
Teachers completing the survey who held alternate route certification reported lower classroom averages, which were considered negatively significant to student achievement. This agrees with research conducted by Clotfelter et al. (2007a), which indicated that teachers who were alternate route certified “exhibit a statistically significant negative effect on student achievement” (p. 677). This also implies that for every teacher with alternate route certification, there is a decrease in predicted writing assessment scores.

Also noted in the ANOVA was the positive significance to the number of Language Arts semester hours reported. Teachers who had completed more coursework in Language Arts reported higher classroom averages on the writing assessment. In agreement, Goldhaber and Brewer (2000) found that “teachers with subject-specific training outperform those without subject-matter preparation” (p. 141). In addition, Moats and Foorman (2003) believe that “instruction of reading, spelling, and writing depends on a specialized content knowledge base” (p. 25). As indicated by both this study as well as those conducted previously, the amount of content knowledge teachers have has a positive significant impact on student achievement.

Research Question Two

Does teaching experience influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven? The averages of the number of total years taught and the number of years teaching fourth and seventh grade were correlated to classroom averages on the writing assessment. According to the Pearson Correlation, the amount of experience a teacher had in the classroom was a non-significant predictor to predicted classroom averages. In contrast, research by Clotfelter
et al. (2007b) found that “teachers with more experience are more effective in raising student achievement than those with less experience” (p. 676). Although the number of years of experience did not significantly impact student achievement in this study, the findings were a result of total years and grade-level specific years averaged together. Correlating the total number of years and the number of years teaching fourth or seventh grade separately with classroom averages could possibly yield different results.

Research Question Three

Do instructional methods influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven? According to the Pearson Correlation, instructional methods are moderately correlated with classroom averages. The correlation of the types of instructional methods teachers used to teach fourth and/or seventh grade writing has a positive and significant influence on student achievement in writing. Research agrees that teachers’ choice of instructional methods can and does impact student learning (Culham, 2003; Kozlow & Bellamy, 2004; Swain et al., 2007). These studies looked closely at strategies that focused solely on methods to deliver writing instruction. They all agreed that consistent, direct, writing instruction methods of classroom instruction can positively influence student performance on writing assessments.

Research Question Four

Does participation in professional development for writing instruction influence student achievement on classroom averages of the Mississippi Writing Assessment in grades four and seven? The Pearson Correlation indicates that professional development is not strongly correlated with classroom averages on the writing assessment. However,
participation in professional development and the implementation of methods obtained through professional development by fourth and seventh grade teachers has a positive and significant influence on student achievement in writing. Literature in Chapter II agrees that teachers who participate in professional development specifically focused on particular content, have student achievement increases in that specific content (Beaty-O’Ferrall & Johnson, 2010; Harris & Sass, 2007; Swain et al., 2007).

Although instructional methods and professional development are not strongly correlated to classroom averages on the Mississippi Writing Assessment, they are significant predictors in student achievement. The use of instructional methods teachers use in the classroom has a slightly higher correlation to student writing achievement than participation in professional development. This could be the difference between those teachers who actually implement new ideas and methods in the classroom and those who only attend professional development without implementation.

Limitations

The researcher noted several limitations throughout the course of the study. After the Institutional Review Board approval, survey instruments were delivered to individual schools the second week in May, which was concurrent with state standardized testing. After state testing was complete, end of the school year procedures began for many teachers and administrators. The researcher had to go through great lengths to obtain completed surveys from teachers. The teachers’ responses on the survey may have been influenced by these events.

Each teacher answered the questions regarding instructional methods on the survey based on their personal preferences and what they felt worked in their classrooms.
Although the questions covered a variety of successful writing instruction methods, some teachers may not have been familiar with the term 6 + 1 Trait Writing mentioned on the survey and still be considered strong writing teachers. This could have possibly altered their responses regarding instructional methods.

Many teachers also indicated that they had a large number of professional development hours. The researcher acknowledges that these responses could have possibly been close estimates by the teachers, and not actual amounts. Some teachers also may not have been familiar with The National Writing Project, which could have altered their responses on their preferences regarding professional development specifically for writing.

Also limiting the study was the selection of only fourth and seventh grade writing teachers. The researcher had a small sample size and had to obtain surveys from practically all teachers who taught those two grades in every school. It was also challenging for the researcher to get the surveys to the teachers who taught fourth and seventh grade the previous school year, due to teachers leaving and being reassigned to different positions. Because the Mississippi Writing Assessment is also administered in the tenth grade, future studies on writing achievement could include teachers in that grade level as well, which would increase the number of teachers who could participate.

Recommendations for Future Research

Future research related to teacher qualifications, certification types, instructional methods, professional development and student achievement of writing assessments should be conducted.
Although the findings of this study indicated no significance in teachers’ degree levels and student achievement, it would be interesting to see if a larger sample size would change the results. It was also noted by the researcher that the findings of this study agreed with other studies that looked closely at degree levels and student achievement. Future research should consider conducting a longitudinal study that would observe teachers’ classroom averages before and after obtaining a higher degree, to determine if their averages would be affected by the change.

Interestingly, teachers who held alternate route certification had lower classroom averages than those who held traditional certificates. This could be the result of alternate route teachers only being qualified to teach fourth through sixth grade at the elementary level. As previously stated, these teachers are not required to take any subject area courses to obtain certification, which explains the lower scores on a subject specific writing assessment. Future research focusing on the overall effects of alternate route certification and student achievement could look closely at all alternately certified teachers and a different form of assessment covering more than one subject.

Future researchers could further investigate instructional methods’ effects on student achievement to determine which specific methods have the most impact on writing instruction. An open-ended survey instrument would allow future research to collectively analyze teachers’ responses to determine which, if any, are reoccurring and if there is any relationship to classroom averages. Analyzing classroom averages before and after the implementation of specific methods would also be beneficial for future research. Recommendations for future research regarding professional development would include an analysis of students’ writing abilities before professional development
for writing and after implementation. It would also be beneficial to survey teachers in geographical areas that are more likely to offer intense, formal professional development for writing instruction.

Recommendations for Policy and Practice

The findings of this study could be used by school districts when selecting teachers to be placed in classrooms that administer the writing assessment. Although all grade levels should use the writing process as part of their instruction, fourth and seventh grade teachers’ main focus is having those skills mastered before moving to the next grade level. The data suggests that teachers who have alternate route certification are more likely to have lower classroom averages on the writing assessment. This could possibly be avoided by either placing alternate route teachers in grades five or six or by providing these teachers with valuable professional development that focuses specifically on writing instruction. It is also recommended that these fourth grade teachers be provided with a mentor to help with the implementation of writing process instruction. Fourth grade alternate route teachers could possibly increase their classroom averages by taking additional classes in Language Arts or writing instruction.

Also impacting classroom averages is the number of Language Arts semester hours teachers had taken in either undergraduate or graduate classes. The findings of the study indicate that teachers who had more hours of Language Arts had higher classroom averages on the writing assessment. When selecting teachers to teach either fourth or seventh grade, administrators could use this information to place teachers into these important assignments. It would also be interesting to see if teachers who taught all
subjects in a self-contained classroom had higher or lower scores compared to
departmentalized fourth grade classrooms where the teacher teaches only Language Arts.

Considering the significance of instructional methods in regards to this study, as
well as others, administrators could possibly increase student achievement by being
mindful of what teachers are doing in their classrooms. Research suggests that methods
that cover a wide variety of learning styles and involve students in their learning are
likely to produce positive student results. Administrators could take note of teachers who
have lower averages and carefully observe them to see what types of instructional
methods are being practiced on a daily basis. Likewise, teachers who have higher
classroom averages and a variety of effective instructional methods could be used as role
models and mentors to other teachers who need guidance.

With school budgets continually decreasing, it is extremely important more now
than ever those funds are allocated in ways that are most beneficial to student
achievement. This study’s findings indicate that professional development can increase
student achievement on the state writing assessment. To do this, however, teachers need
to be provided with subject-specific quality professional development. Teachers should
also be held accountable for the implication of knowledge and practices gained from such
trainings. Research also suggests that for professional development to be effective,
follow up sessions are necessary. These post-training visits or contact are designed to
allow teachers have the chance to try things out and then ask questions to clarify any
issues they may have once they practice new methods in the classroom. Using
professional development for specific subject areas and providing follow up
question/answer sessions are likely to help increase student achievement.
Summary

The purpose of this study was to determine if teacher qualifications, experience, instructional methods, and professional development had any influence on student writing achievement. Data was collected from three coastal counties of Mississippi and included 154 fourth and seventh grade teachers. The participants were asked to respond to questions regarding their qualifications, number of years experience, preferred instructional methods, and their thoughts on professional development. These teachers also provided their classroom averages from the 2010–2011 administration of the Mississippi Writing Assessment. Each teacher’s responses were tested with their classroom averages to see if any relationships existed.

All four research questions in this study were answered by data analysis of the teachers’ responses and their averages on the survey instrument. Of the four questions, only two were considered significant to classroom averages. Teacher qualifications and teacher experience did not indicate any significant effect on student success. However, the data did indicate that teachers who were alternate route certified had lower classroom averages. Whereas, teachers who have a greater number of Language Arts semester hours had higher classroom averages. This study concluded that the type of instructional methods used by teachers and participation in writing-specific professional development are statistically significant to classroom averages on the writing assessment.
APPENDIX A

INSTITUTIONAL REVIEW BOARD NOTICE OF COMMITTEE ACTION

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 34906-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

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

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

PROTOCOL NUMBER: 12040303
PROJECT TITLE: Influence of Teacher Qualification, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven
PROJECT TYPE: Dissertation
RESEARCHER/S: Stacy K. Garcia
COLLEGE/DIVISION: College of Education & Psychology
DEPARTMENT: Educational Leadership & School Counseling
FUNDING AGENCY: N/A
IRB COMMITTEE ACTION: Expedited Review Approval
PERIOD OF PROJECT APPROVAL: 04/17/2012 to 04/16/2013

Lawrence A. Hosman, Ph.D.
Institutional Review Board Chair
Dear Participant,

I am a doctoral candidate at The University of Southern Mississippi working on my degree in Educational Administration. I am currently writing my dissertation and have begun collecting the necessary data to complete my study. The title of my dissertation is *Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven*. I am very eager to look closely at which (if any) teacher qualifications make a difference in the classroom.

The survey instrument will ask you various questions regarding your personal qualifications, teaching experience, preferred instructional methods, and professional development. Your responses to these questions will provide me with information that will be analyzed to determine if any correlations exist between teacher qualifications and student achievement on the writing assessment. It is very important that you provide your classroom average on the Mississippi Writing Assessment from LAST school year. This survey should only take approximately 10 minutes of your time. Your participation in this study is completely voluntary. This information will be kept anonymous and confidential. You have the right to discontinue your participation without any risk of penalty. Please feel free contact me with any comments or concerns at stacykgarcia@hotmail.com.

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-001, (601) 266-6820).

Thank you very much for your time.

Sincerely,

Stacy Garcia
March 8, 2012

Ms. Stacy K. Garcia
23920 Stablewood Drive
Pass Christian, MS 39571

RE: Doctoral Research
   Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement as Measured on the Mississippi Writing Assessment in Grades Four and Seven

Dear Ms. Garcia,

I am approving your request to conduct a survey of fourth and seventh grade teachers for your dissertation.

Please arrange with Mrs. Teresa Allen in this office for distribution and collection of the questionnaires. Her email is tallen@pc.k12.ms.us.

Best wishes as you undertake this ambitious study.

Sincerely,

[Signature]
Superintendent
APPENDIX D

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
Fax: 228-865-1928
Email: stacykgarcia@hotmail.com
Address: 23920 Stablewood Drive
Pass Christian, MS 39571

I hereby grant permission for Stacy K. Garcia to contact elementary and middle school principals in this district, which I serve as superintendent, to complete the survey process for the study mentioned above. I understand the explanations about the study and agree with the procedures.

[Signature and Date]
Superintendent

School District
APPENDIX E

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
Fax: 228-865-1928
Email: stacykgarcia@hotmail.com
Address: 23920 Stablewood Drive
Pass Christian, MS 39571

I hereby grant permission for Stacy K. Garcia to contact elementary and middle school principals in this district, which I serve as superintendent, to complete the survey process for the study mentioned above. I understand the explanations about the study and agree with the procedures.

Superintendent Signature/Date

School District
APPENDIX F

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
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APPENDIX G

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
Fax: 228-865-1928
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[Signatures and dates redacted]
APPENDIX H

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
Fax: 228-865-1928
Email: stacykgarcia@hotmail.com
Address: 23920 Stablewood Drive
Pass Christian, MS 39571

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[Signature and Date]

[School District]
APPENDIX I

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
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Superintendent Signature/Date 5/23/2023

School District
APPENDIX J

SUPERINTENDENT CONSENT

Dissertation Study:

Influence of Teacher Qualifications, Experience, Instructional Methods, and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Researcher: Stacy K. Garcia

Institution: The University of Southern Mississippi

Return Information: Stacy K. Garcia (Please fax if possible)
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[Blank space for signature and date]

Superintendent Signature/Date

[Blank space for school district]

School District
APPENDIX K
INSTRUMENTATION

School District __________________________ Grade __________________

School Name __________________________

Grade Level Taught LAST school year __________________________

Subject Area (s) Taught LAST school year __________________________

Thank you for taking the time to answer the following questions. This survey will take approximately 10 minutes to complete. Your responses will help determine if certain teacher qualifications impact student achievement on the Mississippi Writing Assessment in grades four and seven. All responses are strictly confidential.

1. What is the highest degree you have obtained?
   A.A or A.S.  B.A. or B.S.  M.Ed. or M.S.  Ed.S.  Ph.D or Ed.D

2. What type of teaching certification do you have? Please circle the letter before your response (s).
   a. Elementary education (K-6)
   b. Middle/Junior High School Education (7-8)
   c. Secondary Reading/Language Arts
   d. Alternate Route Certification
   e. Other __________________________

3. Have you taken and passed designated PRAXIS tests for your certification level?

4. Do you hold necessary endorsements for teaching the “core academic” subject(s) in which you are assigned? __________________________

5. If the answer to question 4 is yes, please list your endorsement(s) __________________________

6. How many graduate or undergraduate semester hours in language arts have you completed?
   Less than 9 hours  9-15 hours  16-21 hours  More than 21 hours

7. How many years (including this year) have you taught?
   0-5 Years  6-10 years  11-15 years  16-20 years  More than 20 years
8. How many years (including this year) have you taught 4th or 7th Grade?
   0-5 Years  6-10 years  11-15 years  16-20 years  More than 20 years

9. A lesson that is delivered by the use of multi-sensory techniques is more effective.
   Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

10. When teaching writing, it is important for teachers to fully teach each step of the
     writing process with each piece of written work assigned.
     Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

11. How likely are you to use information and/or methods obtained from professional
     development in your classroom with your students?
     Very Unlikely  Unlikely  Neutral  Likely  Very Likely

12. How often do you use ideas/methods obtained from professional development for
     writing in your writing instruction?
     Once a week  2-3 times a week  4-5 times a week
     6-7 times a week  Every writing lesson

13. Writing is a concept that can be integrated into other subjects and disciplines
     throughout the day and does NOT need to be formally taught on its own.
     Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

14. Formal writing instruction along with integrating writing into other subjects helps
     students to see the purpose and benefits of writing.
     Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

15. Participation in formal training of writing in a program such as The National
     Writing Project could make a difference in classroom writing instruction and
     students’ achievement.
     Strongly Disagree  Disagree  Neutral  Agree  Strongly Agree

16. How often do you implement The Six + 1 Trait model in your classroom?
     Not at all  Once a week  2-3 times a week  4-5 times a week> 5 times a week
17. My school district supports teacher training in specific subject areas, especially in writing.

18. How much time do you spend each day delivering writing instruction?

   0-15 min   15-30 min   30-45 min   45-60 min   More than 60 min

19. How many hours of professional development for writing instruction have you had?

   0-4 Hours   5-10 hours   10-15 hours   15-20 hours   More than 20 hours

20. Do you use rubrics to assess your students’ writing? Yes No

21. What types of instructional methods do you use regularly in your classroom?

__________________________________________________________________
__________________________________________________________________

22. How do you prepare your students for the state writing assessment?

__________________________________________________________________
__________________________________________________________________

23. What was your classroom average on the Mississippi Writing Assessment for the 2010-2011 school year?

24. Do you feel that you were provided with adequate resources for teaching writing? Yes No

25. Do you feel that your classroom average was a true reflection on how well you prepared your students for the assessment? Yes No

26. How likely are you to deliver writing instruction differently this year compared to last year based on your classroom writing assessment average?

   Very Unlikely   Unlikely   Neutral   Likely   Very Likely
27. If your answer to #26 is Likely or Very Likely, do you feel your classroom average will be impacted by the change? Yes No

28. Overall, how would you describe your teaching style?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

Thank you again for your time.
APPENDIX L

ADULT CONSENT FOR RESEARCH

University of Southern Mississippi
118 College Drive #5147
Hattiesburg, MS 39406-0001
(601)266-6820

Consent to Participate in a Research Study

Date: February 27, 2012

Title of Study: Influence of Teacher Qualifications, Experience, Instructional Methods and Professional Development on Student Achievement on the Mississippi Writing Assessment in Grades Four and Seven

Research will be conducted by: Stacy K. Garcia 228-596-0251

Email Address: stacykgarcia@hotmail.com

Faculty Advisor: Dr. David Lee

---

**What are some general things you should know about research studies?**

You are being asked to take part in a research study. Your participation in this research study is voluntary and there are no negative consequences if you choose not to participate in the research. You may refuse to join, or you may withdraw your consent to be in the study, for any reason and at any time, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

**What is the purpose of this study?**

The purpose of this research study is to determine if any correlations exist between teacher qualifications, experience, instructional methods, professional development and student achievement on the Mississippi Writing Assessment.

**How many people will take part in this study?**

If you decide to be in this study, you will be one of approximately 150 people in this research.
study.

**How long will your part in this study last?**
You will be asked to fill out a survey, which will last no longer than 15 minutes. You may request a report of my findings at the conclusion of this study by emailing me at stacykgarcia@hotmail.com.

**What will happen if you take part in the study?**
You will be asked to complete the survey instrument. A completed, returned survey instrument will serve as consent for your anonymous data to be used in the current research. Upon completion of the survey, you will be asked to hand it to the researcher. The researcher will maintain confidentiality of responses by storing all information in a locked, secure location throughout the entire study. The survey instrument will be shredded upon completion of this project.

**What are the possible benefits from being in this study?**
The results of this study could provide school districts with information that could aid in the recruitment and retention of highly effective teachers who influence student achievement in writing. School districts could also allocate funds more efficiently with professional development, choice of materials and instructional methods. Participants are encouraged to request a summary of this survey from stacykgarcia@hotmail.com.

**What are the possible risks or discomforts involved with being in this study?**
There will be no possible risks, discomforts, or inconveniences to the teachers completing the survey. Teachers’ surveys will not be included in data collection if they indicate they did not teach fourth or seventh grade during the 2010-2011 school year. Teachers will be identified only by their school district, school and the order they turn in their surveys. Personal information including name, age, race, etc. is not requested on the instrument. Confidentiality and anonymity will be explained to the teachers prior to the administration of the survey instrument. Surveys will be kept in a secure, locked location and only the researcher and her committee will have access to it. After data is entered into SPSS and the study is complete, all surveys will be shredded and discarded.

**How will your privacy be protected?**
Participants will not indicate their identities on the survey instrument. They will not be identified in any report or publication about this study. Surveys will be collected and placed in locked, secured location. Only the researcher and committee members will view the surveys. Surveys will be kept secure and locked in the researcher’s home. Surveys and consent forms will be shredded after a year.

**What if you have questions about this study?**
You have the right to ask, and have answered, any questions you may have about this research. If you have questions, or concerns, you should contact the researcher listed on the first page of this form.

**What if you have questions about your rights as a research participant?**
This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about your rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.
APPENDIX M

CITI COMPLETION REPORT

CITI Collaborative Institutional Training Initiative (CITI)

SBR Faculty, Students and Staff at the University of Southern Mississippi
(Basic Course) Curriculum Completion Report
Printed on 1/31/2012

Learner: Stacy Garcia (username: StacyKGarica)
Institution: University of Southern Mississippi
Contact Information
23920 Stablewood Drive
Pass Christian, MS 39571 USA
Department: Educational Leadership
Phone: 228-598-0251
Email: stacykgarcia@hotmail.com

SBR: Faculty, Students and Staff at the University of Southern Mississippi (Basic Course)

Stage 1. Stage 1 Passed on 01/31/12 (Ref # 5706305)

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<th>Required Modules</th>
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<th>Score</th>
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<tr>
<td>The University of Southern Mississippi</td>
<td>03/01/11</td>
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<tr>
<td>Belmont Report and CITI Course Introduction</td>
<td>01/31/12</td>
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<td>Students in Research</td>
<td>01/31/12</td>
<td>10/10 (100%)</td>
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<tr>
<td>History and Ethical Principles - SBR</td>
<td>01/31/12</td>
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<td>Defining Research with Human Subjects - SBR</td>
<td>01/31/12</td>
<td>5/5 (100%)</td>
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<td>The Regulations and The Social and Behavioral Sciences - SBR</td>
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<td>01/31/12</td>
<td>5/5 (100%)</td>
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<td>01/31/12</td>
<td>2/5 (40%)</td>
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<td>Privacy and Confidentiality - SBR</td>
<td>01/31/12</td>
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<td>Internet Research - SBR</td>
<td>01/31/12</td>
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For this Completion Report to be valid, the learner listed above must be affiliated with a CITI participating institution. Falsified information and unauthorized use of the CITI course site is unethical, and may be considered scientific misconduct by your institution.

Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator
CITI Collaborative Institutional Training Initiative (CITI)

GRAD Students at The University of Southern Mississippi (Common RCR Course) Curriculum Completion Report
Printed on 1/31/2012

Learner: Stacy Garcia (username: StacyKGarcia)
Institution: University of Southern Mississippi
Contact Information
23920 Stablewood Drive
Pass Christian, MS 39571 usa
Department: Educational Leadership
Phone: 228-596-0251
Email: stacykgarcia@hotmail.com

GRAD Students at The University of Southern Mississippi (Common RCR Course): This course is for investigators, staff and students with an interest or focus in Biomedical Research. This course contains text, embedded case studies AND quizzes.

Stage 1. RCR Passed on 03/31/11 (Ref # 5706303)

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<td>03/01/11</td>
<td>no quiz</td>
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<tr>
<td>Introduction to the Responsible Conduct of Research</td>
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<td>Publication Practices and Responsible Authorship</td>
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Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator
CITI Collaborative Institutional Training Initiative (CITI)

Researchers, Faculty, Students and IRB Member's Curriculum Completion Report
Printed on 1/31/2012

Learner: Stacy Garcia (username: StacyKGarcia)
Institution: University of Southern Mississippi
Contact: 23920 Stablewood Drive
Information: Pass Christian, MS 39571 usa
Department: Educational Leadership
Phone: 228-596-0251
Email: stacykgarcia@hotmail.com

Researchers, Faculty, Students and IRB Member's Engaging in Research Involving Human Subjects RCR Co: Researchers, Faculty, Students

Stage 1. Stage 1 Passed on 01/31/12 (Ref # 5706304)

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REFERENCES


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and Policy Analysis, 22(2), 129-145.


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Swain, S., Graves, R., & Morse, D. (2005a). *The Effectiveness of Mississippi/Thinking Institute Programs on improving student writing achievement and teacher practices at the Fourth Grade level*. Starkville, MS: Mississippi State University Press.

Swain, S., Graves, R., & Morse, D. (2005b). *The Effectiveness of Mississippi Writing/Thinking Institute Programs on improving student writing achievement and teacher practices at the Seventh Grade Level*. Starkville, MS: Mississippi State University Press.


