2016

Southeastern High School Teachers' Perceptions and Experiences in Preparing Students for Required Standardized Testing

Alberta Raymond
Walden University

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Alberta Raymond

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Glenn Penny, Committee Chairperson, Education Faculty
Dr. Celeste Stansberry, Committee Member, Education Faculty
Dr. Chukwuemeka Eleweke, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University
2016

Abstract

Southeastern High School Teachers' Perceptions and Experiences in Preparing Students

for Required Standardized Testing

by

Alberta Raymond

EdS, Walden University, 2011

BS, Mississippi Valley State University, 1980

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Educational Leadership

Walden University

August 2016

Abstract

The reauthorized No Child Left Behind requirement for annual state-mandated student examinations led some teachers to believe that they must teach solely for test preparation. This case study explored teachers' perceptions of preparing students for the state-mandated tests at an economically disadvantaged high school in the southeastern United States. Ten teachers were interviewed to understand their perceptions of "teaching to the test," feelings of pressure and stress, motivation to teach, and recommendations for integration of creative teaching strategies. The researcher collected demographic data, such as gender, grades taught, and subjects taught, and manually calculated frequencies and percentages. With an electronic software program for qualitative data management, the researcher analyzed the data manually by iterative review of the interview transcripts for codes and themes. Teachers' perceptions of standardized test preparation were both positive and negative. Preparation fostered discipline and content mastery but inhibited teacher creativity and stressed students. Teachers experienced pressure and stress with unhealthy physical reactions, lack of competence, and responsibility to students. Teachers' motivations were both positive and negative. Some experienced increased self-efficacy, and other experienced decreased motivation; commitment to students; and inadequate institutional support. Teachers recommended incorporation of creative teaching strategies and professional development (PD) programs. Findings led to a PD for addressing the problems and creative strategies (e.g., reciprocal teaching, graphic organizers). Findings may help teachers reduce negative feelings toward standardized test preparation and use innovative strategies for students' more effective learning.

Southeastern High School Teachers' Perceptions and Experiences in Preparing Students

for Required Standardized Testing

by

Alberta Raymond

EdS, Walden University, 2011

MA, Delta State University, 1997

BS, Mississippi Valley State University, 1980

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Educational Leadership

Walden University

August 2016

Dedication

To my sister, Ruby, with love.

Acknowledgments

Foremost, with a grateful heart I thank my working committee, Dr. Richard Penny and Dr. Celeste Stansberry. Your ever-thoughtful feedback constantly pushed my thinking. I would also like to thank my colleagues who took time out of their busy schedules to assist me. Finally, I heartily thank my loving family, who endured the neglect of a mother's love during this important time in my life.

Table of Contents

i

iii

List of Tables

Section 1: The Problem

Introduction

At the local study school, teachers believe that they are "teaching to the test" to ensure that their students meet state-mandated standardized test scores, which affects their motivation (Longo, 2010, p. 54). Pressures of accountability and the frustrations of teaching to the requirements rather than fostering student creativity and critical thinking lead teachers to become stressed. They may lose motivation to teach (Donnelly & Sadler, 2009; Finnegan & Gross, 2007; Gutierrez, 2014; Smith & Kovacs, 2011). Adequate student scores on state-mandated standardized tests, also called high stakes testing, have become the focus of much classroom teaching (Bhattacharyya, Junot, & Clark, 2013; Jones, 2007; National Center for Education Statistics, 2014; Rubin, 2011).

In compliance with No Child Left Behind (NCLB, 2002), local schools made efforts to raise educational standards so that all children receive quality instruction (Spellings, 2007). Recent policy changes with regard to NCLB and standardized testing were instituted with the Obama administration's Elementary and Secondary Education Act flexibility package (U.S. Department of Education, 2012), which was reauthorized in 2013 (Scott, 2013). Lawmakers in most states have mandated high stakes standardized tests (Hout, Elliot, & Frueh, 2012). These tests are given annually to students in Grades 3 through 11.

The Elementary and Secondary Education Act (ESEA) provided alternative means to NCLB for state assessments and accountability, with the focus on alignment with standards that promote readiness for college and careers (U. S. Department of

Education, 2012). Schools that were categorized in the bottom 5% of performance were awarded funds from the School Improvement Grant, which is an entity of the American Recovery and Reinvestment Act of 2009. Significant funds were distributed to states by a formula based on the state's Title I, Section 1003(g), of the ESEA. Schools that were awarded these funds were required to adopt intervention models that would help improve student performance in the classroom (U.S. Department of Education, 2011, 2012).

The intervention model adopted by the local school district in this study was the transformation model. This model required that the principal be replaced, that the district create or adopt a teacher and leader evaluation (M-STAR), that the school introduce significant instructional reforms (consultants were hired) and increase learning time (the school day was extended to 4:00 p.m.), and that the school provide sufficient operational flexibility and support (Mississippi Department of Education, 2012). Despite the changes and improvement, many teachers still experience the pressure of the requirement to teach to the test (Longo, 2010). This method is primarily composed of highly systematized, often rote "low-level, drill-and-skill-building instruction in place of an integrated, meaning-based approach" to content (Assaf, 2006, p. 158). With these methods, teachers focus their teaching efforts and strategies on prescribed student achievement rather than more creative teaching methods (Finnegan, 2010).

At the project study school and many others, as well as internationally (Kuehn, 2010), standardized testing has remained and will likely remain in various forms (Nichols, Glass, & Berliner, 2012). The impact of NCLB and requirements for annual school and district improvement (adequate yearly progress [AYP]) remain in effect. If the

students' test scores do not improve, and thereby the school and district reports, penalties to schools and teachers are imposed (Hemelt, 2011; Mathis, 2006) within the project study school.

However, the penalties may be slightly different for schools. For example, schools will no longer be required to meet 100% proficiency. Schools will no longer be labeled in Title I School Improvement for not meeting AYP, and schools will no longer be required to provide Supplemental Educational Services and Public School Choice if in improvement stages (Mississippi Department of Education, 2012). Neither will schools be limited to spending funds received for extended day or year programs (Mississippi Department of Education, 2012).

Problem Statement

At the high school under study, teachers' attitudes toward high stakes testing have had a negative effect on their teaching practices (G. Greenwood, personal communication, March 28, 2014). The teachers have been dealing with pressure and stress in this mode of teaching, and many have lost their motivation to teach (G. Greenwood, personal communication, March 28, 2014). Some have left the study school and the profession, taking early retirement or transitioning into other careers. When teachers leave the school because of unforeseen reasons, students are affected in negative ways in the classroom. The effects result in lower test scores in mathematics and English language arts (Ronfeldt, Loeb, & Wyckoff, 2013).

Because of teachers' attrition, students have become disheartened, confused by substitute teachers, and less motivated to learn (G. Greenwood, personal communication,

March 28, 2014). Students do not complete homework assignments that would help them achieve higher standardized test scores and must adjust to new teachers, which may interrupt their continuum of learning (R. Grierson, personal communication, February 14, 2014). The students who are in classes that require a state test are taught by new teachers who have little or no teaching experience, or the students may have substitute teachers who have no qualifications in the subject area (R. Grierson, personal communication, February 14, 2014). Students become reluctant to perform at a high level because they believe the teacher is not qualified to be in the classroom, their grades may decrease, and they may lose interest (G. Greenwood, personal communication, March 28, 2014).

Schools that are designated as low performing and are at risk of failure, such as the high school under study, may have additional constraints placed upon them through the NCLB regulations (Thomas, 2013; U.S. Department of Education, 2014). The study school was placed under guidelines that were identified through NCLB regulations to help improve student achievement. The study school chose to adhere to such regulations in order to apply for Title I funds that would be used to help with school improvement (R. Grierson, personal communication, February 14, 2014).

The school and district are accountable to the community, including parents and students. School and district policies, such as the mandates to teach to the test and inflexible and narrow curriculum criteria, may not support the teachers' desires to teach effectively and instead add to their frustrations, pressures, and decreased motivations. In turn, students may not learn effectively and score low on the state-mandated tests.

Evidence of the Problem at the Local Level

Student scores. At the high school under study, the state Subject Area Testing Program (SATP) mandates student mastery of minimum academic skills with standardized tests in English II, Algebra I, Biology I, and U.S. History (Mississippi Department of Education, 2013). Student passing rates in the state-mandated tests in these four subjects have remained low or declined in the last several years (Mississippi Department of Education, 2010). In English II, the percentage of students passing remained at 51.9% from 2007-2008 to 2009-2009, dipping in 2008-2009 to 43.9%. In Algebra I, the percentages were between 61.5% and 68.7% for all 3 years. In Biology I, the percentages declined from 90.5% in 2008-2009 to 71.1% in 2009-2010. In U.S. History, the percentages declined from 94.0% in 2007-2008 to 82.1% in 2009-2010 (Mississippi Department of Education, 2010). For the local school district in English II, the percentage of students passing increased from 51.9% in 2009-2010 to 54.5% in 2010-2011. In Algebra I, the percentages increased from 66.7% in 2009-2010 to 83.7% in 2010-2011. In Biology I, the percentages were 71.1% in 2009-2010, with a decrease of 58.8% in 2010-2011. In U. S. History, the percentages increased to 90.7% in 2010-2011(Mississippi Department of Education, 2014).).

These data indicate that the test scores fluctuated throughout each tested area. The percentages were especially low in English II and Algebra I. The percentages in Biology I were higher than in the previous subjects but still declined. The percentages in U.S. History were lower in 2007-2008 but higher in 2009-2010. Except for the increase in

U.S. History, the percentages of scores support the low achievement of students in these four subjects.

Effects on teachers. At the study high school, the low student scores put increased pressure and stress on the faculty and staff. For example, the Mississippi Department of Education (2014) required the school to make changes aimed at enhancing student achievement. With a memo to the school's 18 certified teachers, the high school principal affirmed the district's policy not to renew three of the five subject area teachers and to place two of the remaining subject area teachers on an improvement plan teaching staff (R. Grierson, personal communication, February 7, 2014). Many requirements were placed on the teachers, including evidence of professional and student growth weekly, with benchmark assessments and well-developed lesson presentations, frequent strategy meetings, and regular telephone consultations with parents (R. Grierson, personal communication, February 7, 2014). The teachers were required to teach more rapidly and cover more standardized test content during their instruction (R. Grierson, personal communication, February 7, 2014).

Teachers who failed to fulfill any of these requirements were reprimanded, suspended, or even terminated, depending on the gravity of the violation (R. Grierson, personal communication, February 7, 2014). Because of such demands, two English teachers left the school for other careers, and one history teacher took early retirement. Moreover, teacher attrition rates have doubled in the last 5 years (G. Greenwood, personal communication, March 28, 2014).

As a result of these changes, the remaining teachers were asked to present their written goals for the semester, and these goals were shared at the end of each semester. Some teachers stated that they would work at trying to complete all objectives per the mandated tests before the end of the semester (R. Grierson, personal communication, February 14, 2014). These promises placed stress and pressure on the teachers' classroom performances, and the stresses were reflected on the evaluations of teachers conducted by the principal (R. Grierson, personal communication, March 25, 2014). The evaluations confirmed that teachers who felt constrained to teach to the test may experience incompetence and ineffectiveness in teaching in rote modes, and they lost their motivation for teaching creatively (R. Grierson, personal communication, March 25, 2014).

The purpose of this qualitative case study was to explore high school teachers' perceptions of the required state standardized testing and its effects on their teaching. In the findings, I discovered teachers' pressure, stress, and motivations for teaching, as well as their recommendations for improvement, in an economically disadvantaged high school in the Southeastern United States. Because of their stated needs, a professional development (PD) program was created for delivery during the late summer (Appendix A). This study and the PD should contribute to the understanding of teachers' lived experiences of state-mandated student test preparation. Based on their suggestions for more satisfying and effective teaching, the PD should help meet their needs for integrating requirements with more creative teaching strategies.

Evidence of the Problem from the Professional Literature

Some research has been conducted on teachers' perceptions about teaching exclusively to the mandated requirements and their thoughts about pressure and stress in this regard, as well as the influence of the requirements on their motivation. Scholars who have conducted studies on teachers' viewpoints about high stakes testing (Al-Fadhli & Singh, 2010; Donnelly & Sadler, 2009; Jones & Egley, 2004) have indicated that teachers experience pressure, stress, and a lack of motivation to teach in meaningful ways. Teachers have reported experiencing these feelings because they are offered career incentives for high student scores and possible severe sanctions for low student scores (Assaf, 2006, 2008; Brumback, 2013; Gabriel, 2010).

Pressure and stress. Teachers have reported that they experience pressure to improve test scores (Bhattacharyya et al., 2013; Tienken & Zhao, 2013). As of 2013, 38 states and the District of Columbia were cited when it was discovered that teachers were cheating by falsifying test scores to reflect student improvement (Gutierrez, 2014; Schaeffer, 2013). The district superintendent of Georgia at the time of a recent cheating scandal commented, "When you add in performance pay and your evaluation could possibly be predicated on how well your kids do testing-wise, it's just an enormous amount of pressure" (Gabriel, 2010, p. 4). This observation indicates that teachers' preparation of students for state-mandated tests involve more than helping the students achieve high scores. Teachers are judged and compensated or penalized in pay and teaching evaluations by administrators based on their students' performances on the tests.

Increased accountability leads to increasing stress for teachers, which may be related to more teachers leaving the profession (Berryhill, Linney, & Fromewick, 2009). Stress from results-driven teaching may also lead to teachers adhering to policies in minimal or superficial ways and to a sense of frustration and loss of control, as teachers believe they lose their sense of autonomy. Perryman, Ball, Maguire, and Braun (2011) described the perceptions of British teachers regarding annual reporting of student results. "It is this belief of jumping through hoops in order to meet targets that can lead to teachers' sense of emotional dissonance as they lose their sense of professional independence" (Perryman et al., 2011, p. 186). This observation reveals that British teachers preparing student annual reporting felt constrained in their teaching and unable to institute their own curricula in favor of adhering to the mandated outlines and materials only. The teachers' feelings were similar to those of the teachers in the present study— loss of morale and feelings of constraint—as indicated by preliminary evidence at the local level from the present study site.

Lack of motivation. A lack of motivation to teach creatively has been recognized as an outcome of high stakes testing accountability (Ciani, Summers, & Easter, 2008). In one study, a major concern of teachers regarding high stakes testing was that it "narrowed the curriculum" by forcing teachers to teach only the subjects that were tested (Jones & Egley, 2004, p. 3). Teachers had to organize their instruction around illustrative items that were the same as, or looked like, actual test items. With regard to the NCLB requirements and teacher motivation, Rubin (2011) stated that "for teachers today, both in ELA [English language arts] and across the curriculum, NCLB is harming teachers, their

practice and their long-term commitment to the teaching profession" (p. 407). At the study school, teachers believed that NCLB mandates affected their teaching negatively and caused them to question whether to remain in the teaching profession. Many teachers complained of the constraints of NCLB and of lack of motivation to teach (R. Grierson, personal communication, March 25, 2014).

Regarding teachers' satisfaction with NCLB and their motivation, in a 5-year study of 58 teachers in three schools in the Mississippi Delta, Al-Fadhli and Singh (2010) revealed differences. The schools were in the same area as the present research site school. In the Al-Fadhli and Singh study, School A met the NCLB requirements, School B did not meet the requirements, and School C remained constant. The teachers in the three schools felt that the NCLB requirements helped improved the accountability in each school. However, the perceptions of teachers varied. Teachers in School B credited accountability as the reason for the school's positive changes. Teachers in School C found the systems too complex and not helpful to their teaching or their students. Overall, some teachers also reported concern at not having enough class time to teach curriculum content and an inability to provide challenging material for high achieving students. Contrary to other studies, the NCLB requirements appeared to enhance teachers' motivations for teaching, although School C teachers reported the least motivation (Al-Fadhli & Singh, 2010). The study results revealed that teachers had criticisms of NCLB. However, not all of the teachers believed the NCLB requirements affected their teaching negatively; rather, all believed the requirements supported their accountability and contributed to their motivations to teach.

Rationale

The teaching and learning situation at the study high school is not unique. Many teachers throughout the United States, especially in economically disadvantaged schools, experience the constraints of teaching to mandated requirements (Longo, 2010; Thomas, 2013). Given the severity of the school sanctions and pressures to improve student test scores, more teachers are forced to teach only to the requirements and have minimized or eliminated their creative teaching methods (Bhattacharyya et al., 2013). As a result, rather than adhere to the perceived emphasis on rote teaching, many teachers are also leaving the profession (Jones & Egley, 2004; Smith & Kovacs, 2011).

At the study high school, several teachers referred to the recent discoveries of alteration by teachers and administrators of student test scores (R. Grierson, personal communication, February 15, 2014). Such infractions have been noted in the literature (Gabriel, 2010; Tienken & Zhao, 2013). At a faculty meeting, several teachers expressed shock and sadness at such behavior and reiterated that they would rather leave the school and teaching than engage in such behavior (F. Johnson, personal communication, May 14, 2014). However, at the high school, both students and teachers suffer from a lack of instruction that should emphasize creative learning and critical thinking. Previous researchers have documented this lack of creative instructional strategies (Forehand, 2010; Hout et al., 2012; Longo, 2010; Rubin, 2011). As Bhattacharyya et al. (2013) noted, "Teachers are the front line workers in the education enterprise. . . . Their feedback should be a major ingredient in any revision or adjustment of NCLB" (p. 638). In this study, I explored teachers' perceptions of teaching for standardized test preparation and

the influences on their teaching in a rural high school. This study also provided a PD

(Appendix A) to meet teachers' needs for implementing creative thinking strategies in

their classrooms.

Definitions

Adequate yearly progress (AYP): This measure requires that in all three areas

under the NCLB guidelines, incremental progress is used to increase student achievement

and show greater progress in closing the achievement gap in education (Mississippi

Department of Education, 2007).

High stakes tests: High stakes tests are defined as state-mandated, standards-based

yearly assessments administered to all students in Grades 3-12 in the state of Mississippi.

Scores and accountability are reported in the state report card (Mississippi Department of

Education, 2011). Student performances on standardized tests generally become linked to

teachers' and schools' rewards and sanctions, such as teacher bonuses, federal funding

for the school, and publicized reporting of student and school scores. The tests then

become high stakes (Ullucci & Spencer, 2009, p. 161).

Mississippi Assessment and Reporting System (MAARS): The MAARS is an

integrated web application incorporating separate web sites that are used for accessing

accountability results or the Mississippi NCLB Report Cards and for downloading

assessment, accountability, and NCLB Report Card data files. Additionally, MAARS

serves as a portal to secure web-based applications designed to help districts meet

accountability requirements (Mississippi Department of Education, 2013).

Mississippi Curriculum Test2 (MCT2): These assessments allow Mississippi to comply with the requirements of NCLB. The assessments are administered to students in Grades 3 through 8, including special education students (Mississippi Department of Education, 2013).

*Mississippi Department of Education (MD*E): This is the governing body with the mission of ensuring that all children in Mississippi have access to the education they deserve. This education can lead to a brighter future and preparation for higher education as well as responsible citizenship (Mississippi Department of Education, 2013).

Motivation: This term refers to an individual's desire, drive, and eagerness to perform actions and the extent of effort required for the outcomes intended (Finnegan, 2010). In terms of teaching, motivation includes a teacher's wishes and convictions to stimulate students' interest in learning (Ciani, Ferguson, Bergin, & Hilpert, 2010).

Pressure: Pressure is a negative emotional response that stems from expected actions according to certain standards, whether self-imposed internally or other imposed externally. For teachers, the restrictions of teaching to the mandated requirements and external expectations of students' improved scores produce much pressure (Assaf, 2008; Dee & Jacob, 2011).

Stress: Stress is also a negative emotional response to expectations, generally of outside influences, for accomplishment or achievement of an outcome. Teachers often experience stress as emotional exhaustion, a sense of depersonalization, a sense of frustration and anxiety, and often physical symptoms (Berryhill et al., 2009; Perryman et al., 2011).

Subject Area Testing Program (SATP): The Mississippi Student Achievement Improvement Act, approved by the Mississippi Senate in 1999, stated that standards for high school graduation should include the mastery of minimum academic skills measured by state assessments developed and administered by the state board of education. To meet the intent of this legislation, four subject area tests were developed: English II, Algebra I, Biology I, and U.S. History, and students are tested annually in these subjects (Mississippi Department of Education, 2013).

Teaching to the test: This is a colloquial phrase indicating instruction in which teaching curriculum and strategies are focused on helping students master the material anticipated on the high stakes annual tests. This focus is intended to increase students' test scores and schools' report cards rather than to augment the curriculum content and skill areas for greater student learning (Bhattacharyya et al., 2013; Longo, 2010). The teaching method concentrates on repetition and memorization, "drill-and-skill-building instruction in place of an integrated, meaning-based approach" to curriculum content (Assaf, 2006, p. 158). These are all rote teaching strategies.

Significance of the Problem

High school students are not receiving the education they need for development of creative and critical thinking, as noted in their annual test scores (T. Morrow, personal communication, February 2, 2014). Nevertheless, teachers of the economically disadvantaged students in this school are constrained to teaching with the focus on test preparation (T. Morrow, personal communication, March 15, 2014), and students, teachers, and schools are all affected. This problem is significant in several ways.

Students are learning principally by memorization and rote, as the teachers have indicated (G, Greenwood, personal communication, March 28, 2014). These teaching strategies are widespread in studies on teachers teaching for state-mandated student test preparation (Assaf, 2008; Lai & Waltman, 2008). The strategies are not effective in helping students learn critical thinking and analysis (Forehand, 2010; Jensen, McDaniel, Woodard, & Kummer, 2014). Teachers at the high school endure pressure and stress to teach to the mandated requirements (G. Greenwood, personal communication, March 28, 2014).

As the literature attests, effective teaching and learning cannot take place when teachers' perceptions of teaching and experiences are not positive (Berryhill et al., 2009; Rubin, 2011; Santman, 2002). In addition, teachers' motivations to teach are adversely affected (Ciani et al., 2008; Donnelly & Sadler, 2009; Hayden, 2011). Teachers are leaving the profession partly because of such pressures (Lloyd & Sullivan, 2012; Smith & Kovacs, 2011). Schools are left without experienced teachers. Schools must fill the gaps, generally with less prepared substitute teachers.

A study such as the current one can help in understanding the multiple problems for all stakeholders inherent in the imposing of high stakes test preparation on teachers. Study outcomes may add to the literature on understanding of teachers' responses in teaching to state-mandated tests. Exploration may help determine how the dissatisfactions can be remedied so teachers are not tempted to alter test scores because of incentives or fears of sanctions. Findings may also help determine how teachers regain enthusiasm for teaching and students receive the education they deserve. Outcomes may additionally enable school and district officials to determine how to meet the requirements of state and

federal mandates and create course syllabi without the negative effects on teachers of sole focus on test preparation. For these reasons, the study was undertaken of teachers' perceptions of state-mandated standardized testing in a high school in a rural Southeastern school district.

Research Questions

High stakes testing is not a new phenomenon in education. These required tests, as mandated by NCLB, affect teachers, administrators, the school system, students, and other stakeholders. Students' scores on the tests affect the teachers and the schools in terms of federal and state resources. The effects of the required tests on teachers are of importance because they are the individuals who prepare the students for the tests. Some studies have been conducted on teachers' responses to high stakes testing, with the consensus that teachers experience constraint and frustration with regard to the requirements. Teachers additionally undergo pressure and stress, which can contribute to emotional trauma and decisions to leave the profession. In addition, few researchers have explored teachers' responses to high stakes testing in economically disadvantaged schools.

In the high school under study, the students' scores have been low for several years and have decreased from 2007-2008 to 2009-2010. Anecdotal evidence from teachers seems to corroborate this decline, with teachers' increasing perceptions of pressure, stress, and a lack of motivation to teach as they were trained (R. Grierson, personal communication, February 15, 2014). Because of the gap in the literature on teachers' perceptions of high stakes tests, especially in economically disadvantaged

schools, additional research is called for. The appropriate research approach is qualitative to investigate in depth the perceptions and beliefs of the teachers themselves in this case study of a rural high school.

Therefore, the following research questions guided this qualitative case study.

1. What are rural Southeastern high school teachers' perceptions of teaching to the SATP?

2. What are rural Southeastern high school teachers' experiences of pressure and stress in relation to teaching to the SATP?

3. How have rural Southeastern high school teachers' motivation to teach been affected by teaching to the SATP?

4. What are rural Southeastern high school teachers' recommendations for integrating standardized test preparation satisfactorily with teaching strategies?

Review of the Literature

In this review of the literature, I summarize previous research pertinent to the topic. Seven subtopics are reviewed. These are as follows: (a) conceptual framework, (b) a brief history of standardized testing in Mississippi and NCLB, (c) teachers' responses to standardized tests, (d) teaching to the mandated requirements, (e) teachers' perceptions of pressure and stress, (f) teachers' motivation, and (g) teachers' recommendations.

I searched many databases to locate the most pertinent and current research. The databases searched included but were not limited to EBSCO, Education Research Complete, ERIC, ProQuest, PsychLit, ProQuest, Questia, and SocINDEX. Search terms

used included the following: *economically disadvantaged schools, high stakes testing, low performing schools, NCLB, rural public high schools, standardized tests, state-mandated tests, teacher pressures, teacher stress, teacher motivation,* and *teaching to the test.* The search was limited to the last 5 years, except for historical and background material.

Conceptual Framework

The conceptual framework for this study incorporates social constructivism and pragmatism. Constructivists seek understanding of the world in which they live and work (Creswell, 2013; Crotty, 2005; Denzin & Lincoln, 2011). The understanding and meanings are subjective, varied, and multifaceted, leading researchers to look for complexity rather than narrow meaning (Denzin & Lincoln, 2011; Patton, 2002). As Crotty (2005) summarized, "Constructivism focuses exclusively on the meaning-making activity of the individual mind" (p. 58). The social constructivism framework leads to multiple meanings of a situation based on the participants' experiences (Lodico, Spaulding, & Voegtle, 2010). In the design of the study, I used social constructivism to explore the individual and subjective perceptions of the high school teachers as they reflected on the directives of teaching for high stakes test preparation. The constructivist framework helped ensure that the complexities of individual participant perceptions and meanings were reflected in data collection as well as data analysis (Denzin & Lincoln, 2011; Patton, 2002).

The framework of pragmatism derives from a worldview that arises from actions, situations, and consequences. Pragmatists are not committed to one philosophy or view of

reality (Creswell, 2012; Teddlie & Tashakkori, 2011). Rather, pragmatism uses any research method that will accurately describe or solve the educational problem (Lodico et al., 2010). Pragmatism emphasizes the practical consequences of actions and events in constituting the criteria to determine meaning, truth, or value. The meaning of an idea or a proposition lies in its observable practical consequences (Glaser & Strauss, 1967; Marshall & Rossman, 2010).

A pragmatic framework is used by researchers to help identify what works to solve educational problems (Lodico et al., 2010). Researchers using a pragmatist framework may use any methods, techniques, or procedures that best meet the needs of the study. For this study, a qualitative approach was chosen that best uncovers participants' perceptions and experiences of pressure, stress, and decreased motivation in teaching for student mandated test preparation. The goals of the pragmatic approach are understanding and action that remediates problems (Teddlie & Tashakkori, 2011).

Brief History of Standardized Testing in Mississippi and NCLB

In Mississippi, for several decades schools have administered standardized tests to measure students' educational performance. In 1982, William Winters helped to establish the Mississippi Education Reform Act (Kieffer, 2012). This act provided limited incentives for high performing districts and limited assistance and sanctions for low performing districts (Ladd, 1996). In 1982, the Mississippi Teacher Assessment Instrument was introduced as an evaluative tool to measure the evaluation of provisional teachers and identify weaknesses of beginning teachers (Amos & Cheeseman, 1991; Daniel & Siders, 1994).

In the 1980s, the Mississippi educational system used the Stanford Achievement Test to measure students' yearly performance in the classroom (Elmore, Abelmann, & Fuhrman, 1996). In the 1990s, the state began use of the Iowa Test of Basic Skills, the Tests of Achievement and Proficiency, and other criterion reference tests to track student achievement (Elmore et al., 1996).

The Mississippi legislature enacted two bills to increase school performance directly affecting schools, teachers, and students, Senate Bill 2156 (Legislature of the State of Mississippi, 1999) and Senate Bill 2488 (Legislature of the State of Mississippi, 2000). These bills detailed the procedures for remediation of low performing schools. As soon as a decline in test scores is recorded, the Mississippi Department of Education requires the school district to develop an effective improvement plan. Experts from Mississippi Department of Education are appointed to supervise the implementation of the plan. This requirement means that strangers are in the school buildings daily observing classrooms, offices, and other facilities, questioning faculty and staff. If growth does not take place after a year of implementing the improvement plan, the school is restructured. Restructuring means that school administrators, teachers, and staff members are replaced, reassigned, or placed on probation (Mississippi Department of Education, 2012).

NCLB (2002) mandated that schools must meet AYP, showing improvement annually over a steady pace in every grade and demographic subgroup (Finn & Hess, 2004). Failure to make AYP, especially in consecutive years, can result in withdrawal of Title 1 federal funds. In addition, the community is notified, and parents may transfer

their children to other schools (Hemelt, 2011; Mathis, 2006). When student performance is low, under NCBL, certain restrictions are placed upon teachers as well as the schools (NCLB, 2002). This has been the case with the high school under study. For example, teachers having problems are placed on improvement plans mandated by the district for help with lesson delivery or low student scores. Some teachers are moved from the state-tested area to another area that does not require a state test.

According to NCLB, if the school continues to underperform, it is labeled for school improvement. The school may eventually be closed if gains in AYP scores are not made from year to year (R. Grierson, personal communication, February 7, 2014). Such restrictions and actions affect teachers' performance documents, including teacher evaluations and recommendations from school officials for other teaching positions or administrative posts (U.S. Department of Education, 2014).

The school report card, produced by the National Association of Educational Progress (NAEP), is also affected by low student performance on the high stakes tests (U.S. Department of Education, 2014). The school may be prohibited from being labeled high performing. This term is an indicator used to grade the performance of the school districts in the Mississippi Delta (R. Grierson, personal communication, February 7, 2014; U.S. Department of Education, 2014). In low performing schools, the teachers receive fewer funds for learning support, and they can use fewer resources to commit toward student improvement or attainment of higher scores (Thomas, 2013). The high school under study has been subject to these restrictions.

As such strictures became implemented and standardized tests gained widespread use, especially with the inception of NCLB, teachers had concerns about the way test data were interpreted. Teachers' reactions to standardized testing became polarized as teachers experienced a loss of control over the content and methods of their teaching. Teachers also believed that they were inaccurately assessed by administrators because of the test data (Ellett & Teddlie, 2003; Jones & Egley, 2004; Klinger & Rogers, 2011).

Teachers' Responses to Standardized Tests

Teachers' responses to standardized tests are mixed. Some teachers believe that the tests and the required preparation can help structure lessons and that test results can provide a gauge for student academic progress (Ballard & Bates, 2008). Other teachers perceive that the testing mandate is overly complex and restrictive (Jones & Egley, 2004). In this section, I review research in which both views were documented.

In Florida, Jones and Egley (2004) investigated elementary teachers' perceptions of the state's high stakes testing program in mixed-method study with 709 teachers from 30 school districts. Few teachers had positive views, such as approval of accountability, the usefulness of student information, guidelines for curriculum, and higher student expectations. More than half the teachers had negative views on the use and accuracy of the test. These included unfairness of comparing students because they differ socioeconomically, culturally, and in their ability to take tests; the tests do not reflect teachers' abilities to teach; the grading system is unfair; and students' abilities cannot be measured accurately by a single test. In addition, teachers pointed out that the preparation forced them to teach only the required material, and they objected to the perverseness of

awarding funds to high performing schools rather than low performing ones. Further, teachers pointed out that the curriculum was superficial, stifled teachers' creativity, and did not address students' individual learning needs (Jones & Egley, 2004).

The effects of standardized tests on teachers, students, and parents were investigated by Ballard and Bates (2008) with participants from an elementary school in the Midwest. Fifteen teachers were included from all grades. Teachers' beliefs were positive about standardized testing because they provide data for means of trends and comparisons among students and schools. Ballard and Bates stated, "Teachers, overall, sensed that the tests were helpful if properly used" (p. 571). However, these teachers also voiced negatives about the high stakes tests. Some teachers believed that the test was biased because of wording and vocabulary. Others recognized the pressure on students and teachers, as well as unrealistic expectations for student performance in many cases. Some teachers noted the disparity between frequent yearlong preparation in the classroom and the small window of time of administration (generally a week or less). Still other teachers pointed to the "unnatural" environment in which the tests are administered (Ballard & Bates, 2008, p. 571). Teachers further recognized that some students do not learn test material well as it must be taught and that student scores do not necessarily reflect students' abilities and conceptual learning (Ballard & Bates, 2008).

Similarly, in a qualitative study, Donnelly and Sadler (2009) studied 22 science teachers from high stakes schools in five school districts in Indiana. Teachers had both positive and negative views of standardized testing. Some teachers viewed standards as a necessary part of the teaching profession and education and did not object to them but

welcomed them. Other teachers expressed negative views with regard to standards, the tests themselves, and accountability based on the standards. The negative views included the standards as too limiting in terms of content teaching. Teachers also pointed out that too many topics were treated superficially, in a "mile-wide-inch-deep overcrowding of the curriculum" (Donnelly & Sadler, 2009, p. 1070). The teachers noticed that the standards and accountability measures were "counterproductive" (Donnelly & Sadler, 2009, p. 1064) in terms of both teachers and students. For students, the negatives affected their attitudes toward science, toward learning itself, and toward their future careers. The school high stakes testing climate can transmit to students that the primary purpose of learning is to score well on the tests (Nichols & Berliner, 2008). For teachers in the Donnelly and Sadler (2009) study, the teachers called for a greater voice in the development of standards and believed the standards interfered with their autonomy as educators.

Al-Fadhli and Singh's (2010) 5-year study of 58 teachers in three schools in the Mississippi Delta was briefly reviewed above. The researchers found that school characteristics were similar to those of the study high school: geographic proximity, 95% of students African American, and from low-income families. Teachers overall perceived that the standardized tests aided accountability. However, the teachers' views were related to the schools' performance levels. Teachers in School A, which met the NCLB requirements, felt that they were respected and accepted and the administration shared their focus on student learning (Al-Fadhli & Singh, 2010). This was the case also in School B, which did not meet the requirements but later accelerated in performance.

Teachers in School C, whose performance remained constant at the minimal passing level, did not share these views. All teachers in the three schools were in favor of NCLB but both internal and external factors, such as district and state support and communication, contributed to the differences of opinion. In Schools A and B, internal factors included "effective leadership cooperation among teachers, small class size, and greater involvement in professional development" (Al-Fadhli & Singh, 2010, p. 29). These factors were all positive.

In School C, however, these and other factors were lacking. Moreover, in School C, teachers noted the complexity of the systems and felt they were not helpful in teaching. Further, teachers also reported concern at not having enough class time to teach curriculum content and their inability to provide challenging material for high-achieving students (Al-Fadhli & Singh, 2010).

Teaching for Standardized Test Preparation

Teachers have become increasingly verbal about the requirement to teach materials for the required tests. As Assaf (2006) observed, such teaching has lowered educational standards in response to the pressures for high student scores by state and district officials. In addition, testing pressures lower the quality of teachers' instruction and add to teachers' pressures (Assaf, 2006, 2008).

Teachers' responses to state-mandated test preparation in the study by Jones and Egley (2004) indicated that 23.3% of the teachers viewed the requirement as negative in terms of the time they spent preparing and implementing the lessons for test preparation. Teachers observed that such teaching does not reflect student abilities but was "only a

reflection of the abilities of each school to teach effective test-taking strategies, not academics" (Jones & Egley, 2004, p. 17) and at high cost to students' true learning. One teacher asserted, "Now I'm basically afraid to NOT teach to the test" (Jones & Egley, 2004, p. 15). Many commented that the requirement contributed to an "educational gap" (Jones & Egley, 2004, p. 15) for students that they did not deserve. The requirement forced teachers to go through the material too quickly, left no time for in-depth exploration of subjects, and did not allow for learners who need more explanation of basic concepts.

In a mixed-method study, Lai and Waltman (2008) explored the views on the teaching requirements for high stakes testing of elementary, middle, and high stakes schoolteachers in Iowa. The study purpose was to investigate teachers' preparation practices for the state-mandated tests. In 131 schools across the state, 3,800 teachers responded, of which 91 participated in interviews. A strategy of standardized test preparation is use of actual previous test questions. Of the teachers interviewed, most viewed this practice as unethical and inappropriate. However, teachers recognized that teaching the skills of test taking and reviewing content and skill areas before testing were ethical and appropriate teaching strategies. They also pointed out that skill building teaching enhanced opportunities for students to learn and thus the possibility of higher test scores.

With recognition that 50% of teachers leave the profession in their first year, Bhattacharyya et al. (2013) interviewed 11 novice teachers, all of whom had been teaching for 3 years or fewer. Their views on standardized test preparation supported

those in earlier studies. Although they saw this teaching strategy had some validity, its

drawbacks were more evident. One teacher in the Bhattacharyya et al. (2013) study said

the students' scores may increase, but they are not being prepared for facing and helping

to solve national challenges, such as energy crises and climate change. Another said that

the emphasis on reading and mathematics in test preparation ignores the needed teaching

time for social studies and other subjects. Other teachers pointed to the severe penalties

for lack of improvement, such as decrease of funding, school's lowered reputation,

parental complaints, and the temptations of teachers to help students with answers.

Additional teachers noted that a single test cannot be an indicator of a student's real

learning and that minority and low socioeconomic students are at a disadvantage: upper-

and middle-class students come from home environments in which the parents are

generally well educated and actively support education.

Bhattacharyya et al. (2013) pointed out that novice teachers may recognize the

constraints to teach to the test. With high stakes test scores as the only measure for

ascertaining teachers' accountability, the test scores inevitably become the teachers' top

priority and concern. This focus may be particularly true for novice teachers whose

reputations and performance at this early stage will determine the progress in their future

careers (Bhattacharyya et al., 2013).

In support of such conclusions, a revealing article written by a first-year teacher in

an elementary school in rural Mississippi showed the dilemma and often shock of

teachers at the mandate to teach to the test:

Ever since No Child Left Behind, this test seems to determine how my school will rank both nationally and within the state—it is likely that the test score will determine which teachers stay and which one go next year. Also, we are already categorized as a factor as to whether the state will take over our school in August. While I think school accountability is a necessity, I fear the way we are going about meeting the state's expectation is not serving our students. The stakes for the tests are so high that administrators often get test tunnel vision. ("Diary of a First-Year Teacher," 2013, paras. 1-4)

This teacher possibly voiced the observations of many novice and experienced teachers at the state-mandated requirements.

Possibly surprising and ironic outcomes of state-mandated teaching requirements to meet the requirements of student improvement in high school testing were found in a literature review of 46 studies by Holme, Richards, Jimerson, and Cohen (2010). The researchers found that these tests were not associated with overall student achievement or improvement by low achieving students. Rather, the more rigorous tests, such as the high stakes examinations, were associated with increased student dropout rates, and this was true especially for low achieving, minority, and economically disadvantaged students (Bhattacharyya et al., 2013). Similarly, Tienken and Zhao (2013) asserted that the mandated standards and standardized testing do not narrow but widen the opportunity gap for disadvantaged students.

Conversely, however, standardized tests have also been found not to be associated with increased dropout rates. The tests may prevent graduation of students

who would have likely dropped out for other reasons. These reasons may include discouragement, economic hardship, or pregnancy (Potucek, 2010; Sanders & Jordan, 2013).

Such outcomes as those by Holme et al. (2010) would seem to work against the intent of NCLB. Nevertheless, despite such dubious outcomes, because of NCLB requirements high stakes tests continue to be widely used. Bhattacharyya et al. (2013) asserted, "Teaching to the tests results in standardized teaching" (p. 634). Teachers continue to protest about the pressure and stress of standardized teaching. Such teaching prevents them from focusing on more effective teaching and learning strategies (Forehand, 2010; Gutierrez, 2014) and contributes to teachers' perceptions of pressure.

Teachers' Perceptions of Pressure and Stress

Despite the supposed benefits of standardized testing, such as the guarantee of a quality education for poor and minority students (Tienken & Zhao, 2013), teachers consistently report that testing pressures and attendant stress affect the quality of their teaching and professional beliefs. Barksdale-Ladd and Thomas (2000) observed that measurement of teacher accountability through student test scores and their expected improvement creates great pressure and stress on the teachers as well as producing anxiety over the impact of the tests on their students and the security of their own teaching positions.

Almost a fourth (22.5%) of the teachers in the Jones and Egley (2004) study reported experiencing stress from the testing pressure. Some teachers pointed out that students, administrators, and parents experience similar pressure and stress. As one

teacher commented, "The pressure to perform is cruel and unusual punishment for both the students and the teachers" (Jones & Egley, 2004, p. 20). The teachers also mentioned stress, anxiety, worry, and fear.

In a case study, Assaf (2006) investigated how one reading specialist teacher dealt with professional beliefs about good literacy instruction and knowledge in response to the testing pressures at the elementary school in central Texas. In attempting to balance testing pressures and belief, the teacher commented, "Their teachers are pressuring them to pass because they encounter the pressure from the principal and from the district" (Assaf, 2006, p. 162). A fellow teacher concurred: "I am just too overwhelmed by the testing pressures the district is placing on us" (Assaf, 2006, p. 162). As a result, both the reading specialist and other teachers felt forced to put aside their convictions about good teaching and instead focus on the skills needed to pass the test.

First-year teachers may encounter special pressures at preparation for high stakes testing. Brashier and Norris (2008) studied 48 first-year elementary teachers from 19 school districts and 25 schools in Texas. Approximately 72% of the schools were eligible for student reduced/free-lunch programs, indicating economically disadvantaged schools. The researchers found that the pressures from schools and districts of standardized testing posed barriers to implementation of developmentally appropriate curriculum in favor of a highly structured test-driven curriculum.

Brashier and Norris (2008) noted that, like teachers in other studies, new teachers in their sample were often confronted with a widespread challenge. This challenge was whether to teach in more student-centered and integrative learning strategies, as they

were taught, or to succumb to a school culture and expectations in which they must conform to teaching to the test practices. The researchers further noted that many teachers yield to the pressures of teaching toward standardized test preparation and sacrifice teaching strategies that support higher-level learning and activities for their students. An entry from a novice teacher in the "Diary of a First-Year Teacher" (2013) confirmed these observations: "The pressure of this one test serves neither the students nor the teachers. It creates a stressful atmosphere that does not allow for the best decisions or the best teaching to occur" (para. 12). As this new teacher noted, the requirement to teach to state-mandated tests does not utilize the teachers' best strategies or serve the students' educational needs.

These studies indicate, and Berryhill et al. (2009) confirmed, that such pressures can lead to teacher burnout, role and values conflicts, and decreased self-efficacy. Berryhill et al. (2009) explored teacher burnout in relation to the required state mandate for improved student achievement through high stakes testing in a South Carolina urban/suburban school district. A total of 100 teachers participated from 11 elementary schools in this mixed-method study. The 20 teachers who responded to the interview portion answered semi-structured questions on their views of accountability policies, specifically whether they saw the policies as supportive or stressful and how they affected the teachers' role conflicts and self-efficacy.

The findings showed teacher perceptions of many negatives, and these helped to "push" teachers toward burnout (Berryhill et al., 2009, p. 9). The negatives included a sense of hurry to teach to the mandated standards and curriculum and lack of time to do

so. The teachers' practices and pedagogical beliefs were consequently compromised, and teachers came to doubt their self-efficacy because it was tied to students' scores. Such negatives can adversely affect teachers' motivations to teach, as reviewed in the following section.

Teachers' Motivations

As may be expected, teachers' motivations are affected by the pressures, stress, and expectations of teaching for standardized test preparation. When teachers are still students, their motivation to teach is generally high (Sinclair, 2008). In three schools studied with regard to motivation provided by the NCLB requirements, Al-Fadhli and Singh (2010) reported that the NCLB requirements appeared to enhance teachers' motivations for teaching, although teachers in the school in which test performance did not change reported the least motivation (Al-Fadhli & Singh, 2010). These results were unusual, however.

Jones and Egley (2004) found that teaching for standardized test preparation decreases teachers' enjoyment of school and lowers their morale. They often experienced being degraded and dishonored. One teacher exclaimed, "The pressure of the scores leading to school grades takes a lot of the joy out of teaching, and I LOVE [emphasis in original] teaching" (Jones & Egley, 2004, p. 21).

A mixed-method study of teacher motivation in relation to accountability in Chicago low-performing schools was conducted by Finnegan and Gross (2007). For the quantitative segment, 269 teachers from 10 schools completed a questionnaire. For the qualitative portion, 171 teachers from 10 schools completed individual interviews. In

general, the quantitative and qualitative findings showed teachers' similar views. Teachers recognized the need for accountability and standards and had similar criticisms of high stakes testing to teachers in other studies. These criticisms included the unfairness of a single test to determine student performance, the recognition that some students did not do well on structured tests, and the acknowledgment that teachers had to change their modes of teaching to adhere to the testing requirements.

Regarding teachers' motivations, again the quantitative and qualitative findings generally agreed. The high stakes policy challenged their motivations in several ways. The first was their status as professionals. Because their schools were labeled as probation schools and this label publicized, teachers perceived their teaching abilities were questioned. One teacher said, "You just kind of feel like a loser" (Finnegan & Gross, 2007, p. 612). The second motivational challenge was teachers' motivation, despite the demeaning school label, to help their students improve: "I care about the kids and I want them to learn" (Finnegan & Gross, 2007, p. 614). This teacher expressed what many felt.

The third motivational challenge was teachers' material challenges. They knew that low student performance could mean the school could be restructured, with as many as half the teachers replaced, and they feared loss of their jobs. One said, "If you don't do good on the test, we might not be here next year. This is the year they say they really mean it and I believe it is so" (Finnegan & Gross, 2007, p. 615). This teacher pointed out how student performance affected teachers' job security.

Such comments indicate that these teachers had varying motivations because of the accountability of high stakes testing mandates. Further, teachers' morale was found to be extremely low. Many observed that they were being blamed for longstanding problems with the educational system and expected to improve it in only a few years. Teachers also experienced frustration, devaluation, and not listened to by the administration or district. As one said,

> I'm so frustrated it's ridiculous. . . . I love education. I love teaching. I think I have some really good ideas, and I would love to execute them. . . . I do like the kids. Maybe it's because . . . I'm up against things I can't control. (Finnegan & Gross, 2007, pp. 620-621)

Thus, both motivation and morale decreased with these teachers. As they became demoralized, they found difficulty in sustaining positive motivation to teach, a necessary ingredient for low-performing schools.

A qualitative study of 16 novice elementary teachers in northeastern North Carolina by Luton (2009) showed that high stakes testing expectations produced significant stress in the teachers as well as fear of failure as teachers. The teachers tended to view their jobs negatively when they were constrained to teach to the test in reading and mathematics to the minimization of social studies and science. As in other studies, teachers enunciated concerns that the present system of standardized testing exerts a detrimental effect on teaching methods as well as learning outcomes. Teachers pointed out that the students who score high may have only a limited understanding of the subject

but are able to memorize well; conversely, some talented students may achieve low scores. However, teacher morale increased in schools where teachers were rewarded for their performance, including improved student achievement in standardized tests.

Middle school teachers in Florida were studied in qualitative research by Hayden (2011) for their perceptions of motivation and state-mandated tests. The themes revealed that teachers had similar complaints to others in studies. Although teachers professed a love for their students and passion for teaching, they were frustrated with the schools' lack of resources, lack of autonomy in the content of standardized test preparation, and low salary. Teachers noticed that their motivation in teaching the content affected their students' desires to do well on the high stakes tests and the outcomes. Teachers recognized also that when they were more highly motivated, they felt they taught better (Hayden, 2011).

With regard to the state-mandated tests, teachers' motivation was low because of unrealistic expectations by stakeholders of students' improvement, believing that the teachers themselves were underappreciated, and lack of respect for their profession in the larger society. Their motivation and morale were affected adversely by low student scores and the implication that the teachers were not performing their jobs effectively. As one participant summarized about the high stakes testing, "I was not a big fan of it and it was basically setting up schools to make kids as though they were a bunch of robots, and we were teaching students to take standardized tests" (Hayden, 2011, p. 85). Thus, teacher's motivations for teaching and motivating their students were hampered by the required focus on preparation for state-mandated tests.

In a discussion of the erroneous focus on high stakes test scores, Gutierrez (2014) recognized like others that high scores do not necessarily indicate learning. Teachers have found to leave the profession because of this focus. Gutierrez asserted also that not only students but also teachers are "casualties" and the misguided emphasis on test scores affects both student and teacher morale (Gutierrez, 2014, p. 22). Rather, Gutierrez (2014) pointed out that the emphasis on closing the achievement gap results from policymakers' need for accountability and testing companies' vested stakes. When teachers recognize these factors, their enormity and complexity contribute to teachers' decreased motivation to teach students in meaningful ways. These more meaningful strategies will help prepare them to "navigate obstacles later in life" (Gutierrez, 2014, p. 21) and help them succeed in later education and responsible citizenship.

High stakes testing and accountability of both teachers and schools resulting from NCLB have led to conflicts in education. Smolin and Clayton (2009) noted that these issues have "created a division within the United States and within the field of education" (p. 33). Teachers must increasingly concentrate their instruction on the content and strategies for students to pass and improve their scores on standardized tests. Because of these pressures, teachers experience pressure, stress, and conflicts about how they have learned to teach, the values they believe in about teaching (such as higher-order thinking), and the strictures on them to meet and teach the material for standardized tests. Teachers experience pressure, stress, and fear because of expectations and possible penalties of high stakes test performance. To address these effects, as documented in this review, teachers and researchers have made recommendations to remedy the situation.

Teachers' Recommendations for Teaching

In the research literature, several practicing teachers and researchers made recommendations and conducted studies on integration of standardized test preparation with content teaching. To address teachers' anxiety and experiences of pressure and stress related to rote teaching in reading, Santman (2002) pointed out that teaching children to read begins with a strong reading curriculum that should be the basis of instruction. Nevertheless, specific strategies should be incorporated to help students prepare for the high stakes tests, such as practice in reading unfamiliar passages. Additionally, Santman (2002) recommended that specific time for test preparation should be allocated within the reading sessions.

Other teachers and researchers have recommended additional improvements. The teachers in the study by Berryhill et al. (2009) suggested that high stakes tests could be made fairer, such as with more than one test administered and benchmarks during the academic year. Teachers could be given more resources and better conditions, such as higher salaries, reduced class size, teacher aides, and more updated materials and equipment. Teachers also suggested that legislators visit their classrooms to view the conditions and gain a better understanding of the teaching process and what teachers face. Some teachers called for a greater (or any) voice in policy making (Berryhill et al., 2009).

Teachers in the Luton (2009) study made similar suggestions but also focused on novice teachers. Teacher support, mentors, networking, and PD resources for novice teachers were suggested. Teachers also suggested informing policymakers about teachers' concerns.

A further recommendation and possible remedy and assurance of teacher motivation could be Longo's (2010) observation that learning by inquiry, rather than rote recall, promotes student creativity. Such higher-level learning takes place "by increasing motivation, wonderment, and curiosity" (Longo, 2010, p. 54). The same qualities might be promoted in teachers who teach with creativity. In asking how teachers can *creatively* teach to the test, Longo (2010) suggested an inquiry learning model, in which students learn by questioning and discovery. This model is appropriate not only for the discipline of science but also for other content areas. Teachers' implementation of an inquiry learning model can encourage creativity, prepare students for high stakes tests, and allow teachers to teach creatively, thereby rekindling their teaching expertise and motivation. For this study, teachers' recommendations may include such suggestions.

The study by Jensen et al. (2014) showed the reverse of standardized test preparation in one school with two sections of an introductory biology course. For a semester, all students were taught in an inquiry-based content, but final examinations were created in two modes. The first was "low-level questions," which were based on rote memory, and the second was or "high-level" questions (Jensen et al., 2014, p. 308), which included application, evaluation, and analysis, based on Bloom's (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956) taxonomy.

Results of the Jensen et al. (2014) study showed that, as expected, students in the high-level examination group performed better than those in the low-level examination group. This outcome held not only for more in-depth understanding of the content information but also for the basic information that required memorization. This result

indicated that standardized test preparation can be combined with teaching for conceptual understanding, and students will benefit from both modes. Teachers' recommendations in the literature for integration of standardized test preparation with content and critical thinking strategies are important for comparison with the participant teachers' recommendations and possible applications to the local setting.

Implications

The findings of data collection and analysis include the high school teachers' perceptions and experiences of pressure, stress, and decreased motivation about teaching because of the mandate to teach to the test. These findings corroborated previous studies documenting teachers' perceptions and experiences of these factors in preparing students for high stakes tests (Longo, 2010; Rubin, 2011; Thomas, 2013). Teachers believe that there is more to teaching and learning than instruction of students for achievement on state-mandated tests (Assaf, 2006, 2008; Barksdale-Ladd & Thomas, 2000; Berryhill et al., 2009).

A major task of teachers is to instill in students a love of lifelong learning (Barksdale-Ladd & Thomas, 2000). Students should learn in more profound and meaningful ways than memorization, such as developing critical thinking skills (Bloom et al., 1956; Forehand, 2010; Jensen et al., 2014). For student success in later education and society, teachers will need to implement teaching strategies that prepare students for such learning. Thus, another outcome of this study was teachers' creative and innovative recommendations for integration of necessary test preparation and critical thinking strategies for student learning. From these findings, the following implications are noted.

For teachers, study results may be used to build a profile of teachers' needs and preferences in terms of the necessity of teaching for test preparation, a narrow definition of student achievement in terms of test scores, and teaching of important lifelong learning skills. Teachers entering the profession may gain knowledge and cautions about teaching requirements that will help prepare them for what is in store, as from a first-year teacher in a Mississippi elementary school (Bhattacharyya et al., 2013; "Diary of a First-Year Teacher," 2013). With attention to Mississippi, study results may also be used for novice and veteran teachers' knowledge and classroom teaching strategies for the required SATPs (Mississippi Department of Education, 2013).

For school administrators, presentation of the study data in an executive summary or report to the high school administrators may inform them of some of the reasons for teachers' negative reactions to test preparation teaching. The report may also help explain low teacher retention, high teacher departures, and election of early retirement. Administrators may then be open to dialogues with teachers on solving such problems (Jensen et al., 2014).

For the local school district, study findings may also provide the district with the same reports as for school administrators and meetings with administrators and teachers. Such meetings may support the cooperation between administrators and teachers and help improve teacher morale (Al-Fadhli & Singh, 2010). As these effects take place, the student achievement gap could be closed, students would perform better on the high stakes tests, and the school report card would improve.

For school and district administrators, study findings leading to teacher profiles and their enunciated needs for effective teaching could be used for selection and assignment of teachers to specific subject area classes. These assignments would be based on teachers' expertise and affinity for specified subject areas. With such decisions, teachers would be more assured of teaching in their specialties and transmitting their enthusiasm to students.

Summary and Transition Statement

NCLB (2002) mandates annual standardized tests for children in every public and charter school toward meeting AYP. NCLB thus holds educational agencies and states accountable for improving the quality of education for all students (Maleyko & Gawlik, 2011). However, many states are not meeting the goals set forth by NCLB, and administrators have argued that the goals are unattainable (Stansfield, 2011; U.S. Department of Education, 2014). For teachers to prepare students for improved scores and passing grades on the tests, teachers are increasingly "teaching to the test" (Longo, 2010, p. 54).

The literature indicates that both students and teachers experience negative effects of the rote teaching strategy: students are not getting the comprehensive education they deserve; and teachers are experiencing pressure, stress, and lack of motivation to teach. Teachers' perceptions in response to the mandates include the quality of teaching, compromise of professional pedagogical beliefs, constraints on teaching strategies, anxiety over students test scores, and worries about job security (Assaf, 2006; Barksdale-Ladd & Thomas, 2000; Berryhill et al., 2009; Jones & Egley, 2004). First-year and

novice teachers have especially experienced these pressures (Bhattacharyya et al., 2013; Brashier & Norris, 2008; "Diary of a First-Year Teacher," 2013; Luton, 2009). Teachers' motivation has also been adversely affected in many cases by the constraints of teaching for high stakes test preparation (Finnegan & Gross, 2007; Gutierrez, 2014; Hayden, 2011; Jones & Egley, 2004).

In Section 1, I have provided an overview of the NCLB mandates, the local problem, and a review of the literature on teachers' perceptions of standardized testing. The literature review supports the need for further investigation as to how teachers perceive standardized testing in terms of their teaching, pressures they feel, stresses they experience, and their motivations. In addition, this review summarized teachers' recommendations for remedying the problems of exclusive adherence to preparation of students for state-mandated tests. In Section 2, I describe the research design, participants, instrumentation, data collection, and data analysis for this study.

Section 2: The Methodology

Introduction

In this section, I discuss the study methodology, including the research design, description of the qualitative tradition, and justification for the research design. Then I describe the participants, including selection criteria, justification for the number of participants, and measures for ethical protection of participants. I next describe the data collection procedures, including the interviews and roles of the researcher. Finally, I describe the methods of data analysis, including coding and credibility procedures to ensure accuracy and credibility of findings.

At the research site high school, low student scores on the state-mandated tests and the negative ramifications of NCLB (2002) have constrained teachers to teach to the test. Teachers' attitudes toward standardized test preparation were also negative. The teachers encountered pressure and stress at this mode of teaching, and many lost their motivation to teach. Some left the school and the profession, taking early retirement or transitioning into other careers. Thus, I explored the teachers' perceptions of the required state standardized testing and their experiences in this type of teaching. These perceptions included their pressure, stress, and motivations for teaching, as well as their recommendations for improvement.

Four research questions were formulated to explore the stated problem:

1. What are rural Southeastern high school teachers' perceptions of teaching to the SATP?

2. What are rural Southeastern high school teachers' experiences of pressure and stress in relation to teaching to the SATP?

3. How have rural Southeastern high school teachers' motivation to teach been affected by teaching to the SATP?

4. What are rural Southeastern high school teachers' recommendations for integrating standardized test preparation satisfactorily with teaching strategies?

To address these questions, a qualitative case study research design was used.

Qualitative Tradition and Research Design

Qualitative research differs from quantitative research in several ways. In qualitative research, few participants are recruited, data gathering makes use of open-ended questions answered in depth, the sampling is purposeful, and interpretation is personal (Creswell, 2012). According to Merriam (2009), the overall purposes of qualitative research are to achieve an understanding of how people make sense out of their lives, delineate the process of meaning making, and describe how people interpret what they experience, often with identification of themes common to the participants. In qualitative research, the investigator seeks the meaning of an experience from the perspectives of the participants (Lodico et al., 2010).

Within the qualitative tradition, researchers engage in case study research to learn more about, discover meaning, and gain insight into a particular individual, group, event, or organization (Hancock & Algozzine, 2006). In a case study, a researcher focuses on a specific setting or "bounded system" and a group or individuals within the setting

(Lodico et al., 2010, p. 269). In a case study, the researcher observes and "investigates a contemporary phenomenon (the 'case') in depth and within its real-world context" (Yin, 2013, p. 16). A qualitative case study was the appropriate choice for the current research because the study took place in a "bounded system" (Lodico et al., 2010, p. 269), a single high school. A real-world and current phenomenon was investigated, teachers' perceptions of how high stakes testing affected their teaching.

A purposeful sample of participants is sought in case study research. The participants have experience in the chosen setting and are willing to speak with a researcher about their experience. Interactions are generally through one-to-one interviews, which may last for a single hour to several hours. In the interviews, the researcher elicits "thick description" (Creswell 2013, p. 202). This term refers to thoughtful, detailed, multilayered responses that convey participants' experiences (Creswell, 2013). Qualitative findings "transport readers to the setting," prompt shared experiences, and provide realism (Creswell, 2013, p. 202).

In case studies, the researcher often conducts onsite observation. The researcher may be a participant observer if the researcher is a part of the setting or culture or a nonparticipant observer. Observations may also be carried out of particular events within the setting (Creswell, 2013; Yin, 2013). In the current study, I was not a participant observer but in the interviews, thick descriptions were elicited as the participants expressed their thoughts and feelings.

Justification of Choice of Research Design

In this qualitative study, the case study method was used to enhance my understanding of the situations and experiences of a small number of participants, a purposeful sample, in a single setting (Leedy & Ormrod, 2012). Baxter and Jack (2008) stated that the case study design is used to seek answers to research questions that may explain the links between real-life situations that are too complex to study with quantitative surveys and experimental strategies. In the present case, NCLB and other federal and state testing mandates have adversely affected teachers' perceptions and lived experiences about their teaching in the high school under study. The case study design allowed me to discover and explore the perceptions, views, and beliefs of teachers about teaching to the standardized material in one specific setting, a rural Mississippi high school.

Other qualitative research approaches were not appropriate for this study. In grounded theory design, the focus is on building theory from the data collected (Merriam, 2002, 2009). In this study, I analyzed data in a comparative manner to answer the research questions, but the intent did not include the development of a hypothesis or substantive theory. Therefore, grounded theory design was not appropriate for this study.

In ethnography, the focus is on a culture, including values, rituals, habits, social structures, and communication styles, in which the researcher spends generally long periods within the cultural system (Creswell, 2013; Merriam, 2009). For this study, the inquiry was not focused on the culture of the school district or school itself but on

individuals within the school culture. Therefore, ethnography was not appropriate for this study.

In the narrative qualitative approach, the researcher investigates the lives of individuals through stories about their lives. The focus is on the individuals' stories and recollections of experiences, with analysis of the meanings of their experiences (Creswell, 2013). However, the narrative approach was not appropriate for this study because the intent was not to summarize or paint a picture of a single teacher's experience.

The phenomenological approach is designed for participants who share a common phenomenon, and participants may be drawn from many settings (Leedy & Ormrod, 2012). The research focuses on the in-depth understanding of that phenomenon, with interpretation by the researcher, noting of researcher biases (bracketing) that may color accurate interpretation, and extraction of common themes (Moustakas, 1994, p. 78). Moustakas (1994) described the purpose of phenomenology as a determination of what an experience means for the persons who have had the experience and are able to provide a comprehensive description of it. From the individual descriptions, general or universal meanings are derived "to obtain comprehensive descriptions that provide a basis for a reflective structural analysis that portrays the essences of the experience" (Moustakas, 1994, p. 13). In addition, phenomenology helps to inspire researchers and studies that will lead to significant new knowledge of everyday human experiences, human behaviors, and human relationships (Moustakas, 1994).

Although the case study approach has some affinities with phenomenology, it focuses on exploration of a particular event, organization, or system within a natural setting (Yin, 2013), as noted above. The purposeful sample of this study helped ensure accuracy because all participants fulfilled the criteria for the case study. The purposeful sample also adhered to the purpose of the research (Donnelly & Sadler, 2009).

The most common forms of data collection in the case study approach are in-depth and semistructured interviews, which allow participants to reveal their insights and perceptions and reflect on their experiences within the setting. Findings reflect an overall description and synthesis of the case (Leedy & Ormrod, 2012). In accordance with this definition, in this research I sought in-depth understanding of teachers' perceptions of and responses to teaching to the required state-standardized tests in a single rural Southeastern high school. All the teachers experienced the same experiences in standardized test preparation. Therefore, to obtain meaningful information from participants, this study employed a case study design.

Participants

Selection Criteria

The teachers selected for this voluntary purposeful sample had to meet four criteria. These were as follows: (a) they must teach full-time at the research site high school; (b) they must have been currently teaching in one or more of the subject areas that required a standardized test at the end of the school year (English II, Algebra I, Biology I, and U.S. History); (c) the teachers must have been willing to share thoughtfully and express their beliefs about the requirement to teach to the test and its

effects on their beliefs of pressure, stress, and motivation to teach; and (d) they must have been willing to share recommendations for integration of standardized test preparation with more creative teaching strategies.

Justification for Number of Participants

In this study, I interviewed a purposeful volunteer sample of 10 participants. A purposeful sample is one in which the researcher deliberately selects individuals in a specific setting or site to gain greater understanding of the phenomenon under study (Creswell, 2013; Patton, 2002). This approach is "criteria-based selection" because the researcher chooses participants who can provide particular information that cannot be obtained as well from alternative sampling procedures (Maxwell, 2004, p. 88). The participants selected provide "information-rich cases . . . from which one can learn a great deal about issues of central importance to the purpose of the research" (Patton, as cited in Lodico et al., 2010, p. 140). The participants at the study school were individuals who had experienced and continued to experience the phenomenon studied. They had lived experience of the phenomenon and could speak about their perceptions and experiences in preparing students for the required standardized testing.

The number of participants in a study can vary depending on the purpose. Creswell (2013) noted that from one to 40 participants can be studied in qualitative research and cited four in each of two studies. For in-depth interviews, such as in the current study, Groenewald (2004) recommended two to 10 participants. Fewer participants increase the possibility of more in-depth inquiries and help ensure more focused concentration on the content during the interviews (Patton, 2002). Guest, Bunce,

and Johnson (2006) found that at 12 participant interviews their study themes had reached saturation, the point at which no new data are revealed. Guest et al. pointed out that "enough data existed after six interviews to support [their] four themes" (p. 78). The assertion by Guest et al. indicated that themes could be repeated after six interviews and that additional interviews may not be necessary for new information or themes. This assertion supported my plan for 10 participants, which should have been sufficient for revealing of the common themes.

In addition, given the variations in the literature, cited above, the number of 10 teachers for this study was acceptable. In addition, only 18 teachers in the high school met the study criteria. Thus, the sample of 10 was adequate for cautious generalization about the teachers' perceptions and experiences of teaching for the standardized test material. Twelve teachers volunteered, and I selected the first 10.

Procedures for Gaining Access to Participants

Access to the participants for this study for the teachers' e-mail addresses was gained through the cooperation of the school principal. The principal gave permission for teacher access and my conducting this study (S. Brown, personal communication, January 15, 2015; Appendix B). This administrator provided me with the e-mail addresses of all teachers at the high school, and I e-mailed them my invitation to participate (Appendix C). This invitation had my contact information for teachers to respond.

I e-mailed all teachers at the high school my recruitment invitation to participate (Appendix C). This invitation had my contact information for teachers to respond. The e-

mail also contained the consent form (Appendix D). When teachers replied to me, those who agreed to participate returned the signed consent. This form assured participants of ethical protections and informed them of the study purpose and nature and procedures for their participation, such as completion of a short demographic questionnaire, in-depth interview with me, and duration of the interview.

Teachers were given assurances that the information they supplied would remain confidential. They were told also that their participation was voluntary. They were further told that they could withdraw at any time without detriment to their employment or professional status. For any questions they had, I supplied the Walden University contact information and my own. I contacted the first 10 teachers who responded to the invitation to arrange an interview.

Methods of Establishing a Researcher-Participant Working Relationship

To increase participants' ease, I arranged the interview locations away from the school site at a local town hall in a private room. This location was chosen to assure participants of privacy and confidentiality. I conducted the interviews with only one participant at a time. I greeted participants, made sure they were comfortable, and thanked them for participating. I continued with informal conversation to "break the ice" (Leedy & Ormrod, 2012, p. 147). At each interview, I shared some of my teaching background and the requirements of teaching. Then I explained the purpose of the study and the role of the findings in helping participants and their colleagues in their teaching.

I gave participants several assurances. Their identities would be protected, and they would be referred to only by participant number in the final report. No detrimental

consequences to their school position would result from participation. In the interviews, I specified that there were no right or wrong answers to my questions. I emphasized that I was interested in their honest responses. I informed them that the interviews would be audiotaped and that I would be taking notes. Finally, I informed participants that they had the right to withdraw from the study at any time.

Prior to asking the interview questions, I requested that participants complete the short demographic questionnaire and reminded them not to place their names on the form, as only I had the key to their identities. When they completed the questionnaires, I collected them. I also encouraged participants to ask any questions at any point for additional clarification. One asked what would happen to the audiotapes. I responded that, as the consent form indicated, they would be kept in my locked file cabinet accessible only to me and destroyed after 5 years. Another participant asked whether I was sure that names would not be used. I responded that no names would be used, and the report would refer only to participant numbers. At each interview, I provided light refreshments to promote participants' further relaxation.

Measures for Ethical Protection of Participants

A letter of permission was provided by the school district for access to teachers' e-mail addresses (Appendix B). The next step in protection of participants took place before data collection. Approval for the study was obtained from the Walden University Institutional Review Board (IRB) for the protection of human subjects. Next, the recruitment invitation informed participants about the nature of the study, requirements for participation, their roles, and basic protections (Appendix C).

For teachers who volunteered to be participants, prior to each interview I e-mailed them the consent form (Appendix D) assuring them of ethical protection. This letter informed participants again of the study purpose and nature, as well as the procedures for their participation, such as completion of a short demographic questionnaire, participation in an in-depth interview with me, and the time of the interview (approximately 60 to 90 minutes). Participants were informed that their participation was voluntary; that they could withdraw at any time without penalty; and that their school employment, standing, or professional status would not be adversely affected.

Participants were also informed that there was no monetary compensation for participation in the study and that the risks were minimal. However, their input could help them and other teachers understand better the personal constraints of standardized test preparation and arrive at strategies to integrate this requirement and more creative teaching approaches.

Participants were reminded that all information they supplied would be confidential, that I would assign pseudonyms to protect all identities, and that only I would know their identities. They were informed that only I had access to all documents used in the study. I would keep them in a locked file drawer in my home office for a period of 5 years, per university regulations. They were informed that I would then destroy the documents and all forms of the data.

Participants were also informed that their signed consent forms would be kept separately from the data, and that any research subsequently published will protect their identity and confidentiality. Finally, participants were asked to sign and date the consent

form and were given a copy for their records. After they returned the signed consents to me by e-mail or in person, we arranged a mutually convenient time and place for the interviews.

<div align="center">**Data Collection**</div>

Justification of Data Collected and Appropriateness

Two types of data were collected. The first was information from a short demographic questionnaire. The second was participants' responses to an in-depth interview. Both of these types of data are described next. The total time for data collection for each participant was 60 to 90 minutes.

Demographic questionnaire. Participants were asked to complete a short demographic questionnaire (Appendix E). The choice of these data is justified and acceptable in qualitative research so that I could describe the participants with individual profiles and generate a descriptive table (Creswell, 2013). The demographic characteristics may also help explain and provide insights into participants' variations of responses to the interview questions based on their years teaching, years at the high school, and subjects taught, as well as directions for further research. The demographic questionnaire consisted of eight short-answer items. These were participant's name (coded for protection), ethnicity, gender, age, years teaching, years at the high school, grades taught, and subjects taught. The demographic questions were formulated based on the literature (Berryhill et al., 2009; Finnegan, 2010; Hayden, 2011)**.** Completion of the demographic questionnaire was estimated to take 5 to 10 minutes.

In-depth interview guide. The major data collected were the participants'

responses to the interview questions. These are outlined in the interview guide (Appendix

F). These data are appropriate for collection because the in-depth interview method is the

traditional and major way data are collected in a qualitative case study (Creswell, 2013;

Lodico et al., 2010).

The goal of the interview method of data collection in this case study was to elicit

the perspectives and experiences of the participants with regard to their standardized test

preparation at a Southeastern high school. I prepared list of questions, as Lodico et al.

(2010) suggested, but I was flexible in exploring ramifications of questions and probing

for additional information to assist in the collection of rich data (Baxter & Jack, 2008;

Creswell, 2013). This prompting ensured that participants describe their experiences and

emotions as fully as possible (Hatch, 2002; Merriam, 2002, 2009). The power of

qualitative interviews allows participants to share their unique perspectives in their own

words. Therefore, the interview method of data collection was the approach that most

closely aligned with the study purpose and research questions.

The interview guide consisted of eight open-ended questions based on the

research questions, with pertinent prompts to encourage participants to respond fully

from their experiences and reflections (Appendix F). An expert panel was contacted to

verify the interview guide and ensure that the interview questions reflected the study

purpose and research questions. The panel was composed of three professors with

advanced degrees in education and experience in educational research: Dr. Jennifer

Hemmingway, a professor at the University of Tennessee; Dr. Yolanda Sample, a

professor at the University of Mississippi; and Dr. Samuel Williams, a professor at the University of Mississippi. All three experts reviewed the questionnaire via e-mail, asked questions, and provided feedback pertaining to format, style, content, and wording. I revised the guide and resubmitted it several times, following the panel's feedback. Then the experts indicated that the content was valid. Completion of each interview with participants took 60 to 90 minutes.

Plan and Process for Data Collection

Ten interviews were planned with teachers at the high school, as described above. At the individual location away from the high school campus, I brought copies of the demographic questionnaire (Appendix E) and interview guide (Appendix F), as well as an audiotape recorder and notebook for my process notes. At the end of each interview, I transcribed the audiotapes, making additional notes.

Following my transcriptions and data analysis, I contacted each participant for review of the specific interview and my findings of the themes to verify accuracy. In an e-mail, I thanked them for participating and attached my transcript of their interview and a summary of the themes. I requested that they correct any of their interview responses and include their thoughts on the themes. If corrections were needed, I instructed them to type the corrections in bold font on the transcript and e-mail the attachment back to me. If no corrections were needed, I asked participants to state this conclusion by return e-mail to me. With this procedure, the participants had the opportunity to clarify their responses in their interviews, if needed. They also had the opportunity to comment on the themes

revealed in my data analysis. This was the procedure of member checking, used to assure accuracy and credibility of the findings (Creswell, 2012) and described below.

Keeping Track of the Data

As I interviewed each participant, I kept a log of the location, date, and time for each interview. I coded all the information in my log, the demographic questionnaire, and the interview transcript with the same pseudonym for each participant. Only I had the key to the name codes. I also made detailed field notes during and immediately after each interview.

In transcribing each interview, I kept a handwritten reflective journal of thoughts that occurred to me about each response, as well as recurring words and phrases as they emerged. I recorded descriptive impressions, such as participants' body language, gestures, and facial expressions, and my own reflective notes (Glesne, 2011). After transcription, I transferred my notes to a computer with files keyed to each participant's interview for my later examination during data analysis.

In my reflective journal I also recorded and memoed my own responses as I listened to the participants. This was "bracketing" my thoughts, emotions, and experiences so as not to influence participants' responses (Moustakas, 1994, p. 78). I bracketed consciously, especially because I am a teacher at the research site (discussed below in the roles of the researcher).

Roles of the Researcher

My roles as the researcher were as an interviewer, data collector, data analyzer, data interpreter, and writer of the final report. My professional role at this high school is

as a veteran teacher, with 23 years of employment. I teach Grades 9 through 12 and the subjects of family and consumer sciences. Although I am also licensed as an administrator in the state, I do not currently have a supervisory position in relation to other teachers or plan to take such a position.

I chose this school for the study because of my observations of fellow teachers' stresses and frustrations and my desire to help with local problem that directly affects my school environment. I am aware that a study of this setting, with which I am very familiar, may raise questions of my bias in interpretation of the data gathered (Creswell, 2013). Knowing all the teachers, I am further aware that this acquaintance may raise issues of conflict of interest. That is, conflicts of interest may occur from "coexisting personal, financial, political, and academic interests and the potential exists for one interest to be favored over another" (Israel & Hay, 2006, p. 120). The conflicts may be primarily personal and academic. Thus, I was aware that I could tend to empathize too much with participants, mentally relate my own struggles to theirs in teaching for standardized test preparation, and ask questions that may not appear wholly neutral.

However, as the researcher, I implemented several approaches to minimize my biases, following the recommendations of Creswell (2013). The self-reflection of the researcher creates an open and honest narrative that will resonate well with the readers. To strive for neutrality during the interview process, I first informed participants that I am a fellow teacher. For neutrality of questions, I adhered to the interview guide (Appendix F). To gain participants' trust, I reiterated to them that their identities would not be revealed in any report and that they could be at ease with the confidentiality of

their responses. I also informed them that my own internal responses would not affect the reporting of theirs.

Biases in research are inevitable. As Janesick (2000) pointed out, "There is no value-free or bias-free design" (p. 212). However, the researcher identifies biases early and becomes increasingly aware of them. Therefore, I was aware of my responses and reactions and bracketed them during the interviews, as described above. I also carefully monitored my nonverbal responses and possible clues to my own views and strived to minimize them (Groenewald, 2004).

During data analysis, I reviewed my field notes and used my reflective journal. In these, I noted my biases and possible parallel experiences so that these were uncovered and did not affect the final data analysis. Creswell (2013) asserted that the qualitative researcher's role involves a shared, ongoing encounter with the participants in an authentic setting. As noted, all the participants in this study were my colleagues at the high school, and I teach in the same building. I have direct experience and knowledge of the questions and issues addressed in this study.

Quantitative Data Collection, Analysis, and Results

I collected the demographic questionnaire (Appendix E) at the interviews and used a manual mode to arrive at their demographic characteristics. First, I created a table of the demographic items with headings for each participant number and then manually extracted the data from the sheets. Next, I copied each participant's responses onto the table. Finally, I added all similar responses for each item and calculated the frequencies and percentages. The resulting table is shown in Table 1.

Table 1

Demographic Characteristics of Sample (N = 10)

Characteristic	Frequency	Percentage
Gender		
Male	4	40.0
Female	6	60.0
Age Group		
21-30	6	60.0
31-40	3	30.0
41-50	1	10.0
Ethnicity		
Caucasian	3	30.0
African American	7	70.0
Number of Years Teaching		
0-3	6	60.0
4-7	2	20.0
8-11	1	10.0
12+	1	10.0
Years at High School		
0-3	6	60.0
4-7	3	30.0
8-11	1	10.0
Grades Taught		
7-8[a]	3	30.0
9-10	7	70.0
Subjects Taught		
English I	3	30.0
Algebra I	2	20.0
Biology	3	30.0
U.S. History	2	20.0

[a]All teachers who teach middle school also teach high school.

Ten teachers at the research site participated. All volunteered for the study and met the study criteria. As Table 1 shows, 60% ($n = 6$) of the teachers were female, and 40% ($n = 4$) were male. The majority, 60% ($n = 6$), were in the 21-30 age group, and a majority were African American, 70% ($n = 7$). The majority of the teachers, 60% ($n = 6$), also had from fewer than 1 to 3 years of teaching and from fewer than 1 to 3 years at the high school.

The majority of the teachers, 70% ($n = 7$), taught Grades 9 and 10, although some of the teachers taught more than one grade level. At the school, all teachers handle both middle school (Grades 7 and 8) and high school (Grades 9 and 10). Of the sample, 30% ($n = 3$) taught Grades 7 and 8. The subjects taught were English I, Algebra I, Biology I, and U.S. History. The subjects were somewhat evenly divided: 30% ($n = 3$) taught English I and Biology I, and 20% ($n = 2$) taught Algebra I and U.S. History (Table 1).

The majority, 70% ($n = 7$) taught Grades 9 and 10, although some of the teachers taught more than one grade level. At the school, all teachers handle both middle school (Grades 7 and 8) and high school (Grades 9 and 10). Of the sample, 30% ($n = 3$) taught Grades 7 and 8. The subjects taught were English I, Algebra I, Biology I, and U.S. History. The subjects taught were somewhat evenly divided: 30% ($n = 3$) taught English I and Biology I, and 20% ($n = 2$) taught Algebra I and U.S. History (Table 1).

Qualitative Data Analysis and Results

The data were analyzed after each participant interview had been transcribed and as an aggregate with all interview transcriptions. Both manual analysis and a software

program were used. This mode of the interview transcripts enabled me to form initial

impressions based on the research questions and interview guide (Appendix F).

Manual Mode for Qualitative Analysis

In manual examination of the data, the researcher forms impressions and notes

them down (Denzin & Lincoln, 2011; Taylor-Powell & Renner, 2003). Lodico et al.

(2010) described interpretation of the findings as the researcher making sense of the

lessons learned, discovering personal reflections, or recognizing the relationships of the

findings to previous studies. In addition, interpretation should synthesize findings from

the research questions as well as reveal new research questions for investigation (Taylor-

Powell & Renner, 2003). The manual method enabled me, further, to become familiar

with participants' responses in the interviews and furnished ideas for coding.

Software Program for Qualitative Analysis

In addition, I used qualitative data analysis software, the MAXQDA software

program, version 11 (MAXQDA, 2014). This is the pioneer software in the field of

qualitative data analysis. The program aids in document organization, coding and code

organization, pertinent document segments for quotation, and organization of field notes

(MAXQDA, 2014). This program aided with the initial sorting and organizing, as well as

quick access to searches through the data and initial grouping of information based on

repeated words and phrases.

However, use of this software did not supplant the manual mode of interpretation

and coding generation but enhanced the analysis with efficiency of the data storing and

retrieving processes. The software also facilitated the process of applying the codes to the

data segments. Software helps in systematizing and facilitating all the steps in qualitative data analysis (MAXQDA, 2014; Teddlie & Tashakkori, 2011).

After the initial computer-aided sorting, I repeatedly reviewed the data manually to become more familiar with all responses and refine my coding. The process was an iterative one as I repeatedly reviewed the transcripts and made additional notes, associations, and interpretations, finally refining the responses to themes and subthemes pertinent to each research question.

Coding Procedure for Categories

Coding of qualitative data is an inductive and iterative process. The process "involves examining many small pieces of information and abstracting a connection between them" (Lodico et al., 2010, p. 305). I repeatedly reviewed the transcripts and made additional notes, associations, and interpretations. My goal was to extract "thick description," the in-depth and rich descriptions (Lodico et al., 2010, p. 307) from each participant in response to the interview questions.

I began the coding procedure by reading and rereading each interview transcript thoughtfully, marking in the margins categories and repeated words and phrases. The initial procedure yielded many codes and units of meaning. I then clustered the units of meaning appropriately to form themes while remaining true to the participants' responses. Throughout this process, I also bracketed my responses and wrote internal memos so my reflections and thoughts did not interfere with the extraction of themes. I also used the process of horizontalization, in which I reviewed and valued equally all participants' interview materials (Patton, 2002).

After these steps, I applied the MAXQDA (2014) software program. This program facilitates convenient data storage and retrieval. I inputted the text and preliminary manual codes for further refinement of categories and themes revealed. The program includes a process for coding data, a visual tool in which results can be evaluated statistically and graphically. The program displays text segments, codes, and coded segments, as well as weighting the codes for relative significance (Creswell, 2013; MAXQDA, 2014). The researcher is able to add codes, memos, and comments to audio files directly in MAXQDA's multimedia browsers (MAXQDA, 2014). This program helped me reduce the codes themselves, as well as repetition and redundancy.

With the program, I also noted specific text segments for verbatim illustration of the themes. At the same time, I was aware of the caution of Lodico et al. (2010): "the researcher still makes decisions about how to do the analysis and what the results mean" (p. 306). Thus, I manually reviewed the information from MAXQDA as well. Below I report the categories and themes that emerged, with participants' verbatim support.

Qualitative Findings

The qualitative findings that emerged resulted from alignment with the research questions in the following categories: (a) perceptions of teaching to the test, (b) experiences, (c) teaching practices, and (d) motivation. With these categories as a basis, I analyzed participants' interview responses as described above to arrive at the relevant themes and subthemes that emerged. In this section, I organized the findings by research questions, themes, and subthemes, with participants' verbatim responses supporting the themes and subthemes. Not all participants' responses are reported because some

expressed the same or very similar thoughts. Those selected are examples of the most representative of the responses (Denzin & Lincoln, 2011; Lodico et al., 2010). Participants are identified by number (e.g., P1). Table 2 summarizes the themes and subthemes for each research question.

Research Question 1: Perceptions of Teaching to the Subject Area Test Program

The first research question was answered by participants' responses to the first interview question (Appendix F). Teachers believed that teaching for standardized test preparation had negative repercussions, including prohibition of teachers' using the creative strategies they had learned and students being prohibited from real learning and focusing only on rote memorization. However, several teachers pointed out positives.

Theme 1: Positive effects—Fosters discipline and content mastery. However, three teachers saw positives in the constraints to teach the standardized material.

P 5: Teaching to the test has been a positive. It gives us discipline as teachers and helps the students master basic memorization skills. The test has created a sense of responsibility for both us teachers and the students. Maybe the level of responsibility is quite high, but it is good for the students.

P6: I have to admit that as a relatively new teacher I lack the background to actually become creative with the content, so the rote lessons are a relief to me. I do feel that next year, when I know the content more, will be a better year.

P10: Even though there is stress about teaching to the test, it's good because it ensures that as a teacher I know the content that will be tested.

Table 2

Summary of Research Questions and Themes and Subthemes

Research Question	Themes and Subthemes
1. What are rural Southeastern high school teachers' perceptions of teaching to the SATP?	Theme 1: Positive Effects: Fosters Discipline and Content Mastery
	Theme 2: Negative Effects: Inhibits Teacher Creativity, Stresses Students
	Theme 3: Teaching Is Data Driven
	Subtheme 1: Positive Effects—Helpful guidelines
	Subtheme 2: Negative Effects—Limiting to teachers and students
	Theme 4: Required Instructional Practices: Positive and Negative Effects
	Subtheme 1: Positive Effects—Address student needs
	Subtheme 2: Negative Effects—Inhibit teaching and learning.
	Subtheme 3: Inadequate district, state, and federal support

Research Question	Themes and Subthemes
2. What are rural Southeastern high school teachers' experiences of pressure and stress in relation to teaching to the SATP?	Theme 1: Unhealthy Physical Reactions Theme 2: Lack of Competence Theme 3: Responsibility to Students
3. How have rural Southeastern high school teachers' motivation to teach been affected by teaching to the SATP?	Theme 1: Positive Effects—Increased Teachers' Self-Efficacy Theme 2: Negative Effects—Decreased Motivation to Teach Theme 3: Teachers' Commitment to Students Theme 4: District, State, and Federal Influences
4. What are rural Southeastern high school teachers' recommendations for integrating standardized test preparation satisfactorily with teaching strategies?	Theme 1: Creative Teaching Theme 2: Need for Professional Development

Teachers' responses for Theme 1 on the positive aspects of standard test preparation support the mandated practice. These teachers' responses may be considered discrepant cases, because they contradict most other participants' views. However, other teachers pointed out the negative effects of mandated test preparation.

Theme 2: Negative effects—Inhibits teacher creativity, stresses students. Most teachers, 7 of 10, reported many negative effects of teaching only for standardized test preparation. The teachers reported these detrimental effects for themselves and their students.

> P1: Students are prohibited from learning and learning to think, and unhappily, some of our teaching abilities and strategies are also prohibited. By that I mean we can't teach as we were trained. For example, some of the first-year teachers who came with bright ideas of teaching learned that they were bound to teach only to the test.

Theme 3: Teaching is data driven. Several participants pointed out that the school was "data driven," meaning that teachers must base their teaching on previous and recent data collected from the subject-area standardized tests and 9-week benchmark assessments. Pacing guides have been developed by the district and state that are used to help teachers stay on track with skills to be taught and are tested. The pacing guides also help teachers keep track of skills they have not taught so they can fill the gaps.

Subtheme 1: Positive effects—Helpful guidelines. This data driven component of teaching for standardized test preparation was seen by some participants as positive.

P1: The data information is reflects student learning. This shows that students are being engaged in the learning process.

P2: Test taking material is very important, and it can be switched up to cater to student needs.

P6: I continue to look at the data to help me move forward.

P7: I know some teachers resent the data but I don't. I use the data and pacing guides to help steer me where I need to go with my teaching. They are good benchmarks.

Subtheme 2: Negative effects—Limiting to teachers and students. However, other teachers were constrained by the data and its materials, as they did in teaching for standardized test preparation overall. They also recognized the toll on students.

P1: I find it very stressful myself and can see it is for the students too. They are overwhelmed, and I empathize with them. I am tired and so are they.

P3: I can only teach within certain narrow limits and feel very inhibited by those guides. I'm not even certain it can be called teaching.

P4: Like I said, all these prohibitions mean the students miss out on a lot of other aspects of learning and thinking. I don't think it's fair to them.

P8: We can't go much beyond the test materials, and I believe that all creativity is taken out of the classroom.

Theme 4: Required instructional practices. Teachers responded that the requirements to teach to the test had both positive and negative effects on their

instructional practices. However, more teachers pointed out the negative effects than the positive ones.

Subtheme 1: Positive effects—Address students' needs. Three participants pointed out positive effects of the prescribed and regimented instructional materials they had to use.

> P4: This curriculum ensures that my students are reading more in class. They get to know how to draw conclusions and how to read maps or draw cartoons used in history classes to show they understand various lessons.

> P7: I look at my curriculum and teach according to what the students need to know to pass a specific test. That's how it is.

> P 9: When teaching to the test, you are also trying to keep the kids engaged. It's not easy, because everything is laid out for you, and you have no leeway. I can see that the students have a very hard time keeping their interest up.

Participants also frequently referred to the fact that the test drives their planning, and they use all class time for memorization and test-related activities. Several talked almost sadly about their former creative, thought-provoking activities that made teaching a joy for them. As one said, "The fun has gone out."

Subtheme 2: Negative effects—Inhibit teaching and learning. Similar to participants' perceptions of teaching for standardized test preparation (Theme 1), many referred to negative effects on their instructional practices.

P4: In my previous school, I looked forward to finding great new materials to stimulate the kids, and I saw I was really using my training. Now I can't do any of that.

P5: Teaching to the test makes it very difficult to teach and be creative. My idea of teaching was very different from what we have to do, and I didn't know how to make it work and at the same time follow the prescribed format we're supposed to. I have to say most of what I learned in teacher training is out the window.

P 8: Some students are already deficient in certain areas, and when I have to stick only to the test materials and pacing guides, these kids may be prevented from learning anything else.

P9: When teaching to the test you are trying to also keep the kids engaged, but it tends to be boring for them. I can't use my creativity or special materials or anything. And I feel definitely limited as a teacher. There is much pressure knowing that what I must teach is highly dependent upon what I have taught the students, because I realize I have a pacing guide I have got to follow in order to cover all skills that are required before students take the test.

P10: There is not enough time to get everything that is required done and say that you substantially have taught your students something they can build upon in their next grade level course. Teaching to the test doesn't give me a chance to use many great materials I have collected or to adapt the materials to individual students' needs. They can't grow as students. And I am almost teaching them to perform like robots.

Subtheme 3: Not enough support from district, state, and federal sources. When participants were asked about the influence school officials had upon their perceptions of teaching for standardized test preparation, most teachers said that they believed the district, state, and federal entities did not offer enough support in the school for teachers who teach in tested area classes.

>P2: I don't think the state knows what it's doing. It needs to stick to a testing system and see the testing results before constantly changing and throwing off the students, teachers, and administrators. This kind of thing is very upsetting and makes our jobs harder.

>P3: I wonder how much real educational background the people have who make all the decisions. If they did, they would understand what it's like to teach to the test from the real classroom perspective before they make all these educational decisions for our students and us.

>P5: They say they support us, but they really don't. They send out these quarterly newsletters summarizing what they are supposed to have done. But we don't see supports in the form of materials or funds.

>P8: I'll tell you truly—the state should look more into building the schools up and spend more money on education and less on the prison system.

>P9: As a single teacher, I sure don't have enough resources. I am always scrounging and borrowing resources. So the district, state, or federal government—or all of them—should step in to help. A lot of us feel this way. I have often heard it.

One participant referred to the district having sent three veteran teachers to a special training for subject area expertise and creative teaching strategies. This training took place during the fall. P7 said, "It was great that the district sent those three teachers for additional training. But where does that leave the rest of us?"

Research Question 2: Perceptions of Pressure and Stress in Relation to Teaching to the Subject Area Test Program

All 10 participants revealed that teaching for standardized test preparation produced great pressure and stress. They described the effects of the pressure and stress. The pressure and stress affected their physical responses, their competency, and their commitment of responsibility to the students.

Theme 1: Unhealthy physical reactions. Participants reported a range of physical symptoms.

P3: Many nights I can't sleep worrying that the curriculum will really help the students understand what is being tested.

P5: My day is so pressured with trying to keep up with everything we have to cover that I often forget to eat lunch.

P6: I stay up late almost every night trying to figure out the data after the benchmark assessments and how I can make it easier for students to learn what the objectives call for.

P7: I still can't get used to the idea that they want me to teach to the test. It goes against my grain, and I don't look forward to going to school anymore. As I am driving up, I often feel almost physically sick.

P8: There is daily stress and constant stress all year in dealing with standardized tests, from whether a student should graduate down to if tests are needed altogether.

Theme 2: Lack of competence. Teachers spoke about their feelings of inadequacy in the required teaching mode and whether they were really helping their students succeed. The teachers were forthright in their admissions that they lacked confidence and felt incompetent.

P4: I struggle and see other teachers struggling to ensure the students gain all the necessary knowledge to cover all the aspects of the test. I still don't know if I succeed.

P5: It's funny—the standardized tests didn't initially shake me up. But when I saw how my students were faced with the test and how it actually affected them, it had a big effect on me as their teacher. I started questioning my ability to get the information across so they could pass.

P8: I keep believing that I'm incompetent to teach the students. This is not a good feeling. It makes me question too my training and choice of career. Did I make a mistake?

Theme 3: Responsibility to students. Despite the stress of teaching for standardized test preparation, almost all participants voiced their opinions of responsibility to the students and that their teaching inadequately could negatively affect students' performances on the state tests.

P2: I always fear I am failing the students in ways that will stop them from graduating from high school. This haunts me.

P4: My goal is to assist in any way possible to ensure that my students are prepared for their test.

P5: I came in not wanting to teach to the test. Even though I think I have grown, it's not enough to ensure that each and every student rises to the occasion on their test.

P6: There are some days when I realize that the education I am giving my students is not something I am proud of. I wouldn't want a classroom observation when I am making them memorize things for the test—this is most of the time.

P9: I'm not doing my duty if I don't cover all the objectives before testing time. And it's a real crunch. The students know it too, of course, and I empathize with them.

P10: We are so pushed for time because of the pacing guide that I don't see how I can give the students what they really should have—in thinking, chances to explore ideas, and just additional reading. I wish I could show them that reading and thinking can be *fun.*

Teachers' responses indicated that, despite their experiences of pressure and stress, they believed strongly in their responsibility to the students to prepare them for successful passing of the standardized tests.

Research Question 3: How Teachers' Motivation to Teach Is Affected by Teaching to the Subject Area Test Program

Like their responses to some of the other questions, teachers responded with both positive and negative observations as to how teaching for standardized test preparation affected their motivation to teach. Many believed the constraints helped develop them as teachers and had positive comments. A few teachers believed the limitations adversely affected their teaching abilities. Several pointed out the effects on their career choice of teaching.

Theme 1: Positive effects—Increased teachers' self-efficacy. Teacher self-efficacy is the degree to which teachers believe that they can effectively teach all students in their classes (Colbert & Kulikowich, 2006). Several participants observed that their motivation to teach and self-efficacy increased with the requirements of teaching to prepare students for standardized testing.

P1: My motivational level was not very high at first. But once I realized how and why students were competing against others [in the district and state], then I got more motivated to see them excel. I learned to craft questions according to the test, and I have gotten better at it.

P2: I'm a first-year teacher, and I can discern that as the year has gone on I've gotten better at teaching to the test. I can't say specifics, but I see growth in myself.

P3: I know the whole test preparation thing can be overwhelming, and the students sure don't need that stress. But I try to let nothing stress me. My job,

and what motivates me, is to help the students learn. I give my all, and when the students see this, many of them give their all. If they do, I do too. And I know I've gotten better.

P5: I have to admit I am kind of biased when it comes to teaching between the low and the high percentile students. I really enjoy teaching the higher percentile kids and being able to push them forward to an even higher level of learning. It challenges me too—I realize I'm developing more proficiency in my teaching.

Theme 2: Negative effects—Decreased motivation to teach. Although many responses showed teachers' motivation was positively affected by the requirement to teach to the test, some teachers voiced decreased motivation.

P6: I have to say that teaching to the test has affected my motivation negatively. I'm not proud of how I teach and what I teach, even though I don't like to admit it. So I don't really look forward to coming to school.

P7: I started the school year with great motivation, like it would be different somehow. But I have to force myself to get interested now. The thing that keeps me going is seeing the students and knowing they really need help.

P9: Yes, my motivation has gone down because of the sheer repetition and how we have to cram so much in. I hate seeing the students' blank or bored looks. And a strange thing too—my motivation has been influenced by some of the other teachers. They talk in the teachers' lounge about how bad it is, and hearing this makes me think too that it's bad.

Theme 3: Teachers' commitment to students. In spite of the low motivation of many participants, all remained committed to their students to help them. Conflicts between teachers' desires to help the students and comply with the standards and methods that were set before them produced many emotional upheavals. But the teachers never gave up.

P4: Like I said, I feel a responsibility to the students to get them through high school.

P6: At first, I was extremely excited to share some of the creative methods of teaching and learning I learned with the other teachers and students, but I soon found that is not easy at all to do when I have to cover the standardized materials. But I have found ways to reach the students anyway.

P10: I try to find ways to make the learning a little more interesting. It's hard, though, and I think the students see my frustration. And I see theirs. But I will not give up on them. They deserve every chance, and if I can help give it to them, I will.

Such responses indicate that teachers endured frustration and stress but did everything they could to help their students be successful at the standardized tests.

Theme 4: District, state, and federal influences. Most participants acknowledged the influences of district, state, and federal officials but in negative ways. Although P7 acknowledged the district's authorizing special training of three veteran teachers, participants believed these administrative bodies did not offer enough support to teachers.

P5: They say they support us, but they really don't. They send out these quarterly newsletters summarizing what they are supposed to have done. But we don't see support in the form of materials or funds.

P7: Once last year a state representative visited us and asked for our ideas and feedback. We gave a lot, telling about how we needed assistance with better curricula and more realistic pacing guides and schedules. And we waited. Nothing happened.

P9: Their big influence is to continually impress on us the importance of the students passing. But they don't do much—or anything—to help us help the students pass.

However, one teacher praised the district in a discrepant view. P6, a relatively new teacher, understood why teaching for standardized test preparation was important for students to compete. "I think the district is doing a decent job. They have constraints like everyone else." With the exception of P6's comments, the responses followed from and reiterated teachers' earlier answers about district, state, and federal support. Support in both cases was negligible.

Research Question 4: Teaching Strategies

Participants had many ideas for improved teaching strategies and believed strongly about them. The teachers recognized they had to teach to the test. They also emphasized that students should be taught creative thinking and that teachers should use innovative methods for creative learning integrated with standardized test preparation.

P1: More motivational tools for students would be helpful in the classroom to help them develop creative thinking before the test. Tools could include survey sites where students can take surveys to determine their interests. They could use sticky pads to jot down their notes or thoughts. We teachers could use games such as *Jeopardy* to jumpstart students' understanding of an objective. These are just a few of the tools that could be used. And they would catch the students' interest.

P4: I try to ensure that similar strategies are used in my class as in the next level class even if it is not directly related to the specific strategies of the next course. At least that way the students will be a little prepared for what's to come.

Theme 1: Creative teaching. Creativity has been a topic of discussion in education for several decades (Craft, 2006). These teachers wanted to teach creatively and believed it was possible to improve students' creativity in the classroom.

P2: I feel very strongly that students should be able to read things that help them have that" Ah Hah!" moment in relation to their own lives. For example, I try to find novels and movie clips that are related to their everyday lives. Then I assign essays where they explain how what they read or saw relates to a specifically important time in their lives. This is how education can be meaningful.

P3: What about all the brain-stimulating tools, the graphic organizers, like mind maps, fishbones, and different thinking maps to get them to think about causes and effects and sequences.

P4: I think we should create more student-centered classrooms where students are actively engaged in teaching and learning.

P5: Many crosscurriculum strategies can be used to help students build their knowledge not only for testing purposes but outside of tests as well. Students can become involved in subject integration. For example, in history class, students can discuss an event and then the language teacher would have them read and write about it. The more student learning becomes interrelated, the more they retain and relate.

P6: We should use tools such as small group discussions, guest speakers, case studies, and role playing, just to name a few. These strategies would bring the lessons alive to students, and they would be much more engaged. In my field of English language arts, I recognize the focus should be more on how to get students to think critically and use these processes to really learn.

P7: We need to help our students think outside of the box. We could get together with other teachers and develop joint lessons. This would require planning among the teachers, but I think it would be worth it. It would give the students variety and help them see how two creative teachers work together.

P8: I like the reverse role play. After I teach a minilesson, say on Native American daily life, I divide the group into small ones and the students choose one aspect. One student becomes "the teacher" (they love this, and leads a discussion on the aspect, with questions, clarifications, and summaries.

P9: I want to use think dots—they have to do increasing skills, like in analyzing a story and creating their own letter as if it's written by a character. We can relate

the analyses to the test topics. We should use exit cards too. You can print your own from templates and make them fun.

P10: I want the opportunity to help my students apply the mathematical concepts to real-life situations so they see the practicality and meaning.

Theme 2: Need for professional development. Several teachers raised the question of why professional development courses or seminars were not offered to help them teach to the test and to incorporate creative teaching methods. Many voiced the opinion that such programs would help them significantly. Some also referred to their colleagues' similar opinions.

P5: I have spoken to the district supervisor about professional development workshops, because we really need to learn how to make the standardized curriculum more interesting for the students.

P6: I just don't know if the district or state can help us with teaching to the test unless they give us more creative and effective ways to do so and still keep the interest of the students. We really *need* professional development techniques. I feel this need, and I've talked about it with a lot of other teachers.

P7: The state could offer more professional development programs that are closely related to the structure of the test. These programs would show us how to combine what we need to from the pacing guides so we can do justice for the students. I think most of us really need these programs. Maybe if we got together and sent a letter to the district supervisor and the state administrator, they would give us several programs.

P8: There are always innovative ways to teach different lessons and subjects. We

should be offered more professional development ways to actually teach the

content and keep our students engaged at the same time. With this combination, I

know they will learn and do better.

These responses indicated that teachers recognized their responsibility to teach to the test

and as well to teach their students creative thinking skills. To accomplish these goals, the

teachers expressed a need for guidance from the district and state, especially in the form

of PD programs.

Representative teachers' suggestions for creative teaching strategies are

summarized in Table 3, with brief descriptions and examples of implementation. Based

on the teachers' recommendations above, these strategies will be incorporated into the

planned PD (Appendix A). The strategies apply to all four subject areas (English II,

Algebra I, Biology I, and U.S. History) in which state tests are mandated. These

strategies will be incorporated in the PD.

Dealing with Discrepant Cases

Discrepant cases in qualitative research represent situations or participant's views

contradicting the emerging themes and meanings discovered and are variations of the

emerging themes (McMillan & Schumacher, 2010). Discrepant data can be useful in

determination of the overall meanings and can "make the original pattern more distinctive

and yield insights to modify patterns" (McMillan & Schumacher, 2010, p. 521). Several

discrepant cases were found in the data analysis of this study.

Table 3

Representative Creative Teaching Strategies

Representative Creative Teaching Strategy	Brief Description	Example
1. Reciprocal Teaching (Role Plays)	The student becomes the teacher after the task has been modeled by the teacher. Students learn to lead small group discussions while focusing on: a. summarizing, b. question generating, c. clarifying, d. predicting.	In U.S. History I, teacher models one difference between leadership styles of two generals in Civil War. Student then leads discussion on other differences. Assigns fellow students to write summaries and ask additional questions.
2. Miniworkshops	Short or small tasks that narrows in on specific topics or focal points where students may show deficiencies. This can be used to lead into larger concepts.	In English I, teacher asks students to summarize character description. Then teacher leads students to how the characteristics are demonstrated in later passage.

Representative Creative Teaching Strategy	Brief Description	Example
3. Graphic Organizers: fishbones, mind maps, thinking maps	Give learners a pictorial view and method of conceptualizing thoughts and ideas. Helps them organize thoughts and plan material to comprehend with ease.	In Biology I, teacher supplies a thinking map about photosynthesis. Asks students to fill it in on using a Bubble Map for overview of photosynthesis and how it is uses light energy, carbon dioxide, and water to make organic molecules. Discussion follows.
4. Think Dots	Prompt students into thinking on different levels by giving a variety of ways to assess and discuss the skills being taught.	In English I, teacher assigns a story and asks students to analyze it for plot, character development, climax. Then students choose a character and write a little from the character about the story experience.
5. Crosscurriculum Themes	Strategy to approach a topic from different perspectives (different classes) to teach students integration of subjects.	With teacher collaboration, in U.S. History I, students discuss causes and outcomes of World War II. In English I, students write letters as if soldiers fighting the war.

Representative Creative Teaching Strategy	Brief Description	Example
6. Exit Cards	Cards used to assess whether or not students have gained important skills. The cards pose questions to students at the end of a lesson or class to test students' understanding.	In Algebra I, teacher assigns students an equation in which they must find the sum of the squares of the lengths of the legs of a right triangle. Students must show work and answers on the exit card.
7. Small Group Discussion	A collaborative learning strategy to build student capacity for understanding through open discussion. Students learn from each other. This method helps promote a specialized approach, especially when students are grouped according to ability level, skills, deficiencies, or commonalities.	In English I, students read an assigned book and view a movie based on the book (e.g., *The Giver*). Book assignment is 1 week. Movie viewing is a double class period. Teacher first models discussion/questions on similarities, differences, omissions. Students resume in small groups. Present group reports after meetings.
8. Thematic Units, Student Portfolios	Combines curriculum objectives and creative strategies to organize a lesson around a central theme or topic.	In U.S. History, on theme of Native American early life, teacher guides students to produce charts of facts, drawings or photographs of typical artifacts, maps, essays from standpoints of teenagers in the culture.

Representative Creative Teaching Strategy	Brief Description	Example
9. Relation of Learning to Practical Applications	Application of principles to students' own lives.	In Algebra I, students demonstrate how they use a mathematical concept to solve a problem in their own lives. For example, a student has friends over to the house and wants to buy pizza for everyone. The student has $30.00 to spend. One medium pizza (cheese only) is $9.50 and one large is $11.50. How many medium pizzas or how many large pizzas could the student buy? The student must use equations to arrive at the answers.

The procedure for dealing with the discrepant cases was based on the accuracy and reliability of the findings, as verified by the use of peer debriefing and member checking (Merriam, 2009). I noted and reported discrepant cases in the findings. For example, for Research Question 1, most participants agreed that teaching for standardized test preparation had negative repercussions (Theme 2), but three teachers cited positive effects of discipline and content mastery (Theme 1). These teachers were among those with less experience teaching (0 to 3 years). Participant 6 was "a relatively new teacher," and said the prepackaged lessons were "a relief." Participant 5 welcomed the discipline and content mastery for the students.

For Research Question 4, most teachers agreed that district, state, and federal support and influences were negative—promises for improvement were made but not

kept. However, one teacher, Participant 6, praised the district support, reiterating belief that the standardized tests were important and complimenting the district for doing a "decent" job.

Evidence of Quality for Accuracy

Accuracy and credibility of the findings were accomplished by several means to ascertain the sample's appropriateness to the research questions, the quality of the interviews, and the appropriateness and completeness of the data analysis and findings (Smith, Flowers, & Larkin, 2009). First, my iterative process in both manual coding and use of MAXQDA helped ensure the trustworthiness of the data. Many reviews of the data aided me in reevaluating and deepening interpretations (Donnelly & Sadler, 2009). The iterative process also helped me become more aware of researcher bias in the interpretations.

Second, I asked a peer debriefer familiar with qualitative methods and data analysis to examine my codes, field notes, and findings. The peer debriefer also reviewed the themes to minimize researcher bias and ensure that the themes reflected the participants' interviews. To ensure greater confidentiality of the data, the peer debriefer signed a confidentiality agreement (Appendix G). The purpose of the peer debriefing was to ask me questions for reexamining conclusions, assumptions, and codes (Lodico et al., 2010). I also asked the debriefer for input on my researcher biases and if they affected the data analysis, as well as thoughts on the discrepant cases. With the debriefer's input, I was also able to reflect on other ways of looking at the data.

Third, I instituted member checking, as noted above. This is the process of asking participants to review the transcripts of their interviews and my themes for accuracy with regard to their input and viewpoints (Creswell, 2013; Merriam, 2009). Creswell (2013) described member checking "as taking the final report or specific descriptions or themes back to participants and determine whether the participants feel that they are accurate" (Creswell, 2013, p. 191). Thus, after data analysis, I communicated with the participants for this purpose.

Participants were informed of member checking in the recruitment invitation (Appendix C) and the consent form (Appendix D). I conducted this process by e-mail and sent the participants the transcriptions of their interviews as well as the final themes to check the accuracy of the information they provided in the interviews and their responses to the themes. I asked them to review carefully my descriptions and conclusions and indicate their corrections. Member checking of the transcripts and themes took participants 30 to 45 minutes.

All participants found the transcriptions accurate. Several also commented that the transcripts reflected their thoughts well. One wrote additional comments to the transcription, expanding on the original response to a question (thoughts on creative strategies). The participants also commented favorably on the themes, saying that they described well their perceptions and observations.

Summary of Methodology

At the high school under study, the problem was that teachers' attitudes toward high stakes testing have had a negative effect on their teaching practices as well as the

students they teach. As a possible result, students' standardized test scores have remained low, placing the school under strict guidelines and in jeopardy of official sanctions. The purpose of this qualitative case study was to explore high school teachers' perceptions of the required state standardized testing and its effects on their teaching, specifically to examine teachers' pressure, stress, and motivations for teaching, as well as their recommendations for improvement in this economically disadvantaged high school in the southeastern United States. Findings should contribute to understanding of teachers' lived experiences of teaching for standardized test preparation and elicit their suggestions for more satisfying yet effective teaching**.**

In this section, I described the study methodology. The research design best suited for this research was a qualitative phenomenological case study, with investigation of the teachers in a rural southeastern U.S. high school. In the research questions I formulated, I explored their perceptions about teaching for standardized test preparation, their perceptions of pressure and stress and motivation to teach. I also requested their recommendations for integration of creative teaching strategies with preparation for the state-mandated tests. To fulfill the study purpose, I recruited a purposeful sample of 10 teachers who met the four criteria and taught at the high school.

My role was an observer, although I am a fellow teacher in the high school. I chose this topic and the research site because of the problems I have observed from the state and district mandates for teachers to teach to the test. However, I guarded against researcher bias by my field notes and reflexive journal to ensure accurate interpretation of the data.

I gained access to participants through the school principal and sent potential participants an invitation to participate (Appendix C). In this invitation and the consent form (Appendix D), I explained to participants the requirements of participation and steps for their ethical protection and confidentiality. The data collected included a short demographic questionnaire for construction of participant profiles (Appendix E) and an in-depth interview guide (Appendix F) for one-to-one private interviews with each participant away from the school grounds. I collected participants' responses to the demographic items and audiotape and transcribed participants' interview responses. I also kept a handwritten reflexive journal of my own responses and reactions to the experiences and perceptions they expressed.

My data analysis of the demographic responses was manual, with use of summary tables to arrive at frequencies and percentages. More than half the participants, 60%, were female; ages 21 to 30, and African American, 70%. More than half, 60%, also were teaching from under 1 to 3 years and had from under 1 to 3 years at the high school. The majority, 70% ($n = 7$) taught Grades 9 and 10, although all teachers are assigned Grades 7 and 8 as well. The subjects taught were relatively equally divided among the teachers, with 30% ($n = 3$) each teaching English I and Biology I, and 20% ($n = 2$) teaching Algebra I and U.S. History (Table 1).

My data analysis of the interviews was both manual and assisted by a software program, the MAXQDA (2014) software program, version 11, to identify emerging themes and coded written responses. In the qualitative analysis, I used an iterative approach of reading and studying the transcripts and identifying repeated words, phrases,

and segments with application of codes. These were condensed and synthesized into themes, with attention to the research questions. Discrepant cases were noted and discussed.

Quality of the data, accuracy, and credibility were enhanced by the purposeful sample, my coding and extraction procedures, and a peer debriefer who examined my codes, field notes, and findings for adherence to the research questions. In addition, the accuracy of the interviews and the themes extracted were enhanced by member checking, in which participants reviewed their transcripts and the themes and gave feedback or correction.

Themes and subthemes were reported by research question, with appropriate verbatim responses from the participants. Table 2 illustrates all themes and subthemes. The themes indicated teachers' well thought out and balanced thinking about their requirements to teach to the test. The subthemes explained the impact of teaching for standardized test preparation in more depth. Discrepant cases were indicated and discussed.

For Research Question 1, teachers' perceptions of teaching to the SATP, I discovered four themes. These were positive effects in terms of fostering discipline and content mastery, negative effects in terms of inhibition of teachers' creativity and great stress for students, teachers' recognition that their teaching was data-driven (previous test data that dictated curricula to align with test criteria), and the required instructional practices. The data-driven teaching had three subthemes: positive in terms of helpful

guidelines; negative in terms of limiting teaching and learning; and not enough district, state, and federal support.

For Research Question 2, teachers' perceptions of pressure and stress in teaching to the SATP, I discovered three themes. The first two were teachers' admission of negative aspects: experiencing unhealthy physical reactions and perceptions of lack of competence to teach for standardized preparation. The third theme was teachers expressing a sense of strong responsibility and commitment to their students to "get them through," as one said.

For Research Question 3, how teaching to the SATP affected teachers' motivation, I discovered four themes. These were both positive and negative. In the first theme, some teachers noted that the necessity to adhere to the constraints increased their self-efficacy as teachers and motivated them further. In the second theme, other teachers admitted their motivation to teach had decreased. The third theme reiterated a point associated with Research Question 2, Theme 3, teachers' responsibility to students. With regard to Research Question 3, despite teachers' often low motivation to teach, they strived to stay committed to students to help them succeed. The fourth theme followed from Research Question 1, Theme 4, Subtheme 3, district, state, and federal support. For Research Question 3, teachers believed that although district, state, and federal officials promised help and seemed to listen to teachers' concerns, the help was minimal and the influences were primarily negative.

For Research Question 4, teachers' recommendations on integration of creative teaching strategies with teaching to the test, I discovered two themes. The first was

creative teaching, which the teachers emphasized should be added in the classroom. They had many suggestions for incorporation of creative teaching strategies. The second theme was professional development. Most of the teachers observed that PD programs for integration of creative strategies with test preparation were not offered and that they needed these programs.

The themes revealed for each research question addressed the study problem. The themes provided insights into teachers' perceptions, teaching practices, and experiences in their constraints of teaching for mandated test preparation. Teachers' recommendations for improvement in the teaching and learning conditions led to the following rationale for implementation of the project study.

Project Study Rationale

This study focused on eliciting the perceptions, teaching practices, and experiences of teachers in a rural Southeastern high school about their mandate to teach to the test. The study results indicate that, despite pointing out some positives, these high school teachers were generally dissatisfied and frustrated with the constraints, and they observed the negative effects on themselves and their students. One of the most striking aspects was the teachers' desire for PD programs that would help them with the problems they cited in the interviews. Teachers pointed out especially how they wanted to integrate creative teaching strategies with the mandated test preparation and still help students improve their test scores.

Development of teachers' knowledge of subject matter, professional judgment, and strengths they bring to the classroom are crucial to their effectiveness and impact as

teachers (Fang, 2013).Teacher PD is "one of the keys to improving the quality of U.S. schools" (Desimone, 2011, p. 28). PDs may take many forms, from formal seminars and workshops, courses, and institutes to informal exchanges with other teachers. The purposes of the PD are to equip teachers with greater knowledge, supply them with more effective skills, and support positive attitude changes that will enhance their instruction and teaching philosophies. These changes improve their students' learning (Desimone, 2011).

Previous studies have documented teachers' calling for PD. Aspects include mentoring, networking, and special resources for novice teachers (Al-Fadhli & Singh, 2010; Luton, 2009). In addition, teacher PD has been found to improve student learning (Antoniou & Kyriakides, 2013; Foster, Toma, & Troske, 2013; Sample McMeeking, Orsi, & Cobb, 2012). If education is to benefit from the results of improved student learning, quality PD programs need to be developed.

Findings from the data analysis of the teachers' interviews in the present study revealed that they desired and requested PD for several reasons, as summarized in Table 2. Teachers also seemed to recognize its benefits to both themselves and their students (Research Question 4, Theme 2). Through the PD, these benefits would help teachers use the positive aspects of teaching for standardized test preparation (foster discipline and content mastery) and minimize the negatives (inhibits teacher creativity, increases student stress, inadequate district, state, and federal support; Research Question 1, Themes 1-4). The PD would also address teachers' experiences of pressure and stress regarding teaching for standardized test preparation (unhealthy physical reactions, lack of

competence, responsibility to students; Research Question 2, Themes 1-3). Additionally, the PD would help teachers restore their motivation to teach (increase their self-efficacy, commitment to students; Research Question 3, Themes 1-4).

Therefore, based on these findings, a 3-day PD project will be created for the teachers. I describe this project in Section 3 and include descriptions of the purpose, goals, and learning outcomes. The description will also outline the components, timeline, activities, and formats of the modules, as well as hourly details of the training. It is hoped this project will be implemented at the high school to help teachers resolve the problems they experience from teaching for state-mandated test preparation and to incorporate creative teaching strategies into their teaching.

Section 3: The Project

Introduction

The purpose of this qualitative case study was to explore rural high school teachers' perceptions of the required state standardized testing and its effects on their teaching. The research site was a southeastern U.S. economically disadvantaged high school. In the findings, I revealed teachers' pressure, stress, motivations for teaching, and recommendations for improvement. The teachers recommended creative strategies that could be integrated into state-mandated teaching through PD programs and noted that such programs were needed. The proposed project, a 3-day PD training program, addresses the teachers' difficulties in required teaching and focus on their needs.

In this section, I present the goals of the program, a rationale as to why this project genre was chosen based on the data analysis of Section 2, and a review of PD literature. Next I describe the project, including needed resources, supports, potential barriers and solutions to the barriers, implementation with a timetable, and roles and responsibilities of all those involved. Finally, I describe the evaluation plan for this project and discuss implications for a positive social change. The entire project agenda and materials appear in Appendix A.

Description and Goals

At the local study site, teachers had negative attitudes toward high stakes testing and the resultant effects on their teaching practices. Although some of the teachers recognized several positives of teaching for standardized test preparation, most experienced pressure and stress at this mode of teaching, and many lost their motivation

to teach. This combination resulted in some teachers leaving the school, as has taken place in other schools (Rubin, 2011). At the high school, student test scores were affected negatively, as often takes place (Ronfeldt et al., 2013), and the low student scores put the school at risk with regard to NCLB criteria (Thomas, 2013).

This PD program of 3 full days will be conducted in August prior to the start of the fall term. The PD will address teachers' experiences of pressure and stress and low motivation about teaching and help them integrate creative instructional strategies with the necessary student test preparation. The program will help meet their needs and provide support with the primary goals of (a) decreasing the teachers' pressure and stress about teaching for standardized test preparation and increasing their motivation and desire to teach, (b) teachers' sharing of their perceptions, (c) instruction in how to implement integrative teaching strategies, (d) practice in collaborative lesson planning and problem solving, and (e) creation of innovative classroom activities and lessons for use with students in the classrooms.

I will develop this PD, and a trained colleague, a veteran teacher, will conduct it after several conferences with me. In the fall of 2015, Ms. Bennett [pseudonym] and two other veteran teachers were sent by the district to a series of seminars in their areas of expertise and development of creative teaching strategies. The goal was for these teachers to conduct workshops in the four subject areas of English I, Algebra I, Biology I, and U.S. History to help fellow teachers develop and implement creative teaching strategies as they help students prepare for the state-mandated tests. I requested this teacher, who

had taught all four subject areas and will be available during the summer for conferences with me prior to the PD in August.

The PD will contain the characteristics necessary for an effective program. Teachers will learn from lecture, group methods, and online self-reflection. They will be given materials, resources, and assigned readings and activities individually and in small groups. They will be asked to read, write, think, and contribute together in practice modules. They may also share their problems and, as Rose (2015) suggested, learn from others who have successfully implemented teaching that combines various modes.

It is hoped that this program will also renew teachers' initial enthusiasm for teaching. The goal is to prepare them more creatively for teaching critical thinking skills as well as test preparation for the improvement and higher quality education of their students. As Williams and Wilson (2012) noted, "There is a need for more extensive teacher professional development in pedagogies which attempt to integrate intellectual rigour and relevance" (p. 471). If the program is successful, as evidenced by the teachers' evaluation and self-reflections, I will suggest to the principal that it be implemented regularly for teachers at the research site high school.

Rationale

PD training has been effective for teachers of English, mathematics, science, and other subject areas, with concomitant increases in student test scores (Antoniou & Kyriakides, 2012; Foster et al., 2013; Sample McMeeking et al., Stronge, 2013). PD activities within and beyond the school day have been shown to have positive effects on teachers (Bayar, 2014). Providing PD for teachers can be a critical component, especially

in this age of teacher accountability for student achievement on state standardized tests (Krawec & Montague, 2014). Teachers' PD is considered a primary effective way for improving teachers' knowledge, skills, and teaching strategies (Lutrick & Szabo, 2012).

In this study, the teachers at the research site experienced pressure and stress and lost motivation for teaching because of the district and state mandates and data-driven curricula for improved student achievement on the annual tests. As a result, in the interviews, many teachers referred to the mandated data-driven curricula and rote methods they were obliged to use or risk their jobs. Teachers desired more creative teaching strategies that could meet the demands without the sacrifice of creative teaching or development of students' critical thinking skills. In addition, teachers suggested the need for PD training that would provide strategies and support to surmount their pressures and provide them with tools for implementation of more innovative teaching strategies.

The following participant comments are representative:

P5: We really need to learn how to make the standardized curriculum more interesting for the students.

P6: We really *need* professional development techniques.

P7: The state could offer more professional development programs that are closely related to the structure of the test. These programs would show us how to combine what we need to from the pacing guides so we can do justice for the students. I think most of us really need these programs.

P8: There are always innovative ways to teach different lessons and subjects. We should be offered more professional development ways to actually teach the content and keep our students engaged. I feel certain they will learn and do better on the tests.

The literature on the success of PD training, and the current participants' recommendations for this mode were the reasons I chose this project genre. Their problems as revealed in the themes found in the study interviews will be addressed through the content of the project, in which both facilitator and participants will be encouraged to contribute. The PD will address teachers' responses to the positive and negative effects of teaching for standardized test preparation (RQ1, Themes 1, 4); teachers' experiences of pressures and stress in teaching for standardized test preparation the test (RQ2, Theme 1); creative teaching strategies (RQ4, Theme 1); teachers' motivations to teach (RQ3, Themes 1, 2, 3); and district and other institutional support (RQ1, Theme 4, Subtheme 3; RQ3, Theme 4).

The PD will serve as an initial solution to the problems teachers revealed in their interviews because of the new learning and approaches it may produce, the training that may increase teachers' knowledge and confidence in teaching for standardized test preparation, the strategies that will help them integrate creative teaching, and the mutual support the teachers may experience. Student achievement will remain stagnant unless PD is addressed as the key to student success (Brand & Moore, 2011; Joyce & Showers 2002; Pehmer, Groschner, & Seidel, 2015). Thus, a PD program would seem to help

remedy the research site low student achievement and the teachers' problems in teaching for standardized test preparation.

Review of the Literature

In the literature review, I provide an explanation as to why a PD genre was used to design this project. I summarize relevant literature related to PD. The subsections are the following: a summary of the theoretical framework that grounded the project, PD's effectiveness for student learning and teacher improvement, teachers' views on PDs, and characteristics of successful PDs. For this review, databases searched included Academic Search Premier, Educational Research Complete ERIC, Google Scholar, Professional Development Collection, ProQuest, and Teacher Reference Center. Search terms I used included the following: *professional development, standardized tests, state-mandated tests, student achievement, teacher improvement, teaching to the test, teachers' perceptions,* and *teachers' dissatisfactions.* I sought related research with combinations of these terms in the academic databases as well as the main Internet search box. The search was limited to the last 5 years, except for historical and background material.

Conceptual Framework for Professional Development Program

The conceptual framework that guided this PD, as it guided the study with participants, was the incorporation of social constructivism and pragmatism. In constructivism, individuals seek understanding and meaning of their worlds, and these are subjective and multifaceted (Crotty, 2005; Denzin & Lincoln, 2011; Patton, 2002).

With constructivism in mind, and based on the teachers' responses in their interviews to the issues of teaching for standardized test preparation and creative teaching strategies, the PD will address both teachers' group and individual needs.

Pragmatism seeks understanding of problems and application of solutions (Marshall & Rossman, 2010). Employment of this concept in the PD, based on study participants' input, should help teachers meet the challenges of incorporation of creative teaching strategies to standardized test preparation. As Teddlie and Tashakkori (2011) pointed out, the pragmatic approach emphasizes action that remediates problems.

The design of this PD focuses on teachers' perceptions of the negatives associated with teaching for standardized test preparation and their greater use of creative strategies that will involve their students. Royce (as cited in Doig & Groves, 2011) drew a parallel between teachers of mathematics and students: "What we know to be true for students also applies in this [professional development] situation to adults. That is, that teachers learn best by doing and building their own understanding rather than being told" (p. 78). The planned PD will help teachers build their own understanding and reaching teir own conclusions about the issues that confronted them.

In the plan of the PD with the principles of constructivism and pragmatism as a foundation (Lodico et al., 2010; Teddlie & Tashakkori, 2011), for maximum help to teachers various formats will be used, such as the group as a whole, small groups, and dyads. Resources will include PowerPoints, handouts, Internet searches, and books; activities will include reading, writing, discussion, and group reports (Caffarella &

Daffron, 2013). Blended activities, in-person and online, will be suggested (Fisher & Frey, 2014).

Further, individual teachers' needs will be addressed as part of the application of pragmatism. Fisher and Frey (2014) pointed out that different secondary teachers may need different aspects of help. Some are strong in content and need pedagogical strategies; others are strong in pedagogy but need aid in content mastery and transmission, although with the mandates of NCLB, teachers are generally more expert in content than pedagogy. As Fisher and Frey observed, some teachers' instructional strategies are "rusty or inconsistent" (p. 207). The planned PD will help teachers address their individual needs.

The PD will be challenging with its two purposes. These are to (a) address the negative effects that study participants discussed in the requirement to teach for student preparation for the state-mandated tests and (b) to share the integration of creative teaching into the students' required content mastery. Teachers will be encouraged to use their imaginations and creativity to create lesson plans, individually and together, that reflect the best integration for maximum teacher interest and student retention (Drapeau, 2014).

Professional Development and Required Mandates

The NCLB mandated teacher accountability and required annual testing of students for adequate performance, reducing achievement gaps, and improving student proficiency (Al-Fadhli & Singh, 2010; Hemelt, 2011; Pella, 2012). Teacher effectiveness should be measured by impact on student learning and defined by students' adequate

performance on standardized, high stakes examinations (Taubman, 2014). PD of teachers is seen as an avenue not only to help students pass the required state-mandated tests and graduate from high school but also to help them people learn complex and analytical skills necessary for their success in 21st-century society (Telese, 2012). For effective teachers, PD was seen as a necessary component by the NCLB act (Fang, 2013; Sample McMeeking et al., 2012; Telese, 2012). For teachers to translate state policies into classroom practices, they must have the requisite training and resources (Al-Fadhli, 2010; Lutrick & Szabo, 2012).

Studies have documented the efficacy of teachers' PD for improving students' mandated test scores. For example, a large study over 5 years was conducted by the Educational Development Center with middle and high school science teachers in eight schools in the Boston, Massachusetts area (Fields, Levy, Karelitz, Martinez-Gudapakkam, & Jablonski, 2012). Students' scores of teachers who had participated in PD programs were significantly higher than students' scores of teachers who had not participated in the programs. Similar results were obtained in Colorado, with middle school students from seven districts and 64 schools; the students' mathematics test scores increased after teachers' 15- to 24-month PDs in content and instructional strategies (Sample McMeeking et al., 2013).

One of the criteria for state-mandated tests is data-driven curricula. In the current study, many teachers were frustrated with this requirement and were limited by it; "all creativity is taken out of the classroom" (P8). In a study of teachers' PD and data-driven instruction, Pella (2012) reported that middle school teachers of English language arts

from urban, suburban, and rural schools voiced similar frustration and rejected data-driven models of PD that would aid them in teaching for standardized test preparation. Rather, through designing and analyzing lessons, the teachers broadened these PD models in favor of collaborative, contextual, and qualitative methods, such as use of media, group work, observations, and student artifacts. The new models restored teachers' enthusiasm and creativity to teaching while at the same time preparing students for state-mandated tests. Thus, PDs may be required but, as Pella's (2012) results showed, they can be innovative and motivating for teachers.

Professional Development and Teacher Effectiveness

As shown in the current study results (Section 2) and previous studies, many teachers become disillusioned and demoralized by teaching for standardized test preparation and with data-driven methods (Al-Fadhli & Singh, 2010; Bhattacharyya et al., 2013; Donnelly & Sadler, 2009; Pella, 2012). Therefore, teachers' PD should provide tools that not only educate them but also support their best practices in the classroom and affect student learning (Darling-Hammond, Wei, & Andree, 2010; Lehiste, 2015; Telese, 2012). PD that results in improving teacher quality has been found directly linked to increases in student achievement (Desimone, 2011; Koellner & Jacobs, 2015; Norton, 2011; Tawalbeh, 2015).

For teachers to maintain and upgrade their skills, periodic and regular PD is required (Gill, 2016; Mack, Watson, & Camacho, 2012). PD programs should have the goals of improving teachers' knowledge, instructional strategies, and pedagogical principles they adhere to. Improvements are necessary so teachers can help their students

meet the challenges of the 21st century (de Vries, van de Grift, & Jansen, 2014; Tawalbeh, 2015).

Teachers may have neither the time nor resources to travel to conferences or courses outside their home school for maintenance and extension of their knowledge and instructional strategies. However, PD experiences are often necessary for teachers to help their students increase their knowledge, grades, and state-mandated test scores (Byrd, Hlas, Watzke, & Valencia, 2011; Shady, Luther, & Richman, 2013). If PDs are skillfully implemented and supported by the school and by federal, state, and local policy, they constitute a powerful means to advance student learning (Croft, Coggshall, Dolan, Powers, & Killion, 2010).

Studies on the effectiveness of PD with regard to student learning have shown mixed results. Lee, Linn, Varma, and Liu (2010) found teachers' PD to positively influence middle and high school students' achievement in science, including high school physics, chemistry, and biology. Mikelskis-Seifert and Duit (2012) found with German middle and high school teachers of physics that teachers substantially changed their views in positive ways of "good" instruction and valued the PD for opportunities to cooperate with other teachers (p. 224). However, feedback from teacher questionnaires revealed little significant change in their beliefs about teaching and learning. With middle and high school teachers of energy science, Seraphin, Philippoff, Parisky, Degnan, and Warren (2013) found after evaluations that teachers' interest in the PD was high but their confidence in teaching the subject remained low compared to other subjects. With fifth-grade science teachers, Diamond, Maerten-Rivera, Rohrer, and Lee (2014) found that,

after a PD, teachers' content knowledge significantly improved but classroom observation ratings did not.

Antoniou and Kyriakides (2013) studied teaching skills and primary school student mathematics achievement with PD integrating learning theory, teacher development, and content. Evaluations at the start and conclusion of the intervention showed that both teachers and students improved. However, a 1-year follow-up evaluation showed no significant gains for either group. Antoniou and Kyriakides (2013) observed that this result took place because no interventions were conducted during the period before the follow-up evaluation. For participants in both groups, their teaching skills had not changed. The authors pointed out that research findings support improvement for teachers who participate regularly in effective PD programs.

In the area of mathematics, Dash, Magidin de Kramer, O'Dwyer, Masters, and Russell (2012) found with fifth-grade teachers' PD programs, teachers in the group who participated in PD improved significantly in their knowledge of content and teaching practices than teachers in a control group. However, as a result of the PD, no significant differences were found in their students' achievement in mathematics. Secondary mathematics teachers in a study by Telese (2012) showed puzzling results of various PD activities. Regarding student achievement, the teachers' knowledge of content, as indicated by their mathematics content courses, predicted the students' gains more than the teachers' instructional knowledge, as indicated by their mathematics education courses. Further, teachers who participated in fewer PD activities had students who had higher scores than teachers with more PD activities. As Telese (2012) conjectured,

further research is indicated, especially with regard to variables concerned with teachers' attitudes and beliefs (Desimone, 2009).

In a mixed-method study, high school teachers of science and English as a second language participated in a yearlong PD study by Haug and Sands (2013). The intervention groups were found to have positive differences in teachers' methods of instruction, their clarity, the tasks assigned to students, expectations of students, collaborative teaching, and student participative activities and groupings. For students, those in the PD teachers' classrooms showed higher academic achievement and "reported significantly higher satisfaction levels with regard to content, emotional supports, collective participation and active learning" (Haug & Sands, 2013, p. 205). For the PD group, teachers appeared to teach better and prompt their students to greater success and satisfaction.

Koellner and Jacobs (2015) found somewhat similar results with a mathematics PD that used adaptive methodologies for teachers' knowledge and teaching practices and student achievement. The adaptive model emphasizes the local needs and contexts, with modifications for greater fit. With middle school teachers and students in a large urban school district in the western United States, over a semester the authors found "at least modest impacts" for both teachers and students (Koellner & Jacobs, 2015, p. 51). Based on these results, Koellner and Jacobs (2015) recommended a wide variety of PD methodologies as well as further research.

Mathematics PD was also the focus of the study by Foster et al. (2013). The authors studied PD and cost effectiveness in elementary, middle, and high school in

mathematics and science in high poverty, low achieving school districts in Kentucky through a state-funded PD program. The goal was to improve the quality of teaching and student learning and achievement. Results indicated that the program was most successful, and therefore most cost effective, with teachers of middle school mathematics. and least successful with teachers of elementary mathematics students. The authors suggested further research and evaluations of similar programs for the different grades as well as relative cost effectiveness.

Teachers at all levels of preparation enter with their own experiences and observations of what works with students, what should have been taught, and what instructional strategies worked best. Teachers need to participate in multiple, interactive, collaborative experiences. If teachers are to facilitate appropriate interactions in the classroom, then provision of appropriate PD to improve the teachers' strategies is acceptable (Al-Fadhli & Singh, 2010; Desimone, 2011; Fang, 2013).

Teachers' Views of Professional Development

Teachers have generally viewed PD with positive comments. They participate to gain content knowledge and instructional methods. Fields et al. (2012) found that 78% of the teachers in their study participated to learn new pedagogical methods, and 67% to gain knowledge of content. Mikelskis-Seifert and Duit (2012) found with teams of 10 teachers and a physics educator that teachers believed the PD benefited them in cooperating with colleagues and science educators, and they saw PD as key in improving education.

When high school teachers in New Zealand took part in a PD, their views were positive (Kaveney & Drewery, 2011). They commented on having "their say" and recognized the value of listening (Kaveney & Drewery, 2011, p. 8). Teachers also recognized how helpful other teachers' views and feedback were and that they became more positive about their teaching. The teachers encountered support as well as they admitted their own negative attitudes and heard about other teachers' similar classroom problems and methods of remedying them. The collegial support was found important; as one teacher said, teaching in secondary schools "is very isolating" (Kaveney & Drewery, 2011, p. 8). Teachers also learned new pedagogical skills in the PD and saw their students respond more positively in the classroom, with a positive change in the learning environment.

In studying a PD that was provided to elementary mathematics teachers for a year, McGee, Wang, and Polly (2013) found that teachers were more confident in their experiences. When teachers were asked how they benefitted, one teacher stated: "I have benefitted from the training session in many ways" and cited peer collaboration, exchanges of ideas, networking, and communicating with colleagues who shared their visions and passion about instruction (McGee et al., 2013, p. 22). This same teacher also recognized the need for change in improved teaching (McGee et al., 2013, p. 22). Another teacher reported learning "how to become a better learner and leader at the same time" and to trust colleagues (McGee et al., 2013, p. 22). A third commented on the enlargement of a point of view in terms of helping the students learn.

Other teachers in a PD on informational literacy commented on the collaborative aspects of the PD in terms of planning, teaching, and assessing. They also acknowledged the benefits of shared self-reflection and the creation of new opportunities for learning by collaboration (Abilock, Harada, & Fontichiaro, 2013). Energy science teachers studied by Seraphin et al. (2013) gained confidence from a PD that presented the teaching of science as inquiry, although their confidence was higher in teaching other science subjects.

Nevertheless, several teachers in the Seraphin et al. (2013) study recognized the value of teaching more innovatively and improving their students' critical thinking skills. The teachers saw that their students "had fun learning" and were highly motivated and able to transfer their knowledge to their personal lives (Seraphin et al., 2013, p. 244). One teacher commented that the inquiry method enabled "students to be their own best critics, learning from trial and error, revising, reinventing = success!" (Seraphin et al., 2013, p. 245). More innovative teaching methods appeared to result in more satisfying student learning.

Middle school teachers' views on PDs in health education in two urban U.S. schools with regard to cultural competence were studied by Flory et al. (2014) with qualitative methods. Over 2 years, the researchers observed and interviewed 23 teachers who participated in PDs and used revised curricula. The findings resulted in four major themes: staff that reflected cultural diversity, curricula that addressed cultural competence, expectations of implementations that were flexible, and support of the teachers after the PDs.

However, teachers' responses can vary with regard to the same PD (Desimone & Garet, 2015). Teachers may have more or less experience and knowledge of their subject areas and more or fewer students with language or behavior issues. Thus, a PD may meet the teachers' needs in varying ways. Desimone and Garet (2015) cited a study of a technological software intervention in which teachers benefited from PDs that addressed their different experiences and skill levels (Bowden, Massey, & Kregor, as cited in Desimone & Garet, 2015).

Teachers' confidence in teaching and the use of technology may be increased with PD programs (Kunter et al., 2013). Lehiste (2015) noted that PDs are an efficient means for helping teachers enhance their confidence, through the teachers' active engagement in the workshop formats and practice sessions. Lehiste's (2015) study results indicated "significant growth" in teachers' incorporation of technologies in their classrooms (p. 25). In this study, PDs helped teachers feel more comfortable with technology and use it more consistency.

In the study by Chikasanda, Otrel-Cass, Williams, and Jones (2012) of teachers' perceptions of technology after a PD, the PD helped enlarge and reshape their views and use of technology in the classroom. One teacher suggested the need to change the curriculum to focus on giving students the chance to work on their own rather than supplying solutions to memorize. Despite such innovative techniques and teachers' receptiveness, however, the authors found also that the teachers did not give up their traditional classroom strategies. The authors concluded that additional exposure and

grounding in the principles of more creative technological methods would be needed for teachers to incorporate these into their teaching (Chikasanda et al., 2012).

Some teachers are deficient in uses of technology in teaching. PD programs that emphasize technology can help teachers build their confidence and competence in technology applications (Beriswill, Bracey, Sherman-Morris, Huang, & Lee, 2016). However, that the goal of such PDs is not technology mastery alone but its integration of technology with teaching strategies and subject-area content (Beriswill et al., 2016; Lehiste, 2015).

High school teachers of English language arts voiced criticisms of a PD in reading endorsement (Greenwell & Zygouris-Coe, 2012). They commented that the program was helpful but should be differentiated for high school students in relation to those in lower grades. The teachers also desired the introduction of strategies and instructions in easily understandable ways from a beginning reading strategy to those requiring critical thinking skills, with observations of the strategies by other teachers' demonstrations or videos.

PD support differed for elementary and secondary teachers in New York State in higher and lower socioeconomic (SES) communities (Torff & Sessions, 2009). Torff and Sessions (2009) found that teachers in low SES communities were not given the same opportunities as teachers in high SES communities. For example, high SES teachers could choose PD topics of interest and low SES teachers could not. Teachers in high SES communities supported PD and recognized its benefits more than did teachers in low SES communities.

The authors noted that specially designed PD models for teachers in low SES communities are needed for meeting teachers' objections and their acceptance of PD. For example, teachers in high SES schools participated in smaller group activities during their PDs. Low SES teachers attended PDs in a large area, such as the auditorium with the entire faculty, and small group or individual attention was not possible. For low SES teachers, the authors recommended PDs with limited enrollment, teachers' choosing their PDs of interest, and incorporation of small group activities (Torff & Sessions, 2009). These observations are especially important for the current study, in which the teachers are in a low SES environment.

Characteristics of Successful Professional Development Programs

PD programs are implemented to improve or extend teachers' knowledge of content and instructional techniques (Desimone, 2011; Telese, 2012). One of the most important considerations for planning effective staff development is designing of content and instructional activities that are motivational, appropriate, interest-driven, and relevant to teachers' present situations (Brown, Dotson, & Yontz, 2011; Lutrick & Szabo, 2012). In adherence to social constructivism and pragmatism, the PD must match the teachers' needs, whether they are for curriculum and content enhancement or instructional strategies (Bayar, 2014; Patel, Franco, Miura, & Boyd, 2012).

Active, hands-on learning, in contrast to listening to lectures, helps teachers retain and implement the material. Active learning can include presentations, peer critiques, creation of lesson plans, and collaborative participation and lesson plan creation (Darling-Hammond et al., 2010; Desimone, 2011; Doig & Groves, 2011). The five characteristics

of high-quality PD of Archibald, Coggshall, Croft, and Goe (2011) apply as well: (a) alignment with school goals, state and district standards and assessments; (b) focus on core content and modeling teaching strategies; (c) opportunities for learning new teaching strategies; (d) collaboration among teachers; and (e) embedded follow-up and feedback.

Other characteristics are equally important for effective PDs. These are clear and specifically communicated objectives for the PD and a direct focus on the grade levels taught. In addition, collective and interactive participation is necessary by all attendees. Finally, the intensity and duration of the PD should be well aligned with the agenda content (Zaslow, 2014). The five key features of effective PDs suggested by Desimone and Garet (2015) from best practices PDs in various countries (Kennedy, as cited in Desimone & Garet, 2015) were similar: (a) content focus, (b) active learning, (c) coherence, (d) sustained duration, and (e) collective participation.

Further, "coherence" has also been observed as highly important for teachers' maximum learning from PD (Pella, 2012). Coherence refers to the consistency of the PD material "with their knowledge and beliefs, and with school, district, and state reforms and policies" (Desimone, 2011, p. 69). Coherence in the PD also can incorporate not only teachers' beliefs but also their school and community cultures (Byrd et al., 2011). These characteristics and others were itemized by McGee et al. (2013). The PD should be learner-centered and should

address deficits in student learning . . . give teachers ownership of their PD

activities . . . promote collaboration . . . address knowledge of both content and

pedagogy . . . support reflection and connections to teachers' classroom practices

. . . and include ongoing support through workshops and in-class activities. (p. 16)

These characteristics summarize the major benefits of PDs.

Teachers' sharing of experiences is emphasized as an essential characteristic of

PDs so teachers experience comfort and empathize with one another (Rose, 2015). For

both seasoned and new teachers, the concept of communities of practice and

collaborative learning in authentic settings (e.g., the school and classroom) can enhance

teaching and learning, in which teachers work together as colearners (Cajkler, Wood,

Norton, & Pedder, 2013). Collaborative learning, shared reflections, and shared

successful classroom strategies and outcomes also add to teachers' comfort and mutual

classroom problem solving (Chikasanda et al., 2012; Haug & Sands, 2013; Lutrick &

Szabo, 2012). Self-questioning and reflections in journals or aloud are also keys to

professional growth (Abilock et al., 2013).

In addition, the longer and more frequent the PD, the more teachers become

acquainted and comfortable with one another and more inclined to share. At least 20

hours are suggested, several times a semester or school year, with follow-ups (Desimone,

2011; Kaveney & Drewery, 2011; McGee et al., 2013). As teachers become more

proficient as a result of the PD, they become more expert and may advise newer teachers

and even develop their own PD workshops (Furtak, Morrison, & Kroog, 2014; Rose,

2015).

Thus, the principles of social constructivism and pragmatism are evident in the

planning of effective PDs. Effective PDs address the learners' needs and concerns, relate

to their lives and concerns, and elicit active participation. The PDs also promote interactivity and mutual problem solving in different formats, drawing on participants' professional and personal experiences. The PDs acknowledge self-directedness in participants' individual differences in learning and different paces of growth.

As noted in Section 2, the present study results showed that the high school teachers were generally dissatisfied and frustrated with the necessity to teach to the test and observed the negative effects on themselves and their students. The teachers recognized the low district support as well and called for PD to address their concerns. They recognized that a PD would help them overcome their feelings of stress, increase their motivations to teach, and help them use creative instructional methods. With these benefits, the PD would help teachers stimulate increased student interest, critical thinking skills, and mastery of content material. Research supports teachers' requesting PDs (Al-Fadhli & Singh, 2010; Luton, 2009) and the effectiveness of PDs for equipping teachers with additional skills (Desimone, 2011; Fang, 2013) and improving student performance (Antoniou & Kyriakides, 2013; Foster et al., 2013; Sample McMeeking et al., 2012).

District and school leaders can support teachers in their desires for improvement. For both elementary and secondary school teachers, Elfers and Stritikus (2014) found that support by administrators could be effective through emphasis on high-quality instruction, initiatives that encompass both district and school leadership, communication, and the use of data for improvement of instruction. Researchers have also recommended coordination of the district curricula with the school curricula and with the teachers' PDs (Luft & Hewson, 2014).

Further, Desimone and Garet (2015) concluded that the school leaders' support and encouragement are key to teachers' implementing their learning from PDs they attend. PDs for the school principals and collaboration with their teachers have also been recommended, especially for rural principals (Stewart & Matthews, 2015). For the planned PD, the research site principal and a district administrator will be invited (Appendix A) toward greater understanding and support of the teachers in resolving their dissatisfactions and problems with teaching for standardized test preparation and incorporation of creative teaching strategies.

Project Description: Implementation

Based on the above characteristics, the principles of social constructivism and pragmatism, and the data analysis, implementation of this project will take place in a workshop format over 3 full days. The benefits of 3 days are discussed below. These days are allocated by the school for teachers' PDs the week before the fall semester. The project will follow the itinerary for each day. For the target audience of the research site high school teachers, this agenda includes the purpose, goals, and learning outcomes, as well as the activities and module formats of the PD. Appendix A shows the guiding PowerPoint, timetable for the 3 days, activities, and the evaluations of the program. The purpose of the PD is to address teachers' concerns about teaching for standardized test preparation and provide them instructional strategies that integrate creative teaching and encouragement of students' critical thinking skills into their lessons.

Steps in Implementation

I will confer with Ms. Bennett in May about conducting the program and share my agenda and materials. During a teachers' workday in June, I will request a meeting for us with the principal to present our plans and request permission for Ms. Bennett to conduct the PD. The principal is well aware of the teachers' difficulties in teaching for standardized test preparation and is concerned about students' low scores. The principal also is well acquainted with Ms. Bennett and has already informed me of willingness to meeting with Ms. Bennett and me about the PD.

I will suggest that the PD be held in August the week prior to students' return for the fall semester. This timeframe will give ample leeway for preparation of the PD, my additional meetings with Ms. Bennett, notification to the teachers. Teachers' contracts specify that they begin work at this time before classes begin. Each year during this week, all teachers are required to attend school meetings. The first 2 days are allocated to staff meetings with the superintendent. The next 3 days are allocated to PDs.

I will point out to the principal the value of this PD just before the start of school to help teachers lessen their feelings of pressure, stress, low motivation, and little ongoing district and state support. The PD will also help them access tools for more creative teaching strategies toward helping students learn better and raise their standardized test scores. With the framework of social constructivism and pragmatism, I will create the materials for the PD, including the learning objectives, overall structure for each day, prompts, protocols, handouts, formative and summative evaluations, and PowerPoint

presentations, as well as teachers' required materials (Appendix A). With Ms. Bennett, I will ask for the principal's input about the PD plan and incorporate suggestions.

The PD will be held at the school in a large room with Internet access. With input from the principal and Ms. Bennett, I will choose an appropriate room in which all teachers should feel comfortable. A long table at the back of the room will be used for light refreshments, which I will supply.

The 3 days will be scheduled consecutively. This scheduling will have several benefits. (a) It will take place during the required time prior to the start of the fall semester as teachers prepare for teaching for standardized test preparation. (b) PDs of 3 days are widely implemented (Brown, Squires, Connors-Tadros, & Horowitz, 2014; King, 2002; Lauer, Christopher, Firpo-Triplett, & Buchting, 2014). (c) Multiple and consecutive days should provide an important foundation for the PD (Park, Roberts, & Stodden, 2012). (d) Teachers will be able to apply the materials presented to their own teaching. (c) Teachers should develop camaraderie that may extend into the school year.

Although 10 teachers participated in the data collection phase of this study, all 18 teachers in the school who met the study criteria will be invited. At the end of the school year the previous spring, in an invitation e-mail to the teachers, I will describe the PD and invite them to participate. I will remind them that the PD is mandated by the school in August during the week prior to classes, and I will ask teachers to reply within 2 days.

Teachers will be required to bring samples of student work, lesson plans, notations of problem students, and curriculum units for incorporation of creative teaching strategies. During the PD, they will be asked to create applications of instructional

strategies for their subject areas, contribute suggestions for meeting the negative aspects of teaching for standardized test preparation (as revealed in the data analysis), take part in cooperative learning groups, participate fully in all activities, and complete formative and summative evaluations. Table 4 summarizes the timetable for the project.

Potential Resources and Existing Supports

This PD will require minimal resources and a minimal budget. A veteran teacher at the school, Ms. Bennett, will conduct the PD, eliminating the need for funds for an outside instructor. Teachers will be required to attend as part of their duties for the coming school year and will be responsible for their own childcare. Teachers will be asked to bring lesson plans that they feel were not successful. They will be asked to complete prompts, protocols, and assignments during the PD.

The classroom in which the PD will be conducted already has Internet accessibility for the teachers' computer use. Teachers will be asked to bring their laptops and iPads for Internet access for resources and materials, as directed in the PD. If teachers do not own these electronic tools, the media department will provide them.

With the principal's approval and assistance from the media department, I will set up a website for the participants' access. The site will have the PD agenda (Appendix A) and all materials distributed during the PD. On the site, teachers will post their assignments and evaluations from the PD. If teachers cannot attend all or part of the PD, they will be able to access these materials on the website. The site will stay up after the PD for teachers' additional access and further sharing of resources, thoughts, and observations.

Table 4

Timeline for Professional Development Project in August 2016

Month/Week	Tasks
April, 4th week	Meeting with district superintendent and high school principal to discuss study results.
May, 1st week	Meeting with facilitator to plan PD.
May, 2nd week	With facilitator, meeting with principal to describe PD and incorporation of suggestions. Approval from principal to implement PD.
May, 3rd week	Reserve room; list equipment and supplies necessary. Confer with media and housekeeping staff for equipment and supplies.
May, 4th week	With facilitator, development of materials for each day of the PD.
June, 1st week	Development of materials, continued.
July, 1st week	Send e-mail invitations to all teachers describing the PD and reminding them of their required presence in first week of August.
July, 2nd week	Follow-up e-mails and telephone calls to teachers for participation.
July, 3rd week	Reminder e-mails to informing them of meeting room and supplies to bring. Principal sends memo to teachers reminding them of mandatory nature of the PD and that it will help their teaching during the coming school year.

Month/Week	Tasks
August, 1st week, Wed-Fri	Project implementation: Delivery of PD by facilitator.
August, 2nd week	With facilitator, reflective period analyzing participants' formative and summative evaluations.
August, 3rd week	Write report and present to principal. Discuss plans for follow-up PDs.

A projector with computer attachment, supplied by the media department, will be required for display of the PowerPoints. For additional use, a whiteboard and marker will also be supplied by the media department. Handouts and the PowerPoint slides I create will be duplicated at the school, and I will supply participants with binders for all materials. I will also supply pads and pens for participants who prefer using these to electronic means.

Potential Barriers and Remedies

Potential barriers may include the principal's objection to the PD. However, the principal was most cooperative in approving my conducting the study with the teachers and in giving me e-mail access to all teachers (Appendix B). Thus, I believe the principal will cooperate in my obtaining the appropriate room and materials for the project implementation.

Attendance at this PD is required by the school. The face-to-face nature should prompt teachers to engage actively in the discussions and learn from each other. The in-person attendance should also help teachers develop camaraderie and mutual support.

However, if teachers cannot attend because of family or other responsibilities, the agenda and materials will be available on the PD website to be mounted (see below). In addition, all materials will be e-mailed to the teachers before the start of school.

Proposal for Implementation and Timetable

This PD will be implemented over 3 full days, from 8:00 a.m. to 3:30 p.m., each day with 15-minute breaks during the mornings and afternoons and hourly breaks for lunch, totaling 6 hours daily to high school teachers to help them address the problems revealed in the interviews regarding the required student preparation for state-mandated tests. The PD will take place at the school in a classroom with Internet access. The major goals of the PD are for teachers to arrive at solutions for the problems related to teaching for standardized test preparation: physical symptoms, negative effects of teaching for standardized test preparation, incorporation of creative instructional strategies, increased motivation to teach, and enlisting of district and other official support. Additional goals are for teachers to share their classroom problems and solutions, to find mutual support, to reduce their frustrations and pressures about teaching for standardized test preparation, and to leave the PD with specific strategies and materials.

A narrative summary of the PD agenda and activities follows (see Appendix A for agenda). On the first day, Wednesday morning, the facilitator will introduce teachers to the purpose, goals, and expected learning outcomes of the PD. The facilitator will use a PowerPoint presentation for this purpose. The facilitator will introduce the information technology (IT) staff member, who will explain the website. The IT member will instruct participants in accessing the website and entering their subpage information. The IT

member will also instruct participants in accessing and using SurveyMonkey® (2016) for their later recommendations on improvement of the PD.

The facilitator will then give participants a sign-in sheet, ask them to include their contact information and subjects taught, and remind them of the website and access. The facilitator will have this sheet duplicated and distribute it so that all teachers may have access to each other for assignments and support. Then the facilitator will introduce the topic of Healthy Practices to Address Teachers' Pressure and Stress. This topic will address the physical symptoms they experience of the pressures and stresses of teaching for standardized test preparation and outline the activities: teachers' presentations, discussion, and online research for sharing resources.

On Wednesday afternoon, the facilitator will introduce the topic of Teaching to the Test: Positive and Negative Effects. The activities will include a prompt for teachers to complete their thoughts, followed by dyad role plays (one teacher is a student complaining about the negatives and the other teacher responds). To further help teachers refine their responses, the facilitator will distribute a protocol for teachers to respond to student complaints. Teachers will complete the protocol, and discussion will take place, with homework assignment for teachers to research additional responses to negatives and post on the website. The facilitator will distribute the first formative evaluation and then lead a discussion with teachers in a reflective period of what they learned. After the session, the facilitator and developer will study teachers' evaluations for possible adjustments for Day 2.

On the second day, Thursday morning, the facilitator will summarize the feedback from Day 1, invite discussion, and announce any adjustments. For the topic of Creative Teaching Strategies, the facilitator first will present a PowerPoint on the differences between traditional and innovative teaching. A discussion will follow, in which teachers will share their experiences with various creative teaching strategies. The facilitator will then distribute a handout of representative creative teaching strategies, followed by a protocol for teachers to complete on an example of one effective creative teaching strategy. The facilitator will distribute other materials of creative strategies (fishbone, thinking maps, and think dots). Teachers will then choose one strategy in their subject area, describe it, show its use and any drawbacks.

On Thursday afternoon, teachers will share their strategies on their computers for all to access and several will present their strategies. The group will act as "students" and respond. The facilitator will then distribute a protocol for teachers to complete on creativity and facts. Based on the protocol, discussion will take place of participants' thoughts, conclusions, and refinement of a lesson plan based on the strategy they chose. Teachers will then complete the second formative evaluation, followed by a reflective period with group discussion of what teachers learned. After the session, the facilitator and developer will study teachers' evaluations for possible adjustments for Day 3. The teachers' homework will be to research additional creative strategies and describe them, as well as how they can be used in the teachers' subject areas. Teachers will share their productions on the website, inviting comments.

On the third day, Friday morning, the facilitator will summarize the feedback from Day 2, invite discussion, and announce any adjustments. For the topic, How Motivated Are You?, the facilitator first will introduce the subject of teachers' motivation to teach and responses as revealed by the study interviews. The teachers will receive a prompt for self-analysis of motivation to teach, increased self-confidence in teaching for standardized test preparation, and their improved commitment to students. Teachers will complete the prompt. In small groups, the teachers will discuss their motivations and, if negative, possible remedies. Summaries will be posted on the website, and discussion will follow of the full group. Discussions will continue from the self-analysis, with teachers' small groups recapping their self-confidence and commitment to students. Summaries will be posted on the website, and discussion will follow of the full group.

On Friday afternoon, the facilitator will introduce topic of enlisting support from district and other institutions. The principal will be invited to attend this session and give input. The facilitator will lead group discussion on teachers' grievances, suggestions, and recommendations for enlisting support. The facilitator will then distribute a prompt for teachers to prepare for meeting with the official. From the prompt preparation, dyad role play will take place, with one teacher playing the official raising objections. The other teacher will meet the official, with input from the principal and the group. In the large group, teachers will create a plan of action to share with the principal for the meeting with the official.

Then on Friday afternoon, as the PD ends, the facilitator will distribute the summative evaluation to teachers. They will have time in a reflective period to complete

their evaluations. Then the facilitator will lead large-group sharing on the teachers'

assessments of the relationship of their evaluations to the PD learning objectives and

teachers' recommendations for improvements to this PD and the next PD. The facilitator

will ask teachers to write out their recommended next actions to continue their learning

and mutual support and post them on SurveyMonkey® (2016).

Follow-ups will be suggested: the website will stay mounted and the teachers will

check in monthly to share their experiences, problems, and solutions. The teachers will

have access to all of their productions on the website, as well as those of other

participants. The teachers will be able to use the productions and materials for reference

throughout the school year.

At the end of each of the first 2 days, the facilitator will give teachers the

formative evaluations in the form of a 4-item open-ended survey so that improvements

may be made during the PD. Each evening the developer and facilitator will review the

formative evaluations for possible adjustments for the next day's activities. At the end of

the third day, the facilitator will give teachers the summative evaluation of seven open-

ended questions to elicit their satisfaction with the PD and their suggestions for

improvements. Formative and summative evaluations aid presenters in midcourse

program adjustments as well as plans for more effective subsequent programs (McMillan

& Schumacher, 2012). The teachers will be able to supply answers on their computers or

with paper and pen.

For formative evaluation results, the teachers will be asked to post their responses

on the program website. I will review these with the facilitator, and we will plan possible

adjustments to the program. In the mornings of the second and third days, the facilitator will lead a discussion based on the formative evaluations and share with teachers the plans for adjustment, requesting teachers' input.

For summative evaluation results, I will analyze the results with the facilitator from participants' SurveyMonkey® (2016) entries and create a summary of the program and activities, including Appendix A. The summary will include teachers' suggestions for overall improvement and a follow-up PD. I will then present a report to the principal, who may also share them with the district supervisor. With the principal's approval, I will also invite teachers to a follow-up session that can be planned at the midpoint of the fall semester. In this follow-up session, on the model of Park et al. (2012), I will invite teachers to volunteer how well they retained what they had learned and how they implemented the new learning.

Roles and Responsibilities

The roles and responsibilities of the principal, the facilitator, and participants are imperative to the success of the PD. The principal will be responsible for approving the PD, arranging the appropriate room, and approving resources and materials I may need. As the PD facilitator, I will arrange the physical venue and light refreshments and have all materials well planned and organized. I will be prepared with my presentation and handouts. At each meeting I will respond honestly to questions and encourage participants' sharing. I will also be available after the formal sessions in person, by phone, and by e-mail.

The participants' roles are primarily to be the students. These roles may be difficult for some, and the facilitator will speak about the necessity of being open as students to gain the most from the PD. Their responsibilities will be to arrive on time, stay throughout, and participate fully in all written work and discussions. They will be asked to provide lesson plans and other materials. They will also be encouraged to share their perceptions and experiences in the classroom and to cooperate and collaborate with the other participants in completing the PD assignments. Participants will be responsible for completing the formative and summative evaluations honestly and fully. For performance-based teaching, they will be required to monitor their students' progress in quizzes and creative assignments, as well as practice standardized tests.

The principal's roles and responsibilities will be to approve the PD, participate as invited, and encourage teachers to gain all the information and practice they can from the PD, as well as being productive participants. The principal will also inform teachers in a memo before the PD that it will be beneficial to their teaching needs relating to the state tests and that teachers will be expected to incorporate strategies learned in their lesson plans.

The principal will follow up during the school year. To ensure that the teachers' learning becomes performance-based, the principal will monitor the teachers' lessons plans and conduct classroom observations, conferring with teachers as necessary for the results (Ruzek, Hafen, Hamre, & Pianta, 2014). The principal will also compare the students' new standardized test results with previous years' scores as another benchmark for monitoring teachers' performances.

Project Evaluation Plan

In a summative goals-based evaluation, I will administer seven open-ended questions to elicit participants' satisfaction with the PD and their suggestions for improvements. Questions will include the following:

1. In what ways do you feel the PD helped you with pressure and stress of teaching to the test?

2. In what ways do you feel the PD helped you increase or regain your motivation and enthusiasm for teaching?

3. In what ways do you feel the PD helped you integrate test preparation and more creative teaching in your lesson plans?

4. What aspects of the PD were the most helpful to you?

5. What aspects of the PD do you feel most comfortable with using in your classroom?

6. What areas or activities of the PD would you improve? Why and how?

7. Would you like to see additional PDs on these subjects? If so, why?

This type of evaluation is appropriate at the end of the program to gauge teachers' satisfaction with the PD in relation to its goals and objectives (Antoniou & Kyriakides, 2013). Teachers will be asked for "their responses that summarize their perceptions of outcomes or experiences" (Lodico et al., 2010, p. 320). In addition, participants' suggestions for improvement of the PD in discussions during the last day and on the PD website will be requested through SurveyMonkey® (2016), after instruction by the media

specialist on accessing this survey site. Participants' responses will be used to design future PDs on teaching for standardized test preparation.

Overall Goals of the Project

The overall goals of the PD are to decrease teachers' pressure and stress and increase their motivation and desire to teach, enable them to share their perceptions, and instruct them in developing integrative teaching strategies. The goals include giving them practice in collaborative lesson planning and problem solving, and helping them create of innovative classroom activities and lessons for use with their students. These goals were formulated based on teachers' feedback in the findings in Section 2, which indicated that the teachers needed support and strategies for combining state-mandated test preparation and more creative teaching strategies.

The overall goals of the evaluation are to determine whether the PD goals have been met, whether the teachers believe they have been helped, and whether they think they can apply the learning of the PD. The goals are also to determine how comfortable teachers react with the strategies they learn in the PD. An additional goal of the evaluation is to gather teachers' feedback on improvement of the PD and if and why they would like further PDs on the integration of traditional and innovative teaching.

Key Stakeholders

Two major groups of key stakeholders in this PD are the teachers and the students, who will experience the immediate effects of the PD. Well-qualified staff, such as teachers who are well prepared, strengthen the links between theory and practice (Unver, 2014). The PD project will help teachers apply the theories of social

constructivism and pragmatism to actual classroom practice through their participation in the assignments and exercises. The teachers should also become more motivated and eager to teach and gain an improved sense of self-efficacy in their teaching (Berryhill et al., 2009). Teachers will be using their creativity to engage their students on more levels than the rote learning most often used in preparation for the state-mandated tests (Moore, 2014). Teachers affect students' knowledge directly; teachers are as well affected by students' deficient knowledge or lack of knowledge (Krainer, 2014). Therefore, the teachers' improved strategies, skills, and attitudes from their participation in the PD should help both themselves and their students to better teaching and learning experiences.

The students are key stakeholders because they should benefit from the teachers' new knowledge and application with their own new knowledge acquisition and development of creative thinking skills (Desimone, 2011; Koellner & Jacobs, 2015; Norton, 2011; Tawalbeh, 2015). Students' interest in learning should also be stimulated by the teachers' improved motivation to teach, more positive attitudes, and incorporation of creative teaching strategies into their lesson plans (Ciani et al., 2010; Jensen et al., 2014). In the state-mandated tests, students should also improve their scores from former years in the four subject areas of English II, Algebra I, Biology I, and U.S. History (Mississippi Department of Education, 2014). Finally, with teachers' improved teaching methods that emphasize more creativity and problem solving, students should become better prepared for contributing as citizens to national challenges (Bhattacharyya et al., 2013).

The principal and school district administrators will also be stakeholders. It is anticipated that students' test scores, overall grades, and critical thinking skills will improve because of the teachers' learning and application of the PD and follow-throughs during the school year. Thus, the high school, formerly designated a low performing school (Brumback, 2013), should show improved ratings on the state report card. Consequently, many restrictions may be lifted, such as receipt of fewer resources for student improvement (Thomas, 2013). In addition, teacher attrition, which had doubled in the last 5 years primarily because of low teacher morale, may decrease.

The school principal, superintendent, and district leaders are answerable to the community, parents, and state and federal leaders for school improvement. It is in the interest of these local administrators to support the teachers and encourage the PD. Support by school leaders can increase teachers' enthusiasm and motivations to teach, as well as implementing their learning from PDs (Desimone & Garet, 2015; Elfers & Stritikus, 2014). For the PD, input will be sought from the principal and a district leader, and they both will be invited to participate, toward greater communication, recognition of problems, and mutual understanding with the teachers.

Project Implications Including Social Change

Local Community

This project will help high school teachers prepare their students better for the state-mandated tests as well as learn critical thinking skills. Based on the project goals, teachers may become more motivated and enthusiastic, and their teaching would reflect these qualities. Students may become more motivated to learn, beyond rote memorization

required for the tests, and should not only improve their test scores but also develop critical thinking skills. Highly motivated teachers who integrate the test preparation with innovative teaching strategies in the district could increase student achievement.

For the school principal, who is accountable to the local community parents, social change because of the successful PD may mean their children's higher-quality education. As the principal meets with parents throughout the year, demonstrations should take place of the ways in which the students are learning beyond rote memorization. The principal would point out how more global and creative teaching strategies prepare the students better for future education and adult life. Research has confirmed that student success can be fostered by collaborative relationships of teachers, principals, and adult family members; with principals actively reaching out to parents for communication and home support of the students (Deslandes, Barma, & Morin, 2015; Fullan, 2014).

The principal is also accountable to the superintendent and other district officials who are, in turn, accountable to the state and federal leaders who may authorize funding to the school. Positive social change for the school in terms of improved student state-mandated test scores as a byproduct of the PD would help district and additional administrators obtain the needed funding and resources (T. Tamison, personal communication, March 1, 2016). In addition, success of the PD would lead to positive social change as district officials become aware of the PD success and support the principal and students in the new and integrated learning and teaching strategies (DuFour & Marzano, 2015). Further, the principal and teachers could encourage district

administrators to participate in open dialogues that could foster the objectives of all stakeholders (Behrstock-Sherratt & Rizzolo, 2014).

Far-Reaching

In the larger context, the recognition by principals and district and other officials that many teachers experience frustration and pressure and decreased motivation from teaching for standardized test preparation could lead to curriculum changes that would allow for enhanced teaching creativity and more satisfied teachers. Students would become more motivated to learn, interested in the subjects, and score higher on their standardized tests. They may also possibly discover their major interests toward further education in college and job and career directions. Higher student test scores would decrease the possibilities of state sanctions because of low student scores. The school and district administrators would recognize the improvements and possibly agree to fund more quality PD programs.

Additionally, previous test data can be used to guide instruction. According to Sindelar (2011), use of data in this way is a powerful tool available to educators. When teachers and administrators actually use test data as benchmarks, meaningful change can be made to guide and improve teaching and learning as well as better scores on high stakes tests. Thus, the district administrators and principal may be motivated to create data-driven course syllabi for teachers. These are guides designed to align with the state-mandated test criteria (Pella, 2012). At the same time, pedagogical skill, imagination, and collaboration between administrators and teachers would be necessary for teachers to

integrate creative methods with the test criteria requirements for teaching critical skills. As Smylie (2012) pointed out,

> If opportunities for teacher learning and development are a crucial part of a system of instructional and school improvement, states can create different ways to enhance the capacity, provide the incentives, and introduce the accountability mechanisms to make high quality professional development in schools and school districts both a higher priority and a reality. (p. 105)

Support by administrative authorities is possible when PDs are considered important for both teacher development and improvement of schools.

It is possible that this project could contribute to the fulfillment of such goals. Additional PDs could be implemented in the research site high school, fostering more enthusiasm in successive cohorts of teachers and students. In addition, this project may become a model for other high school PDs in the district and throughout the state.

Conclusion

In this section, I reviewed the study findings and from the participants' responses concluded that teachers needed a PD to address their concerns of pressure and stress, lack of motivation for teaching, and desire for more creative instructional strategies to integrate with the mandated teaching for standardized test preparation. The PD goals were formulated to address these needs, and I discussed the rationale based on the literature for choice of the PD: teachers respond positively to PDs and research demonstrates that student test scores and grades improve. Next, I reviewed the literature that further supports the choice of a PD. The literature included the theoretical framework

of social constructivism and pragmatism, the effectiveness of PDs for both teacher improvement and student learning, and teachers' positive views of PDs they have attended. Major characteristics of PDs were then reviewed, such as inclusion of subject content and pedagogical methods, collaborative learning, hands-on activities, sharing of classroom problems and experiences, and self-reflection.

I then discussed the project implementation, including permission from the principal, development of materials, the PD venue, resources and supports, and potential barriers and solutions. Then I presented a detailed description of the activities for the 3 days of the PD and outlined all participants' roles and responsibilities. I described the project evaluation plan and a summative evaluation at the close of the program, and included the seven open-ended questions that would help participants reflect on their learning and provide information for possible improvement in future PDs. Finally, I reflected on social change in the local community and beyond: teachers should become more motivated to teach with the range of more creative instructional tools supplied and students more motivated to learn, with improved test scores. With findings presented to administrators, this PD could become a standard of best practices for both teacher and student improvement. The PD could also be used as a model for other high schools with teacher frustrations at teaching for standardized test preparation and low motivation in both the district and other locations.

In Section 4, I will reflect on this project. First, I will observe the project strengths and limitations and then recommend possible alternative approaches. Next, I will reflect on what I learned about the processes involved in completing this project as well as

observations on my personal growth as a scholar, practitioner, and project developer. I will reflect on the importance of this work and the learning that resulted. This reflection will be followed by a discussion of the potential impact for positive social change at the individual and school organizational levels. Finally, I will describe methodological, theoretical, and empirical implications and suggest recommendations for practice and future research as well as a final conclusion.

Section 4: Reflections and Conclusions

Introduction

The purpose of this project study was to explore high school teachers' perceptions of the required state standardized testing and its effects on their teaching. A qualitative case study research design was used to obtain teachers' practices, perceptions, and experiences in teaching for standardized test preparation. Participants engaged in 60- to 90-minute interviews with me and answered open-ended questions. In this section, I discuss the strengths and weaknesses of this project; suggest alternative approaches; and examine my roles as a scholar, practitioner, and project developer. I conclude the section with the potential impact for social change, implications, and suggested applications and directions for further research.

Project Strengths and Limitations

Strengths

This project PD has several strengths. The topics of the PD, the problems of teachers related to teaching for standardized test preparation revealed in the study interviews, will be addressed. These topics are the physical symptoms they experience from the requirement to teach to the test, negative effects of teaching for standardized test preparation, incorporation of creative instructional strategies, increased motivation to teach, and enlisting of district and other official support. The topic of teaching for standardized test preparation has been widely discussed, and many teachers have been frustrated and resentful of this requirement (Assaf, 2006, 2008; Bhattacharyya et al., 2013; Holme et al., 2010).

By the project addressing the problem directly, teachers should be helped to integrate creative teaching strategies into the curricula for their required test preparation. Participants in the PD will have had a range of teaching experience. This range includes seasoned teachers who have been in the classroom at the local school district for at least 5 years and novice teachers who have been in the classroom for only 1 year. The more experienced teachers may be able to help and reassure the less experienced teachers. The less experienced teachers may be able to share the problems that many teachers face. All teachers should be able to learn from each other.

This project will provide teachers with many tools to meet the problems outlined as well as time for reflection on their individual situations. With the tools and insights gained, the teachers should be able to combine various teaching modes to lessen their own frustrations and pressures and make the lessons more interesting for students. The PD will take place the week before classes begin for the fall term, when teachers do not have classroom or homework duties.

In this PD, the teachers will be focusing on the coming term and how to enhance their teaching. PDs outside the school day have positive effects on teachers (Bayar, 2014). Teachers will be freer to concentrate only on the immediate tasks related to the PD. This focus should help them give maximum attention and effort to the activities and assignments of the PD and adapt them to their teaching. Teachers' PDs are highly effective for improving their knowledge, skills, and teaching strategies (Lutrick & Szabo, 2012).

Limitations

This project will necessarily have several limitations. The PD will be based on data and findings that were limited to the state, local school district, and high school research site. The findings may not necessarily apply to schools in other states or districts. However, they offer perspectives on teachers' pressures, motivations, and teaching perceptions that could be used as starting points for broader discussions of the experiences and perceptions of teachers nationwide concerning their problems associated with teaching for standardized test preparation.

I chose the topics of the PD, and they may not address all the needs of the teachers who attend. In future PDs, their input could be requested as to the agenda and selection of topics. The planned PD will take place only once before the start of the school year.

Additional PDs during the year would be advised as teachers may encounter problems with the curriculum and raise questions about integration of creative strategies with test preparation. In addition, the PD will take place over 3 days rather than longer, such as a week. Single PDs are less effective than continuous training for teachers' implementation (El-Deghaidy, Mansour, Aldahmash, & Alshamrani, 2015; Lehiste, 2015). With more days and additional PDs, teachers would be able to consolidate their learning to a greater extent. They could also be able to apply what they learned to their approaches and current classroom experiences (Greenwell & Zygouris-Coe, 2012; Lehiste, 2015).

Recommendations for Alternative Approaches

An alternative approach to this project would be a series of PDs throughout the school year, for example, one or two per semester. This frequency would help teachers deal with the classroom problems they encounter as they are taking place. Through evaluations and classroom observations, changes in teachers' attitudes and student learning could be monitored and tracked. Based on the results, the PDs could be customized to address the teachers' additional difficulties. This approach was not selected because, after consultation with the principal, I recognized that a PD just before classes started would be most beneficial to teachers.

Another approach would be to include the high school principal and district administrators in the PD (this approach is incorporated in the PD). Moore (2014) observed that principals who recognize the value of excellent PD may be a factor in positive student achievement in high poverty schools, such as the research site. When administrators are included, they may gain a better understanding of the challenges teachers face and be more inclined to fund future PDs.

An alternate definition of the problem would be to address it from the students' standpoint. Many of the present participants commented that their students became bored and lethargic with the constant rote memorizations involved in teaching for standardized test preparation. For example, P9 commented, "I hate seeing the students' blank or bored looks." The high stakes testing often does not substantially increase students' scores and may actually widen the achievement gap (Holme et al., 2010; Tienken & Zhao, 2013). A study and student PD on the integration of required test preparation and more creative

teaching and learning methods could reveal students' innovative ideas and contributions to more stimulating and effective teaching strategies. Approaches other than the PD could be a mentoring system of veteran and less experienced teachers meeting regularly to work out solutions, monthly faculty meetings to brainstorm and exchange methods and experiences, or an online forum only for teachers to share ideas and remedies.

Scholarship

This project has allowed me to gain a better understanding of the importance of research in education toward solving important issues in teaching. Grounding the study and project in the scholarly literature has given me new respect for the literature as well as practice in accessing appropriate databases, such as Education Research Complete, ProQuest, Academic Search Premier, and ERIC, among others. When I was not entirely satisfied with the scholarly foundations of a topic or subtopic, I persisted and continued to search out articles, especially recent ones. This effort prompted more diligence, thoroughness, and patience, as well as creativity in developing keywords that would yield better results.

I also developed my critical thinking skills in several ways through the scholarship. I had to scan, assess, and judge the various articles for relevance to my topics. With data analysis, I grew in the ability to analyze and interpret the data, distilling the teachers' most relevant comments. I also grew in the capacity to focus on what was most important from working with the peer reviewer, the questions asked, and the points made. As I located different articles, I developed the ability to distill the essence of each

for reporting in the study. With the varying perspectives of the articles, I also practiced and further developed critical thinking to compare and contrast the authors' findings.

Finally, exposure to the scholarly literature helped me in my own scholarly writing. Despite good grades in doctoral course papers, I was unsure of my scholarly writing. Constant reading and thinking about the articles aided me in my own writing as I recognized and began to "imitate" appropriate styles and language. This new writing ability, as well as the other benefits I gained from the immersion into scholarship, will help me immeasurably as I continue developing my own scholarly writing toward publication of my findings in professional journals.

Project Development and Evaluation

I learned a great deal about both project development and evaluation from this dissertation. Project development, I realized, is not a random process. It must be carried out methodically and scientifically, with grounding at the research site and in the literature.

This was my first development of a project. Toward the best project, I had to document the problem at the local setting. Once this documentation took place, I then had to consider research questions that would pinpoint the problem and provide appropriate scholarly research for investigation of the problem. My development of Sections 1 and 2 of the study were the means by which I accomplished these goals. Next, based on the findings of Section 2, I had to consider possible outcomes or solutions that would address the problem and benefit the local setting.

As I analyzed the findings, it became clearer that what would address the problem was a PD for teachers to help them integrate teaching for standardized test preparation with more creative teaching strategies. In this project development, again I had to search out literature that substantiated the advantages and successes of PDs and their best characteristics (e.g., utilization of social constructivist and pragmatism principles, collaborative learning, hands-on exercises that addressed current needs). As I also accessed literature and models of successful PDs for teachers, the structure of my PD began to take shape. I realized that a longer PD would be more effective than a shorter one, such 1 hour or a half day. Thus, my PD is designed for 3 days in succession.

Designing the parts of the PD was extremely challenging. I had to place myself in the minds of the teachers to determine what would best benefit them. Their feedback and responses to the interviews reported in Section 2 guided me as to the problems they would want addressed. Locating materials and developing the PD for each day for both sustained interest and thorough coverage took creativity, revisions, and continual referring to previous models. Once I completed the agenda, though (Appendix A), I had feelings of satisfaction (and elation). I learned a tremendous amount about PD development, and myself, in this project development. With this new knowledge, I intend to continue developing PDs for the teachers at the research site to help them further not only with their problems in teaching for standardized test preparation but in other areas of need.

I also learned a great deal in designing the evaluations for the PD. After additional research into how other PDs were evaluated, I determined that the most effective

evaluations would be both formative and summative evaluations. For the formative evaluations after Days 1 and 2, four to five open-ended questions requested participant'' views of the PD to date ((Lodico et al., 2010; McMillan & Schumacher, 2012; Smylie, 2014). For the summative evaluation, with seven open-ended questions and a final invitation for any other comments, I requested participants' input at the close of the program (Antoniou & Kyriakides, 2013; Lodico et al., 2010). The summative evaluation should reveal participants' views and perceptions of the PD, their recommendations for improvement, and their thoughts on future programs that could serve them. Both types of evaluations should yield a more accurate picture of participants' learning and growth as a result of the PD and how the PD can be improved.

Leadership and Change

From this study and project development, I learned a great deal about leadership and change. For a teacher or administrator to be a leader of change in schools is not an easy task. Many entrenched belief systems and methods, especially in administration, can impede the road to effective change, and the leader must be able to meet all objections (Abilock et al., 2013). However, PD is one avenue for effective leadership that can institute positive change (Lutrick & Szabo, 2012). Effective change cannot occur in schools if the school leader is unable to initiate the change process. Many definitions of leadership have a common theme of the leader mobilizing and directing others towards goal setting and goal achievement. Leadership also involves a vision and setting a direction and developing the strategies necessary to implement the vision (Clawson, 2011; Hallinger, 2003).

Following from this project, I recognized that the school administration has been lagging in vision and desire to change. The teachers' comments and feedback indicated that the school leaders at the district, state, and federal levels did not listen to their concerns or support them in improving teaching to include more creative strategies. A major lesson I learned about leadership and change was that leadership must sometimes come from the "ranks"—in this case, the teachers—and their vision of better and more creative teaching should direct the needed positive change.

Analysis of Self as a Scholar

Because of this doctoral study project, I have acquired new knowledge, skills, and dispositions. I learned how to identify a problem important enough to be researched and to support its importance with evidence from the local setting and previous literature. Through the development of the study and the data collection process, I learned the importance of supporting an assumption that a problem exists, situating it in the literature of the same and similar problems. I learned also how to interview participants in the most neutral manner possible and to analyze their feedback with a minimum of researcher bias.

This study provided me the opportunity to grow from a beginning researcher into a more effective one who produced a work of scholarship and an effective project to address the problem identified. This problem was improvement of teachers' effectiveness in incorporation of creative teaching strategies with the necessary teaching for standardized test preparation toward improved student achievement. The study also helped me develop a PD program and activities that demonstrate effective teacher

development and enhanced strategies for teachers to promote and encourage students'
critical thinking abilities.

As I go forward, I believe that to be a good educator and scholar, I must be a
lifelong learner. To be a scholar in education, I need to immerse myself constantly into
current research. This process, I also believe, will improve my own critical thinking skills
and abilities to observe and help solve other problems in teaching and learning at my
research site.

Analysis of Self as a Practitioner

I have been a practitioner as a high school teacher and administrator for 23 years.
I know firsthand what the participants have faced in teaching for standardized test
preparation. In developing the PD, I learned the differences between teaching young
people and facilitating adults. Although I have talked informally with other teachers, the
role of facilitator is a very different one from that of a peer teacher. This new role seems
a little daunting. To learn the most I can from it, as a practitioner-facilitator of the PD, at
the midpoint and end of each of the 3 days, I will take reflective notes on my
performance and participants' comments and suggestions. I will reflect on how the next
sessions can then be improved as I develop facility in being a leader-practitioner.

Through the adventure of conducting interviews with my colleagues, I learned
that even though at this time I do not teach subject area classes, I still play an important
role as an educational practitioner to help our students become successful. Despite the
many obstacles that are placed upon teachers' shoulders in terms of regulations and
constrictions, we are still dedicated to educating students. In the interviews, the

participants expressed in many different ways how they went about educating their students—these ways did not always include written lesson plans or memos from the main office. These are people who are dedicated and devoted and believe that "Teamwork makes the dream work!" (Maxwell, 2002, book title). As a practitioner facilitating the teachers in their mission, I am very pleased to be a part of a team of people who love what they do.

Analysis of Self as Project Developer

This doctoral project was a challenging task. It was my first attempt as a project developer, and I had to do much research into other PDs to gain an understanding and a sense of the project. However, I was able to consolidate my thoughts, research, and related study findings to create a project that I believe will benefit teachers in reducing their stress and pressure in teaching for standardized test preparation and enhance their creative abilities to integrate critical thinking skills into their teaching.

One of my goals as a project developer was to develop a project that would address the teachers' concerns. To develop such a project, I had to listen to the teachers and analyze thoroughly their feedback in the interviews. I also wanted to develop a project that could be repeated and updated as teachers identify related problems and new research becomes available. I have to admit that these goals made me nervous and excited at the same time.

Nevertheless, as I pursued in the project development, I had to remain focused and engaged in the ongoing monitoring of the strengths and the potential weaknesses of the project. I learned that ongoing self-evaluation is critical to its development and

implementation. The question I always had before me was this: How will this activity, discussion, or set of materials help the teachers?

I learned also that effective change within a school does not have to be official, mandated by state regulations. Rather, positive and meaningful change can be built around collaborative efforts of the educational leaders within the school. I hope the PD will result in such change.

Because of the study project, I also learned that I do not need to be an expert in any one particular area to make a difference. Through the process of developing the proposal, I learned how to identify a problem important enough to be researched. Through the data collection process, I learned how important it is to support the assumption that a problem exists and how the multiple literature reviews should support my study.

The Project's Potential Impact on Social Change

The project's potential impact on social change is help teachers teach better and students learn better. More specifically, the PD project offers the teachers in the local school setting a variety of strategies to prepare their students for the state-mandated tests as well as learn critical thinking skills. Teachers' high motivation to integrate the strategies in the project into their teaching will help increase student achievement on the tests and otherwise in the classroom. The PD, in which innovative teaching will be developed, can be incorporated not only for the high school students but also for the middle and elementary school students.

Graduate teacher preparation programs cannot always adequately train preservice teachers for all classroom situations. To fill such gaps, PD training programs can be extremely beneficial (Shady et al., 2013). PD programs for teachers are acknowledged as means to help young people learn complex and analytical skills necessary for the 21st century (Telese, 2012). The educational system and administrators are called on to provide more effective professional learning than in the past, especially because students are expected to be college- and career-ready upon graduation from high school (Telese, 2012).

With accountability as a vehicle for change, the federally mandated ESEA focused on transitioning students, teachers, and schools to a system aligned with college- and career-ready standards for all students (NCLB, 2002; Spellings, 2007). In the Common Core state standards, this new focus included development of differentiated accountability systems and undertaking reforms to support effective classroom instruction and school leadership (Council of Chief State School Officers, 2013). This PD can help effect such accountability and social change. It addresses teachers' concerns and frustrations about teaching for standardized test preparation, motivating them to use more creative teaching methods, teaching students more critical thinking skills, and encouraging their engagement with the subject area content. These strategies will help teachers prepare students for the 21st-century challenges they will face as they enter college and pursue careers.

Reflection on the Importance of the Work

The importance of the project can be viewed in several ways. First, through the PD training sessions, teachers will gain information that they may use to help decrease their pressure and stresses of teaching for standardized test preparation. In turn, reduction of these negatives will increase their motivation and desire to teach. Second, in the process of the work, teachers will learn to implement integrative teaching strategies and create innovative classroom activities and lessons that should increase student interest and encourage them to become more creative in their learning.

Third, in the PD collaborative mode, teachers will learn from other teachers who have successfully implemented various teaching modes in their classroom. Teachers will also share their creative ideas for combining the teaching of critical thinking skills and skills for test preparation. In the PD, with feedback from their peers and reflections on their classroom experiences, teachers will be able to evaluate which strategies students prefer and which prove most effective for promoting achievement. As the school year commences and teachers use what they have learned in the PD, they will be able to further assess the effectiveness of the integration of teaching approaches. Understanding the effects of certain strategies or tools, teachers will increase their implementation of effective teaching strategies.

Finally, the successful implementation of this PD may lead to its use as a model. This model would be used, first, for similar additional PDs in the research district, and second, for schools across the southeastern United States and other regions. These schools are struggling with closing the achievement gap (Al-Fadhli & Singh, 2010;

Blank, 2011; Guitterez, 2014). With implementation of PDs that are directly related to teachers' needs, such as the present PD, teachers may become less frustrated and pressured and students' test scores may be improved.

Implications, Applications, and Directions for Future Research

The purpose of this project was to discover rural high school teachers' perceptions, teaching practices, and experiences with the requirements of state standardized testing. Through the interviews, teachers voiced psychological and content-related dissatisfactions with the requirement to teach to the test and requested a PD that would help them integrate this requirement with more innovative teaching. Research documents that PDs increases teachers' positive attitudes (McGee et al., 2013; Shady et al., 2013), help teachers teach better, and students learn better (Abilock et al., 2013; Antoniou & Kyriakides, 2013; Fisher & Frey, 2014; Sample McMeeking et al., 2012; Telese, 2012).

The participants' responses and request for a PD indicated their conviction that if students are to learn more profoundly and creatively, teachers must be more creative and innovative in their teaching. Teachers must be prepared to implement different teaching strategies for student learning, with application of strategies such as those offered in the PD. With these different strategies, teachers should be more successful in teaching for standardized test preparation and incorporating creative methods into their teaching.

Following the present PD, implementation of additional PDs would help the faculty of the local school to unite as a team. In addition, other faculty could be invited to subsequent PDs. As noted above, the current PD can be adapted for middle and

elementary teachers. Staff and administrators could be invited to subsequent PDs to help them understand the unique challenges of the teachers. An additional benefit of this participation could be teachers' requests and administrators' granting of funding and materials for further helping teachers. Such applications would not only boost teachers' motivations and enhance their classroom performance but also help them develop critical thinking skills strategies for more effective student learning.

I learned in the participant interviews that each participant was willing to attend the 3-day PD to increase student achievement on state-mandated test. The PD was developed with their willingness and needs in mind. NCLB has been modified with Common Core standards (Anderson, Harrison, & Lewis, 2012). Recently, President Obama advocated fewer standardized tests (Lederman & Kerr, 2015). Nevertheless, the major test requirements remain, with teachers' accompanying problems. Thus, I foresee many PDs being offered in the future to help struggling teachers build upon their knowledge and teaching skills and impact student achievement by teaching their students not only to prepare for the tests but also to learn creatively and in more depth.

Future research may take several forms. Following from my recommendations for alternative approaches, above, future research could take place after several PDs were conducted with the local school high school teachers throughout the school year. Both formative and summative evaluations could be administered. With comparison of the results, recommendations could be made for regular, ongoing PDs for the teachers in dealing with the challenges of teaching for standardized test preparation. Additionally, based on the high school teachers' PDs, workshops could be developed for both the

elementary and middle school teachers who also must teach to the test. Qualitative

interviews such as those in the present study could help identify these teachers' problems

and PDs tailored to meet their needs.

Further, if administrators were included in the PDs, their feedback and

evaluations could be informative and revealing in terms of the problems they encounter

with district and state regulations. Inclusion of administrators could lead to greater

understanding and teamwork between them and their teachers. Teachers may recognize

the problems of administrators more deeply and even suggest solutions. As results would

be reported, such a PD could lead other school districts to include administrators.

Finally, qualitative studies and additional PDs based on my project could be

offered in other school districts with similar demographics. Findings could be compared

with mine in terms of the teachers' challenges, experiences, and perceived problems in

teaching for standardized test preparation. Findings of parallel studies may further

document the extent of teachers' problems with standardized test preparation and reveal

additional innovative strategies for them to incorporate into their classrooms for their

students' more sustained interest and deeper learning.

Conclusion

Based on the participants' interviews, I saw the need to develop a project that

would address their concerns and frustrations in teaching for standardized test

preparation. Through additional research and study of the teachers' responses, I

formulated a PD that could do so. I believe that my PD project has the depth and breadth

to meet the participants' needs in ways they have indicated and after delivery to which they may refer.

The relatively new Common Core Standards call for state education leaders to move beyond subject area testing program requirements. Critics of Common Core have pointed out that they "are no improvement over the current set of state standards. The Common Core State Standards are simply another set of performance objectives" (Tienken & Orlich, 2013, p. 6). The roles of classroom teachers to prepare students for college and career in the 21st century remain the same.

For teachers to meet the ongoing and current challenges of teaching today, they must keep in mind the institutional requirements as well as the need to encourage students to think critically and creatively. With development of these thinking skills, students will become more successful in both the state tests and critical thinking applied to all their subject areas. Continued PD programs for teachers, addressing their stated needs for these challenges, provides a major means for their training in integration of the required material and creative teaching strategies.

PDs, such as the one developed for this project, give teachers the support they need in both theoretical and practical forms. These forms help them conquer their frustrations and dissatisfactions with teaching for standardized test preparation, regain their motivation to teach, and use additional teaching strategies that are more creative and engage their students more profoundly. Through these means, the teachers will help their students succeed in school and in life.

References

Abilock, D., Harada, V. H., & Fontichiaro, K. (2013). Growing schools: Effective

professional development. *Teacher Librarian, 41*(1), 8-13. Retrieved from

http://search.proquest.com/docview/1446976230?accountid=14872

Al-Fadhli, H. M., & Singh, M. (2010). Unequal moving to being equal: Impact of No

Child Left Behind in the Mississippi delta. *Journal of Negro Education*, *79*(1),

18-32. Retrieved from http://search.proquest.com/docview/366345288?

accountid=14872

American Recovery and Reinvestment Act of 2009. Pub. L. No. 111-5. (2009).

Amos, H., & Cheeseman, R. H. (1991, November). *An analysis of provisional teachers*

failing the Mississippi Teacher Assessment Instrument for certification: An

evaluation for 1991-92. Paper presented at the Annual Meeting of the Mid-South

Educational Research Association, Lexington, KY. Retrieved from

http://files.eric.ed.gov/fulltext/ED353311.pdf

Anderson, K., Harrison, T., & Lewis, K. (2012*). Plans to adopt and implement Common*

Core State Standards in the Southeast Region states (Issues & Answers Report,

REL 2012–No. 136). Washington, DC: U.S. Department of Education, Institute of

Education Sciences, National Center for Education Evaluation and Regional

Assistance, Regional Educational Laboratory Southeast. Retrieved from

http://ies.ed.gov/ncee/edlabs/regions/southeast/pdf/REL_2012136.pdf

Antoniou, P., & Kyriakides, L. (2013). A dynamic integrated approach to teacher professional development: Impact and sustainability of the effects on improving teacher behaviour and student outcomes. *Teaching and Teacher Education*, *29*, 1-12. doi:10.1016/j.tate.2012.08.001

Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). *High-quality professional development for all teachers: Effectively allocating resources* (Issue Brief). Washington, DC: National Comprehensive Center for Teacher Quality.

Assaf, L. (2006). One reading specialist's response to high-stakes testing pressures. *International Reading Association, 3,* 156-167. doi:10.1598/RT/60.26

Assaf, L. C. (2008). Professional identity of a reading teacher: Responding to high-stakes testing pressures. *Teachers and Teaching: Theory and Practice*, *14*(3), 239-252. doi:10.1080/13540600802006137

Ballard, K., & Bates, A. (2008). Making a connection between student achievement, teacher accountability, and quality classroom instruction. *Qualitative Report, 13*(4), 560-580. Retrieved from http://www.nova.edu/ssss/QR/QR13-4/ballard.pdf

Barksdale-Ladd, M. A., & Thomas, K. F. (2000). What's at stake in high-stakes testing: Teachers and parents speak out. *Journal of Teacher Education*, *51*(5), 384-397. doi:10.1177/0022487100051005006

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *Qualitative Report, 13*(4), 544-559. Retrieved from http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf

Bayar, A. (2014). The components of effective professional development activities in

    terms of teachers'perspectives. *International Online Journal of Educational*

    Science, 6(2), 319-327. doi:115345/iojes.201.02.006

Behrstock-Sherratt, E., & Rizzolo, A. (2014). Everyone at the table. *Educational*

    Leadership, *71*(5), 64-69. Retrieved from www.ascd.org/publications.educational-

    leadership/feb14/vol71/num05

Beriswill, J. E., Bracey, P. S., Sherman-Morris, K., Huang, K., & Lee, S. J. (2016).

    Professional development for promoting 21st century skills and common core

    state standards in foreign language and social studies classrooms. *TechTrends:*

    Linking Research & Practice to Improve Learning, 60, 77-84. doi:

    10.1007/s11528-015-0004-5

Berryhill, J., Linney, J. A., & Fromewick, J. (2009). The effects of education

    accountability on teachers: Are policies too stress-provoking for their own

    good? *International Journal of Education Policy & Leadership*, *4*(5), 1-14.

    Retrieved from http://journals.sfu.ca/ijepl/index.php/ijepl/article/viewFile/99/68

Bhattacharyya, S., Junot, M., & Clark, H. (2013). Can you hear us? Voices raised against

    standardized testing by novice teachers. *Creative Education*, *4*, 633-639. doi:

    10.4236/ce.2013.410091

Blank, R. K. (2011). *Closing the achievement gap for economically disadvantaged students? Analyzing change since No Child Left Behind using state assessments and the National Assessment of Educational Progress.* Washington, DC: Council of Chief State School Officers. Retrieved from http://files.eric.ed.gov/fulltext/ED518986.pdf

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). *Taxonomy of educational objectives, handbook I: Cognitive domain*. New York, NY: David McKay.

Brand, B. R., & Moore, S. J. (2011). Enhancing teachers' application of inquiry-based strategies using a constructivist sociocultural professional development model. *International Journal of Science Education*, *33*(7), 889-913. doi: 10.1080/09500691003739374

Brashier, A., & Norris, E. (2008). Breaking down barriers for 1st-year teachers: What teachers' preparation programs can do. *Journal of Early Childhood, 29*(1), 30-34. doi:10.1080/10901020701878651.

Brown, C., Dotson, L., & Yontz, E. (2011). Professional development for school library media professionals: Elements for success. *TechTrends, 55*(4), 56-62. doi: 10.1007/s11528-011-0512-x

Brown, K. C., Squires, J., Connors-Tadros, L., & Horowitz, M. (2014). What do we know about principal preparation, licensure requirements, and professional development for school leaders? *CEELO Policy Report.* New Brunswick, NJ: Center on Enhancing Early Learning Outcomes. Retrieved from http://ceelo.org/wp-content/uploads/2014/07/ceelo_policy_report_ ece_principal_prep.pdf

Brown, S. (2014). *Traditional vs innovative teaching methods.* Professional development presentation. Hollandale, MS: Author. Retrieved from www.hollandalesd.org

Brumback, K. (2013). Former superintendent indicted in Atlanta school cheating scandal. *US News.* Retrieved from http://usnews.nbcnews.com/_news/2013/03/29/17520628-former superintendent-indicted-in-atlanta-school-cheating-scandal?lite

Bull, S., Feldman, P., & Solity, J. (2013). *Classroom management: Principles to practice.* New York, NY: Routledge.

Byrd, D. R., Hlas, A. C., Watzke, J., & Valencia, M. F. M. (2011). An examination of culture knowledge: A study of L2 teachers' and teacher educators' beliefs and practice. *Foreign Language Annals, 44(1),* 5-39. . Retrieved from http://search.proquest.com/docview/872087920?accountid=14872

Caffarella, R. S., & Daffron, S. R. (2013). *Planning programs for adult learners: A practical guide* (3rd ed.). San Francisco, CA: Jossey-Bass.

164

Cajkler, W., Wood, J., Norton, J., & Pedder, D. (2013). Lesson study: Towards a collaboration approach to learning in initial teacher education? *Cambridge Journal of Education, 43*(4), 537-554. Retrieved from http://dx.doi.org/10.1chool 080/0305764x.2013.834037.

Chikasanda, V., Otrel-Cass, K., Williams, J., & Jones, A. (2012). Enhancing teachers' technological pedagogical knowledge and practices: A professional development model for technology teachers in Malawi. *International Journal Design Education, 23,* 597-622. doi:10.1007/s10798-012-9206-8

Ciani, K., Ferguson, Y., Bergin, D., & Hilpert, J. (2010). Motivational influences on school-prompted interest. *Educational Psychology*, *30*(4), 377-393.

Ciani, K. D., Summers, J. J., & Easter, M. A. (2008). A top-down analysis of high school teacher motivation. *Contemporary Educational Psychology*, *33*, 533-560. doi: 10.1080/01443411003660232

Clawson, J. G. (2011). *Level three leadership: Getting below the surface* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Colbert, R., & Kulikowich, J. (2006). School counselors as resource brokers: The case for including teacher efficacy in data-driven programs. *Professional School Counseling*, *9*(3), 216-222. doi:http://dx.doi.org/10.5330/prsc.9.3.65q3q529630x5846

Council of Chief State School Officers, Achieve, Council of the Great City Schools, & National Association of State Boards of Education. (2013). *K-8 publishers' criteria for the Common Core State Standards for Mathematics*. Washington, DC: Council of Chief State School Officers. doi: 0.1177/1076217512468546

Craft, A. (2006). Fostering creativity with wisdom. *Cambridge Journal of Education*, *36*(3), 337-350. doi:10.1080/03057640600865835

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston, MA: Pearson.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed method approaches* (4th ed.). Thousand Oaks, CA: Sage.

Croft, A., Coggshall, J., Dolan, M., Powers, E., & Killion, J. (2010). *Job-embedded professional development: What it is, who is responsible, and how to get it done well* (Issue Brief). Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from files.eric.ed.gov/fulltext/ED520830

Crotty, M. (2005). *The foundations of social research: Meaning and perspective in the research process.* Thousand Oaks, CA: Sage.

Daniel, L. G., & Siders, J. A. (1994). Validation of teacher assessment instruments: A confirmatory factor analytic approach. *Journal of Personnel Evaluation in Education, 1,* 29-40. Retrieved from link.springer.com/article/10.1007%2FBF00972707?

Darling-Hammond, L., Wei, R., & Andree, A. (2010). *How high-achieving countries develop great teachers* (Issue Brief). Stanford, CA: Stanford Center for Opportunity Policy in Education. Retrieved from www.demonish.com/cracker/1431131933_658a8b3968

Dash, S., Magidin de Kramer, R., O'Dwyer, L. M., Masters, J., & Russell, M. (2012). Impact of online professional development or teacher quality and student achievement in fifth grade mathematics. *Journal of Research on Technology in Education*, *45*(1), 1-26. Retrieved from http://search.proquest.com/docview/144876366?accountid=14872

Dee, T., & Jacob, B. A. (2011). The impact of No Child Left Behind on student achievement. *Journal of Policy Analysis and Management, 30*(3), 418-446. Retrieved from www.nber.org.exp.waldenulibrary.org/papers/w15531.pdf

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2011). *The Sage handbook of qualitative research* (4th ed.). Thousand Oaks, CA: Sage.

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, *38*(3), 181-199.   Retrieved from http://search.proquest.com/docview/216902889?accountid=14872

Desimone, L. M. (2011). A primer on effective professional development. *Phi Delta Kappan*, *92*(6), 68-71. Retrieved from https://pdfs.semanticscholar.org/ c7b0ef4ad96ec3ed85914b5f0a64f6a73d36e04.pdf

Desimone, L. M., & Garet, M. S. (2015). Best practices in teachers' professional

    development in the United States. *Psychology, Society and Education, 7*(3), 252-

    263. Retrieved from www.psye.org.es/index.php/presentacion/article/

    download/7/6

Deslandes, R., Barma, S., & Morin, L. (2015). Understanding complex relationships

    between teachers and parents. *International Journal About Parents in*

    Education, *9*(1), 131-144. Retrieved from web.a.ebscohost.com/abstract?

    site=ehost&scope=site&jrnl=19733518&AW=112327103&h=KV9kNm

    W9WJY1uXgSh5Azvvzk2GY

de Vries, S., van de Grift, W. J., & Jansen, E. P. (2014). How teachers' beliefs about

    learning and teaching relate to their continuing professional development.

    Teachers and Teaching, *20*(3), 338-357. doi:10.1080/13540602.2013.848521

Diamond, B. S., Maerten-Rivera, J., Rohrer, R. E., & Lee, O. (2014). Effectiveness of a

    curricular and professional development intervention at improving elementary

    teachers' science content knowledge and student achievement outcomes: Year 1

    results. *Journal of Research in Science Teaching*, *51*(5), 635-658. doi:

    10.1002/tea.21148

Diary of a first-year teacher: Teaching to the test is taking over our school (2013, April

    1). *TakePart.* Retrieved from http://www.takepart.com/article/2013/04/01/diary-

    first-year-teacher-teaching-test-taking-over-Mississippi-school

Doig, B., & Groves, S. (2011). Japanese lesson study: Teacher professional development through communities of inquiry. *Mathematics Teacher Education and Development, 13*(1), 77-93. Retrieved from filefiles.eric.ed.gov/fulltext/ EJ960950.pdf

Donnelly, L. A., & Sadler, T. D. (2009). High school science teachers' views of standards and accountability. *Science Education Policy, 93,* 1050-1075. doi:10.1002/sce.20347

Drapeau, P. (2014). *Sparking student creativity: Practical ways to promote innovative thinking and problem solving*. Alexandria, VA: Association for Supervision and Curriculum Development.

DuFour, R., & Marzano, R. J. (2015). *Leaders of learning: How district, school, and classroom leaders improve student achievement*. Bloomington, IN: Solution Tree Press.

El-Deghaidy, H., Mansour, N., Aldahmash, & A. Alshamrani, S. (2015). A framework for designing effective professional development: Science teachers' perspectives in a context of reform. *Eurasia Journal of Mathematics, Science & Technology Education. 11*(6), 1579-1601. Retrieved from www.researchgate.net/profile/Nasser_Mansour/publication/282288764

Elfers, A. M., & Stritikus, T. (2014). How school and district leaders support classroom teachers' work with English language learners. *Educational Administration Quarterly, 50*(2), 305-344. doi:10.1177/0013161X13492797

Ellett, C., & Teddlie, C. (2003). Teacher evaluation, teacher effectiveness and school effectiveness: Perspectives from the USA. *Journal of Personal Evaluation in Education*, *17*(1), 101128. Retrieved from link.springer.com/article/10.1023A:1025083214622

Elmore, R. F., Abelmann, C. H., & Fuhrman, S. H. (1996). The new accountability in state education reform: From process to performance. In H. F. Ladd (Ed.), *Holding schools accountable: Performance-based reform in education* (pp. 65-98). Washington, DC: Brookings Institution.

Fang, Z. (2013). Learning to teach against the institutional grain: A professional development model for teacher empowerment. In X. Zhu & K. Zeichner (Eds.), *Preparing teachers for the 21st century* (pp. 237-250). Berlin, Germany: Springer. Retrieved from link.springer.com/chapter/10.1007/978-3-642-36970-4_14

Fields, E. T., Levy, A. J., Karelitz, T. M., Martinez-Gudapakkam, A., & Jablonski, E. (2012). The science of professional development: If you offer professional development in science, will teachers come? More importantly, will it matter if they do? *Phi Delta Kappan*, *93*(8), 44-46. doi:10.1177/003172171209300809

Finn, C. E., Jr., & Hess, F. M. (2004). On leaving no child behind. *Public Interest, 157*, 35-56. Retrieved from http://search.proquest.com/docview/222110185?accountid=14872

Finnigan, K. S. (2010). Principal leadership and teacher motivation under high-stakes accountability policies. *Leadership and Policy in Schools, 9,* 161-189. doi: 10.1080/15700760903216174

Finnigan, K. S., & Gross, B. (2007). Do accountability policy sanctions influence teacher motivation? Lessons from Chicago low-performing schools. *American Educational Research Journal, 44*(3), 594-630. doi:10.3102/0002831207306767

Fisher, D., & Frey, N. (2014). Effective professional development in secondary schools. In L. E. Martin, S. Kragler, D. J. Quatroche, & K. L. Bauserman (Eds.), *Handbook of professional development in education: Successful models and practices, PreK-12* (pp. 205-228). New York, NY: Guilford. Retrieved from http://search.proquest.com/docview/1651824331?accountid=14872

Flory, S. B., McCaughtry, N., Martin, J. J., Murphy, A., Blum, B., & Wisdom, K. (2014). US urban teachers' perspectives of culturally competent professional development. *Professional Development in Education, 40*(2), 282-294. doi:10.1080/19415257.2013.775663

Forehand, M. (2010). Bloom's taxonomy. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology* (pp. 41-47). Retrieved from http://projects.coe.uga.edu/epltt/

Foster, J. M., Toma, E. F., & Troske, S. P. (2013). Does teacher professional development improve math and science outcomes and is it cost effective? *Journal of Education Finance, 38*(3), 255-275. Retrieved from muse.jhu.edu/article/503894

Fullan, M. (2014). *The principal: Three keys to maximizing impact.* San Francisco, CA: Jossey-Bass/Wiley.

Furtak, E. M., Morrison, D., & Kroog, H. (2014). Investigating the link between learning progression and classroom assessment. *Science Education, 98*(4), 640-673. doi:10.1002/sec.21122

Gabriel, T. (2010, June 10). Under pressure, teachers tamper with tests. *New York Times.* Retrieved from http://bedfordtownmeeting.com/ uploads/ NYT_6_10_10_Test_Tampering.pdf

Gill, S. R. (2016). Perspectives on professional development and training**.** *Legacy, 27*(1), 10-11. Retrieved from web.b.ebscohost.com.ezp.waldenlibrary.org/ehost/ pdfviewer?sid=e96ae6b-98af-4375-84f8-514cc33bco1e

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago, IL: Aldine.

Glesne, C. (2011). *Becoming qualitative researchers: An introduction*. Boston, MA: Pearson Education.

Greenwell, S., & Zygouris-Coe, V. (2012). Exploring high school English language arts teachers' responses to professional development in reading instruction. *Journal of Reading Education, 37*(2), 21-26. Retrieved from eds.b.ebscohost. com/abstract?site=ehost&scope=site&jrnl=08865701&AN=74

Groenewald, T. (2004). A phenomenological research design illustrated. *International Journal of Qualitative Methods, 3*(1), 1-26. doi:10.1177/160940690400300104

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 50-82. doi:10.1177/1525822X05279903

Gutierrez, R. (2014). Improving education and the mistaken focus on "raising test scores" and "closing the achievement gap." In P. C. Gorski & K. Zenkov (Eds.), *The big lies of school reform: Finding better solutions for the future of public education* (pp. 17-28). New York, NY: Routledge. Retrieved from https://books.google.com/books?hl=en&lr=&id=7rc TAwAAQBAJ&oi=fnd&pg=PA17&dq

Hallinger, P. (2003). Leading educational change: Reflecting on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 321-351. doi:10.1080/0305764032000122005

Hancock, D. R., & Algozzine, B. (2006). *Doing case study research: A practical guide for beginning researchers.* New York, NY: Teachers College Press.

Hatch, J. A. (2002). *Doing qualitative research in educational settings*. Albany, NY: State University of New York Press.

Haug, C. & Sands, D. (2013). Laboratory approach to secondary teacher professional development: Impacting teacher behavior and student engagement. *Clearing House, 86,* 197-206. doi:10.1080/00098655.2013.826484

Hayden, S. S. (2011). *Teacher motivation and student achievement in middle school students.* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Full Text database. (UMI No. 3487816)

Hemelt, S. W. (2011). Performance effects of failure to make Adequate Yearly Progress (AYP): Evidence from a regression discontinuity framework. *Economics of Education Review*, *30*(4), 702-723. doi:10.1016/j.econedurev.2011.02.009

Holme, J. J., Richards, M. P., Jimerson, J., & Cohen, R. W. (2010). Assessing the effects of high school exit examinations. *Review of Educational Research*, *80*(4), 476-526. doi:10.3102/0034654310383147

Hout, M., Elliot, S., & Frueh, S. (2012). Do high-stakes tests improve learning? *Issues in Science and Technology, 15,* 33-38. Retrieved from proquest.com.ezp. waldenulibrary.org

Israel, M., & Hay, I. (2006). *Research ethics for social scientists*. Thousand Oaks, CA: Sage.

Janesick, V. J. (2000). The dance of qualitataive research design: Metaphor, methodolatry, and meaning. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 209-219). Thousand Oaks, CA: Sage. Retrieved from psycnet.apa.org/psycinfo/1994-98625-011

Jensen, J. L., McDaniel, M. A., Woodard, S. M., & Kummer, T. A. (2014). Teaching to the test . . . or testing to teach: Exams requiring higher order thinking skills encourage greater conceptual understanding. *Educational Psychology Review*, *26,* 307-329. doi:10.1007/s10648-0013-9248-9

Jones, B. D. (2007). The unintended outcomes of high-stakes testing. *Journal of Applied School Psychology, 23*(2), 65-86. doi:10.1300/J370v23n02_05

Jones, B. D., & Egley, R. J. (2004). Voices from the frontlines: Teachers' perceptions of

    high-stakes testing. *Education Policy Analysis Archives*, *12*(39), 1-34. Retrieved

    from http://epaa.asu.edu/epaa/v12n39/

Joyce, B. R., & Showers, B. (2002). *Student achievement through staff development* (3rd

    ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Kaveney, K., & Drewery, W. (2011). Classroom meetings as a restorative practice: A

    study of teachers' responses to an extended professional development

    innovation. *International Journal on School Disaffection*, *8*(1), 5-12.

    Retrieved from files.eric.ed.gov/fulltext/EJ962367.pdf

Kieffer, C. (2012, December 16). A new wave of reform? 30 years after

    historic effort state's schools still lag. *Northeast Mississippi Daily Journal*.

    Retrieved from http://djournal.com/news/a-new-wave-of-reform-30-years-after-

    historic-effort-states-schools-still-lag/

King, M. B. (2002). Professional development to promote schoolwide inquiry. *Teaching

    and Teacher Education*, *18*(3), 243-257. doi:10 .1016/S0742-051X(01)00067-1

Klinger, D. A., & Rogers, T. W. (2011). Teachers' perceptions of large-scale

    assessment programs within low-stakes accountability frameworks.

    International Journal of Testing, 11, 122-143. doi:

    10.1080/15305058.2011.552748

Koellner, K., & Jacobs, J. (2015). Distinguishing models of professional development: The case of an adaptive model's impact on teachers' knowledge, instruction, and student achievement. *Journal of Teacher Education*, *66*(1), 51-67. doi: 10.1177/0022487114549599

Krainer, K. (2014). Teachers as stakeholders in mathematics education research. *Mathematics Enthusiast. 11*(1), 49-59. Retrieved from http://search.proquest.com/docview/1509095953?accountid=14872

Krawec, J. & Montague, M. (2014). The role of teacher training in cognitive strategy instruction to improve math problem solving. *Learning Disabilities Research & Practice, 29*(3), 126-134. doi:10.108010098650903505399

Kuehn, L. (2010). Standardized testing is a global issue: Policies spread through policy-borrowing, harmonization and coercion. *Our Schools, 20*(1), 69-75. Retrieved from http://search.proquest.com/docview/816192605?accountid=14872

Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, *105*(3), 805-820. doi: 10.10371a0032583

Ladd, H. F. (Ed.). (1996). *Holding schools accountable: Performance-based reform in education*. Washington, DC: Brookings Institution.

Lai, E. R., & Waltman, K. (2008). Test preparation: Teacher perceptions and practices. *Educational Measurement: Issues and Practices, 3*, 29-45. doi:10.1111/j.1745 3992.2008.00120

Lauer, P. A., Christopher, D. E., Firpo-Triplett, R., & Buchting, F. (2014). The impact of short-term professional development on participant outcomes: A review of the literature. *Professional Development in Education*, *40*(2), 207-227. doi: 10.1080/19415257.2013.776619

Lederman, J., & Kerr, J. C. (2015, October 24). Obama encouraging limits on standardized student tests. c*nsnews.com* Retrieved from http://www.cnsnews.com/news/article/obama-encouraging-limits- standardized-student-tests

Lee, H. S., Linn, M. C., Varma, K., & Liu, O. L. (2010). How do technology-enhanced inquiry science units impact classroom learning? *Journal of Research in Science Teaching*, *47*(1), 71-90. doi:10.1002/tea.20304

Leedy, P., & Ormrod, J. (2012). *Practical research: Planning and design* (10th ed.). London, England: Pearson Education.

Legislature of the State of Mississippi. (1999). *Mississippi Student Achievement Improvement Act of 1999*. Senate Bill 2156. Retrieved from http://billstatus.ls.state.ms.us/documents/1999/html/SB/2100-2199/SB2156SG.htm

Legislature of the State of Mississippi. (2000). *Superior-Performing Schools Program and an Exemplary Schools Program.* Senate Bill 2488. Retrieved from http://billstatus.ls.state.ms.us/documents/2000/html/SB/2400-2499/SB2488SG.htm

Lehiste, P. (2015). The impact of a professional development program on in-service teachers' TPACK: A study from Estonia. *Problems of Education in the 21st Century, 66,* 18-28. Retrieved fromwww.scientiasocialis.lt/pec/files/pdf/ vol66/18-28.Lehiste_Vol66_PEC.pdf

Lloyd, M.E.R., & Sullivan, A. (2012). Leaving the profession: The context behind one quality teacher's professional burn out. *Teacher Education Quarterly. 39*(4), 139-162. Retrieved from http://www.jstor.org/stable/23479656

Lodico, M., Spaulding, D., & Voegtle, K. (2010*). Methods in educational research: From theory to practice* (2nd ed.)*.* San Francisco, CA: Jossey-Bass/John Wiley.

Longo, C. (2010). Fostering creativity or teaching to the test? Implications of state testing on the delivery of science instruction. *Clearing House, 83*(2), 54-57. doi:10.108010098650903505399

Luft, J. A., & Hewson, P. W. (2014). Research on teacher professional development programs in science. In N. G. Lederman & S. K. Abell (Eds.), *Handbook of Research in Science Education*, Vol. 2 (pp. 889-909). New York, NY: Routledge. doi:10 .1007/s11191-010-9294-3

Luton, C. A. (2009). *Hearing new voices: Novice teachers' experiences with high stakes testing in mathematics and reading* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Full Text database. (UMI No. 3387672)

Lutrick, E. & Szabo, S. (2012). Instructional leaders' belief about effective professional
development. *Delta Kappa Gamma Bulletin, 78*(3), 1-12. Retrieved from
http://search.proquest.com/docview/1030423012?accountid=14872

Mack, D., Watson, E. D., & Camacho, M. M. (Eds.). (2012). *Mentoring faculty of color:
Essays on professional development and advancement in colleges and
universities*. Jefferson, NC: McFarland.

Maleyko, G. & Gawlik, M. A. (2011). No Child Left Behind: What we know and what
we need to know. *Education, 131*(3), 600-624. Retrieved from
https://krboernke.files.wordpress.com/2011/05/nclb.pdf

Marshall, C., & Rossman, G. B. (2010). *Designing qualitative research*. Thousand Oaks,
CA: Sage.

Mathis, W. J. (2006). *The accuracy and effectiveness of Adequate Yearly Progress,
NCLB's school evaluation system.* East Lansing, MI: Great Lakes Center for
Education Research and Practice. Retrieved from
http://greatlakescenter.org/docs/Policy_Briefs/GLC_AYP_exsum-FINALpdf

MAXQDA. (2014). *What Is MAXQDA?* Retrieved from http://www.maxqda.com/

Maxwell, J. A. (2004). *Qualitative research design: An interpretive approach* (2nd ed.).
Thousand Oaks, CA: Sage.

Maxwell, J. C. (2002). *Teamwork makes the dream work.* Nashville, TN: Thomas
Nelson.

McGee, J., Wang, C. & Polly, D. (2013). Guiding teachers in the use of a standard-based mathematics curriculum: Teacher perceptions and subsequent instructional practice after as intensive professional development program. *School Science and Mathematics, 113*(1), 16-28. doi:10 .1111/j.1949-8594.2012.00172.x

McMillan, J. H., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Upper Saddle River, NJ: Pearson Education.

McMillan, J. H., & Schumacher, S. (2012). *Practical research: Planning and design* (10th ed.). London, England: Pearson Education.

Merriam, S. B. (2002). *Qualitative research in practice; Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA*:* Jossey-Bass.

Mikelskis-Seifert, S. & Duit, R. (2012). Physics teachers' professional development in the project "Physics in Context." *COSMOS, 8*(2), 211-227. Retrieved from http://dx.doi.org/10.1142/S0219607712500085

Mississippi Department of Education. (2007). *Adequate Yearly Progress.* Retrieved from http://www.mde.k12.ms.us

Mississippi Department of Education. (2010). *Mississippi Department of Education Quality Distribution Index (QDI) 2009-2010 school year cut points by school district.* Retrieved from http://southernecho.org/s/wp-content/uploads/2009/12/qdi-scores.pdf

Mississippi Department of Education. (2011). *High stakes test.* Retrieved from

http://www.mde.k12.ms.us

Mississippi Department of Education. (2012). *Assessment.* Retrieved from

http://www.mde.k12.ms.us

Mississippi Department of Education. (2013). *Subject Area Testing Program.* Retrieved

from http://www.mde.k12.ms.us

Mississippi Department of Education. (2014). *Accountability.* Retrieved from

http://www.mde.k12.ms.us

Moore, K. D. (2014). *Effective instructional strategies: From theory to practice.*

Thousand Oaks, CA: Sage.

Moustakas, C. (1994). *Phenomenological research methods.* Thousand Oaks, CA:

Sage.

National Center for Education Statistics. (2014). *Are the nation's 12th-graders making*

progress in mathematics and reading? Retrieved from

http://nces.ed.gov/nationsreportcard/subject/publications/main2013/

pdf/2014087.pdf

Nichols, S. L., & Berliner, D. C. (2008). Testing the joy out of learning. *Educational*

Leadership, *65*(6), 14-18. Retrieved from http://www.ascd.org/portal/site/

ascd/menuitem.459dee008f99653fb85516f762108a0c/

Nichols, S. L., Glass, G. V., & Berliner, D. C. (2012). High-stakes testing and student

    achievement: Updated analyses with NAEP data. *Education Policy Analysis*

    Archives, *20*(20), 1-35. Retrieved from

    http://files.eric.ed.gov/fulltext/EJ982699.pdf

No Child Left Behind Act of 2001. (NCLB). (2002). Pub. L. No. 107-110. (2002).

Norton, M. S. (2011). Please, not another push to get tough on student retention.

    Planning and Changing, 42(3/4)*,* 209-223. Retrieved from crawl.prod.proquest.

    com.s3.amazonaws.com/fpcache/0a676d173574ece6761f09

    ebe1e143b3.pdf?

Park, H. J., Roberts, K. D., & Stodden, R. (2012). Practice brief: Faculty perspectives on

    professional development to improve efficacy when teaching students with

    disabilities. *Journal of Postsecondary Education and Disability*, *25*(4), 377-383.

    Retrieved from http://www.eric.ed.gov/contentdelivery/servlet/ERIC

    Servlet?accno=EJ1002147

Patel, N., Franco, S., Miura, Y., & Boyd, B. (2012). Including curriculum focus in

    mathematic professional development for middle school mathematic teachers.

    School Science and Mathematics, 112(5), 300-309. Retrieved from

    http://dx.doi.org.ezp.waldenulibrary.org/10.1111/j.1949-8594.2012.00146.x

Patton, M. (2002). *Qualitative evaluation and research methods* (3rd ed.). Newbury Park,

    CA: Sage.

Pehmer, A. K., Gröschner, A., & Seidel, T. (2015). How teacher professional development regarding classroom dialogue affects students' higher-order learning. *Teaching and Teacher Education*, *47*, 108-119. doi: 10.1016/j.tate.2014.12.007

Pella, S. (2012). What should count as data for data-driven instruction? Toward contextualized data-inquiry models for teacher education and professional development. *Middle Grades Research Journal, 70*(1), 57-75. Retrieved from search.proquest.com/openview/8e297dbfd65672dc8232f3e6fff91980/1?pq-origsite=gscholar

Perryman, J., Ball, S., Maguire, M., & Braun, A. (2011). Life in the pressure cooker: School league tables and English and mathematics teachers' responses to accountability in a results-driven era. *British Journal of Educational Studies*, *59*(2), 179-195. Retrieved from http://mmiweb.org.uk/hull/site/pt/downloads/pbl_pas_PressureCooker.pdf

Potucek, J. S. (2010). *How teachers talk to students about tests: Teachers' perceptions of motivational messages in high-stakes testing* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Full Text Database. (UMI No. 3492815)

Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal, 50(1),* 4-36. doi: 10.3102/0002831212463813

Rose, M. (2015). School reform fails the test. *American Scholar*. *84*(1), 18-30. Retrieved from web.a.ebscohost.com.ezp.waldenulibrary.org/ehost/ detail/detail?vid=3&sid=fc5a8ff2-e7cd-4801-9c52-ee2e8a857b6e

Rubin, D. I. (2011). The disheartened teacher: Living in the age of standardization, high-stakes assessments, and No Child Left Behind (NCLB).*Changing English*, *18*(4), 407-416. doi:10 .1080/1358684x.2011.630197

Ruzek, E. A., Hafen, C. A., Hamre, B. K., & Pianta, R. C. (2014). Combining classroom observations and value added for the evaluation and professional development of teachers. In T. Kaine, K. Kerr, & B. Pianta (Eds.), *Designing teacher evaluation systems: New guidance from the Measures of Effective Teaching Project* (pp. 205-233). San Francisco, CA: Jossey-Bass.

Sample McMeeking, L. B., Orsi, R., & Cobb, R. B. (2012). Effects of a teacher professional development program on the mathematics achievement of middle school students. *Journal for Research in Mathematics Education*, *43*(2), 159-181. doi:10.5951/jresematheduc.43.20159

Sanders, M. G., & Jordan, W. J. (Eds.). (2013). *Schooling students placed at risk: Research, policy, and practice in the education of poor and minority adolescents*. New York, NY: Routledge.

Santman, D. (2002). Teaching to the test? Test preparation in the reading workshop. *Language Arts, 79*(3), 203-211. Retrieved from http://search.proquest.com/ docview/196896268?accountid=14872

Schaeffer, B. (2013). Standardized exam cheating confirmed in 37 states and D.C.;

New report shows widespread test score corruption. *FairTest, National Center for*

Fair and Open Testing. Retrieved from http://fairtest.org/2013-cheating-report-

press release

Scott, G. (2013, July 19). U.S. House passes No Child Left Behind reauthorization.

Governing. Retrieved from http://www.governing.com/news/federal/gov-house-

passes-nclb-reauthorization.html

Seraphin, K. D., Philippoff, J., Parisky, A., Degnan, K., & Warren, D. P. (2013).

Teaching energy science as inquiry: Reflections on professional development as a

tool to build inquiry teaching skills for middle and high school teachers. *Journal*

of Science Education and Technology, 22(3), 235-251. Retrieved from

http://dx.doi.org.ezp.waldenulibrary.org/10.1007/s10956-012-9389-5

Shady, S., Luther, V., & Richman, L. (2013). Teaching the teachers: A study of perceived

professional development needs of educators to enhance positive attitudes toward

inclusive practice. *Education Research and Perspectives. 40,* 169-191.

Retrieved from http://www.erpjournal.net/wp-content/uploads/2013/04/

ERPV40-_Final_Luther-et-al-_2013_

Sinclair, C. (2008). Initial and changing student teacher motivation and commitment to

teaching. *Asia-Pacific Journal of Teacher Education, 36*(2), 79-104.

Retrieved from http://www.informworld.com/openurl?genre=article&id=

doi:10.1080/13598660801971658

Sindelar, N. W. (2011). *Using test data for student achievement: Answers to No Child Left Behind.* New York, NY: Rowman & Littlefield**.**

Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research.* Thousand Oaks, CA: Sage.

Smith, J. M., & Kovacs, P. E. (2011). The impact of standards-based reform on teachers: The case of "No Child Left Behind." *Teachers and Teaching: Theory and Practice*, *17*(2), 201-225. doi:10 .1080/13540602.2011.539802

Smolin, A., & Clayton, J. K. (2009). Standardized testing: How prepared are we? *Journal of Cases in Educational Leadership*, *12*(4), 29-36. doi:10.1177/1555458909352465

Smylie, M. (2014). Teacher evaluation and the problem of professional development. *Mid-Western Educational Researcher*, *26*(2), 97-111. Retrieved from www.mwera.org/MWER/volumes/v26/issue2/v26n2-Smyli-POLICY-BRIEFS.pdf

Spellings, M. (2007). *Building on results: A blueprint for strengthening the "No Child Left Behind Act."* Washington, DC: U.S. Department of Education. Retrieved from www.edupubs.org

Stansfield, W. (2011). Educational curriculum standards and standardized educational tests: Comparing apples and oranges. *American Biology Teacher, 73,* 389-393. doi:10.1525/abt.2011.73.74

Stewart, C., & Matthews, J. (2015). The lone ranger in rural education: The small rural

    school principal and professional development. *Rural Educator*, *36*(3), 49-60.

    Retrieved from http://search.proquest.com/docview/1762041274?

    accountid=14872

Stronge, J. (2013). *Effective teachers = student achievement.* New York, NY: Routledge.

SurveyMonkey®. (2016). *Create and send surveys with ease.* Retrieved from

    https://www.surveymonkey.com/mp/take-a- tour/?ut_source=header

Taubman, P. (2014). The art of the impossible professional study and the making of

    teachers. *English Journal, 103*(6), 14-19. Retrieved from

    http://search.proquest.com/docview/1544419809?accountid=14872

Tawalbeh, T. (2015). Instructors' perceived effectiveness of current professional

    development programs at Taif University English Language Center. *English*

    Language Teaching, 8(11), 117-130. doi:10 .5539/eltv8n11p117

Taylor-Powell, E. & Renner, M. (2003). Analyzing qualitative data. *Program*

    Development & Evaluation, 12, 1-10. Retrieved from

    http://www.alnap.org/resource/19264

Teddlie, C., & Tashakkori, A. (2011). *Mixed methods research. The Sage handbook of*

    qualitative research. Thousand Oaks, CA: Sage.

Telese, J. A. (2012). Middle school mathematics teachers' professional development and

    student achievement. *Journal of Educational Research, 105,* 102-111.

    Retrieved from http://dx.doi.org.ezp.waldenulibrary.org/10.1080100220671.2010.

    521209

Thomas, R. M. (2013). *High-stakes testing: Coping with collateral damage*. New York, NY: Routledge.

Tienken, C. H., & Orlich, D. C. (2013). Translating the Common Core state standards. *AASA Journal of Scholarship and Practice, 10*(1), 3-7. Retrieved from http://www.aasa.org/jsp.aspx

Tienken, C. H., & Zhao, Y. (2013). How common standards and standardized testing widen the opportunity gap. In P. L. Carter & K. G. Welner (Eds.), *Closing the opportunity gap: What America must do to give every child an even chance* (pp. 111-122). New York, NY: Oxford University Press. doi: 10.1093/acprof:oso/9780199982981.003.0008

Torff, B., & Sessions, D. (2009). Teachers' attitudes about professional development in high-SES and low-SES communities. *Learning Inquiry*, *3*(2), 67-77. doi: 10.1007/s11519-009-0040-1

Ullucci, K., & Spencer, J. (2009). Unraveling the myths of accountability: A case study of the California high school exit exam. *Urban Review, 41*(2), 161-173. doi: 10.1007/s11256-008-0105-y

Unver, G. (2014). Connecting theory and practice in teacher education: A case study. *Educational Sciences: Theory & Practice, 14*(4), 1402-1407. doi: 10.12738/estp.2014.4.2161

U.S. Department of Education. (2011). *No Child Left Behind legislation and policies*. Retrieved from http://www.ed.gov

U.S. Department of Education. (2012). *ESEA flexibility.* Washington, DC: Author. Retrieved from http://www2.ed.gov/policy/elsec/guid/esea flexibility/index.html

U.S. Department of Education. (2014). *NAEP overview.* Retrieved from http://nces.ed.gov/nationsreportcard/

Williams, C., & Wilson, S. (2012). Achieving both intellectual quality and relevance in classroom learning experience: Some conceptual challenge. *Studies in the Cultural Politics of Education, 33*(4), 471-484. doi: 10.1080/01596306.2012.692956

Yin, R. K. (2013). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage.

Zaslow, M. (2014). General features of effective professional development. In H. P. Ginsburg, M. Hyson, & T. A. Woods (Eds.), *Preparing early childhood educators to teach math* (pp. 97-115). Baltimore, MD: Brookes Publishing.

Appendix A: The Project

Full Agenda: Curriculum and Materials

Teachers' Professional Development Training:
Teachers' Problems With Teaching to the Test and Solutions

Day 1: Wednesday   **Total Hours: 6**

Morning
8:00 a.m.-8:30 Introductions: Researcher introduces topics, facilitator, and IT member.
- Participants introduce themselves.
- Facilitator shares private website address and login for the PD.
- IT staff member demonstrates website access and gives teachers contact information for questions and problems. Each teacher is assigned a subpage to post all productions.
- PowerPoint: Purpose, Goals, Learning Objectives of PD (see below).

8:30-10:00   **Healthy Practices to Address Teachers' Pressure and Stress** (RQ2, Theme 1).
- Prompt: My New Healthy Practices (see below). Teachers complete.
- Small groups: Teachers complete prompt and prepare presentations to address larger group.
- Presentations, resolutions.

10:00-10:15   Break

10:15-12:00
- Discussion: How new healthy habits lessen stresses and pressures from teaching to the test.
- Teacher production: Teachers research resources (e.g., articles, books, videos) to support their healthy practices and post on website for all.

12:00 p.m.-1:00   Lunch

Afternoon
1:00p.m.-2:30 Teaching to the Test: Positive and Negative Effects (RQ1, Themes 1, 4)

- Introduction: Facilitator introduces topic, toward increasing teachers' awareness of both positives and negatives and solutions.
- Prompt: Positives and Negatives of Teaching to the Test (see below).
- Role plays: A complaining student. In dyads, one teacher role plays a student complaining about the negatives and the other teacher responds.

2:30-2:45   Break

2:45-3:30

- Protocol: Answering a Complaining Student (see below).
- Discussion of teachers' responses to protocol.
- Formative Evaluation: Day 1 (see below). Teachers post on website.
- Reflective period: From formative evaluation, teachers reflect on their learning and progress of first day, with discussion.
- Teacher production: Teachers research possible additional responses to negatives and post on website for all to access.
- Facilitator and developer study formative evaluations and if necessary make corrections for Day 2 based on feedback.

Day 2: Thursday   **Total Hours: 6**

Morning
8:00 a.m.-8:30 Feedback: Feedback and discussion from Day 1 formative evaluation.

8:30-10:00   Creative Teaching Strategies 1 (RQ4, Theme 1)

- PowerPoint: Differences between Traditional and Innovative Teaching (see below).
- Discussion: Teachers discuss the pros and cons in their experience of various creative teaching strategies.
- Handout: Table of Representative Creative Teaching Strategies (see below).

10:00-10:15 Break

10:15-12:00

- Protocol: An Effective Creative Teaching Strategy in My Classroom (see below).
- Handout: Fishbone Diagrams (see below).
- PowerPoint: Thinking Maps (see below).

- Handout: Think Dots Activity (see below).
- Teacher production: Teachers choose one strategy in their subject area, using models if they wish. They write out a description of the strategy, example of application in subject area, impediments and benefits they foresee, whether they used it before, and if so effectiveness in their classroom**.**

12:00 p.m.-1:00 Lunch

Afternoon
1:00p-2:30   **Creative Teaching Strategies 2** (RQ4, Theme 1)
- Sharing of Teachers Effective Creative Teaching Strategies: Teachers present their creative teaching strategies, using their computers to post their examples.
- For sharing, teachers volunteer to present their strategy and application in a lesson. Reciprocal Teaching: Group members role play as students. As teachers present, facilitator encourages "students" to ask questions, request further explanations, raise objections.
- Protocol: Creativity and Facts (see below).

2:30-2:45   Break

2:45-3:30
- Discussion: Integration of Creative Teaching and Standardized Test Preparation. Based on protocol, participants share their conclusions, thoughts, and a lesson plan for implementation with integration.
- Formative Evaluation: Day 2 (see below). Teachers post on website.
- Reflective period: From formative evaluation, teachers reflect on their learning and progress of second day, with discussion
- Facilitator and developer study formative evaluations and if necessary make corrections for Day 3 based on feedback.
- Teacher production: Teachers research other creative strategies. Write out descriptions of how they can be used in their individual subject areas, share them on the website and invite other teachers' comments.
- Handout: Resources for Creative Teaching (see below).

Day 3: Friday   **Total Hours: 6**

Morning
8:00 a.m.-8:30 Feedback: Feedback and discussion from Day 2 formative evaluation
and teachers' sharing of creative strategies.

8:30a-10:00   How Motivated Are You? (RQ3, Themes 1, 2, 3)
- Introduction by facilitator of teachers' motivation to teach as affected
  by teaching to the test, with summary of study participants' responses.
- Prompt and Self-Analysis: Motivation, Self-Efficacy/Self-Confidence,
  Commitment to Students (see below).
- Small groups: Sharing of thoughts, feelings, perspectives on
  motivation to teach, with possible remedies. One teacher in each group
  posts list of possible remedies on website.

10:00-10:15   Break

10:15-12:00
- Further discussion and sharing of self-analyses:
  Self-Efficacy/Self-Confidence, Commitment to Students
- Small groups: Teachers discuss how to increase their self-efficacy/self-
  confidence in teaching to the test, integration of creative strategies, and
  commitment to students. One teacher in each group posts list of
  possible remedies on website.
- Large group: Each group presents their remedies and facilitator invites
  large-group feedback.

12:00 p.m.-1:00 Lunch

Afternoon
1:00p-2:30   Support by District and Other Institutions (RQ1, Theme 4, Subtheme
3; RQ3, Theme 4)
- Introduction by facilitator: "Gripes" about lack of official support,
  from study interviews.
- Group discussion: Teachers reiterate, add to, their complaints. Make
  suggestions and recommendations about enlisting support.
- Prompt: Preparation for Meeting With a District (State, Federal)
  Official (see below)
- Teachers post their prompt responses on website.
- Role play, dyads: From prompt preparation, one teacher plays an
  official in the group meeting. Dialogue about official's objections and
  teachers' critiques and recommendations, with input from group.

- Large group: Teacher production: Teachers create plan of action to share with principal and district official. Plan of action posted on website.
- Introduction of principal and district administrator. Teachers share their plan of action and principal and administrator are invited to give input.

2:30-2:45   Break

2:45-3:30   **Teachers' Reflective Period and Recommendations** (RQ4, Themes 1 and 2)
- Summative Evaluation: Day 3 (see below).
- Reflective period: From summative evaluation, teachers reflect on their learning and progress of third day and full PD and share in the group.
- Large group discussion: Relationship of evaluations to learning objectives.
- Large group discussion: Teachers' suggestions for improvements and recommendations.
- Teacher production: Teachers write and share next actions (e.g., informal meetings as a group or small groups, postings on website, next PD).
- Follow-up: Website stays mounted. Teachers "check in" monthly, sharing experiences, insights, problems, solutions.
- Facilitator's closing remarks: Thanks participants for attending. encourages them to keep checking in on website, requests their input for next PD in person, via e-mail, or on website.

PowerPoint: Purpose, Goals, Learning Objectives of PD

Purpose of the Program

To address teachers' problems in teaching to the test, as identified in the interviews:

▶ Feelings of pressure and stress from requirement to teach to the test.

▶ Negatives of teaching to the test.

▶ Lack of confidence in integration of creative teaching strategies.

▶ Low motivation and desire to teach.

▶ Lack of district and other institutional support.

2

Goals

1. To help teachers identify their specific habits that lead to feelings of pressure and stress in teaching to the test.

2. To help teachers understand and verbalize the positives and negatives of teaching to the test.

3. To help teachers gain practice in integration of creative teaching strategies and standardized test preparation.

4. To help teachers understand and identify their low motivation and desire to teach.

5. To help teachers establish plans for meeting with district and other officials.

3

Learning Outcomes

1. Teachers will list their specific habits that lead to feelings of pressure and stress in teaching to the test and healthy solutions for each. Teachers will produce resources to support healthy habits.

2. Teachers will complete table of positives and negatives of teaching to the test and role play in dyads to demonstrate their understanding.

3. Teachers will gain practice in integration of creative teaching strategies and standardized test preparation by producing example and description in their subject area of one strategy and classroom application. Selected teachers will demonstrate their strategy before the group. Teachers will locate resources for additional creative strategies.

4. Teachers will analyze and summarize their reasons for low motivation and desire to teach.

5. Teachers will prepare an agenda for meeting with district or other officials and role play with one teacher as official in the group meeting.

4

Additional Benefits

► Teachers share their experiences, insights, perceptions about their difficulties in teaching to the test.

► Teachers share their PD productions and resources.

► Teachers develop greater camaraderie and support network for help with other possible problems.

► Teachers can access PD website at any time.

5

Prompt: My New Healthy Practices

	To Reverse	**Perceived Barrier**	**New Healthy Habit**
Diet			
Exercise			
Rest			
"Me" Time			
Other Activities That Nurture Me			

Prompt: Positives and Negatives of Teaching to the Test

1. In what ways do you believe teaching to the test benefits:

    a. Your students: _____

        Why? _____

    b. Your teaching: _____

        Why? _____

2. In what ways do you believe teaching to the test hinders or constraints:

    a. Your students: _____

        Why? _____

    b. Your teaching: _____

        Why? _____

Protocol: Answering a Complaining Student

1. From your prompt on positives and negatives of teaching to the test and role plays, list the negatives you believe a student would complain about.

_____

2. In your own words, communicate to student(s) you understand. Explain that the requirement is to help the students and the school.

_____

3. Address each negative with a positive (e.g., rote memorization leads to mastery of the facts).

_____

4. Share with student(s) your plans for incorporating more creative teaching strategies into a lesson. Give one example (e.g., themed unit).

_____

Formative Evaluation: Day 1

1. These topics are especially important to me:

   _____

2. I feel that the following are working well in this PD:

   _____

3. These aspects of the program could be improved:

   _____

4. Here are my suggestions for improvements:

   _____

THANK YOU FOR PARTICIPATING!

PowerPoint: Differences between Traditional and Innovative Teaching

From: Brown, S. (2014). *Traditional vs. innovative teaching methods*. Professional

development presentation. Hollandale, MS: Author.

Handout: Table of Representative Creative Teaching Strategies

Representative Creative Teaching Strategy	Brief Description	Example
1. Reciprocal Teaching (Role Plays)	The student becomes the teacher after the task has been modeled by the teacher. Students learn to lead small group discussions while focusing on: a. summarizing, b. question generating, c. clarifying, d. predicting.	In U.S. History I, teacher models one difference between leadership styles of two generals in Civil War. Student then leads discussion on other differences. Assigns fellow students to write summaries and ask additional questions.
2. Miniworkshops	Short or small tasks that narrows in on specific topics or focal points where students may show deficiencies. This can be used to lead into larger concepts.	In English I, teacher asks students to summarize character description. Then teacher leads students to how the characteristics are demonstrated in later passage.
3. Graphic Organizers: Fishbones, mind maps, thinking maps	Give learners a pictorial view and method of conceptualizing thoughts and ideas. Helps them organize thoughts and plan material to comprehend with ease.	In Biology I, teacher supplies a thinking map about photosynthesis. Asks students to fill it in on using a Bubble Map for overview of photosynthesis and how it is uses light energy, carbon dioxide, and water to make organic molecules. Discussion follows.

Representative Creative Teaching Strategy	Brief Description	Example
4. Think Dots	Prompt students into thinking on different levels by giving a variety of ways to assess and discuss the skills being taught.	In English I, teacher assigns a story and asks students to analyze it for plot, character development, climax. Then students choose a character and write a little from the character about the story experience.
5. Crosscurriculum Themes	Strategy to approach a topic from different perspectives (different classes) to teach students integration of subjects.	With teacher collaboration, in U.S. History I, students discuss causes and outcomes of World War II. In English I, students write letters as if soldiers fighting the war.
6. Exit Cards	Cards used to assess whether or not students have gained important skills. The cards pose questions to students at the end of a lesson or class to test students' understanding.	In Algebra I, teacher assigns students an equation in which they must find the sum of the squares of the lengths of the legs of a right triangle. Students must show work and answers on the exit card.
7. Small Group Discussion	A collaborative learning strategy to build student capacity for understanding through open discussion. Students learn from each other. This method helps promote a specialized	In English I, students read an assigned book and view a movie based on the book (e.g., *The Giver*). Book assignment is 1 week. Movie viewing is a double class period. Teacher

Representative Creative Teaching Strategy	Brief Description	Example
	approach, especially when students are grouped according to ability level, skills, deficiencies, or commonalities.	first models discussion/questions on similarities, differences, omissions. Students resume in small groups. Present group reports after meetings.
8. Thematic Units, Student Portfolios	Combines curriculum objectives and creative strategies to organize a lesson around a central theme or topic.	In U.S. History, on theme of Native American early life, teacher guides students to students produce charts of facts, drawings or photographs of typical artifacts, maps, essays from standpoints of teenagers in the culture.
9. Relation of Learning to Practical Applications	Application of principles to students' own lives.	In Algebra I, students demonstrate use of a mathematical concept to solve a problem in their own lives. For example, a student has friends over to the house and wants to buy pizza for everyone. The student has $30.00 to spend. One medium pizza (cheese only) is $9.50 and one large is $11.50. How many medium or large pizzas could the student buy? The student must use equations to arrive at the answers.

Protocol: An Effective Creative Teaching Strategy in My Classroom

1. Choose one of the creative strategies in the handout, preferably one you are not familiar with.

2. With Internet resources or other resources, supply a description of the strategy.

3. Produce an example of how you will apply the strategy in your subject area.

4. List possible impediments and benefits of using this strategy with your students.

5. Supply information on how you would overcome impediments.

6. Discuss why you would see this as an effective creative strategy with your students.

Handout: Fishbone Diagrams

What Led to the Battle of Hastings?
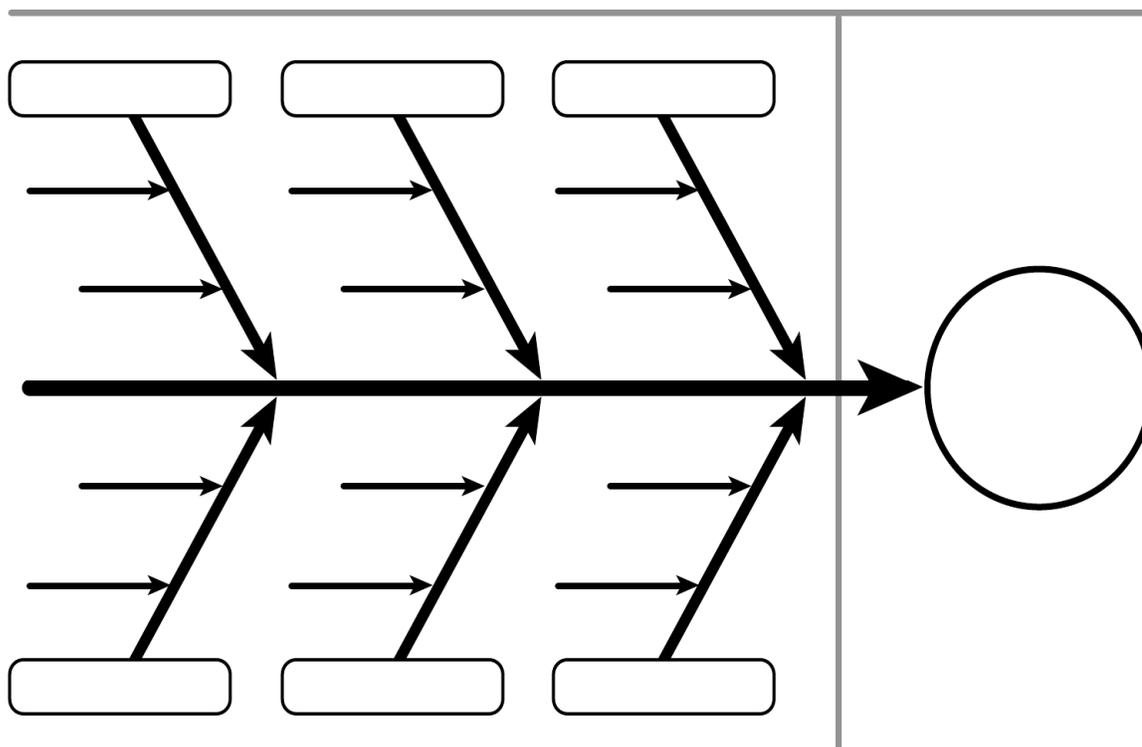
THINKING MAPS
>Circle Map
>Bubble Map
>Double Bubble Map
>Brace Map
>Tree Map
>Flow Map
>Multi-flow Map
>Bridge Map

1

CIRCLE MAP

Thinking Skill: Defining in Context & Brainstorming

How do you know this?

Ideas, examples, definition

How do you know this?

Ideas, examples, definition

Main Idea or Concept

Ideas, examples, definition

How do you know this?

Ideas, examples, definition

How do you know this?

2
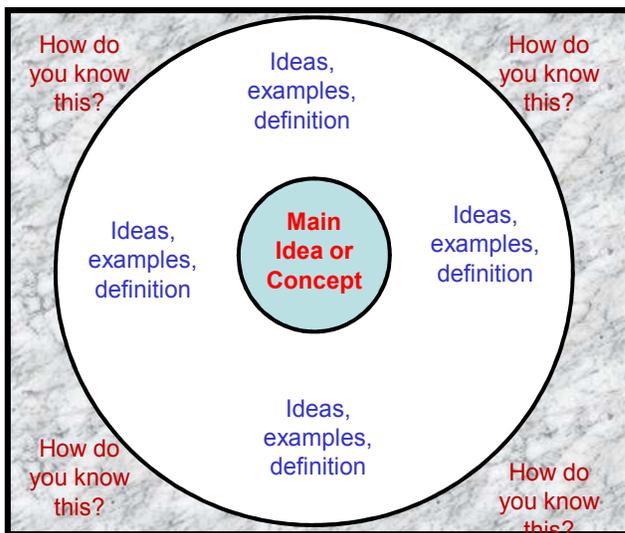
BUBBLE MAP
Thinking Skill: Describing

Describing
word or
phrase
(adjective)

Describing
word or
phrase
(adjective)

Describing
word or
phrase
(adjective)

Main
Idea or
Concept

Describing
word or
phrase
(adjective)

Describing
word or
phrase
(adjective)

Describing
word or
phrase
(adjective)

3

DOUBLE-BUBBLE MAP

Idea #1

Idea #2

Unique Attribute of Idea #1

Unique Attribute of Idea #1

Unique Attribute of Idea #1

Unique Attribute of Idea #1

Unique Attribute of Idea #1

Similarity

Similarity

Similarity

Similarity

Similarity

Unique Attribute of Idea #2

Unique Attribute of Idea #2

Unique Attribute of Idea #2

Unique Attribute of Idea #2

Unique Attribute of Idea #2

Thinking Skill: Compare/Contrast

TREE MAP

Thinking Skill: Classify/Categorize

Title

Category	Category	Category
Member	Member	Member
Member	Member	Member
Member	Member	Member

6

FLOW MAP

Thinking Skill: Sequencing

Event Title

1st thing that happened	2nd thing that happened	3rd thing that happened

4th thing that happened	5th thing that happened	6th thing that happened

7

MULTI-FLOW MAP

Thinking Skill: Comparing/Contrasting

Cause

Cause

Cause

Event

Effect

Effect

Effect

8
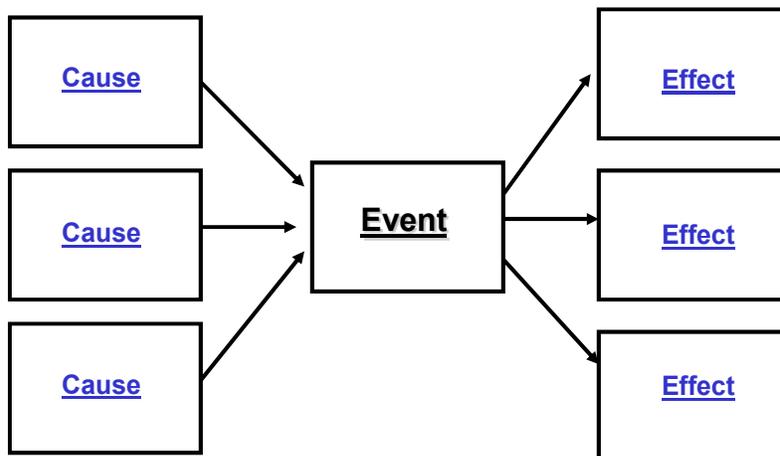
BRIDGE MAP

Thinking Skill: Analogies

EXAMPLE #1:

House   as   Car   as   Airplane

Home   Automobile   Jet

Relating Factor: synonyms

"The word "house" is a synonym for "home" AS the word "car is a synonym for "automobile" AS "airplane" is a synonym for "jet.

EXAMPLE #2:

Red   as   Yellow   as   Green

Rose   Sun   Grass

Relating Factor: is the color of . . .

"Red is the color of a rose AS yellow is the color of the sun AS green is the color of grass.

9

Handout: Think Dots Activity

"Thank You, Ma'am"
Short Story by Langston Hughes
Published 1958

Analyze ☐	Create ☐☐
This story takes place in the 1950s. How would changing the setting to the current time affect the plot? Could Mrs. Jones behave similarly in today's society? What might the author have to change to communicate a similar theme?	Write a letter from the boy to Mrs. Jones ten years after this story takes place. Describe how the incident in the story changed his character, and as a result, his life. What did he say to her about giving people second chances?
Evaluate ☐☐☐☐	Analyze ☐☐☐☐
There are several themes or life lessons in this story. What do you believe is the most important theme and why? Cite two pieces of evidence from the text to support your answer.	Look at the picture on page 65 of your text. What might you infer about the tone and mood of the story based on this picture? Compare this to the tone and mood in the story.
Create ☐☐☐ ☐☐	Evaluate ☐☐☐ ☐☐☐
Write a rap song or poem based on either the boy or Mrs. Jones. What characteristics do they have both physical and mental? How would you put their actions into words? Your song or poem must be a minimum of four stanzas.	Evaluate the conflict in the story. What problem does Mrs. Jones have? What problem does the boy have? How are these problems related? Can both the woman and the boy have what they want? What internal and external conflicts do the characters face?

Protocol: Creativity and Facts

Based on our learning and activities in this PD, reflect on your thoughts and feelings about integration of creative teaching strategies with the learning of facts for standardized test preparation.

1. List three advantages of the integration for your students.

   _____

2. List three advantages of the integration for you as the teacher.

   _____

3. List three disadvantages of the integration for your students.

   _____

4. List three disadvantages of the integration for you as the teacher.

   _____

5. List or describe what actions and activities you will perform resulting from this PD for greater integration of creativity and learning of facts.

   _____

Formative Evaluation: Day 2

1. These topics are especially important to me:

    _____

2. I feel that the following are working well in this PD:

    _____

3. These aspects of the program could be improved:

    _____

4. Here are my suggestions for improvements:

    _____

5. In my view, was the second day better than the first? Why or why not?

    _____

THANK YOU FOR PARTICIPATING!

Handout: Resources for Creative Teaching

Annetta, L. A., Holmes, S. Y., Vallett, D., Fee, M., Cheng, R., & Lamb, R. (2013).

    Cognitive aspects of creativity: Science learning through serious educational

    games. In M. B. Gregerson, H. T. Snyder, & J. C. Kaufman (Eds.), *Teaching*

    creatively and teaching creativity (pp. 53-62). New York, NY: Springer.

Gardner, P. (2014). *Creative English, creative curriculum: New perspectives for key*

    stage 2. New York, NY: Routledge.

Orlich, D., Harder, R., Callahan, R., Trevisan, M., & Brown, A. (2013). *Teaching*

    strategies: A guide to effective instruction (10th ed.). Belmont, CA: Wadsworth

    Cengage Learning.

Starko, A. J. (2013). *Creativity in the classroom: Schools of curious delight* (5th ed.).

    New York, NY: Routledge.

Zevin, Jack. (2015). *Social studies for the twenty-first century: Methods and materials for*

    teaching in middle and secondary schools. New York, NY: Routledge.

Prompt and Self-Analysis: Motivation, Self-Efficacy/Self-Confidence,

Commitment to Students

After participating so far in this PD, rate your degree of motivation to teach on the following scale.

5 = Extremely Motivated

4 = Quite Motivated

3 = Undecided

2 = Somewhat Motivated

1 = Not at All Motivated

Now respond to the following questions:

1. Recalling my motivation to teach when I entered this PD, what is the contrast or similarity now?

_____

2. If motivation has changed: To what do I attribute my change in motivation?

_____

3. In what ways can I sustain and build on my renewed motivation?

_____

4. If motivation has not changed: To what do I attribute my lack of change?

_____

5. In what ways can I renew my motivation?

_____

Self-Efficacy/Self-Confidence in Teaching to the Test

After participating so far in this PD, rate your degree of self-confidence in teaching to the test on the following scale:

5 = Extremely Self-Confidence

4 = Quite Self-Confident

3 = Undecided

2 = Somewhat Self-Confident

1 = Not at All Self-Confident

Now respond to the following questions:

1. Recalling my self-confidence when I entered this PD, what is the contrast or similarity now?

_____

2. If self-confidence has changed: To what do I attribute my change in self-confidence?

_____

3. In what ways can I sustain and build on my renewed self-confidence?

_____

4. If self-confidence has not changed: To what do I attribute my lack of change?

_____

5. In what ways can I renew my self-confidence?

_____

Commitment to My Students

After participating so far in this PD, rate your degree of commitment to your students on the following scale:

5 = Extremely Committed

4 = Quite Committed

3 = Undecided

2 = Somewhat Committed

1 = Not at All Committed

1. Recalling my commitment when I entered this PD, what is the contrast or similarity now?

_____

2. If commitment has changed: To what do I attribute my change in commitment?

_____

3. In what ways can I sustain and build on my renewed commitment?

_____

4. If commitment has not changed: To what do I attribute my lack of change?

_____

5. In what ways can I renew my commitment to my students?

_____

Prompt: Preparation for Meeting With a District (State, Federal) Official

You are preparing for this important meeting to present your case for support.

1. How can you enlist the principal to support your case?

2. What specific "gripes" do you have about teaching to the test? List them. Be specific in your subject area/school.

    E.g., students are bored, "turn off," do not apply themselves.

3. What reasons/rationales can you give for incorporating creative teaching strategies into your lessons?

    E.g., students become more interested, learn in more depth; teachers become more creative and motivated to teach.

4. What suggestions/recommendations can you make for the official's support?

    E.g., official attends PD; regular meetings of principal and teachers with official for progress reports; teachers' feedback on student progress.

Summative Evaluation: Day 3

1. In what ways did the PD help you with pressure and stress of teaching to the test?

_____

_____

2. In what ways did the PD help you increase or regain your motivation and enthusiasm

for teaching?

_____

_____

3. In what ways did the PD help you integrate test preparation and more creative teaching

strategies in your lesson plans?

_____

_____

4. In what ways did the PD help you in meeting with officials?

_____

_____

5. What aspects of the PD were the most helpful to you?

_____

_____

6. What areas or activities of the PD would you improve?

_____

_____

7. Why would you improve these areas or activities?

_____

_____

8. How would you improve these areas or activities?

_____

_____

7. Would you like to see additional PDs on these topics? Why?

_____

_____

8. Other comments are welcome.

_____

_____

THANK YOU FOR PARTICIPATING!

Appendix B: Letter of Permission From School

~~Simmons~~ High School

▬▬▬▬▬▬▬▬▬
▬▬▬▬▬▬▬▬▬▬
▬▬▬▬▬▬▬▬▬
▬▬▬▬▬▬▬

▬▬ Jr. Sr. High School
▬▬▬▬▬▬▬▬▬▬
▬▬▬▬▬▬▬▬▬
▬▬▬▬▬▬▬

January 12, 2015

Dear Alberta Raymond:

Based on my review of your research proposal, I give permission for you to conduct the study entitled "Preparing Students for Standardized Testing: Rural High School Teachers' Perceptions, Teaching Practices, and Experiences" within ▬▬▬ Junior-Senior High School. As part of this study, I authorize you to conduct interviews with subject area teachers. Data will be validated through manual coding and MAXQDA, peer debriefers, and member checks. Individuals' participation will be voluntary and at their own discretion.

We understand that the researcher's responsibilities include: interviewing only subject area teachers. The location setup to conduct the interviews will be away from the high school campus after hours during the study. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.
I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

▬▬▬▬▬▬▬▬▬

▬▬▬▬▬ EdS
Principal
▬▬▬▬▬▬▬
▬▬▬▬

Appendix C: Recruitment Invitation

HOW DO YOU FEEL ABOUT TEACHING TO THE TEST?

Your views and experiences are requested for a research study.
This study is part of a doctoral dissertation by Alberta Raymond at Walden University exploring your perceptions and practices about "teaching to the test." The title is *Preparing Students for Standardized Testing: Rural High School Teachers' Perceptions, Teaching Practices, and Expectations.*

You are invited to participate if you fulfill the following:

- Teach full-time at the high school.
- Teach in one or more of the subject areas requiring a standardized test at the end of the school year (English II, Algebra I, Biology I, U.S. History).
- Want to share your beliefs about the requirement of teaching to the test and its effects on your feelings of pressure and stress and motivation to teach.

You will be asked to meet with the researcher, Alberta Raymond, for a private audiotaped interview about your beliefs and experiences. The interview should take from 60 to 90 minutes. Your later review of your transcript is requested and should take 30 to 45 minutes.

Your participation is completely voluntary and you may withdraw at any time, and all information you supply will be reported without use of your name. There is no monetary compensation for participating. But you may gain satisfaction and additional self-knowledge from discussing your responses as a teacher to state-mandated standardized testing.

If you are interested in participating in the study, please contact the researcher, Alberta Raymond, at araymond@waldenu.edu or **XXX-XXX-XXXX.** You may also contact her advisor, Dr. Richard Penny at glenn.penny@waldenu.edu or **XXX-XXX-XXXX**. If you would like to talk privately about your rights as a participant, you may call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1 800 925-3368, extension 1210.

Your participation is very much appreciated.
Sincerely,

Alberta Raymond, EdS, MA

Appendix D: Consent Form

You are invited to take part in a project study of your perceptions and experiences in teaching with the focus on standardized testing, especially your feelings of pressure and stress, your motivation to teach, and your recommendations for integration of "teaching to the test" with more creative forms of teaching. The researcher is inviting 10 teachers who teach at the high school in the state-tested areas of English II, Algebra I, Biology I, and U.S. History in Grades 9 through 12 at the high school to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Alberta Raymond, who is a doctoral student at Walden University. You may already know the researcher as a teacher who works closely with each of you, but this study is separate from that role.

Background Information:
The purpose of this study is to explore your lived experiences as a high school teacher at your current school in terms of your perceptions of the required state standardized testing and its effects on your teaching, that is, your pressure, stress, and motivations for teaching, as well as your recommendations for improvement.

Procedures:
If you agree to be in this study, you will be asked to:

- Complete a short demographic questionnaire.
- Participate in a private, audiorecorded interview with the researcher away from the school, lasting 60 to 90 minutes.
- Review the researcher's written report of your interview from the audiotaped sessions to be sure the information is accurate, and review the researcher's conclusions from the data. This process should take 30 to 45 minutes.

Here are some sample questions:
- What are your perceptions of teaching to the test?
- What are your perceptions of pressure and stress in relation to standardized testing?
- How has your motivation to teach been affected by standardized testing?
- What are your recommendations for integrating standardized test preparation with creative and content-focused teaching strategies?

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. No one at the high school will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as reliving the stress and pressure of teaching to the test. Being in this study would not pose risk to your safety or wellbeing.

However, potential benefits include your greater understanding of your perceptions of teaching to the test, how it affects your motivation to teach, and self-discovery of your recommendations to integrate test preparation with more creative teaching strategies.

Payment:
There will be no payment, thank you gifts, or reimbursements for participants.

Privacy:
Any information you provide will be kept confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure on a password-protected flashdrive, with the password known only to the researcher. The data will be kept in a locked file cabinet in the researcher's home office. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via alberta.raymond@waldenu.edu or XXX-XXX-XXXX. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 612 312-1210.

Walden University's approval number for this study is 03-31-15-0178782 and it expires on March 30, 2016.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By replying to this e-mail with the words "I Consent," I am agreeing to participate.

<div align="center">Please keep/print a copy of this consent form.</div>

Appendix E: Demographic Questionnaire

Thank you for completing this brief questionnaire. Be assured that your name and all other personally identifiable information will be kept completely confidential. Pseudonyms of your name, the high school, and school district will be used to protect your privacy.

1.   Name: [To be coded for your protection by the researcher]

   _____

2.   Ethnicity: _____

3.   Gender: _____

4.   Age: _____

5.   Years Teaching: _____

6.   Years at the High School: _____

7.   Grade(s) Taught: _____

8.   Subject(s) Taught:_____

Appendix F: Interview Guide

Introduction: Thank you for agreeing to meet with me, and thank you for completing the demographic questionnaire and the consent form.   I would like to ask you some questions about your perceptions and experiences with teaching to the test. In my report, your answers will not be identified with you in any way. There are no right or wrong answers. My goal is to find out how *you* feel about teaching to the test and the effects of this requirement on your teaching. Please feel free to respond in additional ways beyond the questions I ask.

1.   What are your overall perceptions of teaching to the test?

Subquestions:

a.   What are your perceptions daily?

b.   How influenced do you feel by the school officials?

c.   How influenced do you feel by other teachers?

d.   How influenced do you feel by district officials?

e.   How influenced do you feel by state and federal officials?

f.   What is the influence of teaching to the test on your teaching methods?

g.   What do you feel are the effects on your students?

2.   What are your perceptions of pressure and stress in relation to standardized testing?

Subquestions:

    a. How have the pressure and stress affected you (depression, burnout, physical symptoms, other)?

    b. How have you handled the pressure and stress?

3.   How do you assess your competency to teach to the test, and why?

Subquestions:

    a.   If you feel your competency is excellent, why?

    b.   If you feel your competency is good, why?

    c.   If you feel your competency is fair, why?

    d.   If you feel your competency is poor, why?

4.   How has your motivation to teach been affected by standardized testing?

Subquestions:

    a.   If your motivation has been affected positively, please explain.

    b.   If your motivation has been affected negatively, please explain.

    c.   Do you feel the district, state, and federal agencies can enhance teaching motivation? Please explain.

    d.   What have been the effects of your motivation on your career goals?

5.	What are your recommendations for integrating standardized test preparation with creative strategies?

     a.	Do your teaching strategies align test preparation with creative teaching strategies?

     b.	How does the school support this alignment for you?

     c.	What other recommendations might you have?

6.	What are your recommendations for integrating standardized test preparation with content-focused teaching strategies?

     a. Does your content-focused teaching align with test preparation?

     b. How does the school support this alignment for you?

     c. What other recommendations might you have?

7.	What else would you like to add?

_____

_____

_____

Appendix G: Confidentiality Agreement, Peer Debriefer

Name of Signer:

During the course of my activity in collecting data for this research: "Preparing Students for Standardized Testing: Rural High School Teachers' Perceptions, Teaching Practices, and Experiences," I will have access to information, which is confidential and should not be disclosed. I acknowledge that the information must remain confidential, and that improper disclosure of confidential information can be damaging to the participant.

By signing this Confidentiality Agreement I acknowledge and agree that:

1. I will not disclose or discuss any confidential information with others, including friends or family.
2. I will not in any way divulge, copy, release, sell, loan, alter or destroy any confidential information except as properly authorized.
3. I will not discuss confidential information where others can overhear the conversation. I understand that it is not acceptable to discuss confidential information even if the participant's name is not used.
4. I will not make any unauthorized transmissions, inquiries, modification or purging of confidential information.
5. I agree that my obligations under this agreement will continue after termination of the job that I will perform.
6. I understand that violation of this agreement will have legal implications.
7. I will only access or use systems or devices I'm officially authorized to access and I will not demonstrate the operation or function of systems or devices to unauthorized individuals.

Signing this document, I acknowledge that I have read the agreement and I agree to comply with all the terms and conditions stated above.

Signature: **Date:** 3/16/15