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Tennessee Teachers' Support for the Curriculum Component of State Accountability Policies

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To the Graduate Council:

I am submitting herewith a dissertation written by Shannon Lee Strahan entitled "Tennessee Teachers' Support for the Curriculum Component of State Accountability Policies." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Pamela A. Angelle, Major Professor

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(Original signatures are on file with official student records.)

Tennessee Teachers' Support for the Curriculum Component of State Accountability Policies

A Dissertation Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Shannon Lee Strahan

May 2014

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Dedication

This dissertation is dedicated to my family who supported me throughout this process. To my husband, I thank you for your unwavering belief in my ability to attain this goal and for your many sacrifices along the way. To my mother and sister, I thank you for all of your help during this time. To my daughter and son, I hope this accomplishment inspires you to be resolved to achieve the goals you set for yourself. This would have been an impossible endeavor on my own and will always serve as a reminder to me of my entire family's love and support.

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Abstract

The existing research on accountability policies rarely examines individual components of an accountability policy (i.e., curriculum, assessments, use of assessment results, and stakes). This mixed-methods study investigated the curriculum component of Tennessee's accountability policies from the perspective of middle-grades, TCAP-tested subjects teacher participants from three East Tennessee districts. The Accountability Policies Stressors and Supports Questionnaire (Berryhill, Linney, & Fromewick, 2009) measured the support for the curriculum component of the state's accountability policies. Further, interviews with sixth grade science and eighth grade social studies teachers examined how the curriculum component of the policies influenced teachers' self-efficacy (Bandura, 1977), one of three theories used to develop the quantitative instrument. Teacher support for the policy was low; however, teachers discussed positive elements of their curricula at length suggesting that the low support for the curriculum component of the state's accountability policies may have more to do with implementation and the overall curriculum rather than individual standards. Qualitative data were analyzed through the lens of the four main sources of self-efficacy (mastery experience, vicarious experience, verbal persuasion, physiological arousal) and revealed areas in which teacher participants' self-efficacy had been negatively influenced as well as areas in which positive influences were apparent. Two prominent areas of negative influence included frustration (physiological arousal) and a general lack of vicarious experiences. Two areas in which positive influences were readily apparent were confidence in use of teaching strategies (mastery experience) and satisfaction with individual standards' appropriateness (physiological arousal). The study concludes with implications for curriculum and assessment developers, state education agencies, and policymakers as the results could inform and guide efforts of school reform by highlighting the

importance of teacher support and teacher self-efficacy when developing and implementing accountability policies.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Accountability has become a prominent issue in public education over the last five decades (Posavac & Carey, 2007). Policymakers have grappled with how to develop and enact policies that will hold educators accountable to all stakeholders. While much work has already been done, there is room for improvement in how accountability policies are crafted and implemented. Education policies, particularly those concerning accountability, can have unintended consequences, such as teachers teaching to the test, quick introduction of untested curricula and techniques, and institutionalizing expectations of student achievement (Linn, 2000). Additional consequences include conflicting policies and practices, unimplemented policies, and inappropriate policies (Marshall, 1998). For these reasons, more information is needed on how accountability policies impact those who implement them, specifically the classroom teacher.

Education accountability policies largely consist of standardized curricula linked with standardized tests. Such policies affect the curricula that are taught, the tools for measuring what was learned, and how those measurements are used. Though much research exists on accountability policies, few studies provide a separation of how policies affect curriculum from how they affect testing measurements and use of results. Isolating one aspect of accountability policy contributes new information on how they impact classroom teachers. Consider the following statements made by Florida teachers when asked how accountability policies affect curriculum (Jones & Egley, 2004):

- The FCAT focuses on too difficult of concepts for many 3rd graders - and it makes children feel like they are failures in math and they're only in the 3rd grade! Many

concepts that we are now expected to teach (like decimals) are very difficult for children because they are not developmentally appropriate....I can teach them to jump through the hoops to pass the test but true understanding is not happening - and it really demotivates me as a teacher. (p. 14, Grade B school)

- It is impossible to teach all the Sunshine State Standards. We teach so many different standards that it is not possible for the children to learn them well. Should we teach a curriculum that's a mile wide and an inch deep, or concentrate on developmentally appropriate concepts and teach them well? (p. 15, Grade A school)
- I feel that our students are becoming 'jacks of all trades' and masters of none... (p. 15, Grade C school)
- Our FCAT 'dumps' stringent requirements on all students, without allowing any exception for the child who just needs more time to develop basic concepts. We have to rush along, not mastering anything, but exposing to everything. What a sad thing to do to both students and teachers. (p. 15-16, Grade B school)

Also consider the multiple reports produced by the American Federation of Teachers, which has tracked states' progress on standards-based reform since 1995. This was the concluding paragraph in its 2008 report (American Federation of Teachers, 2008):

If we want students to have a deeper understanding of important topics, then we need to ensure that they have opportunities in the classroom to delve deeper into various concepts and skills. This is not possible in the current environment, which requires teachers to spend endless hours on test preparation and teaching-to-the-test activities. Now more than ever, the need for common, content-rich standards has become essential. (p. 10)

Finally, consider the discrepancy between achievement scores of American and Japanese students and students on internationally-standardized tests. American students are often outperformed by students in Japan (U.S. Department of Education, National Center for Education Statistics, 2011). An analysis of the differences in approaches to instruction between the two countries shows vast differences in the amount of content students are required to learn. Japanese national curriculum fits into “three slender volumes, one for elementary schools, one for lower secondary schools, and one for upper secondary schools” (Ravitch, 1995, p. 15). In contrast, the essential knowledge for a high school education in the United States now takes as much classroom time as what historically resulted in a master’s degree (Marzano, Kendall, & Gaddy, 1999). Marzano and colleagues have conducted research that shows an additional nine years of schooling would be needed for even the brightest students to master all of the content and subjects that are considered essential for a high school diploma. They contend that our current curriculum lacks recognition of the limited amount of class time available and is overwhelming to both students and teachers.

Standardized curriculum and testing linked to student outcomes is the cornerstone of current accountability policies. While the majority of both educators and policymakers likely support endeavors of accountability, the preceding discussion exposes a disconnect between what policymakers attempt to achieve with accountability policies and how the specifics of those policies impact educators. Exploration into how teachers feel about their ability to teach while negotiating the guidelines about what to teach is needed.

The legal references for this policy can be found in Tennessee Code Annotated (TCA) Title 49-1-302(a)(8) and Tennessee Rules and Regulations and Minimum Standards (TRR/MS) 0520-1-3-.05(1)(a). They contain the following statements:

TCA 49-1-302(a)(8) – It is the duty of The State Board of Education and it has the power to set policies governing all curricula and courses of study in the public schools;

TRR/MS 0520-1-3-.05(1)(a) – The State Board of Education shall adopt curriculum standards for each subject area grades K-12. The standards shall specify learning expectations and include performance indicators. The approved standards shall be the basis for planning instructional programs in each local school system.

Statement of the Problem

The existing literature concerning accountability policies includes the importance of garnering teacher input as part of the policymaking process (Dewey, 1977; Fullan, 2001). As teachers are the primary intermediary implementers (McLaughlin, 1987) of most accountability policies, their input is unique, but often not considered (Massell, Kirst, & Hoppe, 1997; Porter, Smithson, & Osthoff, 1984). If teachers as primary intermediary implementers of accountability policies experience a problem with either their will or their capacity to fully implement a policy, there is often no way for that information to be captured and brought back to policymakers for the purpose of revising or evaluating the policy. This study explores a mixed-methods approach for garnering that input as it concerns the curriculum component of Tennessee's accountability policies.

In addition, there is a gap in the literature related to teacher self-efficacy (Bandura, 1977). Teacher self-efficacy is situation-specific. Currently, teacher self-efficacy literature and measures tend to focus more on the situations of student engagement, instructional practices, and classroom management (Tschannen-Moran & Hoy, 2001). Investigations into teacher self-efficacy within the context of accountability policies are needed, particularly in light of the previously stated unintended consequences that have been revealed in other states. One indicator

that Tennessee's accountability policies might have unintended consequences similar to those of other states is that Tennessee's state curriculum and testing policies change frequently. The most recent change was implemented in the 2009-2010 school year as part of the Tennessee Diploma Project. Curriculum standards and assessments were changed with the intent to make Tennessee's high school graduates more college-and career-ready ("Why the Tennessee Diploma Project?", 2009). By June 1, 2009, then-Governor Bredesen had already signed a Memorandum of Agreement to change the curriculum again in accordance with a new initiative called the Common Core Standards. This new curriculum and related high-stakes test will be fully implemented by the 2013-2014 school year (Tennessee Department of Education, 2009; Tennessee Department of Education, 2010). That means within five years Tennessee's curriculum will have undergone two major overhauls. Teacher self-efficacy could be negatively influenced as a result of these curriculum changes.

In addition, Tennessee's curriculum is extensive. In the introduction to this study were quotes from Florida teachers concerning the breadth of their state's curriculum. Tennessee's curriculum is easily comparable to the Florida curriculum of which the previously quoted teachers spoke. For instance, Florida and Tennessee both have a 20-page document outlining the eighth grade language arts curriculum standards alone. Moreover, some of these standards are vague. An example learning expectation from Tennessee's eighth grade language arts curriculum is to "develop an understanding of the concepts of print." An example of an accomplishment from the same document is "adhere to rules for public conversations." The room for interpretation as to what these standards mean and how to teach them is significant, and it highlights a need for investigation into how curriculum may influence a teacher's self-efficacy.

Purpose of the Study

The purpose of this mixed-methods study was to investigate the extent to which middle grades teachers in three east Tennessee districts (TCAP-tested subjects) support the curriculum component of the state's accountability policies (QUAN) and to explore teachers' perceptions of how this policy influences their self-efficacy (QUAL).

Research Questions

There typically are unintended consequences of accountability policies; however, by examining the support of a policy through the lens of well-established theory, policymakers and education leaders can be informed about what these consequences may be and their potential impact. To help provide this information, this study investigated the following questions:

1. To what extent do middle grades teachers in three east Tennessee districts (TCAP-tested subjects) support the curriculum component of state accountability policies (QUAN)?
2. What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy (QUAL)?

Delimitations

This study had several delimitations imposed upon it. It focused on teachers in only Tennessee and investigated their perceptions concerning only the curriculum component of the Tennessee's accountability policies. Also, the study only focused on core teachers (i.e. teachers in subjects tested by the Tennessee Comprehensive Assessment Program (TCAP): math, reading/language arts, science, social studies) in grades six through eight in the quantitative portion. Since TCAP scores are separated by subject, the researcher was able to disaggregate the findings of this study more clearly by including teachers that typically only taught one of the

tested subjects. Since this study focused only on teachers in grades six through eight, findings may not be generalizable to other grade levels. Further, the study only included sixth grade science teachers and eighth grade social studies teachers in the qualitative portion due to sixth grade science teachers having the highest cognitive level of standards and eighth grade social studies teachers having the most standards as determined by a document analysis of sixth through eighth grade TCAP-tested subjects curriculum documents.

Limitations

This study only focused on teachers in three East Tennessee districts out of 136 Tennessee school districts. Findings from this study may not be of value to school districts in other regions of Tennessee and in other states. This research also may not generalize to states with substantially different curriculum standardization policies.

The researcher could not find any validity information for the instrument used in this study, the Accountability Policies Stressors and Supports Questionnaire (Berryhill, Linney, & Fromewick, 2009). Thus, there is a possibility that the construct of teacher policy support is not adequately measured with this instrument. Findings from the questionnaire should be viewed in light of the instrument not having been validated.

Further, this study attempted to explain teacher perceived self-efficacy within the context of accountability policy, specifically that of curriculum mandates. Bandura (1986) argues that self-efficacy varies from situation to situation. Hence, other factors affecting teacher perceived self-efficacy will not be examined in this study. In addition, data on self-efficacy perceptions are self-reported.

Another limitation of this study developed when four participating schools did not provide an opportunity for me to discuss the study with teachers and administer the questionnaire

in person. Principals requested that school personnel administer the questionnaire in these four schools. Response rates were lower in these four schools.

Finally, this study did not attempt to answer the larger question of the appropriateness of accountability policy. The researcher in this study deferred the appropriateness and responsibility to education, government, and business leaders to develop and implement such policies. In the current climate of education in which standardized curricula and high stakes tests are seen as an integral part of reform, this study merely explores one possible facet of unintended consequences of reform policies.

Significance of the Study

This study expanded the knowledge base surrounding how policy conditions influence teacher self-efficacy, which is a powerful indicator for student achievement. The study also measured Tennessee teachers' (TCAP-tested subjects, grades six through eight) support for current curriculum policy. This research contributed to what is known about possible unintended consequences of Tennessee's education policies, specifically policies involving accountability.

The extant literature is lacking in studies focusing only on curriculum policy and mandates as opposed to including curriculum mandates as one part of accountability policies, the other part being high-stakes testing. There is a possibility that the impact of curriculum mandates has been overshadowed by that of high-stakes testing in these studies. This study separated curriculum from high-stakes testing in an attempt to extrapolate the information and fill this gap.

This problem is particularly relevant in light of the current climate of accountability in education, highlighted by the newly created Common Core Standards. The Common Core Standards are federally-endorsed curricula for Kindergarten through eighth grade math and

reading that states have the option to adopt (U.S. Department of Education, 2009b). Tennessee adopted the Common Core Standards in July 2010 (Tennessee Department of Education, 2010). With this shift in policy, the extent of teacher support for curriculum policy and its potential impact are in need of review. This study will fill that need.

Further, with this study's qualitative data having been analyzed through the lens of self-efficacy, it could provide a springboard for additional research involving the policy's impact in other areas, such as student achievement. Self-efficacy has an established relationship with student achievement (Armor, Conry-Oseguera, Cox, King, McDonnell, & Zellman, 1976). Low support for curriculum policy may lead to low teacher self-efficacy, which could result in low student achievement. The outcry for higher and higher standards could become self-defeating.

There are implications for state and district education leaders, curriculum developers, and policymakers as the results of this study may inform and guide efforts of school reform by highlighting the necessity of teacher support for the curriculum component of accountability policies. Tennessee's education leaders and policymakers will benefit from an understanding of how the state's accountability policies are influencing its teachers' self-efficacy.

Definitions

To better understand this study, the following definitions are provided. Most were transcribed from the Association for Supervision and Curriculum Development (ASCD) Lexicon of Learning Online Dictionary and from Hoy and Miskel's *Educational Administration: Theory, Research, and Practice* (2008).

Standards – “In current usage, the term usually refers to specific criteria for what students are expected to learn and be able to do. These standards usually take two forms in the curriculum:

- Content standards (similar to what were formerly called goals and objectives), which tell what students are expected to know and be able to do in various subject areas, such as mathematics and science.
- Performance standards, which specify what levels of learning are expected. Performance standards assess the degree to which content standards have been met. The term “world-class standards” refers to the content and performances that are expected of students in other industrialized countries. In recent years, standards have also been developed specifying what teachers should know and be able to do” (Association for Supervision and Curriculum Development).

Curriculum – “Although this term has many possible meanings, it usually refers to a written plan outlining what students will be taught (a course of study). Curriculum documents often also include detailed directions or suggestions for teaching the content. Curriculum may refer to all the courses offered at a given school, or all the courses offered at a school in a particular area of study. For example, the English curriculum might include English literature, literature, world literature, essay styles, creative writing, business writing, Shakespeare, modern poetry, and the novel. The curriculum of an elementary school usually includes language arts, mathematics, science, social studies, and other subjects” (Association for Supervision and Curriculum Development).

Standards-based Education – “Teaching directed toward student mastery of defined standards. Teachers are expected to teach in such a way that students achieve the standards. Experts say this means that teachers must have a clear idea what each standard means, including how it can and will be assessed, and that teachers should monitor individual student achievement of each important standard” (Association for Supervision and Curriculum Development).

Accountability – “The responsibility of an agency to its sponsors and clientele for accomplishing its mission with prudent use of resources. In education, accountability is currently thought to require measurable proof that teachers, schools, districts, and states are teaching students efficiently and well, usually in the form of student success rates on various tests.

In recent years, most accountability programs have involved adoption of state curriculum standards and required state tests based on the standards. Many political leaders and educators support this approach, believing that it brings clarity of focus and is improving achievement. Others argue that, because standardized tests cannot possibly measure all the important goals of schooling, accountability systems should be more flexible and use other types of information, such as dropout rates and samples of student work” (Association for Supervision and Curriculum Development).

Stakeholders – In this study, stakeholders include students, teachers, principals, district and state education leaders, and policymakers.

Teacher Efficacy – “The teacher’s belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (Hoy & Miskel, 2008, p. 160).

Self-Efficacy – “A person’s judgment about his or her capability to organize and execute a course of action that is required to attain a certain level of performance.” (Hoy & Miskel, 2008, p. 157). This is sometimes referred to as perceived self-efficacy.

Organization of the Study

This study examined teachers’ support for the curriculum component of state accountability policy. It also explored teachers’ perceptions of how the curriculum influences their self-efficacy.

To help build an argument for why this study was necessary, Chapter Two provides a review of the literature surrounding both teacher self-efficacy and teacher support for policy. It also provides a historical context for the study by outlining the standards-based reform movement thus far and establishing the current accountability climate in education.

Chapter Three details how the study was conducted and situates the research philosophically. In addition, Chapter Three supplies the reader with information concerning the role of the researcher and methods for verification. Finally, the different aspects of the questions, design, and methods and how they support one another are communicated to the reader through tables, figures, and text.

The analyses of the data collected through the methods prescribed in Chapter Three are presented in Chapter Four. The influence of the curriculum component of accountability policies on teachers, specifically teachers' self-efficacy is closely examined. The data collected to answer the research question were analyzed and grouped for the reader.

In conclusion, Chapter Five discussed the findings of the study, their implications, and recommendations for further research. The significance was highlighted in this section as it is the final and culminating portion of the study.

CHAPTER TWO

REVIEW OF LITERATURE

In 1994, then-President of the Association for Supervision and Curriculum Development Barbara Talbert Jackson, stated, “As the nation moves toward standard curriculum requirements and an emphasis on performance-based student outcomes, educators must become aware of the policy decisions that will be involved and be prepared to play an active role in shaping those policies. We...must be cognizant of impending change and prepare to act with knowledge and insight” (Elmore & Fuhrman, 1994, p. vi). Though the move to a national curriculum took 20 years to take hold, Jackson’s words were prophetic. The question remains whether or not educators played an active enough role in shaping those policies.

The Common Core Standards, a state-initiated, state-developed curriculum endorsed by the Obama administration (U.S. Department of Education, 2009b), embody Jackson’s words. Accountability policies such as this can have many intended and unintended consequences. Their consequences raise questions about the potential impact on teachers’ support for state accountability policies and perceptions about how those policies influence their self-efficacy. There currently is not enough research available to help policymakers or education leaders prepare for the possible repercussions of such a dramatic policy shift. The following review of literature will establish the historical aspects of the standards-based reform movement thus far, provide the theoretical and empirical frameworks for the study, and examine the importance of teacher support for education policies, particularly those concerning accountability.

Brief History of the Standards-based Reform Movement in America

The standards-based reform movement gained momentum when a report titled *A Nation at Risk* (National Commission on Excellence in Education, 1983) was released. The report stated

that the nation's educational system was in need of reform for predominantly two reasons: (1) students did not have the necessary skills for competing in a global economy, and (2) an unacceptable achievement gap persisted between disadvantaged and advantaged students. The multitude of resulting changes included states implementing mandatory statewide standardized curricula and several professional organizations drafting voluntary national standards.

Current standards-based reform shares similarities with the common school movement of the late 1800s (Fowler, 2009). The common school movement focused around an academically-oriented common curriculum for all students with high-stakes criterion-referenced tests aligned to the curriculum. Standardization would serve an important purpose for businesses when hiring. A high school diploma would be proof of a particular knowledge set and an ability to compete in a global economy.

By the mid-1990s, federal legislation, such as Goals 2000: Educate America Act (1994) and the Improving America's Schools Act (1994), helped solidify the standards-based reform movement. In Goals 2000: Educate America Act (1994), eight educational goals to be met by the year 2000 were set for the nation along with a framework for achieving those goals. The eight goals were: (1) all American children will start school ready to learn; (2) America will have a 90% high school graduation rate; (3) all American students will show competency in difficult subject matter when leaving grades four, eight, and 12. American schools will prepare students for further learning, responsible citizenry, and productive employment; (4) American teachers will have access and opportunity to receive knowledge and skills necessary for preparing students for the next century; (5) American students will rank first in the world in science and math; (6) every American adult will be literate; (7) every American school will be free of violence and drugs, and provide a disciplined environment; (8) every American school will

promote partnerships to increase parental involvement. As noted above, goal three of Section 102 dealt with student achievement. High standards linked to standardized tests were part of the framework for achieving that goal. Specifically, the law states that the academic performance of all elementary and secondary students will increase in every quartile. Further, minority students' distribution will more closely reflect the student population as a whole.

The Improving America's Schools Act (1994) addressed helping disadvantaged students, in particular, reach higher levels of educational standards through extending appropriations allowed under the earlier Elementary and Secondary Education Act, which this bill reauthorized. At the time, the U.S. Department of Education described the law as support for four key areas as determined through research for comprehensive education improvement efforts. The four areas were: (1) partnerships among schools, communities, and families; (2) ability to stimulate local reform accompanied by accountability measures; (3) high standards; and (4) teacher training for competence in teaching to high standards. In this law, Title I was fundamentally changed by added language addressing the role of high academic standards and use of state standardized tests. Logically incongruous, it simultaneously increased support for public charter schools and their release from such rules. The Department of Education's claim concerning this law in conjunction with Goals 2000 and the School-to-Work Opportunities Act was a comprehensive approach to "support states, districts, and schools as they work to ensure that *all* children in America reach challenging academic standards" (U.S. Department of Education, 1995, p. 12).

Though education is not a federal responsibility per the Constitution, because federal funds can be attached to federal initiatives, most states volunteer to abide by federal education legislation. This was the case with the Elementary and Secondary Education Act of 1965, Goals 2000, and the Improving America's Schools Act of 1994. Though the efforts of some states in

their responses to these laws were praised by Congress, many states had not done enough according to the federal legislature. This initiated a reauthorization of the Elementary and Secondary Education Act under the name The No Child Left Behind Act of 2001 (2002), or NCLB. This legislation was the first to have “teeth”. It created requirements for states to enlist punitive measures against low-performing schools and districts, established new qualification benchmarks for teachers, and allowed for more marketization of education through charter schools and school choice. Past federal education legislation had focused on improving education access for all students. NCLB was different in that its focus was on educational outcomes as measured by student performance on standardized tests.

Notably, NCLB stopped short of asking states to adopt a national curriculum. This brings us to the current educational policy initiative, endorsed by the Obama administration, in which many states across the nation are preparing to adopt or implement a national curriculum. This shift is being accomplished through approximately \$5 billion of federal funds being made available through competitive grants under the Race to the Top program (RTTT).

RTTT has one absolute priority which is each state’s comprehensive approach to education reform. As outlined in the RTTT Executive Summary, this could include a demonstrated ability to raise student achievement on National Assessment of Educational Progress tests overall or with disadvantaged subgroups, along with state capacity to support its reform agenda. Comprehensive reform also could include collaborative work on state standards and assessments, development of longitudinal data systems, development of exemplary teachers and leaders, and turning around low-achieving schools. States were provided with detailed information on how to prepare competitive grant proposals (U.S. Department of Education, 2009a). As these funds are being offered at a time of economic crisis for most states, 40 of the

50 states competed for the first round of funding, and 35 competed for the second and last round of funding (U.S. Department of Education, 2010a, 2010b). The exuberant response to the eligibility requirements of Race to the Top could be due to strong support of the Obama administration's reform agenda, or could be because of the desperately needed funding offered through the program. Whatever the reasoning, it appears that the majority of the states will adopt a new national curriculum in an effort to gain funding, since the eligibility requirements for receiving RTTT funds include state willingness to adopt the Common Core Standards, once developed (U.S. Department of Education, 2009a).

Race to the Top and its Impact on Tennessee

Tennessee was one of only two states to win funding under RTTT during the first phase, receiving just over \$500 million. With 40 states having competed for this money, this is evidence that Tennessee put forth a competitive grant proposal. This was supported with aggressive political maneuvering within the state's congressional bodies in order to take swift legislative action. Discussed below are the two significant policy changes that took place in Tennessee as a direct result of RTTT, the Tennessee First to the Top Act of 2010 and the Complete College Tennessee Act of 2010.

The Tennessee First to the Top Act of 2010 was introduced on January 12, 2010, and signed into law on January 16, 2010. As a result, changes were made to Tennessee Code Annotated Title 49 Chapters 1, 2, 3, and 5, in regard to education. These changes affected several areas of public K-12 education including the introduction of tying teacher evaluations to state standardized test data, establishing an "achievement school district" to assist in taking over underachieving schools and districts, tying teacher effect data to specific teacher preparation programs, and designing a plan for yearly evaluations of all teachers and principals in public

schools beginning with the 2011-2012 school year. The passing of the Tennessee First to the Top Act of 2010 combined with Governor Bredesen's 2009 signing of a Memorandum of Agreement to adopt the Common Core Standards helped Tennessee meet the multiple eligibility requirements mentioned above for receiving RTTT competitive grant funds.

Another legislative move that helped Tennessee receive RTTT funds was the Complete College Tennessee Act of 2010. This act ties state money allocated to institutions of higher education to outcomes, such as student retention, degree completion, and student transfer activity. The act requires higher education institutions to develop mission statements that are in accordance with a statewide master plan for higher education which considers the state's economic and workforce development, ensuring increased degree production, and minimizing redundancy in degree offerings. The act requires state community colleges to coordinate programs and provide pathways for students from state community colleges to continue their educational goals through state universities. Finally, the act authorized an interdisciplinary research collaboration between the University of Tennessee and the Oak Ridge National Laboratory and established a Memphis Research Consortium.

These two changes in Tennessee's educational policies, along with the Memorandum of Agreement concerning the Common Core Standards, ensured a successful RTTT grant application for Tennessee. However, those who work in the state's public education system were charged with the monumental task of complying with all of the new requirements put forth in these policies.

This study's focus is limited to teachers of grades 6-8 in Tennessee's public education system. Therefore, this review concentrates on classroom teacher support for educational policies that impact them, such as the Tennessee First to the Top Act of 2010, and excludes any

literature concerning members of the higher education workforce. The next section of this review relates the theoretical lens through which the qualitative data from this study were analyzed, self-efficacy. Following is a section on teachers and education policy, emphasizing the importance of teacher support for a successful policy implementation

Self-efficacy

The qualitative data from this study were analyzed using Bandura's theory of self-efficacy (Bandura, 1977). Self-efficacy involves determinants of behavior and is not to be confused with personality traits. Bandura emphasized that self-efficacy is situation-specific. He discussed the importance of studying self-efficacy based on microanalyses of situational determinants. This study focused on the influence of accountability policy, specifically curriculum policy, on teachers as one such microanalysis. The principles of self-efficacy theory and its importance in the teaching profession will be detailed in this section.

Principles of Self-efficacy Theory

Bandura (1977) proposed the self-efficacy construct as a method for understanding human behavior. Self-efficacy is "a person's judgment about his or her capability to organize and execute a course of action that is required to attain a certain level of performance" (Bandura, 1986, 1991, 1997, 2005). Since self-efficacy is based on one's belief, or perception, of capability, it is also sometimes referred to as perceived self-efficacy. Bandura (1989) stated that self-efficacy is not to be viewed as a fixed personality trait but rather a dynamic system that can be influenced by a particular situation, task, or the individual's development level.

Bandura (1986) separated self-efficacy from one's actual behaviors, despite there often being overlap. Just because a high level of confidence, or self-efficacy, will likely lead to appropriate actions that will, in turn, lead to desired behavioral outcomes, this does not

necessarily have to be the case. However, self-efficacy research does show a strong connection between people being more willing to undertake acts, put forth effort, and persist when they believe they are capable of conducting a task or activity. Conversely, they will avoid or give up when they perceive an activity as beyond their capability (Bandura, 1986).

Self-efficacy is a construct derived from Bandura's broader social-cognitive theory (Bandura, 1989). This theory states that one's knowledge is derived, in part, from observing others in social interactions and experiences and also from outside media influences. The conceptual model that Bandura established to represent social-cognitive theory is referred to as triadic reciprocal causation. In this model, the three factors that are continually influencing each other are individuals' behavior, environment, and personal factors (Bandura, 1989).

One's self-efficacy comes from four primary sources as identified by Bandura (1977): mastery experience, modeling, verbal persuasion, and physiological arousal. Though these sources are not exhaustive, self-efficacy determinants typically can be grouped within one of the four.

Mastery experience is the source of self-efficacy that is most important. One's self-efficacy is strongly influenced by past performance. Successes typically raise perceptions of capability, while failures often lower them. Lowered self-efficacy due to past failures is especially predictable if the failures were not because of a lack of effort. Self-efficacy, then, is positively influenced by one's accomplishments that have developed skills, proven the ability to persevere, or simply provided a framework of familiarity (Bandura, 1977).

Modeling, otherwise known as vicarious experience, also strongly influences self-efficacy. This source is particularly useful for people who are being asked to perform a task with which they have limited experience. Individuals can become convinced that they are capable, or

incapable, of performing a task after observing someone else perform it. In such, modeling influences self-efficacy in two ways: providing knowledge and social comparison. Seeing that someone else is capable of performing a task can increase a person's belief that he is capable of performing the task as well (Bandura, 1977).

Verbal persuasion is a third source, though it does not influence self-efficacy as strongly as the first two. Verbal persuasion generally involves individuals being told they are capable of doing something. This source's power is limited, however. Even if told multiple times of one's capability of accomplishing a task, this belief can be easily overridden by past experience. For this reason, verbal persuasion is most effective in influencing self-efficacy when it is accompanied by another source or is used as merely a short-term fix (Bandura, 1977).

Last, physiological arousal can serve as a source of self-efficacy. Physiological arousal is also sometimes referred to as affective state. This source is the recognition that general well-being or personality type can play into one's self-efficacy, as well as one's feelings. Examples of positive arousal, or feelings, may include excitement or enthusiasm for performing a task. Negative examples include fear, anxiety, or stress over a task (Bandura, 1977). Physiological arousal does not influence self-efficacy as strongly as mastery and vicarious experiences, but can and does contribute. This led Wood and Bandura (1989) to recommend stress-reduction and increasing physical well-being as viable methods for elevating self-efficacy.

Empirical studies on self-efficacy have provided consistent results (Hoy & Miskel, 2008) when applied to organization and management. Self-efficacy has been associated with productivity, adaptability, coping with change or difficult tasks, learning, and career choice. Similarly, in educational organizations, self-efficacy has been linked to classroom management, student motivation, teacher competence, and teacher adoption of innovations. Most importantly

in the field of education, self-efficacy has been tied to student achievement (Armor et al., 1976; Ashton & Webb, 1986; Borton, 1991; Caprara, Barbaranelli, Steca, & Malone, 2006; Cheung & Cheng, 1997; Hillman, 1984; Moore & Esselman, 1992; Ross, 1992; Woolfolk Hoy & Davis, 2006).

Unresolved issues surrounding self-efficacy theory include how and to what extent self-efficacy can be improved. General suggestions have been made (Wood & Bandura, 1989), such as participating in physical activity and reducing stress. However, since the construct of self-efficacy involves decisions being made while taking multiple aspects of oneself and the proposed task into consideration, it is a highly complex situation to attempt to influence.

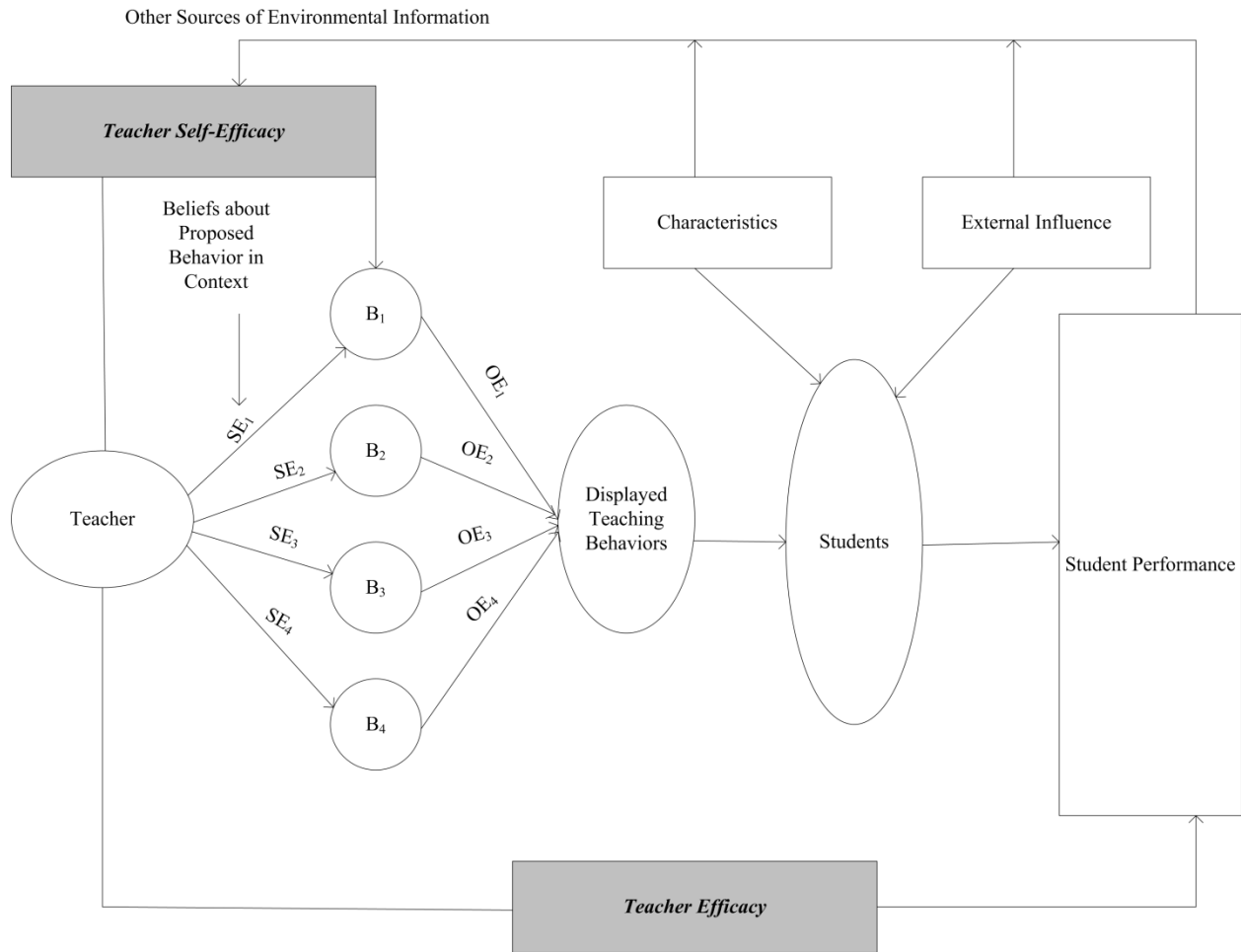
Self-efficacy theory serves as a construct for understanding behavior and stems from the broader social-cognitive theory. The theory is highly associated with behavioral and performance outcomes. In short, individuals who believe they are capable of a task are typically more successful, while those who do not typically exert less effort or may even avoid tasks all together. Self-efficacy may change depending on the proposed task or the development level of the individual at the time of the task. The theory is fluid and dynamic and predominantly determined by four sources: mastery experiences, modeling, verbal persuasion, and physiological arousal.

The Application of Self-efficacy Theory in Education

Since Bandura's introduction of self-efficacy theory, the construct has been used widely in the field of educational research. Relationships with many variable of interest to education researchers have been established, making it an effective theoretical framework for this study. The theory's relationships with student achievement and successful policy implementation are particularly compelling. However, there is an issue with the use of this term. The terms teacher

efficacy and teacher self-efficacy have been a source of debate since the mid-1970s. During that time, the RAND Corporation conducted a study in which it found that teacher efficacy, based on Rotter's locus of control (1966), played a significant role in student achievement (Armor et al., 1976). This created an interest for other educational researchers in teacher efficacy. One year later, Bandura published his self-efficacy theory. Bandura was then consulted by the RAND Corporation when conducting a follow-up to its 1976 study. Ever since, the blending of teacher efficacy and teacher self-efficacy has been a source of confusion. The very similar meanings combined with the concurrent debuts, have made them almost inseparable in the literature. Recent research has attempted to disentangle the two terms (Dellinger, Bobbett, Olivier, & Ellett, 2008), providing a more specific definition of teacher self-efficacy. The authors contend that many current depictions of self-efficacy and teacher efficacy focus on student outcomes, overlooking the crucial role of teachers' beliefs in their abilities. By leaping straight from beliefs to measuring student outcomes, external influences that may also affect student outcomes may escape a researcher's attention. Figure 1 (see Appendix A for permission to use figure) demonstrates the authors' thinking concerning how to separate teacher efficacy from teacher self-efficacy; however, in the following review the researcher simply used the language of the researchers when referring to their specific studies.

A section of this review is dedicated to the established link between teacher self-efficacy and student achievement as this link could prove the most convincing reason for policymakers' concern about teacher self-efficacy. However, teacher self-efficacy has been linked to a



*Figure 1. Differences between teacher self-efficacy beliefs and teacher efficacy. Adapted from “Measuring teachers' self-efficacy beliefs: Development and use of the TEBS-Self,” by A. B. Dellinger, J. J. Bobbett, D. F. Olivier, and C. D. Ellett, 2008, *Teaching and Teacher Education* 24(3), p. 753. Copyright 2007 by Elsevier Ltd.*

number of other indicators of importance to educational researchers. For example, teacher self-efficacy can predict a multitude of variables including referral to special education decisions (Meijer & Foster, 1988; Soodak & Podell, 1993), student motivation (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977), teacher stress (Bliss & Finneran, 1991; Parkay, Greenwood, Olejnik, & Proller, 1988), school effectiveness (Hoy & Woolfolk, 1993), teacher absenteeism (Imants & Van Zoelen, 1995), and teacher classroom management (Brouwers & Tomic, 2000; Woolfolk, Rosoff, & Hoy, 1990). Of particular importance, there are relationships between

teacher self-efficacy and indicators of teacher turnover (i.e., burnout, intent to stay, job satisfaction). Retaining quality teachers is a primary concern for educational leaders. Not only does teacher retention help provide consistency for students, but experienced teachers also contribute to increased student academic achievement (Rockoff, 2003). In this section, special attention was paid to the relationship between teacher self-efficacy and successful policy implementation.

Teacher Self-efficacy Linked to Student Achievement

Many theories could have been used to gauge teachers' perceptions of how policy influences them. This study employed Bandura's (1977) self-efficacy theory which has an established link to student achievement in the literature. The following studies show the relationship between teacher self-efficacy and student achievement.

The link between teacher self-efficacy and student achievement is well established. The seminal work in this area of research was a study conducted by the RAND Corporation in 1976 (Armor et al., 1976). This study used Rotter's (1966) work on locus of control to develop a tool for measuring a teacher's efficacy. One year later, after Bandura published his work on social cognitive theory, which included the self-efficacy construct, a group of researchers were once again contracted by the RAND Corporation to conduct work pertaining to teacher efficacy and student achievement (Berman et al., 1977). At this point, the two worlds of teacher efficacy and teacher self-efficacy were officially merged as the second group of researchers consulted with Bandura in the development of the revised measurement tools.

A body of research has confirmed the findings of the studies discussed above. Ashton and Webb (1986) found that the cognitive attainment of students as well as their success in school could be predicted using the teacher self-efficacy construct. Ashton and Webb posited

that teachers in their study with high self-efficacy were more apt at selecting teaching strategies to support student learning, while also keeping students on task during the learning process. These capabilities, in turn, supported higher student achievement. Evidence supporting a link between high teacher self-efficacy and student achievement recently was documented in an extensive literature review conducted by Woolfolk Hoy and Davis (2006). Ashton and Webb (1986), Muijs and Reynolds (2001), and Ross (1992) as cited in the Woolfolk Hoy and Davis review successfully re-established the link between teacher self-efficacy and student achievement. Additional studies have explored this relationship with corroborating results (Borton, 1991; Cheung & Cheng, 1997). With a strong relationship between teacher self-efficacy and student achievement established, researchers began exploring the possibility of strengthening or using this relationship to better understand schools, thus beginning the next phase of self-efficacy research, which is discussed in the following paragraphs.

Other research has added variables to ascertain if the predictive power of teacher self-efficacy on student achievement can be increased if placed in conjunction with said variables. The work of Caprara and associates (Caprara et al., 2006) investigated whether the addition of teacher job satisfaction with teacher self-efficacy strengthened the relationship to student achievement and found this true in part. Though the combined effect of the two variables on achievement was statistically stronger than that of self-efficacy alone, there was no effect of previous student achievement on teacher job satisfaction nor were there prolonged effects on achievement based solely on teacher job satisfaction. Other studies that have explored the combined effects of self-efficacy and job satisfaction on performance also support these findings (Cranny, Smith, & Stone, 1992; Judge, Thoresen, Bono, & Patton, 2001).

Moore and Esselman (1992, 1994) also contributed to understanding the relationship between teacher self-efficacy and student achievement with their work, which included the variable of school climate. Ross (1992) combined the effects of teacher self-efficacy with teacher coaching on student achievement. Hillman (1984) explored the role of expectations in conjunction with self-efficacy, not just in teachers, but in students and principals as well. Teague and Angelle (2010) established a relationship between teacher leadership and collective efficacy, which is also linked to student achievement. Muijs and Reynolds (2001) found a relationship between teacher self-efficacy that extended beyond student achievement to students' self-concepts in reference to education.

The relationship between teacher self-efficacy and student achievement has a lengthy and well-researched history. This is one reason why self-efficacy theory was employed to explore teachers' perceptions of how curriculum policy influences them. Policymakers and formal implementers may be interested in finding and crafting policy conditions that positively influence teacher self-efficacy for the potential benefit of teachers and students alike.

Teacher Self-efficacy and Policy Implementation

As mentioned above, this review will end with an emphasis on the importance of teacher support for a successful policy implementation. Though a detailed description of teacher support is not provided until later in this review, one of the theoretical constructs that helps frame the concept of teacher support is teacher self-efficacy. Teacher self-efficacy is a teacher's "judgment about his or her capability to organize and execute a course of action that is required to attain a certain level of performance" (Hoy & Miskel, 2008, p. 157). In terms of policy implementation, self-efficacy is the feeling of a teacher that he/she is capable of carrying out the implementation and achieving the policy's desired results. Teacher self-efficacy should not be

overlooked when developing curriculum policy, having been found to be an important part of successful policy implementation (Guskey, 1988), school effectiveness (Hoy & Woolfolk, 1993), and adoption of innovations (Fuchs, Fuchs, & Bishop, 1992). The power of the self-efficacy construct may, in fact, be its ability to shed light on many complex education issues, such as those noted above. Perhaps most importantly in terms of accountability policy, self-efficacy has been tied to student achievement (Armor et al., 1976), as noted in an earlier section of this review.

One study concerning teacher efficacy and policy implementation is Guskey's (1988) research on teachers' responses to an implementation of an instructional innovation. After receiving professional development on an instructional practice called mastery learning, 120 elementary and secondary teachers were administered a survey concerning their efficacy and their attitudes toward implementing the new practice in their classrooms. Analysis of the responses highlighted a relationship between teachers' efficacy and teachers' attitudes toward the implementation. The findings indicated the importance of teacher efficacy in school reform efforts involving policy implementation.

A second study regarding teacher self-efficacy and policy implementation dealt with teacher adoption of innovations (Fuchs et al., 1992). The researchers were interested in exploring the possibility of two aspects of successful classrooms, establishing routines and adapting instruction to individuals' needs, serving as competing forces. In their findings, math teachers judging themselves as being capable of handling disruptive behaviors in the classroom served as a predictor of their abilities to both establish routines and provide instructional adaptation.

An additional study involving teacher efficacy and policy implementation focused on the organizational health of schools (Hoy & Woolfolk, 1993). In this study, the researchers established a relationship between the two and illustrated a difference between general and personal teaching efficacy. The significance rested in the ability of healthy schools to effectively educate students. A recommendation made by the researchers suggested qualitative studies that map teachers' definitions of accomplishment and success to examine organizational factors that support these definitions. Such a study would help researchers take the next step of finding out how to develop teacher efficacy as opposed to exploring its relationship with other variables.

Conley also argued for policymakers' consideration of teacher self-efficacy in relation to education policy, by saying that when teachers felt state objectives were unattainable, their reactions typically included rejecting the goal of the policy or adopting compliance-oriented behavior (Conley, 2003). Specifically concerning curriculum mandates, one study found that even when teachers consider a curriculum appropriate for their students, they still may feel that variables outside their control, such as student support and motivation, will cause students to fail to meet those standards (Porter, Smithson, & Osthoff, 1994).

These self-efficacy studies help illustrate the importance of teacher self-efficacy when implementing education policy and undertaking reform initiatives. The school's ability to carry out policy directives, as well as the attitudes toward and willingness of personnel concerning efforts of school reform, are all related to teacher self-efficacy and, unfortunately, tend to be overlooked in the current form of accountability policies.

Teachers and Education Policy Implementation

Research has shown that an important part of successful education policy is the implementation phase (Fullan, 2001). Implementation is "the process of carrying out

authoritative public policy directives” (Nakamura & Smallwood, 1980, p. 1). Successful implementation is dependent on the implementers, of whom there are formal and intermediary (McLaughlin, 1987). As teachers are the primary intermediary implementers of many education policies, their compliance is necessary. This certainly is the case with curriculum mandates. However, policymakers may want to encourage not only teachers’ compliance with education policies, but also teachers’ support for them. Fullan (2001) argued for the importance of recognizing teacher support in policy implementation. He stated that change initiatives, even those that are well-intentioned, are creating havoc for teachers out of a general lack of respect for the process. Also, if careful attention were not paid to this problem, the continuation of failures would make it unlikely that teaching and learning would realize a revitalization that he argued is desperately needed for both students and educators today (Fullan, 2001, p. 8).

Successful policy implementation must be viewed in terms of its goals. In the case of a state- or nationally-standardized curriculum, the goals are consistency (i.e., for the purpose of making comparisons) and increased student academic achievement. However, policymakers may want to consider a third goal: teacher support for the curriculum. After all, successful implementation is dependent on both the will and the capacity of the intermediary implementers (McLaughlin, 1987). The intermediary implementers must be willing to cooperate with the formal implementers. In the case of the current curriculum policy agenda, teacher support could become a goal of the Common Core curriculum initiative. In this study, teacher support refers to teachers’ positive attitudes toward a policy as mediated through the construct of self-efficacy, burnout, values, and role (also referred to as teacher voice).

Though the research on the specific topic of teacher support is still muddled, authors from all fields of educational research have alluded to an underlying need for research on teacher

support. Their writings on educational policies and their impact hint at a need for understanding how teachers view educational policies. For example, from literature on change, Senge and colleagues (1999) wrote, “The fundamental flaw in most innovators’ strategies is that they focus on their innovations, on what they are trying to do – rather than on understanding how the larger culture, structures, and norms will react to their efforts” (p. 26). Also, from the field of curriculum supervision, Wraga (1999) argued against any top-down approaches to curriculum implementation citing research showing that teacher participation in the development of curriculum has been strongly related to improvements in student learning.

Following is an overview and synthesis of what are referred to as the three generations of education policy implementation (Fowler, 2009). The review of third generation policy implementation research is further separated into two categories: compliance and support. All three generations of research are still being actively pursued. The names first, second, and third resulted from the lessons learned from that particular bulk of research and do not imply their discontinued use. This section builds the case that policymakers could glean new lessons from third generation research and strive to encourage teacher support when considering the successes and failures of educational policy implementation, particularly policies of accountability.

First Generation Research of Policy Implementation

Studies conducted in the early 1970s focused on the difficulty of implementing education policy (Fowler, 2009). During the 1950s and 1960s, the federal government monetarily supported several initiatives. Studies were developed to track the effects of policies at the “ground level”. In other words, policymakers were interested in finding out if policies were being implemented as intended and having the desired effects. The initial findings of the quantitative studies commissioned by the federal government were inconclusive and prompted

qualitative studies to determine the cause for such puzzling results. Researchers discovered that the uninterpretable results were due largely to the policies simply never having been implemented, which spurred further research on policy implementation, focusing on the implementation process itself (Firestone & Corbett, 1988).

Three seminal studies provide an understanding of the lessons learned from the first generation of policy implementation research. All show the tendency for policies to go unimplemented, though the reasons vary. Murphy (1971) realized after examining several commissioned studies of Title I that the federal bureaucracy in place at that time was incapable of implementing some policies due to lack of personnel. Sarason (1971) noted that policies that did not take school culture into account many times failed. The interaction of culture with implementation continues to be an active area of research today, even prompting a re-release of Sarason's book in 1996. A more in-depth look at one particular policy implementation was provided by Gross, Giacquinta, and Bernstein (1971) when they studied a policy requiring teachers to change their roles to that of "catalytic role models." After a failed implementation, the researchers determined that many teachers, though supportive of the ideals of the policy, were not given clear direction on what to do as a catalytic role model and eventually reverted to traditional teaching roles.

The problem of policies not being implemented at a state or national level is largely averted in today's accountability arena. Policymakers, though having access to several policy levers, have found compliance is cheaply and quickly enforced and classroom practices by teachers are swiftly changed, through the use of externally mandated assessments (Cohen & Hill, 2001; Firestone, Mayrowetz, & Fairman, 1998; McDonnell, 2004; Stecher, Barron, Kaganoff, & Goodwin, 1998). Such is the case with curriculum policy that is accompanied by externally

mandated assessments in Tennessee, the focus of this study. Hence, the assumption for this study is that Tennessee curriculum policy does not face a problem with teachers simply not implementing the policy and does not require an implementation study in line with first generation research.

Second Generation Research of Policy Implementation

Second generation research focuses on the conditions necessary for successful policy implementation, in which successful is defined as compliance, also referred to as full implementation. This generation came as a direct result of the lessons learned from the first generation of research. Possible variations in individuals' and institutions' responses to policies are explored (Elmore & McDonnell, 1987). Lessons learned in second generation research revolve around the idea that policymakers must never assume that policies will be implemented simply because the parties responsible for making the implementation possible were told to do so. Second generation research suggests that successful implementation most likely occurs with the onset of a "mutual adaptation," which refers to a harmonious change in both the behavior of the implementers and the design of the policy (Fowler, 2009).

Examples of mutual adaptation, and hence full implementation of a policy, can be found in the study of curriculum reforms such as the Physical Science Study Committee (PSSC) curriculum initiated after the launch of Sputnik and the Man: A Course of Study (MACOS) social studies curriculum. These studies focused on the changing role of the teacher during a policy implementation (Dow, 1976). Additional studies of note explored the importance of time for redistributive policies such as these to take hold. Though many short-term studies during this time showed failure of full implementation, researchers who conducted longitudinal studies of 10 or more years found increased successes (Huberman & Miles, 1984; Kirst & Jung, 1980). By the

time a wave of graduation requirement policies ran through many states in the late 1980s, policymakers had learned how to refine their policies to assist with the mutual adaptation process. These policies were much more successful in terms of numbers of schools in which full implementation had occurred and time taken for full implementation to be achieved (Murphy, 1990).

Policymakers during this time probably learned much from the work of Berman and McLaughlin (1978). Commissioned in 1973 by the U.S. Office of Education to conduct research on hundreds of federal projects occurring in 18 states, the RAND Change Agent Study is the best known of second generation research and introduced the concept of mutual adaptation. Like most researchers before them, the team found many instances of failed implementations, but more importantly, they found several instances of success and were able to identify the conditions that seemed to lead to those successes (Berman & McLaughlin, 1978; McLaughlin, 1976). Policymakers now had rich descriptions of how individuals' and institutions' behaviors change during a policy implementation and how new policies are redesigned to fit existing local conditions. This information allowed them to craft policies that would aid this process and encourage full and swift implementations. However, data from the following time period did not show significant change in the problems that policies were meant to address. Despite policies being implemented, the desired effects were not being achieved. This prompted calls for systemic reform, which included policy cohesiveness, to help attain the results for which policymakers were searching (Smith & O'Day, 1990).

Third Generation Research-Compliance

To summarize, first generation research is applied to understanding how policies are implemented and second generation research is applied to identifying what conditions helped

policies get implemented. Third generation research is applied to understanding the identified conditions of how education policy initiatives become implemented (Fowler, 2009).

As stated earlier, the review of third generation policy implementation research has been divided into two categories: compliance and support. The studies in this section are connected with compliance, the concept of teachers as learners during the policy implementation process. This type of research focuses on the types of provisions made for those responsible for implementation, including cohesive policies that reflect a single vision of education reform (Smith & O'Day, 1990), physical and monetary resources for teachers, administrators, and district personnel (Darling-Hammond & McLaughlin, 1995), and professional development and social networking structures for educators (Fowler, 2009). Third generation policy implementation research studies found in the following section are hinged by the assumption that student achievement will increase and at a faster rate the better a policy is crafted for the purpose of full implementation, or compliance. These studies track, record, or describe how full implementation of education reform initiatives is achieved.

Education accountability policies, such as the curriculum policy which is the focus of this study, typically use student achievement data as a measurement for successful implementation (Association for Supervision and Curriculum Development). Student achievement is sometimes referred to as global competitiveness and college-and-career readiness by those in the policy making arena, though student achievement data (i.e., test scores) remain the primary indicators for all three. However, as previously noted, accountability policies have not always focused on educational outputs, such as test scores. Prior to the early 1990s, educational policy focused on making educational opportunity more equitable (Elmore & Fuhrman, 1994).

Since the mid-1990s, there has been mounting evidence that teachers should be viewed as learners during a policy implementation, and thus should be provided with supports. These supports typically are administered as professional development, social networks, or physical resources.

One of the earliest and best-known authors on using professional development to support teachers as learners is Linda Darling-Hammond. In a 1995 article, she and the most well-known second generation researcher, McLaughlin, called upon policymakers to support the professional development of teachers by rethinking how schools are staffed, funded, and managed (Darling-Hammond & McLaughlin, 1995). They encouraged both policymakers and district personnel to consider policies that would increase time for teacher collaboration and problem solving with a focus on learner-centered outcomes. They claimed that reform policies would be successful only through local responses that were specific to learner and teacher needs. This stance was concurrent with later findings that stressed the importance of district-level mediation for teacher sense-making of accountability policies (Louis, Febey, & Schroeder, 2005), teacher understanding of content and how children learn content, strategies for effective teaching, social supports, and the resources and time to support change (Schorr & Lesh, 2003; Spillane & Thompson, 1997). In addition, some researchers argue for teacher learning communities to further enhance policy implementation (Coburn & Stein, 2006; Little, 2003).

The literature also includes evidence that policy cohesiveness, also referred to as systemic reform, helps support teachers during a policy implementation. This research highlights the importance of avoiding policies that might be in conflict with other policies, especially those placing teachers in situations in which they have to choose which policy to follow (Conley & Goldman, 1995). Research in this area can also emphasize the need for

policies that all support the goal of student learning rather than focusing on mandates for student testing (Darling-Hammond, 2003). Concurrently, the literature explores the context in which some policies are more successfully implemented. Delving into context has come about from necessity according to several implementation researchers, including Fuhrman and colleagues, who wrote about policies from earlier eras saying they were:

...more peripheral than central to core elements of schooling. They were discrete and amenable to study. By contrast, the current reforms deal with central issues of who shall teach and what shall be taught and in what manner. (Fuhrman, Clune, & Elmore, 1988, p. 239)

These new policies that deal with core issues of schooling simultaneously aim to ensure increased student achievement. Complex accountability policies such as this have required implementation researchers to examine success more closely. One researcher goes so far as to say that research dealing with the context of success, including the people, places, and policies particular to each instance, is itself a new generation of policy implementation research (Honig, 2006). However, though the researcher agrees with Honig's stance that the complexity of today's policies pose new challenges, the researcher does not agree that this vein of research constitutes a new generation. The researcher contends that research concerning the specific context of success still defines success as full implementation and still focuses on supports necessary to achieve that end. These aspects continue to associate this type of research as third generational.

Finally, the role of accountability policy critic can be found in third generation policy implementation research. Researchers in this vein point to evidence showing that current accountability policies, either in how they are implemented or in their basic

axiology, do more harm than good and should (at least in their current form) be discontinued. These researchers tend to focus on the question, just because it can be implemented, should it be? For example, Linn challenges the credibility of results from high-stakes testing in his analysis of testing as part of educational reforms over the last 50 years (Linn, 2000). Koretz (2008) contends that tests become corrupt when high-stakes are attached, and that schooling suffers as teachers focus more on the measure than the goals of education. Ravitch (2010), once a staunch supporter of and active participant in accountability policy, now claims, “Accountability as we know it now is not helping our schools. Its measures are too narrow and imprecise, and its consequences too severe” (p. 163). She goes on to say that when we “...use the results of tests, with all their limitations, as a routine means to fire educators, hand out bonuses, and close schools, then we distort the purpose of schooling altogether” (p. 167). The words of these critics and others serve as a bridge to the second category of third generation implementation research, *teacher support*.

Third Generation Research-Support

As noted previously, education policy currently is dominated by issues of accountability. The push for accountability is a legitimate education agenda for policymakers with 80% of the public believing that schools are in need of greater accountability and 34% defining accountability as standards with tests to assure that standards are met (Hart & Teeter, 2004). However, there is still room for improvement as to how to craft accountability policies in a manner that would solicit what the researcher refers to as *teacher support*. Teacher support for a policy is a generic term that deals with teachers’ positive attitudes toward a policy as mediated by several

constructs from the literature. These constructs include teacher self-efficacy, role (also referred to as voice), and burnout. Teacher support also includes the values of teachers and their general sense of whether policies are moving students in the “right” direction in relation to those values.

The following policy implementation literature shares commonalities with fourth generation policy evaluation. Fourth generation policy evaluation encourages researchers to consider the constructed nature of how humans view a policy, the way in which their views might be tied to their values and their contexts (i.e., social, cultural, physiological), and that policies have the power to disenfranchise stakeholders (Guba & Lincoln, 1989). The following studies support a need for policymakers to consider these same points when developing education policies, particularly those of accountability.

A construct prominent in third generation literature is teacher voice. The importance of teacher voice is not new. John Dewey argued over 100 years ago that teachers should have ways to exact judgment upon educational matters, with assurance that their judgments would affect the school system in some way (Dewey, 1977). Educational matters would certainly encompass curriculum as it is “the center of teachers’ work” (p. 10), having been included as part of the definition for teachers’ working conditions (Johnson, 2006). However, the rise of complex accountability policies, which include high standards in many states has not been coupled with clear expectations for teacher role within the policy nor provided enough fostering of teacher voice. In a study of standards-based reform in nine states, despite strong challenges from teachers concerning their states’ standards, all nine states “stayed the course” (Massell et al., 1997).

A study of six states also noted the importance of teacher voice, specifically in relation to curriculum. Porter, Smithson, and Osthoff (1994) found that even when selected teachers were given the opportunity for input when curriculum initiatives were formulated, none of the states had a system for responding to teacher concerns once the curriculum was in place. Further, many of the professional development requirements, resources and instructional materials, and procedures for assessment served merely to reinforce the teachers' concerns and deterred teachers from making significant changes in classroom practices.

A second construct in third generation research is teacher role. Teachers, as a result of accountability policies, are sometimes faced with choosing between competing roles. Teachers whose college preparation might have centered on teachers acting as facilitators of learning can be confused by a perceived role of test-preparer once in the classroom. When studying the impact on teachers of high-stakes testing in Maryland and Pennsylvania, researchers identified several unintended consequences of these accountability policies, including reduced teacher motivation and morale, reduced collegial interaction among teachers, and attention to basic practices of the school being diverted to the test. They concluded: "When the modal response to statewide testing by professional educators is typified by practices that even the educators acknowledge are counterproductive to improving learning over the long term, then the issue is a 'policymaking problem'" (Corbett & Wilson, 1990, p. 321). These findings were corroborated in a study of two different states. Barksdale-Ladd and Thomas offered the following quote from one teacher interviewed, stating it summed up what many of the interviewed teachers felt.

I know this is disrespectful, but these tests are making my kids stupid. The kids I've had the last few years have gotten higher test scores because I've worked so hard at getting them ready for the tests, but this is a façade because they just don't have it together like my former students. They don't read as well because they're only reading for main ideas and supporting details and resolutions and characterizations which compared to my students a few years ago is a sin. Those students read for getting the whole picture and for fun. They loved reading. But these students, they just think reading is something you do for a test. Learning for the tests isn't meaningful; it's a chore, and so I think the tests have really made achievement go down...the scores are up, but the kids know less, and are less as people. (Barksdale-Ladd & Thomas, 2000, p. 9)

Conley (2003) also discussed teacher role at length in his book about school governance. He argued that recent complex reform initiatives have left teachers struggling with their changing roles. He pointed out that despite states more heavily invested in teacher quality rather than testing achieving stronger increases in NAEP scores, most states continue to focus policies and resources on testing. He also contended that though historically school reform has happened slowly and incrementally, today's accountability policies have not. He stated that, "the current situation is different because educators are being called upon to change from all sides at once...The changes are not necessarily all in the same direction, and sometimes ...even alter their priorities before schools have been able to respond fully to the first charge they received" (p. 83).

A third construct found in third generation research is that of teacher burnout. Teacher burnout was employed in a study conducted by Berryhill, Linney, & Fromewick

(2009). Though these researchers also used the constructs of self-efficacy and role conflict in their study as mediators for the relationship between accountability and burnout, the study's ultimate goal was to establish the latter. This study was particularly interesting for three reasons. First, it seemed to be the first to attempt to measure teacher support for a policy. Having an instrument that could be used to quickly and cheaply gauge teachers' perceptions about a policy is intriguing. Second, the researchers make the case that low support for a policy could not only be related to teacher self-efficacy, role conflict, and burnout, but could be extended to the policy problems of teacher recruitment and retention, as has been explored by other researchers (Clotfelter, Ladd, Vigdor, & Diaz, 2004; Goddard & Goddard, 2006; Murnane & Steele, 2007). Third, though the authors do not specifically define teacher support, the basic concept appears to fall in line with this review.

Finally, a host of writings and studies have focused on teachers' values and their interplay with policies, providing the fourth construct found in third generation support research. Conley (2003) and others assert that teachers must be given opportunities to make sense of policies in relation to their local realities, values, and personal teaching practices (Conley & Goldman, 2000; Jennings, 1996; Spillane & Zeuli, 1999). Further, Conley claims that teachers may never be able to make sense of some policies because they may expose a fundamental disagreement between policymakers and educators over the purposes of schooling. Conley poses questions that illustrate these potential disagreements, such as, should education strive to meet the goals of business or the needs of students? And, should education produce successful economic participants or well-rounded, active learners? Differing answers to questions such as these may prevent

teachers from being able to make sense of some policies in regard to their values.

Disagreements over values could become a major contention as states move from state-developed curricula to the Common Core standards, further removing teachers and other stakeholders from direct involvement with curriculum creation and assessment.

Early in third generation research, MacPherson (1996) coined the term *educative accountability*. Educative accountability encourages policymakers to support only accountability policies that are demonstrably educative. In other words, the policies have to be proven to support student learning. Stating that current accountability policies are objectivist and empirically oriented, he claimed that they mirrored only one social reality. For example, when state governments began monitoring graduation rates many districts and schools merely made graduation requirements less stringent in order to meet the empirical target. Graduation rates improved without a change in quality of education. Situations such as this make it clear that performance data are merely evidence of values of people with the power to define and operationalize them. He called for policymakers to allow other types of socially constructed realities to play a part in policy planning, emphasizing an integration of empirical data, values, and theory. He did not argue for abandoning accountability measures in their current forms, but instead argued that a system for receiving formative empirical data concerning stakeholder support for an accountability policy should be part of policymaking. In addition, Conley (2003) postulates that five factors are needed for successful policy alignment, one of which is teachers' perceptions being captured and factored back into the process of policy adaptation.

Also early in third generation research, McDonnell (1991) found that teachers were likely to oppose implementing policies in conflict with their professional values. She went on to contend that several U.S. education policies failed because of such value conflicts. Specific to standards-based reform, Barksdale-Ladd and Thomas (2000) found that though teachers overwhelmingly supported having standards, there was evident dissension about the value of their current standards, especially in the area of child development. One teacher said, "...their standards are the name of the game, not the children" (p. 6). Further, none of the 59 teachers interviewed were able to come up with any positive effects of the state standardized tests other than that it would prepare students for many more years of testing. Another teacher confided that though s/he had been successful in improving test scores, s/he believed the students had actually learned less than students in previous years. The teacher said, "I think it's a crime; it's educational malpractice" (p. 9). Overall, most teachers interviewed felt that though the current standards and tests were hurting teachers and students, they were powerless to do anything about it (Barksdale-Ladd & Thomas, 2000). The policymakers in these states might have been able to prevent such dissent had the policies provided avenues for teachers to be assured that their values would be respected as has been suggested by several of the previous authors.

Finally, a study conducted in Florida by Jones and Egley (2004) delved into how teachers' values interact with accountability policies. The teachers in this study were posed with a simple yes or no question: "Is the FCAT program taking Florida's public schools in the right direction?" (p. 6). After providing a yes or no, teachers were asked to elaborate on their answers. Last, the teachers were asked another yes or no question: "Do

you believe that it is fair to assign grades to schools based on the FCAT scores?”(p. 6). There were 79.9% negative responses to the first yes or no question and 93.7% to the second. When given the chance to elaborate on why the FCAT program was not taking Florida schools in the right direction, more than half (54.1%) cited negative effects on curriculum, teaching, and learning. In particular, teachers were concerned that the program did not take the whole child into account and was not able to provide what would constitute a well-rounded education. This study, though simply designed, once again exposes a disconnect between many teachers’ values and the values enforced through accountability policies.

To summarize, third generation policy implementation research views teachers as learners during the implementation process and seeks ways to provide the necessary learning in an effort toward full implementation. Some studies also explore ways in which policies are designed that seem to solicit teacher support during implementation.

Conclusion

The review of literature is an important aspect of conducting research. The primary purpose of this review was to set the context of the current accountability policy scene, to provide the findings of other researchers in the field of education policy implementation, to identify gaps in the literature, and to describe the theoretical lens through which the qualitative data from this study were viewed.

Accountability policies have given researchers much to study, particularly over the last few decades. However, there is still a need for the production of new information in this field. Of specific concern is the tendency of researchers to group the two parts of accountability policies, the standards and the tests, into one. Another concern is the need for clarity within third

generation policy implementation research as many of the studies categorized as such seem to be extending into areas not clearly represented by the stated goals of third generation.

Self-efficacy theory was used in this study partly because of its established relationship to so many variables of interest to education researchers and leaders, particularly student achievement and successful policy implementation. In addition, self-efficacy has experienced many growing pains as a theory as researchers have attempted its measure.

The synthesis and analysis of the research concerning education policy and self-efficacy presented in this chapter revealed that though much is already known about these two variables, there is still much to learn. Both what is known and what is not known served to guide the research questions, design, and purpose of this study. The methodology behind this study is presented in the next chapter.

CHAPTER THREE

METHODS

The purpose of this mixed-methods sequential QUAN/QUAL study was to examine the extent of middle grades teacher support for Tennessee state standardized curriculum and to describe how the curriculum influences teachers' self-efficacy. The study focused on teachers in grades six through eight who teach core subjects, or subject that are assessed using TCAP: math, social studies, science, reading/language arts. The questions central to the study were:

1. To what extent do middle grades teachers in three east Tennessee districts (TCAP-tested subjects) support the curriculum component of state accountability policies (QUAN)?
2. What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy (QUAL)?

This chapter provides a description of the methods and procedures used in this study, including the assumptions of a mixed methods design, a discussion on the role of the researcher, and an explanation of how the data were collected and analyzed. All of this information was submitted to The University of Tennessee's Institutional Review Board for approval prior to conducting the study.

Assumptions of Mixed Methods Design

Mixed methods research stems from a pragmatic orientation, merging the concepts of qualitative and quantitative research (Creswell, 2008). To understand the underpinnings of mixed methods, one must understand those of its predecessors.

Quantitative research stems from a positivist foundation. Though positivism can be traced back much farther, the basic tenets of positivism and how it is manifested in social science

today were first documented by Comte in the mid-1800s (Mill, 1891). The laws of positivism are shared with those of natural science and are used to explain and predict human behavior. The foundation of positivism is in natural science and asserts that knowledge is derived from sensory experiences and can be explored through use of the scientific method. Deductive logic can explain and predict human behavior, just as in natural science. Empirical evidence is the cornerstone of the positivist philosophical foundation.

The philosophical foundation of qualitative research is found in constructivism. Constructivism deals with how humans come to understand or know. There are three basic principles of constructivism:

1.) understanding is in our interactions with the environment, 2.) cognitive conflict, or puzzlement, is the stimulus for learning and determines the nature and organization of what is learned, and 3.) knowledge evolves through social negotiation and through the evaluation of the viability of individual understandings (Savery & Duffy, 1996, pp. 135-136).

With this philosophy, there is the possibility of having one problem, but multiple valid explanations for it.

Mixed methods, based in pragmatism, allow quantitative and qualitative research to be viewed as compatible. The assumption behind the use of mixed methods is that a combination of quantitative and qualitative methods provides better understanding of a research problem. This design can even be used to offset the weaknesses of each. For example, the quantitative data in a study offer strength in generalizability, and qualitative data contain the rich description and context that strictly quantitative studies may lack (Creswell, 2008).

However, by employing a mixed-approach to research, one does accept a value-laden environment within which to conduct research (Johnson & Onwuegbuzie, 2004). This might be viewed as a weakness by those who subscribe solely to positivist research philosophy and methodologies. On the other hand, constructivist purists would note the use of a quantitative approach as a weakness. Many researchers maintain that the two methods should never be mixed. The unresolved issue of paradigm-mixing shines a spotlight on potential problems, most notably, how to interpret results that are in conflict (Creswell, 2008; Johnson & Onwuegbuzie, 2004). A second weakness of mixed methods concerns the researcher. Not only must the researcher be knowledgeable in both quantitative and qualitative research methodology and skilled in mixing the two appropriately, but mixed methods studies are often more time consuming and expensive to conduct. In some cases, it is even necessary to employ a research team (Creswell, 2008).

Type of and Rationale for a Mixed Methods Research Design

This study examined the extent of teacher support for curriculum policy and explored teachers' perceptions of how curriculum policy influences them. Since the study involved both statistical analysis and contextual descriptions, a mixed approach was chosen.

Tashakkori and Teddlie (1998) developed the terminology used in this study to define the type of design. They characterized three types of mixed methods design. The first, equivalent status design, uses both qualitative and quantitative approaches equally to understand the research problem. This type of design can be executed sequentially (QUAN/QUAL or QUAL/QUAN) or parallel/simultaneously (QUAN + QUAL or QUAL + QUAN). Another type is the dominant-less dominant design. This design uses one method more dominantly than the other and can be conducted sequentially (QUAN/qual or QUAL/quan) or parallel/simultaneously

(QUAN + qual or QUAL + quan). When using data from more than one level of an organization or group, the researcher may use a third design incorporating the multiple levels in order to reach more comprehensive results.

This study was conducted using an equivalent status, sequential, mixed methods (QUAN/QUAL) design (see Figure 2). The research questions fit well with this design. The first research question was quantitative and measured the extent of teacher (TCAP-tested subjects, grades 6-8) support in three east Tennessee districts for curriculum policy. The quantitative segment of this mixed-methods study was conducted using the Accountability Policies Stressors and Supports Questionnaire published by Berryhill, Linney, and Fromewick (2009). The second research question was qualitative and explored sixth grade science and eighth grade social studies teachers' perceptions. The qualitative segment included interviews with teachers concerning how the curriculum component of Tennessee state accountability policy influenced teacher self-efficacy. Documents, specifically Tennessee's state curriculum standards, also were analyzed as part of the quantitative data for this study. Both the qualitative and quantitative components of the study were given equal importance.

As noted in the previous section, researchers may sometimes choose a mixed methods approach to a research problem in order to help overcome potential weaknesses to the study, such as the qualitative weakness of generalizability and the quantitative weakness of lack of context and description (Creswell, 2008). This study employed mixed methods for this reason. The mixed methods design in this study was aimed at increasing generalizability with the use of quantitative data and providing meaning, context, and potential significance with the use of qualitative data. The first question provided precise measurements for the extent of support

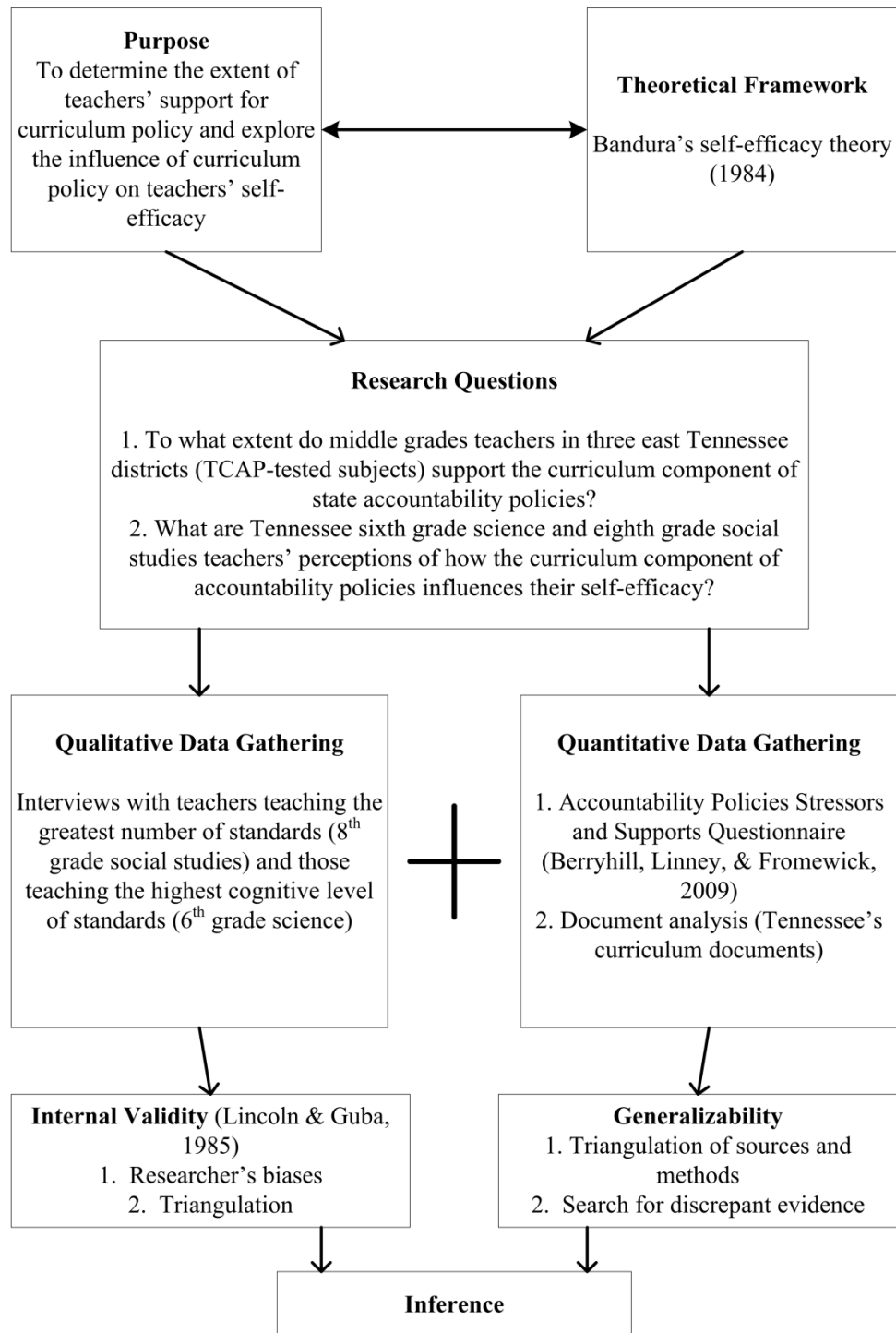


Figure 2. Research design.

while the second question offered contextual meaning of the numbers and thick description of the teachers' narrative, both being equally important.

The Role of the Researcher

Maxwell (2005) discussed the goal of “controlling for” any potential effect of the researcher on the outcome variables during quantitative studies, even though completely eliminating the researcher’s influence would be impossible. Conversely, he stated that the goal of qualitative research is not to try to eliminate researcher influence, but instead to understand this influence and attempt to use it productively.

The qualitative component of the design (interviews) required the researcher to become a participant. Concerning qualitative research, Merriam (1998) stated that the investigator is

The primary instrument for gathering and analyzing data and, as such, can respond to the situation by maximizing opportunities for collecting and producing meaningful information. Conversely, the investigator as human instrument is limited by being human – that is, mistakes are made, opportunities are missed, personal biases interfere. (p. 20)

The personal bias of the researcher in this study is that there are certain areas of the Tennessee curriculum that are too abundant, vague, and developmentally inappropriate to be taught effectively by even the best teachers. The desire to conduct research in this area stems from the researcher’s personal experience as a sixth-grade math teacher in Tennessee, racing to cover all of the necessary material before the state standardized test was administered. The researcher began to wonder if others shared the concerns about the curriculum, and if so, what other kinds of problems could extend from this situation. The frustration experienced is the source of bias in this area and is what the researcher had to stay mindful of when pursuing this research. Merriam (1998) again provided insight on this point. She claimed,

...the philosophical assumptions underlying this type of research is that reality is not an objective entity; rather, there are multiple interpretations of reality. The researcher thus brings a construction of reality to the research situation, which interacts with other people's constructions or interpretations of the phenomenon being studied. The final product of this type of study is yet another interpretation by the researcher of others' views filtered through his or her own. (pp. 22-23)

To address the issue of bias while assuming a participant role during the qualitative portion of this study, purposeful sampling was used. The teachers interviewed were middle school teachers presumably most affected by curriculum policy because they were responsible for teaching the most standards (8th grade social studies) and the highest cognitive level of standards (6th grade science) in the state's TCAP-tested subjects. The curriculum of each tested subject in grades six through eight were analyzed using the QDA Miner (Provalis Research, n.d.) WordStat tool to determine which teachers were responsible for the most and highest cognitive level of standards. The researcher also relied heavily on Bandura's (1977) self-efficacy theory while designing the interview questions. By using theory to guide the interviews, the researcher was not allowing bias to guide the interviews. Finally, the researcher made the qualitative research processes as public as possible by using strategies suggested by Anfara, Brown, and Mangione (2002). The researcher included all interview protocol and a detailed description of how categories were developed during data analysis.

Data Collection Procedures

In a mixed methods study such as this, a discussion of the collection procedures for both qualitative and quantitative data is required. With a QUAN/QUAL design, as noted earlier, there is no dominance of either type of data. Sampling strategies will be discussed first, followed by a

discussion of the qualitative then quantitative data collection. This section will end with a discussion of the complementarity of the data collection methods.

Site and Participants

Three school districts in Tennessee comprised the sample sites for this study, referred to as District 1, District 2, and District 3. These districts were convenience sampled due to their close proximity to the supervising university combined with district leadership's willingness to participate. After district written permissions were received, written permissions were collected from participating school principals. In the three districts that agreed to participate, 15 out of 27 (56%) schools agreed to participate. UT's Institutional Review Board reviewed these documents and granted permission for the study in March 2013.

Since the focus of the study involved a specific policy, the researcher purposefully sampled from teachers in the participating districts who were held accountable according to said policy. In 15 schools, the researcher administered the Accountability Stressors and Supports Questionnaire to teachers of grades six through eight in TCAP-tested subjects who volunteered to participate. After completing the questionnaire, teachers were asked to turn in a separate sheet of paper asking for their contact information if they were teachers of sixth grade science or eighth grade social studies and willing to be interviewed during phase two of the study. The criteria for soliciting interview volunteers were developed after the analysis of state curriculum documents detailed below revealed that sixth grade science had the highest order thinking standards according to the Revised Bloom's Taxonomy (Anderson et al., 2001) and eighth grade social studies had the overall highest number of standards. If teachers were willing to be interviewed, the researcher contacted them after the completion of phase one using the contact information they provided to schedule the interview.

Fourteen teachers volunteered to be interviewed. Seven were sixth grade science teachers and seven were eighth grade social studies teachers. Interview volunteers represented all three participating districts and both subjects with the following numbers: six teachers from District 1 (3 science, 3 social studies), two teachers from District 2 (1 science, 1 social studies), and six teachers from District 3 (4 science, 2 social studies). Interviews were conducted using the interview protocol that can be found in Appendix D and were designed to last approximately twenty minutes. All interviews were conducted face-to-face at the volunteer's school.

Document Analysis

Documents, as defined by Merriam (1998), are written, visual, and physical material that are relevant to the study. Curriculum documents obtained from the Tennessee Department of Education's website were used for the document analysis portion of the study. Findings from this analysis were the basis for the purposeful sampling of soliciting teacher volunteers for interviews. Teachers were only asked to volunteer for interviews if they taught sixth grade science or eighth grade social studies per the findings of the frequency counts described below.

Since this study was limited to three middle grades (6-8) and the four TCAP-tested subjects (reading/language arts, science, social studies, math), these were the only curriculum documents examined. Each file (e.g., sixth grade science, seventh grade math, etc.) was downloaded separately from the Department of Education's website as a portable document format (pdf) file for a total of twelve files. Those twelve files were then uploaded as twelve "cases" into QDA Miner version 4.0 (Provalis Research, n.d.), a data analysis software program.

QDA Miner's WordStat tool is a module used for quantitative content analysis and for text mining (Provalis Research, n.d.). the researcher employed WordStat for mining the curriculum documents' text for five keywords from the Revised Blooms's Taxonomy (Anderson,

et. al., 2001) of the cognitive process dimension: *remembering, understanding, applying, analyzing, evaluating, and creating*. This taxonomy categorizes learning processes according to both form and level of learning. *Remembering* as a form of learning process is categorized as the lowest level, followed in order by *understanding, applying, analyzing, evaluating, and creating* (Anderson, et. al., 2001). With this study's focus on curriculum as part of Tennessee's accountability policies, the hypothesis was that teachers with a greater number and/or higher cognitive level of standards would be influenced to a greater extent by the curriculum component of accountability. Each curriculum document was mined by frequency of all keywords in combination. Each document was then mined again by frequency of only one keyword, *creating*, since this is the highest level of the Revised Bloom's Taxonomy. The text mining for frequency of all keywords in combination resulted in eighth grade social studies having the highest frequency. The text mining for frequency of the keyword *creating* resulted in sixth grade science having the highest frequency. Based on these frequencies, the researcher requested interview volunteers from teachers of eighth grade social studies (436 total keywords as found by the text mining) and sixth grade science (30 frequency counts with the keyword *creating* as found by the text mining). The hypothesis that teachers with the greatest number of curriculum standards and the highest cognitive level of curriculum standards are most influenced by the curriculum portion of the state's accountability policy was supported by the interview data as detailed in the qualitative analysis section in Chapter 4.

Quantitative Data Collection

This mixed-methods study used a QUAN/QUAL design. Tashakkori and Teddlie (2003) wrote that mixed methods research appears to be superior to single approach design in three areas: it can answer research questions other methodologies cannot, it provides for stronger

inferences, and it provides opportunity for presenting greater diversity of divergent views (p. 15). For these purposes the researcher chose to use mixed methods in this study.

Accountability Policies Stressors and Supports Questionnaire

The first research question of this QUAN/QUAL study was quantitative and involved the use of the Accountability Policies Stressors and Supports Questionnaire (Berryhill, Linney, & Fromewick, 2009)(see Appendix B). Permission to use this instrument from its creator, Dr. Joseph Berryhill, was received via e-mail (see Appendix C). The 24-item questionnaire elicits responses regarding teachers' extent of support or stress from a particular accountability policy, in this case, the curriculum standards they are mandated to teach. The measure uses a 6-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

All questionnaires were completed on paper. Potential faulty data was avoided by first asking teachers to circle the grade-levels and subject matters they taught. The only options to circle were the grade levels and subjects the researcher was sampling. Only those teachers in the target population (i.e. middle school TCAP-tested subject teachers) then completed the questionnaire.

Again, after completing the questionnaire, sixth grade science and eighth grade teacher volunteers for interviews were solicited with another paper that was turned in separately from the questionnaires to ensure confidentiality of participants' questionnaire data. Volunteers were contacted for scheduling interviews using the contact information provided after the completion of phase one.

Validity and Reliability of the Accountability Policies Stressors and Supports

Questionnaire

Berryhill, Linney, and Fromewick (2009) asserted in their publication of the Accountability Policies Stressors and Supports Questionnaire that the questionnaire was created because of the lack of quantitative measures for teachers' attitudes toward accountability policies. The researcher concurs with this assertion as this was the only instrument that the researcher was able to find for this purpose after following the guidelines for searching for an instrument suggested by Creswell (2008), as well as following the guidance of a University of Tennessee librarian. When choosing an instrument for a study, one must consider the instrument's validity and reliability. "Validity can be thought of as the larger, more encompassing term when you assess the choice of an instrument" (Creswell, 2008, p. 169). Reliability refers to the consistency of scores from an instrument, and in this way is inseparable from validity. Scores that are unreliable will also be invalid. However, validity goes beyond reliability in that it includes consideration of the appropriateness of the selected instrument for the study and, in general, for gathering data on the intended area of interest. In the article, Berryhill and associates did not address the validity of the Accountability Policies Stressors and Supports questionnaire by itself, though they did perform a factor analysis on the items for the purpose of testing the model referred to in the next paragraph. Though this instrument, ideally, would have validity information provided, because of the lack of any other quantitative measure and because the items on the questionnaire closely align with what the researcher has referred to as teacher support for a policy, the researcher contends that this instrument is a good choice for this study.

Berryhill et al. (2009) did address reliability in the publication by pilot-testing the instrument, which had originally been developed through the work of Berryhill's dissertation, with four elementary teachers from a different district prior to being used for the published study. Data were collected that were then used to test a causal path model concerning teacher support for policies and teacher burnout. That model is not the focus of this study, and hence, was not tested for accuracy. The analysis of the data collected from the questionnaire showed an alpha internal consistency coefficient of .80. In most social science research, a reliability rating of .75 or higher is considered acceptable (Creswell, 2008). When an individual's scores on a measurement such as this questionnaire are reliable, the participant has completed the items at the beginning as s/he has at the end (Creswell, 2008). An example pertinent to this instrument might be an individual who agreed with the statement about curriculum mandates resulting in support from parents would later disagree with the statement about curriculum mandates resulting in pressure from parents.

Qualitative Data Collection

This study used interviews for qualitative data collection. The interview protocol was developed with guidance from Bandura's self-efficacy theory (1977). The interviews answered research question two: What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy?

Interviews

Interviews for this study were conducted after receiving written consent of the person being interviewed and after all protocol was approved by the University of Tennessee's

Institutional Review Board. Interview participants were assured confidentiality. All interviews were recorded digitally and then transcribed verbatim for analysis.

The purpose of conducting interviews in this particular study followed Patton's (2002) guidance of using interviews to enter the perspective of those being interviewed. The researcher wanted to find out how curriculum policy influences teachers' self-efficacy. The decision to use interviews and then analyze the data using self-efficacy theory instead of using a self-efficacy measurement tool, of which several exist, was based on two reasons.

The first reason for choosing to employ interviews involves the argument of researchers within the field of self-efficacy concerning these tools. As noted in Chapter Two, the literature on teacher efficacy and teacher self-efficacy has overlapped due to the similarity of meanings and the almost simultaneous introduction of the two constructs. As a result of this overlap in literature, there also has been an overlap in tools constructed to measure teacher efficacy and teacher self-efficacy. Though the difference in meaning between the two terms is slight, some researchers believe it is enough to possibly confound data obtained using them (Dellinger, Bobbett, Olivier, & Ellett, 2008).

A second reason for choosing interviews is related to the first. While reviewing the literature, the researcher decided the data she wanted to gain more closely aligned with the original meaning of Bandura's self-efficacy theory, before it became confused with teacher efficacy. Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3) or one's belief that s/he is capable of accomplishing a task with a specific level of quality. Bandura further clarified self-efficacy as not being a character trait of an individual, but rather a system of beliefs held in context. The key word in this clarification is context. None of the tools currently in use for

measuring self-efficacy adequately include the context of accountability policies, which this study examines exclusively.

In this study, the researcher interviewed 14 Tennessee teachers teaching sixth grade science or eighth grade social studies using semi-structured interviews (interview protocol in Appendix D). Each participant's grade-level and subject matter was used for both interview questioning and as a check against what each participant shared with me during the interview. The researcher designed the interview questions both to reflect the theory employed for analyzing the data and to align with Patton's (1990) guidelines for asking good questions during interviews. Patton classifies interview questions into six types. The types are experience/behavior, opinion/value, feeling, knowledge, sensory, and background/demographic questions (see Table 1). This helped

Table 1

Interview Question Analysis

Question No.	Source of Self-Efficacy (Theory)	Type of Interview Question
1	Mastery Experience (ME)	Experience/Behavior and Knowledge (E/B, K)
2	Physiological Arousal (PA)	Opinion/Value and Knowledge (O/V, K)
3	Vicarious Experience (VE)	Knowledge (K)
4	Verbal Persuasion (VP)	Feeling (F)
5	Mastery Experience (ME)	Knowledge and Sensory (K, S)
6-8		Background/Demographic

the researcher to design interview questions that would answer the research question and lead to varied information from respondents in reference to Patton's guidelines.

Complementarity of Data Collection Methods

A mix of qualitative and quantitative methods were used in this study for the purpose of adding to the inferential power of the study. The Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) allowed data to be collected and analyzed using descriptive statistics. The large amounts of data collected increased the study's external validity, or

generalizability. Teacher interview data, triangulated with document analysis, allowed for in-depth data collection in regard to the theory employed, increasing the quality and rigor of the study.

The descriptions of this study's multiple sources of data and evidence which follow were used specifically to help combat some of the common criticisms for qualitative research in regard to a lack of methods for verifying a study's reliability and validity, referred to as dependability and credibility/transferability respectively in qualitative research (Anfara et al., 2002). Anfara and colleagues, in their suggestions for assessing qualitative research, contend that "each data source provides corroborative evidence to verify information obtained by other methods" (p. 33).

Though self-efficacy was one of three theories employed during the development of the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009), it was not the main focus. This stood to jeopardize the external validity of the findings reached with this study. By using interviews to explore teachers' perceptions of how curriculum policy influenced them and then analyzing that data using self-efficacy theory, thick, rich descriptions of this influence were provided about self-efficacy specifically, increasing the study's transferability. Further, document analysis of curricula provided triangulation of the interview data and lent credibility to the overall study, though both the questionnaire and the interviews were limited in that they provided only self-reported data. Finally, the purposive sampling strategies employed also helped achieve transferability for the study.

Another suggestion for assessing qualitative research involves a process called code mapping (Anfara et al., 2002). In code mapping, a researcher attempts to make his/her thought processes during the data analysis phase of qualitative data more public. Since the qualitative

data in this study were analyzed using self-efficacy theory, my initial codes for the interview data involved which source of self-efficacy (mastery experience, physiological arousal, vicarious experience, or verbal persuasion) was being influenced. This initial code mapping served the purpose of dividing the data into manageable pieces. While evaluating the categorized data, the researcher was able to generate additional categories and findings based on the patterns found within the data. Upon the third iteration of analysis, these findings were applied to the research question: What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy? The three iterations of teacher interview data analysis are represented on the following code map.

Table 2

Codes Organized and Applied to the Research Question through Three Iterations (to be read from the bottom up)

Code Mapping for Research Question 2	
(What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy?)	
Third Iteration: Application to Research Question	
Self-efficacy Sources - Positive Influence	Self-efficacy Sources - Negative Influence
Physiological Arousal (find value in the curriculum)	Physiological Arousal (frustration, stress)
Mastery Experience (success with individual lessons, highly-skilled in instructional strategies)	Mastery Experience (unsuccessful covering entire curriculum satisfactorily)
Verbal Persuasion (much support, limited affirmations – primarily from students)	Verbal Persuasion (limited affirmations)
Vicarious Experience (very limited)	Vicarious Experience (very limited)

Second Iteration: Pattern Variables/Additional Findings

1a Resources and support come mostly from colleagues and administrators

Table 2 Continued

- 1b Affirmations are scarce, but exist from parents, colleagues, and administrators
 1b Affirmations come primarily from students
 2a Most teachers expressed frustration over covering all standards within time allotted
 2b Use of several instructional strategies in a given lesson
 2b Use of student interest and learning styles to make lessons engaging and relevant
 3a Parts of curriculum are relevant and important
 3b Parts of curriculum are repetitive, irrelevant, or too difficult
 3c How teachers decide what is valuable in the curriculum
 4a Most teachers do not have vicarious experiences
 4b A few teachers have either a mentor or a supportive group of colleagues
 4c A few teachers had a role model of either a good or bad teacher from their past

First Iteration: Initial Codes Based on Four Major Sources of Self-efficacy

Verbal Persuasion	Mastery Experience	Physiological Arousal	Vicarious Experience
1a Resource and support/district	2a Building-level time constraints	3a Relevance in the curriculum	4a No vicarious experience
1a Resource and support/administration	2a Time shortage	3a Parts of curriculum hold students' interest	4b Mentor teacher, supportive group of colleagues
1a Resource and support/colleagues	2a Great number of standards	3a Parts of curriculum are important	4c Role model for good or bad teacher, but not for teaching assigned curriculum
1a Evaluation process	2a Need to cover base knowledge for many standards	3a Parts of curriculum are heavily tested	
1b Affirmations from colleagues	2a Broad scope of standards	3b Parts of curriculum are repetitive from previous grades	
1b Affirmations from students	2a Repetition of many standards from previous grades	3b Parts of curriculum are irrelevant	
1b Affirmations from administration	2a Lost instructional time	3b Part of curriculum is too difficult	
1b Previous scores	2a Challenging depth of standards	3b Parts of curriculum are not heavily tested	
1b Comments from parents	2a Have to also teach test-taking strategies	3c I cover what I'm supposed to	
1b "Favorite class"	2a I don't have an issue with it	3c I cover what's assessed	

Table 2 Continued

1b Kids' interest	2a Have to be very efficient with your time	3c I cover what the kids like
1b Student feedback	2b Have students analyze	3c I cover what's important
1b Student-driven accountability	2b Have students predict	3c I cover what will be applicable to kids' everyday lives
	2b Have students use context clues	
	2b Have students use academic vocabulary	
	2b Class discussions	
	2b Compare/contrast activities	
	2b Have students analyze for causes and consequences	
	2b Activating strategies	
	2b Objective-based lessons	
	2b Note-taking	
	2b Inter-connected lesson plans	
	2b Visual aids	
	2b Use of technology	
	2b Have students draw/label	
	2b Hands-on activities	
	2b Group work	
	2b Have students identify text features	
	2b Have students create cartoons	
	2b Have students evaluate peers' work	

Table 2 Continued

2b Use graphic organizers
2b Use pair-shares
2b Provide examples
2b Have students test theories/hypotheses
2b Have students create structures
2b Have students self-evaluate their work
2b Have students create blueprints
2b Provide 2-dimensional drawings of 3-dimensional concepts
2b Test prep
2b Kinesthetic learning
2b Provide opportunities for review
2b Provide real-world examples of applicability
2b Teacher demonstrations
2b Teacher modeling
2b Use of mnemonic devices
2b Providing opportunities to explore/experiment

Data Analysis

Analysis for this mixed methods study took place in several steps. The first step was to collect the curriculum documents associated with TCAP-tested subjects in grades six through eight. The analysis of these documents was conducted using QDA Miner's (Provalis Research, n.d.) WordStat tool to determine both the number of standards in each curriculum document and the level of those standards. This analysis allowed the researcher to decide which teachers would presumably be most influenced by current curriculum policy and would thus be purposefully sampled for interviews. Second, quantitative data from the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) was collected. The next step was soliciting and conducting interviews. Finally, the data from both the questionnaire and the interviews were analyzed.

Analysis of Quantitative Data

Teachers' responses on the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) were collected. The analysis of these data answered the first research question: To what extent do middle grades teachers in three east Tennessee districts (TCAP-tested subjects) support the curriculum component of state accountability policies?

The responses of the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) were analyzed for descriptive statistics. Descriptive statistics help organize and summarize the data in a study for easier understanding (Coladarci, Cobb, Minium, & Clarke, 2004). Mean scores and standard deviations from the results were determined using SPSS statistical software and reported. Last, comparisons were made amongst differing grades, subjects, and years of experience. Prior to conducting interviews, analysis of Tennessee curricula for tested subjects grades 6-8 for number and level of standards was performed after

locating the curricula on the Tennessee Department of Education's website. Document analysis of these curricula was accomplished using the Revised Bloom's Taxonomy (Anderson, Krathwohl et. al, 2001) as a guide. The researcher downloaded the documents into QDA Miner (Provalis Research, n.d.) and used the WordStat tool to identify how many standards in each curriculum would be classified into each of the Revised Bloom's Taxonomy categories. The researcher also completed a simple count of the number of standards in each curriculum. At the beginning of each interview, the researcher provided a copy of the teacher's standards. The number and overall level in reference to Bloom's Taxonomy of each teacher's curriculum was incorporated into the interview questions when appropriate. The hypothesis was that higher numbers or levels of standards to cover might influence teachers more so than fewer or lower standards because of the additional demands on teacher time and expertise necessary to cover more or higher standards. This hypothesis stems in part from the structure of the Revised Bloom's Taxonomy which suggests that higher forms of learning in a particular area are not possible (or at least not advised to address) without the lower forms having been established.

Analysis of Qualitative Data

Analysis of the quantitative data established the extent of support middle grades teachers in three east Tennessee districts (TCAP-tested subjects) have for the curriculum component of the state's accountability policies. That left the question as to if and how teachers perceived curriculum policy to influence their self-efficacy. The qualitative data, teacher interviews, were used to answer the remaining question.

Before analysis, each teacher interview was transcribed from recordings verbatim. Coding was used per Maxwell's suggestion for categorizing data (2005). Coding aided in developing the theoretical concepts behind the study. For example, since self-efficacy is a

construct with four distinct aspects, data that fit within one specific aspect would be coded as such. All data that fit with one or more of the four aspects of self-efficacy, once coded, were categorized. Data that did not fit neatly into any of the four codings were then categorized. Developed categories then were used to examine the influence of curriculum policy on teachers, specifically analyzing the data to explore the influence on teachers' self-efficacy.

Though interviews were recorded, the researcher also took notes during all interviews. Notes were kept in a consistent format from interview to interview through the use of a matrix of interview questions and components of self-efficacy upon which the notes were taken. Shortened responses were written into the appropriate boxes. These notes served as the starting point for initial coding and data categorization, with transcriptions providing the specific words of the participants. Data that did not fall into a component of self-efficacy were used in the development of additional categories. Finally, these data were used to answer the second research question: What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy?

Conclusion

The literature review provided in Chapter Two outlined the rationale behind the mixed-methods design of this study. Research question one, which asked teachers in three east Tennessee districts (TCAP-tested subjects, grades 6-8) about the extent of support for the curriculum component of the state's accountability policy, helped determine if curriculum policy in Tennessee is soliciting teacher support. The second question, which explored Tennessee sixth grade science and eighth grade social studies teachers' perceptions about the policy's influence on their self-efficacy, served to enhance the existing connection in the literature between teacher

self-efficacy and successful policy implementations. If quantitative measures of teacher support for policy are to continue to be pursued by researchers, self-efficacy would be a worthy addition as it holds a relationship with many variables of interest to education researchers, including student achievement. The information resulting from the second research question could serve as a starting point concerning how to incorporate self-efficacy into accountability support measurement tools more so than is currently evident in the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009).

CHAPTER FOUR

ANALYSIS AND FINDINGS

This mixed-methods sequential QUAN/QUAL study investigated the extent to which middle grades, TCAP-tested subjects teachers in three east Tennessee districts support the curriculum component of state accountability policies. In addition, this research explored teachers' perceptions of accountability policy influence on self-efficacy. Quantitative data were collected using the Accountability Policies Supports and Stressors Questionnaire (Berryhill et al., 2009) and qualitative data were collected from interviews with sixth grade science teachers and eighth grade social studies teachers. Demographic questions added to the Accountability Policies Supports and Stressors Questionnaire and responses to the interview protocol were analyzed. Document analysis provided the framework for selecting sixth grade science teachers and eighth grade social studies teachers for interviews as discussed in Chapter 3.

In this chapter, an analysis of data responding to the two research questions concerning teachers' policy support and perceptions of how policy influences self-efficacy is presented. These data were collected in fifteen schools from three school districts in Tennessee. Using the Accountability Policies Supports and Stressors Questionnaire, sixth through eighth grade TCAP-tested subject teachers' support of the curriculum component of state accountability policies was measured.

This chapter includes the response rate of the questionnaires, mean scores and standard deviations of the questionnaire data, analysis of demographic data, disaggregation of questionnaire data by item and demographic, and analyses of interview data.

Quantitative Data

Participation Response Rate

Leadership of school districts within close proximity to the supervising university and within which the researcher had been provided a gateway to the district through an outside party were asked to participate in the study. Three school districts agreed. Of those districts, 15 out of 27 (56%) schools agreed to participate. Of 315 surveys distributed, 189 completed surveys were returned for a response rate of 60%. The researcher administered the questionnaires in 11 of the 15 schools. Principals requested that school personnel administer the questionnaire in the remaining four schools. Nearly three-fourths (71%) of the non-participants came from the schools where the researcher was not provided an opportunity to discuss the study with teachers and administer the questionnaire in person. Response rates were lower in these four schools. The response rate of 60% was disaggregated by the three participating districts: District 1 at 65%, District 2 at 53%, and District 3 at 60%.

Demographic Data Summary

The characteristics provided by the demographic questions included on the questionnaire revealed the means of the participating teachers in terms of subject taught, grade taught, and years of experience. Frequencies and percentages for each demographic variable are found in Table 3. Findings are presented by participating district and by all districts combined. Reading and language arts are frequently assigned different teachers despite being assessed with one TCAP test. Thus, reading and language arts may appear overrepresented in Table 3. Demographic differences seemed to be distributed as expected with the exception of an abundance of teachers with 0-4 years of experience in their current subject and grade.

Table 3

Demographic Data Summary in Percentages and Disaggregated by District

Demographic Data Summary in Percentages	Total (n=189)	District 1 (n=42)	District 2 (n=25)	District 3 (n=122)
Subject Taught				
Math (n=40)	21.2	31.0	16.0	18.9
Reading/Lang. Arts (n=72)	38.1	31.0	44.0	39.3
Science (n=33)	17.5	17.0	16.0	18.0
Social Studies (n=32)	16.9	17.0	24.0	15.6
Multiple Subjects (n=9)	4.8	4.8	0	5.7
No Response (n=3)	1.6	0	0	2.5
Grade Taught				
6 th Grade (n=73)	38.6	28.6	48.0	40.2
7 th Grade (n=40)	21.2	9.5	20.0	25.4
8 th Grade (n=42)	22.2	14.3	20.0	25.4
Multiple Grades (n=27)	14.3	47.6	8.0	4.1
No Response (n=7)	3.7	0	4.0	4.9
Total Years Teaching Experience				
0-4 Years (n=43)	22.8	14.3	20.0	26.2
5-10 Years (n=49)	25.9	31.0	48.0	19.7
11-19 Years (n=45)	23.8	31.0	16.0	23.0
20+ Years (n=44)	23.3	23.8	12.0	25.4
No Response (n=8)	4.2	0	4.0	5.7
Years Teaching in Current Subject/Grade				
0-4 Years (n=88)	46.6	45.2	48.0	46.7
5-10 Years (n=40)	21.2	26.2	32.0	17.2
11-19 Years (n=31)	16.4	21.4	8.0	16.4
20+ Years (n=23)	12.2	7.1	8.0	14.8
No Response (n=7)	3.7	0	4.0	4.9

Analysis and Findings for Research Question One: Accountability Policies Stressors and Supports Questionnaire

This section examines data analysis and findings through the lens of research question one: To what extent do middle grades, TCAP-tested subjects teachers in three east Tennessee districts support the curriculum component of state accountability policies? Data were collected from participants using paper copies of the Accountability Policies Stressors and Supports Questionnaire that included demographic questions. Demographics data and results of the questionnaire were analyzed using SPSS version 20. The Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009), a Likert-style measurement tool, was used to measure teachers' support of the curriculum component of the state's accountability policies. While the authors of the instrument did not provide details of scoring, either through personal communication or through publication, a scoring method was determined in consultation with the University of Tennessee statistical support staff in the Office of Informational Technology. The questionnaire measures perceptions of both stressors and supports of accountability policies with stressors and supports viewed as opposite ends of a spectrum. Items scoring high in stress would translate as low support and vice versa. Thus, the questions referring to stress were reverse coded in SPSS 20 and a means of means calculated, resulting in one score, labeled as the teacher policy support score. On a scale of 1 (strongly disagree) to 6 (strongly agree), the mean score for teacher policy support as determined using SPSS 20 for all three participating districts was low at 2.68 (SD=.68), well below the range midpoint of 3.5. Item response means with standard deviations can be found in Table 4 and can be found in a graph delineated by district in Figure 3.

Table 4

Accountability Policies Stressors and Supports Questionnaire Item Response Summary, All Schools

Questionnaire Item (all items have the stem below)		Mean (n=189)	Standard Deviation
For me, the mandated curriculum portion of Tennessee's accountability policies to increase student academic performance:			
1.	Result in my getting more support from the state	2.83	1.20
2.	Result in my getting more support from parents	2.43	1.15
3.	Result in my getting more support from the school district	3.57	1.25
4.	Result in my getting more support from my supervisor	4.04	1.23
5.	Result in my getting more support from the public	2.43	1.08
6.	Result in more pressure on me from the public *	2.43	1.24
7.	Result in more pressure on me from my supervisor *	2.49	1.12
8.	Result in more pressure on me from the state *	1.88	1.06
9.	Result in more pressure on me from parents *	3.01	1.22
10.	Result in more pressure on me from my school district *	1.97	1.03
11.	Make me feel like my job performance is being fairly evaluated by the public	2.44	1.17
12.	Make me feel like my job performance is being fairly evaluated by my supervisor	3.54	1.19
13.	Make me feel like my job performance is being fairly evaluated by lawmakers	2.14	1.26
14.	Make me feel like my job performance is being fairly evaluated by my school district	3.01	1.27
15.	Help me focus more on what I should be doing	3.40	1.49
16.	Make me choose between what I think children need and what the state says I should do *	2.48	1.38
17.	Help me more effectively impart knowledge	3.05	1.20
18.	Result in standards that make it difficult to teach students who have different abilities *	2.63	1.26
19.	Overall put more stress in my job *	1.95	1.17
20.	Overall ease the tasks I have in teaching	2.32	1.23
21.	Overall provide more support for me in my efforts to educate students	2.78	1.22
22.	Overall add a lot of burdens to my job *	2.32	1.26
23.	Make me feel the state is helping me improve students' academic performance	2.69	1.22
24.	Set standards that just are not reachable for all students *	2.68	1.40

Note. Reprinted with permission from "The Effects of Education Accountability on Teachers: Are Policies too Stress-provoking for their Own Good?" by J. Berryhill, J.A. Linney, and J. Fromewick, 2009, *International Journal of Education Policy and Leadership*, 4(5), 1-14.

Note. Items with * were reverse coded in SPSS for scoring consistency as detailed in text.

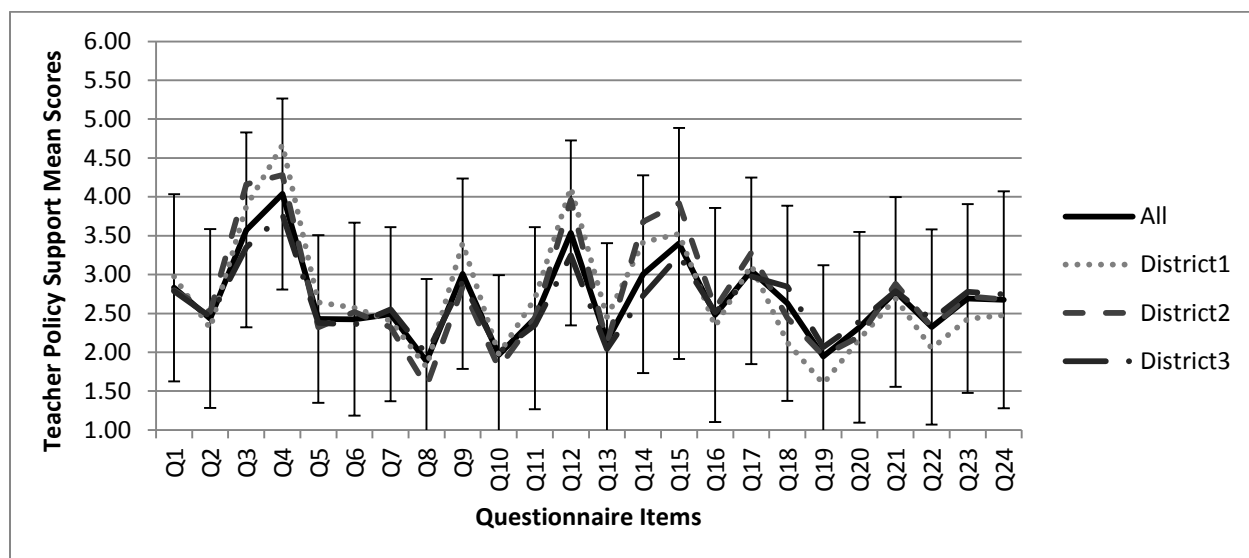


Figure 3. Teacher policy support mean scores with standard deviation bars.

Upon examining the questionnaire item response means, two sets of items will be discussed in further detail. The first set, *support by stakeholder*, includes the first 14 items of the questionnaire all dealing with teachers' perceptions about accountability policy, addressing how well the policy allows teachers to garner support from and feel appropriately evaluated by specific stakeholders (i.e., supervisors, parents, the school district, the state, the public, and lawmakers). A second set of items, labeled *policy support*, are based on a factor analysis conducted by the authors of the questionnaire (Berryhill et al., 2009). The *policy support* factor included items 17, 21, and 23 and closely mirrored *teacher support*, as specified in Chapter Two of this study, a generic term that deals with teachers' positive attitudes toward policy as mediated by three constructs from the literature: teacher self-efficacy, role (also referred to as voice), and burnout. *Teacher support* also includes the values of teachers and their general sense of whether policies are moving students in the "right" direction in relation to those values.

A possible relationship was found from the *support by stakeholder* items. Item analysis uncovered that the further removed the teacher is from the stakeholder, the less support the teacher feels in reference to the policy. For example, higher support scores were reported when teachers were asked about parents, school districts, and supervisors. Support scores were lower when teachers were asked about the public, the state, and lawmakers. However, no factor analysis or principal components analysis was performed on these items; thus, these findings should be viewed with caution. This potential inverse relationship between the distance of a stakeholder from the teacher and the support felt by the teacher, though not statistically significant, is a finding that warrants further research. A graph illustrating responses to the *support by stakeholder* items by all districts and by individual districts is found in Figure 4.

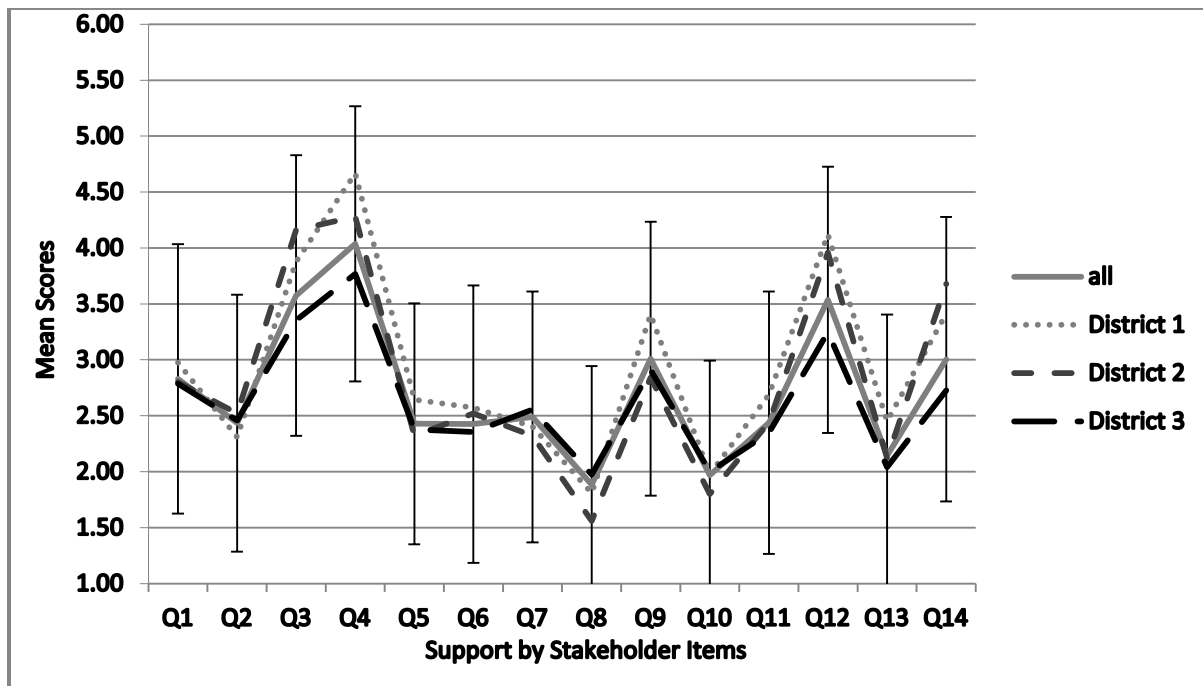


Figure 4. Response means with standard deviation bars for support by stakeholder items.

The second set of items, *policy support*, all with low mean responses indicated that teachers in the participating districts perceived that the curriculum component of Tennessee's

accountability policy does not support their efforts in educating children, does not help them more effectively impart knowledge, and does not make them feel as if students' academic performance will be improved. Figure 5 illustrates mean responses by all districts and by individual districts to these items.

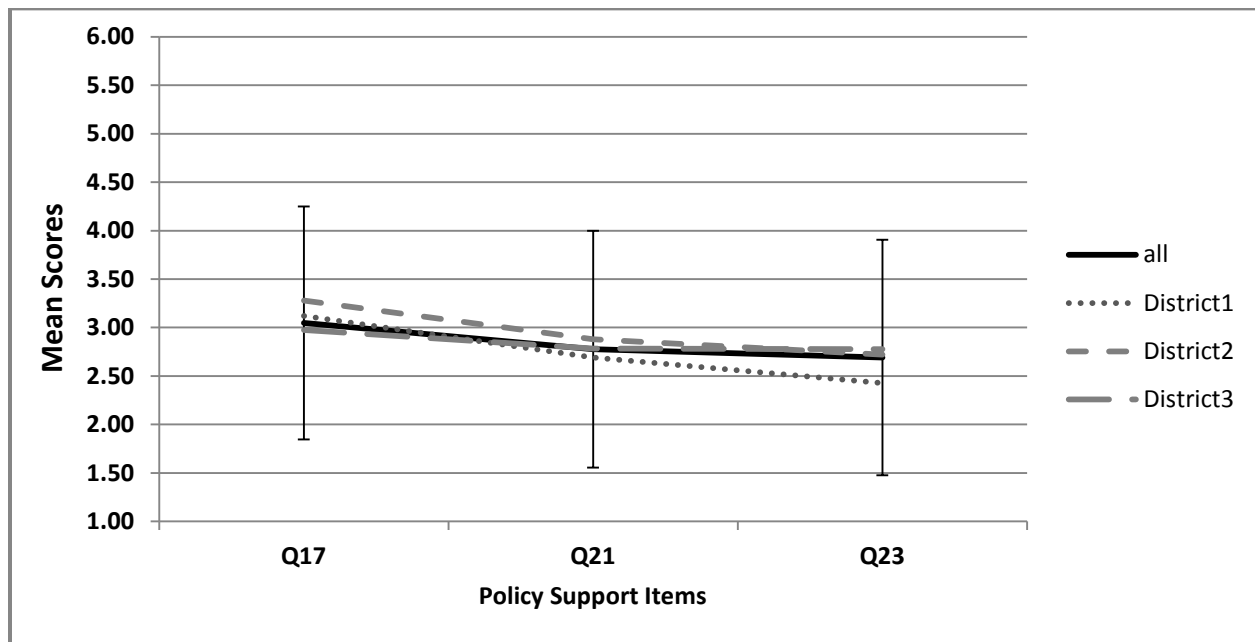


Figure 5. Mean scores with standard deviation bars for policy support items.

Teachers with 20 or more years of total teaching experience and teaching experience in their current placement perceived lower support than any of the other groups. A disaggregation of response means grouped by demographic data can be found in Table 5. Some respondents indicated more than one demographic item due to teaching multiple subjects and/or grades or chose not to answer demographic questions. Those responses were not included in Table 5.

Table 5

Mean Scores of Accountability Policies Stressors and Supports Questionnaire by Demographic

Demographic	Total		District 1		District 2		District 3	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Math (N=40)	2.69	0.63	2.72	0.62	2.80	0.76	2.66	0.64
Reading/LA (N=72)	2.72	0.71	2.73	0.86	2.83	0.79	2.69	0.66
Science (N=33)	2.74	0.62	2.64	0.50	3.20	0.49	2.70	0.66
Social Studies (N=32)	2.55	0.78	2.83	0.91	2.33	0.54	2.52	0.90
6 th Grade (N=73)	2.69	0.68	3.01	0.57	2.56	0.69	2.65	0.69
7 th Grade (N=40)	2.56	0.80	3.26	0.91	2.63	0.90	2.46	0.75
8 th Grade (N=42)	2.75	0.55	2.53	0.56	2.98	0.52	2.76	0.55
0-4 Total Years Experience (N=43)	2.84	0.61	2.99	0.41	3.17	0.84	2.76	0.60
5-10 Total Years Experience (N=49)	2.68	0.76	2.81	0.76	2.84	0.49	2.57	0.86
11-19 Total Years Experience (N=45)	2.73	0.64	2.70	0.75	2.61	1.02	2.75	0.55
20+ Total Years Experience (N=44)	2.49	0.70	2.67	0.71	2.13	0.71	2.46	0.69
0-4 Years Experience in Current Grade/Subject (N=88)	2.74	0.70	2.69	0.61	3.04	0.73	2.70	0.72
5-10 Years Experience in Current Grade/Subject (N=40)	2.71	0.64	2.81	0.68	2.77	0.48	2.63	0.69
11-19 Years Experience in Current Grade/Subject (N=31)	2.68	0.71	2.75	0.97	1.85	0.50	2.74	0.55
20+ Years Experience in Current Grade/Subject (N=23)	2.41	0.64	2.81	0.75	2.23	0.97	2.37	0.61

Summary of Quantitative Analysis

Analysis of data from teacher respondents in three districts in east Tennessee indicated that teachers have low support for the curriculum component of the state's accountability policies. A possible relationship in the data concerning teacher support in terms of stakeholders was found, showing that the further the stakeholder was from the teacher, the lower the mean for that item. Teachers responded that the policy does not support their efforts in educating children, does not help them more effectively impart knowledge, and does not make them feel as if students' academic performance will be improved. They perceived that the accountability policy adds stress to their job, adds burdens to their job, and makes them choose between what they think children need and what the state says they should do.

Demographic data only played a small role in respondents' support scores. Teachers with 20 or more years of teaching experience, both in total and in their current placement, responded with the lowest scores.

Qualitative Data

To achieve the purpose of this study, qualitative data were collected through teacher interviews. The interviews served as an exploration into teachers' self-efficacy in relation to the curricula they teach and answered the second research question: What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy? The criteria for soliciting interview volunteers were developed after an analysis of state curriculum documents from grades six through eight revealed that sixth grade science had the highest order thinking standards according to the Revised Bloom's Taxonomy (Anderson et al., 2001) and eighth grade social studies had the overall highest number of standards. The rationale was that middle school

teachers in these two subject areas would be most highly impacted by their curricula and were purposefully selected for exploration into how curriculum influences teachers.

To understand the teacher perspective, fourteen teachers were interviewed. To ensure confidentiality, teachers were identified by district (1, 2, or 3) and by letter (i.e., Teacher 1A, 1B, 1C, 1D, 1E, 1F, 2A, 2B, 3A, 3B, 3C, 3D, 3E, and 3F). Demographic information included total years of teaching experience, years of teaching experience in the current subject and grade, and how many other teachers in the building taught the same grade and subject as the interviewee. Of the 14 teachers, eight taught sixth grade science and six taught eighth grade social studies. Two teachers had 0-4 years total teaching experience, five had 5-10 years, three had 11-19 years, and four had 20+ years. Six teachers had 0-4 years experience in their current subject and grade, three had 5-10 years, five had 11-19 years, and none of the teachers interviewed had 20+ years. Almost half of the teachers interviewed (6) served as the only person in their building dedicated to their subject and grade. The other eight teachers each had at least one other person in the building teaching the same grade and subject. Three of the interviewees had one other teacher, one had two other teachers, and four had three other teachers in their building teaching the same grade and subject. The demographic information for each interview volunteer can be found in Table 6.

Interview data were organized by categories according to Maxwell (2005). Organizational categories for this study were the four sources of self-efficacy theory: verbal persuasion, physiological arousal, vicarious experience, and mastery experience. Organizational categories were established prior to interviews in this study and served as the initial coding of the data. The organizational categories of the four sources of self-efficacy are followed by two additional

findings that developed throughout the analysis, *how* teachers teach versus *what* they teach and a perceived lack of time.

Table 6

Interview Respondents' Demographic Information

Respondent (n=14)	Position	Total Years Experience	Years Experience in Current Placement	Number of Other Teachers in Building with Same Grade and Subject
1A	6 th Science	20+	11-19	0
1B	8 th Social Studies	11-19	11-19	0
1C	6 th Science	0-4	0-4	0
1D	8 th Social Studies	5-10	0-4	0
1E	8 th Social Studies	5-10	5-10	0
1F	6 th Science	5-10	0-4	0
2A	8 th Social Studies	11-19	5-10	1
2B	6 th Science	0-4	0-4	1
3A	8 th Social Studies	5-10	0-4	1
3B	8 th Social Studies	20+	11-19	2
3C	6 th Science	20+	11-19	3
3D	6 th Science	5-10	0-4	3
3E	6 th Science	11-19	11-19	3
3F	6 th Science	20+	5-10	3

Organizational Categories: The Four Sources of Self-efficacy

The semi-structured interview questions (see Appendix D for interview protocol) were formed and data were analyzed through the lens of self-efficacy theory (Bandura, 1977). Self-efficacy, as described by Bandura, is situation-specific and deals with one's feelings about how capable s/he is in performing a task. In this study, the task addressed by the interview questions

was teaching the state standards. The theory posits that self-efficacy has four sources: mastery experience, verbal persuasion, physiological arousal, and vicarious experience. Of these sources, mastery experience holds the most weight in influencing self-efficacy (Bandura, 1977). For that reason, two of the interview questions focused on mastery experience while the other three sources were addressed by one question each.

Verbal persuasion. Verbal persuasion, in general, involves individuals being told by someone deemed credible that they are capable of successfully completing a task. This source's power, however, is limited and is most effective in influencing self-efficacy when it is accompanied by another source or is used as merely a short-term solution (Bandura, 1977). Actual successes experienced, either lived or vicarious, influence self-efficacy to a greater extent than verbal persuasion. In the interviews conducted for this research, teachers were asked what kind of support and affirmations they received in terms of teaching their curricula.

The interview data addressing verbal persuasion were first organized by whom or from where the persuasion came (e.g., colleagues, administrators, TCAP scores, Tennessee Educator Acceleration Model or TEAM evaluation system, parents, students) and then by type (affirmation or support). The responses from teachers concerning verbal persuasion were difficult to categorize as either affirmation or support. Hence, some overlap may be evident. Though support does not fully match the definition of verbal persuasion, it is closely related in that it is information received from someone perceived to be trustworthy concerning one's capability of performing a task. Thus, a discussion of support responses is provided following the discussion of affirmation responses.

Sources of affirmation, as stated, were first organized by whom or from where teachers perceived the persuasion came. All sources were discussed by multiple teachers with one

exception. Only one teacher discussed colleagues saying they would often comment about that teacher's ability to cover the curriculum when viewing student work displayed in the hallway. Parents, administrators, test scores, and TEAM evaluations were all cited by three to four teachers each. Teachers commented that parents conveyed affirming statements to them, such as expressing happiness that their children had been assigned that teacher, or appreciation for information sent home concerning academic progress. TCAP scores served as a source of affirmation for teachers, though this was tempered by one teacher stating that s/he tried not to place a lot of emphasis on TCAP scores and another stating that s/he had experienced having both good and bad scores. The TEAM evaluation system was mentioned by respondents when asked about sources of affirmation. For example, a novice science teacher who provided more detail to this point said:

As a result of the state of Tennessee's TEAM evaluation process, I've also had support from my administration. 'Cause we all strive to be that Level 4, Level 5 teacher and without getting all my evaluations and my surprise evaluation and all that, without getting that constructive feedback, it's really hard to try to grow the kids in the aspect of closing the achievement gaps. (Teacher 2B)

Administrators were cited by four teachers as a source of affirmation. Typical teacher responses included principals telling teachers they were doing a good job, that they had enjoyed observing a lesson, or leaving positive notes for the teacher. Teacher 1D claimed, "You constantly have your principal, well our principal anyway, telling you that you're doing a good job." The implication made by these teachers was that the affirmations from their principals were ongoing and frequent. The affirmations provided an atmosphere of support and encouragement.

Of the 14 interview respondents, eight named students as a source of affirmation. This number was double that of any other source cited. Student feedback appeared to weigh most heavily for teachers when considering affirmations they received about their ability to teach their curricula. Student feedback was discussed by respondents in three ways: positive feedback - about the teacher or class, about the subject matter, and about perceived success on TCAP.

Teachers discussed receiving positive feedback about their teaching or their class in general. Teacher 1A stated, “The kids enjoy it. A lot of them will come in and say, ‘This is my favorite class.’”. Teacher 1F quickly responded to being asked about affirmations with, “student feedback.” Teacher 1E stated:

I’ve had folks approach me and tell me that they loved my class, that they love me as a teacher, and that they couldn’t imagine, ya know, that they would love this class as much as they ended up and so those kinds of things keep me going.

Teacher 1F elaborated by saying that not only had students enjoyed the class activities, but that student scores reflected that enjoyment.

Teacher comments about student affirmations surrounding their subject matter included, “When I see that one develop that love for history, or it finally clicks for them, that’s the best affirmation you can get” (Teacher 1D). Teacher 3C discussed student accountability sheets that are completed by students after unit tests and noted that the student accountability piece was powerful because students could actually see and take pride in their subject matter progress. Teacher 3C went on to say that it, “puts it back on the kids to take responsibility for their learning... They understand that if I’m here to teach, they’re here to learn, and we need to work together on this.” Finally, Teacher 3B commented that, “I guess the biggest reward is when the

kids show an interest and enthusiasm for the subject. I think most every teacher probably feels that way.”

Teachers discussed students’ perceptions of how well they performed on TCAP as a source of affirmation. This student feedback was, like the feedback about the teacher, class, or subject matter, informal and self-reported. Teachers claimed that students had expressed positive feelings after completing a TCAP test by saying they felt like they had done well and that they received exposure to all of the tested material. Teacher 3B expressed experiencing conflict when given this type of student feedback by saying:

I know this sounds really dumb, but after TCAP the kids saying, ‘you taught us well.’

That doesn’t really provide me a reward. It makes me really sad to be honest with you.

But the kids, to be really honest, they want to feel like they know how to do that test.

And so, because it affects their lives, they want to feel like they did well, and that they were well-prepared for the test. I don’t know what that necessarily means. I don’t know that they necessarily walked away with the depth of understanding I could have potentially developed in them, but I feel like I’ve served them in that way.

When responses concerning student feedback as affirmations were separated by demographics, equal numbers of teachers cited students as a source of affirmations between science (four teachers) and social studies (four teachers). The number of other teachers in the building teaching the same grade and subject did not appear to influence responses. Also, years of experience did not appear to influence whether or not students were cited as a form of affirmation with one exception. While only two teacher (14%) had 0-4 years teaching experience, neither named students as a source of affirmation.

Four teachers (29%) did not cite any source of affirmations, only sources of support. Two additional teachers (14%) had only one comment about affirmations received. Even though verbal persuasion is not very powerful as a source for self-efficacy, an interesting fact of the interviews was that so many of the interview respondents made no mention or very little mention of affirmations even after follow-up questioning.

Ten of the 14 interviewees listed at least one source of support for teaching their curricula. All ten named their district, their administrators, and/or their colleagues as a source of support which, as stated earlier, was paired with affirmations when asking teachers about their experiences with the verbal persuasion component of self-efficacy. Though administrators and colleagues were also listed as sources of affirmation, responses regarding support did not include any mention of “cheerleading,” only as someone who could provide constructive feedback or emotional backing.

Teachers’ responses about administrators providing support included, “the principal and vice principal are very supportive” (Teacher 1C), “I’ve had a lot of support from the administration” (Teacher 2B), and “administration...always made things about the students and provided help any time I needed it” (Teacher 3F). Teacher responses indicated that their administrators provided support by maintaining a positive attitude about students, about improving instruction, and about the teaching and learning within the building. Teachers also felt supported when they could approach their administrators and ask for help without feeling demeaned.

Only two teachers cited their districts as a source of support, one naming the district supervisor over that curriculum and one mentioning district-provided training. The supervisor cited was said to have provided support with instructional strategies and curriculum

modification. One teacher cited that the quality of training received in the district helped support teachers.

Half of the teachers interviewed (7) named colleagues as their source of support. Several teachers made comments about receiving support from mentor teachers and support from a good team of teachers. Specific examples included colleagues helping out when needed, providing assistance with planning and time management, providing focus, sharing ideas, and growing together.

The data concerning teachers who named administrators as sources of support were not affected by demographics. However, subject matter did influence whether or not teachers cited colleagues as a source of support. Science teachers named colleagues three times more often than social studies teachers, noting that there typically were more sixth grade teachers in a building than eighth grade teachers. Sixth grade teachers may have an increased likelihood of having a team of teachers teaching the same grade and subject, and perhaps, capable of providing more support.

In summary, only about half of the teachers (57%) interviewed were able to provide more than one comment about affirmations received concerning their ability to teach their curricula. However, when additionally asked about support, that increased to 100%. Overwhelmingly, students were cited most often as a source of affirmation, at least twice the number of mentions regarding parents, administrators, test scores, or evaluations. Administrators and colleagues were cited most often as sources of support. Demographics did not influence how respondents answered, with the exception of science teachers citing colleagues as a source of support more often than social studies teachers.

Physiological arousal. Like verbal persuasion, physiological arousal does not influence self-efficacy as much as vicarious experience or mastery experience, but does contribute.

Physiological arousal, or affective state, is the recognition that general well-being or personality type can play into one's self-efficacy, as well as one's feelings. Examples of positive arousal, or feelings, may include excitement or enthusiasm for performing a task. Negative feelings include fear, anxiety, or stress over a task (Bandura, 1977). To explore teachers' feelings, comfort, and personality in terms of their teaching of their curricula, interviewees were asked what they thought students valued about their curricula. In addition, teachers were asked which standards were most and least valuable to their students, why those standards were most/least valuable, and how they, as teachers, decided which standards were valuable to their students.

The data revealed were organized first by positive then negative responses expressed by teachers about their curricula. The data concerning how teachers' personality might affect their teaching of their curricula and the data concerning how teachers' overall well-being might affect their teaching were addressed.

Overall, teachers had more positive than negative responses concerning their curricula. Teachers seemed to like their curricula, saying:

That's hard because I teach U.S. History and it's hard to really pick something that isn't valuable to them because it's a part, it is a part that builds... I feel like the curriculum as is, as it's conceived, is a good curriculum. (Teacher 3B)

Other teachers made comments like, "I think anything you're learning about the history of America is valuable...Kids need to know how we were built,"(Teacher 1D) and "I think all of it's important 'cause it'll help them understand...because they will use it in some way or another". (Teacher 3C)

When asked why these standards were valuable to their students, teachers talked about standards that seemed relevant and applicable to students' everyday lives, relevant to the topic of the course, and applicable to students' other or future studies. Most of the standards, according to teachers interviewed, were valuable. Teachers also discussed their role in helping students see the applicability, transferability, and importance of the standards. They took this responsibility very seriously and viewed the knowledge contained in the standards as "needed", "beneficial", and "foundational." Teacher 3D noted the importance of standards that, "apply across the curriculum. They're more, not always but a lot of them are more, life applicable as opposed to just straight content." Teacher 1B claimed, "Moral things I guess would be the most beneficial...because you can transpose those from history to everyday life." The notion that the standards could prepare students to think critically was also mentioned with Teacher 1F saying:

If any of them go into engineering or any real-life sciences, they're going to use these things like evaluating new models and how to retest existing data. How to just check and see if what somebody else did was right. I think that's very valuable.

Conversely, when teachers were asked which standards held the least value for their students and why, teachers discussed three things that might cause them to place lower value to certain parts of their curricula. The first reason for describing a portion of the curriculum as having the least value was given by both science and social studies teachers. This concerned standards that had been addressed in previous grades. Teachers claimed spending weeks, sometimes months, on material that students had already been taught. For example, Teacher 3D stated, "interdependence (has low value) just because they've had it every year before they get to me, and they know it so well...It feels like a waste of time." A second reason given for placing low value to parts of the curriculum concerned standards that were not relevant to students'

everyday lives or future successes. This reasoning was discussed by a science teacher who wondered if knowing the phases of the moon would be of benefit to students in their future lives or careers. Several teachers discussed spending time covering minute details in case they appeared on the TCAP test. For example, memorizing the names of the moons for planets other than Earth and memorizing certain dates in American History were deemed trivial by some teachers, but necessary for success on TCAP. A third reason for placing low value on a part of the curriculum came up in science teacher interviews when two teachers talked about one portion (the same portion) of the curriculum being too difficult for their students. In summary, most of the responses were largely the mirror image of the responses from high value, citing irrelevance and lack of applicability as the reasoning for placing low value to parts of the curriculum.

Demographics did not largely influence respondents' positive and negative feelings about the curricula; however, there are some notable points. Social studies teachers were twice as likely to cite the importance of the subject matter as a reason for placing high value to parts of their curricula. Science teachers were six times as likely to name applicability to students' everyday lives as a determinant for why they would place high value to certain parts of their curriculum.

Teachers' overall well-being as part of their physiological arousal can play a part in their self-efficacy. The interview data showed that most of the teachers' well-being had been compromised. Teacher responses indicated confusion about whether their role is that of teacher or test preparer. Interestingly, the responses may be related to role conflict which was one of the three theories used to develop the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) used in the quantitative portion of this study.

Role conflict, originating in organizational stress literature (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), occurs when two or more requirements or pressures are deemed incompatible (Rizzo, House, & Lirtzman, 1970). To carry out one requirement would make complying with another requirement difficult. Lipsky (1980) described role conflict as an operationalization of the phenomena that occurs when policy implementers carry out exosystem policies while working in a microsystem. There are several studies that have related this concept to teachers in the midst of reforms which involve increasing academic standards (Black, 1994; Dunham, 1992; Hatch & Freeman, 1988).

Evidence of what may be role conflict was found in the interview data's complete disconnect between what teachers said was the reasoning behind why some parts of their curricula are more valuable to their students and the reasoning behind how they decided which parts of their curricula were valuable. In short, teachers said standards that were more relevant and applicable to students' everyday lives held the most value, but when asked how they decided what was valuable in their curricula, they cited by the number of questions relating to that standard on the TCAP test.

When teachers were asked how they decided what was valuable to their students from their curricula, many of them mentioned a tool they use, developed by the Tennessee Department of Education, which details how heavily specific standards will be assessed on TCAP. This tool allows teachers to have some idea of how many questions per category will be on TCAP so as to prioritize their content. Teachers discussed feeling like, "...now it's basically making sure they are prepared for those tests so you leave out parts of American History that are probably very important, but you don't think that they are going to be on the test" (Teacher 3A). Teacher 1D stated,

you have to go by your assessed standards because (the standards) have a lot of information that's not assessed...if it's not an assessed standard, then we're basically, we don't cover that. We cover what they're going to be tested over. There are things I wish we could, but we can't.

Teacher 3B provided the only response that seemed to show awareness of any potential role conflict, but not articulated, by so many of the teachers. This teacher's response was lengthy and jumbled, illustrating the teacher's hesitancy to say these things out loud:

I hate to say this. To be honest, I look at the SPIs and I guess I'd say five or six years ago, because of the way things were going in the State, I uhm, I teach to the test. And I just got real tired... I just kind of threw up my hands to be really honest with you and said if this is how you want me to teach, I can teach this way. I know how to teach to a test. It's probably the easiest thing anybody can do... I teach SPIs, but...I don't know how to separate the two. The SPIs and the test are the same in my, so I don't know how to answer that question really. I mean, we call it two separate things because it makes people feel better about what they're doing, but we teach the test. That's what I do...I try to put depth into the conceptual strands that are most going to help the kids understand the stuff they really need to know for the test, or the SPIs whichever you want to call them. To me, they're one in the same. I'm sorry.

As illustrated by the quote above, this question concerning physiological arousal seemed to create discomfort for a few teachers. One respondent expressed having difficulty answering questions about the value of the curriculum by saying, "I have to teach it and so that's what I do." (Teacher 3C)

Seventy-one percent of the teachers interviewed exhibited a disconnect in their responses between why parts of their curriculum are valuable and how they decided. Two teachers (14%) did not mention the test at all in any of their answers. One teacher (7%) consistently cited TCAP throughout his/her answers to this part of the interview protocol. Other answers to this question included student interest, importance of standards in terms of the espoused topic of the course or other/future studies, by applicability to the real world, and by how difficult a standard was/how much that standard influenced other standards.

A total of twelve teachers (86%) cited TCAP as a deciding factor for what is valuable in their curricula with ten of them (71%) exhibiting what may be role conflict. All social studies teachers interviewed cited the TCAP test as a determinant for how they choose what is valuable in their curriculum. Of the four teachers whose interview data did not contain any evidence of potential role conflict, two of them had been teaching less than five years and were the only two interviewed who had taught less than five years.

In summary, teachers in this study generally liked their curricula. Though there were small things they would change, they responded that the majority of material covered in the standards was valuable to their students. Teachers said that they knew the material was valuable because it was relevant, important, and applicable to students' everyday lives. They expressed positive feelings about the content of their curricula and their ability to teach their curricula. The data concerning how teachers' personality might affect their teaching of their curricula and the data concerning how teachers' overall well-being might affect their teaching revealed that some teachers may be experiencing role conflict.

Vicarious experience. Of the four sources of self-efficacy, vicarious experience and mastery experience influence self-efficacy to a greater extent than physiological arousal and

verbal persuasion, with mastery experience having the greatest influence. Vicarious experience, also called modeling, can convince individuals that they are capable, or incapable, of performing a task after observing someone else perform it. As such, modeling influences self-efficacy in two ways: providing knowledge and social comparison. Seeing that someone else is capable of performing a task can increase a person's belief that s/he is capable of performing the task as well (Bandura, 1977). During interviews, teachers were asked if they had a role model in terms of teaching their curriculum. If they did, teachers were then asked how the role model had influenced them.

The data collected from this interview question was organized by how many and which teachers answered yes or no and then by how role models helped the interviewees. Of the 14 teachers, five responded that they did not have a role model. One teacher claimed to not have a role model, but a supportive team of teachers who worked together often. Four teachers responded yes, but after further questioning the researcher determined these four had not understood what had been asked. These four discussed a person who served as a role model for a "good" or "bad" teacher instead of someone who they had witnessed teaching their standards successfully. For example, Teacher 1D claimed a former teacher as a role model for knowing that a teacher should not simply read from the text. Teacher 1E claimed that a former teacher had had "it" and had served as inspiration for this teacher's desire to become an educator. Despite follow-up questioning, ultimately only four teachers discussed having someone whom they had seen being successful in teaching their curricula.

When delineated by demographics, two of the four teachers with role models were new teachers with less than five years of experience. One teacher had five years of experience, and one had more than 20 years of total teaching experience. Three of the four teachers had less than

five years of experience in their current subjects and grades, while the fourth teacher had seven years. All four were science teachers. Three of the four had at least one other person in the building teaching the same grade and subject.

According to teacher responses, role models were helpful to them in the following ways: providing tips on things that work, providing guidance in planning and time/course management, sharing resources and workload, providing knowledge about the curriculum, and providing ideas for motivating students to want to learn the course material. Overall, teachers had very little to tell about their vicarious experiences. Ultimately, the small number of teachers interviewed having witnessed another teacher successfully teaching their standards is concerning as vicarious experience has a strong influence on self-efficacy.

Mastery experience. Mastery experience is the source of self-efficacy with the strongest influence. One's self-efficacy is influenced by past performance. While successes often raise perceptions of capability, failures often lower them. Past failures will more predictably lead to lowered self-efficacy if the failures were not because of a lack of effort. Self-efficacy, then, is positively influenced by one's accomplishments which have developed skills, proven one's ability to persevere, or simply provided a framework of familiarity (Bandura, 1977). During interviews, teachers were asked two questions that were meant to elicit their past perceived performance concerning their teaching of their curricula. Teachers were asked to discuss their capability of covering standards in the time allotted. They were also each asked to name one standard recently taught and tell what the lesson looked like as well as whether anything would be changed if the teacher were to teach the lesson again.

In response to covering standards in the time allotted, Teacher 3B made a statement that seemed to sum up the feelings of many of the teachers interviewed when she said, "I cover the

curriculum, I feel, to a degree that doesn't satisfy me entirely in terms of the depth of understanding." In addition, Teacher 1C replied, "I do not have enough time to cover (the standards)." Teacher 1D stated, "I have to cram a lot in."

However, when asked about their capability of covering the standards in the time allotted, three of the 14 (21%) said they were capable with no problems. An additional two teachers (14%) said they would have been able to cover their standards had it not been for building-level time constraints. Since the teachers interviewed were all science and social studies teachers, some had been granted less instructional time than reading and math teachers. This is a strategy sometimes used by principals or districts to boost the heavily scrutinized Adequate Yearly Progress. Teachers perceived they would have adequately covered the standards had they been granted the same amount of instructional time as math and reading. Overall, a total of five teachers (36%) felt that, outside of building-level time constraints, they were capable of covering their curricula with no problems.

Though an additional five teachers (36%) said they had gotten through all of their curricula before TCAP, these five teachers said they had difficulty in doing so. Four teachers (29%) said they did not have time to cover all of their standards. The three responses given for why teachers were not successful in covering their standards in the time allotted or covered them with difficulty were: the number of standards, loss of instructional time due to inclement weather or assessment/assessment review, and the difficulty/depth of the standards. In total, nine teachers (64%) either did not cover all of their standards in the time allotted or had difficulty doing so without consideration for the building-level time constraints. If those numbers are included as teachers who cited loss of instructional time as a difficulty in covering their curricula, the number rises to eleven teachers (79%).

Teachers commented that they have a great number of standards to cover and social studies teachers particularly wished they were given either a fewer number of standards to cover or additional time in which to cover them. Teachers who discussed the loss of instructional time causing difficulty in covering their standards in the time allotted made reference to time lost to review and assessments and, in some cases, time lost due to inclement weather. Teachers who claimed they had difficulty covering all of their curricula because of the difficulty or depth of the standards said that this could have been due to students lacking base knowledge or a perceived lack of time to teach to the indicated level of understanding for all standards.

Demographics influenced the responses of teachers when asked about their ability to cover their curricula in several ways. First, the responses were influenced by subject matter taught. As stated earlier, interview volunteers were only requested from teachers with the highest number of subject standards (eighth grade social studies) and the highest cognitive level of standards (sixth grade science) to teach in middle-grade, TCAP-tested subjects. Social studies teachers were more likely to cite the number of standards as a difficulty, with all four of the teachers responding in this way being social studies teachers. Science teachers were more likely to cite the depth or difficulty of the standards, with four of the six teachers responding in this way being science teachers. Interestingly, of the three teachers who said they had absolutely no problems covering their curricula, all three were science teachers. Years of experience did not seem to influence the way respondents answered the questions about their ability to cover their curricula in the time allotted.

To reiterate the data from the first interview question about mastery experience, almost 80% of teachers interviewed claimed they had difficulty covering their curricula in the time allotted. All three teachers who did not claim any difficulty were science teachers.

While the first interview question examined mastery experiences focused on the curriculum as a whole, the second targeted teacher experiences with a particular standard. Each teacher was asked to choose a standard recently taught and discuss the lesson for mastery of this standard and changes if the teacher were to teach the lesson again.

When asked about their mastery experiences with a particular standard, all of the teachers chose a standard which they felt successful in teaching. These responses showed teachers had experienced success if not in covering their entire curricula, with at least covering one of the standards. Their responses were especially interesting upon further analysis. Though three of the teachers answered with simply a description of the standard covered, eleven of the 14 teachers provided in-depth answers to this question that allowed further insight into what may have been the groundwork for their successes. Demographics did not influence how respondents answered this question greatly as all teachers interviewed cited a successful experience upon which they could build mastery experience, and thus, self-efficacy.

In summary, though nearly 80% of teachers interviewed did not express great levels of success when discussing their ability to cover their entire curricula, 100% discussed a story of success when asked to tell about their teaching of one particular standard. Of those who had difficulty covering their curricula, the three reasons were the number of standards, loss of instructional time, and the depth of the standards. Social studies teachers were more likely to experience difficulty with the number of standards while science teachers were more likely to experience difficulty with the depth of standards. Overall, it appears as though teachers have instances of daily success to build upon when considering mastery experiences leading to self-efficacy, but most teachers do not exhibit having successful mastery experiences when asked about viewing a year's worth of teaching as a whole.

Additional Findings

To answer research question two, the researcher focused on teacher self-efficacy. However, in the interview analysis additional findings emerged. The rich data supplied by the respondents provided for the following analysis which was verified by triangulation with the document analysis, interview protocol development and initial coding strategies, and the comparisons available between sixth grade science and eighth grade social studies teachers and between novice and experienced teachers.

Time constraints. Teachers felt a lack of time due to instructional time used for review and assessment and a lack of time to cover material not included in the curriculum. Additionally, teachers discussed the number of standards. Particularly eighth grade social studies teachers felt pressure to “cram” standards, and as Teacher 1E said, “It’s not really a pacing issue so much. I think there are just so many.”

Science and social studies teachers expressed difficulty in covering their curriculum due to the number of high cognitive level standards in their curriculum. Teachers talked about not being able to teach some standards until they had also taught a certain level of base knowledge necessary for students to reach the level of understanding indicated by the standard. Teachers acknowledged that they sometimes did not teach a standard to the actual cognitive level. Instead, they covered the related vocabulary terms, checked for basic understanding, and then moved on without providing students with an opportunity to analyze, draw conclusions, evaluate, or create, even if that was the cognitive level called for in the standard. Teachers’ perceptions were that this was done out of necessity to cover the material at least enough for students to perform adequately on the TCAP test. Teacher 1F claimed:

I have enough time to touch on all of them, and I have enough time to go into a couple of them, the way, almost the way I'd like to. But there's just, there's definitely not time to go into depth with all of them so that the children have a really good understanding.

We'll be able to cover some terms. They can kind of understand what you're talking about, but as far as let's watch videos on this, let's do an activity on this, let's do a hands-on thing, let's do this, there's not enough time for that for all of it. Like I said, we get to do that with some units but I have to pick and choose.

On this point, Teacher 1C said:

Going in deep with them, and them grasping everything, probably not. I kind of have to skim a lot...The questions that are kind of the more basic things like kind of the vocabulary part, we can do that pretty well. But then, drawing conclusions about things and analyzing things, we need a lot of time to do that...and they may not grasp that part just because there's not time to stay with that a long time.

Teacher 3B stated, "Well, I've gotten to be much better at it at the sacrifice of depth. I cover the curriculum I feel to a degree that doesn't satisfy me entirely in terms of the depth of understanding." Finally, Teacher 2B commented, "Some of the standards require more cognitive thinking ability, and so with that cognitive ability, if it's not there you have to develop it and then make sure they get the standard."

A few teachers discussed what they thought was missing from their curricula. A couple even went so far as to say they explicitly teach things not in the curriculum because of their personal beliefs about the importance of the material. These teachers seemed aware of and willing to accept any consequences to that action, such as lower test scores or lower evaluation

ratings, in exchange for the personal satisfaction of passing the information along to their students. Teacher 3B claimed:

...and I think these kids are old enough to appreciate it and especially some of the students who are deep thinkers really also miss out a little bit if they don't understand just at least a little bit about the aristocracy during the Renaissance in Europe. Just the briefest amount. Then they can't really understand what America meant to the British. This was a chance for, I mean, that land ownership is such a big deal and I think that that in terms of American history and what I teach, it's not an SPI, but it's such a fundamental part of our fabric and our personality as a nation that I think you kind of miss out on really appreciating the texture of history. The texture and feel of it when you just like cut that off completely.

Teacher 1F said:

...if there is something that I feel is going to benefit them for the rest of their lives, I add it anyway, whether I should or not. Conserving, the three Rs of conservation - I cover that with every single one of my classes because I think we've got one Earth, we need to take care of it. So my personal values, I guess, guide me a little bit as well...

Though several teachers mentioned that instructional time was sometimes lost to review and assessment, Teacher 3B and Teacher 2A discussed this at length. Teacher 2A even thought TCAP should be moved to the end of the school year so as to gain additional instructional time.

Teacher 3B stated:

So you're not just taking the TCAP test and cutting out instructional time. You're sacrificing two solid weeks of reviewing for the TCAP test. That cuts instructional time. And then you are sacrificing, oh I can't even think about how many days where you are

giving standardized testing to measure math skills, to measure reading skills, to measure writing skills, to measure, measure, measure, measure, measure.

These data show that some teaching personalities (i.e., teachers who like to do hands-on learning, teachers who value higher-order/critical thinking skills, teachers who want to go beyond the curriculum, and teachers who do not value assessment of instruction as highly as instruction itself) may perceive mastery experiences differently and be influenced differently concerning their affective state than other teachers, specifically when considering their ability to teach their curricula. Eight out of 14 (57%) teachers talked about information they felt was missing from the curriculum, information they couldn't cover as in-depth as they would like, or too much instructional time used for assessments. Teachers' perception that there is a lack of time to adequately cover their curricula may be influencing their physiological arousal and their mastery experience, and hence their self-efficacy.

Instructional strategy focus. An additional finding came from teacher responses concerning a lesson they had recently taught. Teachers were asked to choose a standard and explain what the lesson looked like. Though content was discussed, most teachers went through a lengthy list of the instructional strategies they employed throughout the lesson, including: activating strategies, objective-based lessons, vocabulary instruction, compare/contrast, hands-on activities, note-taking, discussion, group work, peer evaluations, teaching text features, graphic organizers, drawings, labeling drawings, TCAP-style review questions, modeling, mnemonic devices, demonstrations. The responses given by eleven of the interviewees clearly illustrated greater emphasis on *how* they were teaching over *what* they were teaching. The emphasis on instructional strategies continued when teachers were asked what they would change about their lessons, if anything.

As stated, all of the teachers responded to the question about a particular standard with a story of success. However, total years of teaching experience influenced these success stories. Responses which focused on instructional strategies were more prevalent in interviews with teachers having the most years of experience (20+) and the fewest (0-4). Table 7 illustrates the wealth of instructional strategies that the respondents discussed and the demographic data associated with them.

Table 7

Instructional Strategies Discussed by Respondents, Disaggregated by Demographic

District	Subject				Total Years Teaching Experience			
	Science		Soc Studies		0-4	5-10	11-19	20+
1	Notes Discussion Video Observation Draw Label Vocabulary TCAP-style Review	Game 2-D Rep Hands-on	Use of Maps Cause/Effect Pair Share Graphic Org.		Video Draw Label Vocabulary Discuss Hands-on	Cause/Effect Pair Share Graphic Org. 2-D Rep. TCAP-style Review Game Draw Label Hands-on	Use of Maps	Notes Discuss Observation
2	Vocabulary Create Structure Examples Discuss Create Blueprint Self-evaluation		Cause/Effect Activating Strategy Objective-based Lesson		Vocabulary Create Structure Examples Discuss Create Blueprint Self-evaluation	N/A	Cause/Effect Activating Strategy Objective-based Lesson	N/A
3	Experiment TCAP-style Review Game Compare/ Contrast Vocabulary	Discuss Notes Activity Demo Modeling Mnemonic Device	Vocabulary Compare/Contrast Defend Answer Discuss Context Clues Objective-based Lesson Peer Evaluation	Predict Analyze Group Work Text Features Create Cartoon	N/A	Analyze Predict Context Clues Vocabulary Discuss Compare/ Contrast Hands-on	Notes Demo	Experiment Objective-based Lesson Group Work Modeling Create Cartoon Game Text Features Hands-on Vocabulary Mnemonic Peer Evaluation Device TCAP-style Review Compare/Contrast

Summary of Qualitative Analysis

In this study, self-efficacy within the specific situation of teaching state standards was explored with pre-determined categories of analysis coming from the four sources of self-efficacy. A summary of the positive comments from teachers concerning the sources is followed by a summary of the negative comments.

Verbal persuasion was one area in which teacher comments indicated a positive influence on their self-efficacy. More than half of the teachers surveyed cited student feedback as a source of affirmation. Three to four teachers named parents, TCAP scores, the TEAM evaluation model, and administrators as sources of affirmation. All of the teachers interviewed were able to name at least one source of affirmation or support. Sources of support were largely colleagues and administrators.

Physiological arousal was another source in which positive comments from teachers were found. Teachers overwhelmingly like their curricula and feel that it is valuable to their students. Teachers espoused the material was valuable because it was relevant, important, and applicable to students' everyday lives. They expressed positive perceptions in relation to their curricula and showed confidence in their abilities to teach their curricula.

The final source from which positive teacher comments were gleaned is mastery experience. All teachers interviewed shared a story of success when asked to tell about a standard they had recently taught. Of particular interest were the teacher discussions about what their lessons looked like. Such in-depth responses allowed insight into what seemed to be the groundwork for their successes, which was a focus on *how* to teach rather than *what* to teach. These experiences of success on teaching their standards indicate a positive influence on their self-efficacy.

Conversely, one of two areas in which teacher comments showed evidence of negative influence on their self-efficacy was mastery experience. Though teachers were quick to point out daily or weekly successes when teaching their standards, the comments were more negative when asked about their successes in teaching the curriculum as a whole. Most teachers expressed having difficulty covering their standards in a manner that satisfied them.

The second area of negative influence on self-efficacy was found in the data surrounding physiological arousal. Teachers experience frustration over a perceived lack of time to cover their curriculum. Teachers' overall well-being seemed compromised with what may be evidence of role conflict in their responses. Though teachers espoused that the curriculum was valuable to their students because of its relevancy and applicability to students' lives, when asked how they decided what was valuable, most teachers decided by the number of questions on the TCAP per standard. Teachers seemed confused as to whether their role was that of teacher or test preparer. Teachers, in this instance, seemed to have a negative influence on their well-being.

One of two areas of deficiency was found in verbal persuasion. Though all of the teachers could cite at least one source of support or affirmation, only 57% had more than one comment to say about affirmations specifically.

The second and final area of deficiency deals with vicarious experience. A lack of vicarious experiences was evident from teacher responses. Most of the teachers interviewed could not name someone that they had witnessed successfully teaching their curricula.

This study did not employ a self-efficacy measurement tool, and hence, a rating of teachers having "high" or "low" self-efficacy cannot be provided. The interviews served as an exploration into teachers' perceptions about their abilities within the confines of discussing the teaching of their curricula, and the analysis simply categorizes those perceptions and highlights

the areas of positive and negative influence. While the four sources of self-efficacy were pre-determined categories for analysis, time constraints as a part of both physiological arousal and mastery experience and teachers' focus on how they teach when discussing mastery experiences served as two additional categories applied during analysis.

Conclusion

By using a mixed-methods approach in this research study, a more comprehensive look at teacher support for accountability policies and how they influence teachers' self-efficacy was provided. The data from the Accountability Policies Stressors and Supports questionnaire gauged teachers' support for the curriculum component of Tennessee's accountability policies. The influence of the curriculum component on teachers' self-efficacy was then explored in interviews to gain further information. Though self-efficacy was one of three theories that served as the theoretical basis for the questionnaire used, the purpose of the questionnaire is not to measure self-efficacy. Therefore, a mixed-methods design allowed the researcher to establish a baseline on teacher support for the policy with the questionnaire and then further explore its influence in terms of teacher self-efficacy with interviews triangulated with the analysis of curriculum documents.

From the quantitative phase of the study, the data show that teachers in the three participating east Tennessee districts do not support the curriculum component of the state's accountability policies. Teachers surveyed feel that the policy does not support their efforts in educating children, does not help them more effectively impart knowledge, and does not make them feel as if students' academic performance will be improved. A possible relationship was found in the data concerning teacher support in terms of stakeholders, showing that the further

the stakeholder was from a teacher, the lower the mean of the item responses associated with that stakeholder.

The qualitative phase of the study provided evidence that teachers generally have, to an adequate extent, three of the four sources from which they could build high self-efficacy. Teachers described their curricula and their teaching of it as valuable (physiological arousal), they felt supported and/or affirmed in their efforts of teaching their curricula (verbal persuasion), and they experience daily/weekly successes in their teaching of their curricula (mastery experience). However, there was also evidence from all three of these sources that self-efficacy could be negatively influenced by an overall lack of affirmations (verbal persuasion), competing values of teaching the students the curriculum or teaching them how to take a test on the curriculum (physiological arousal), and the struggle with covering the entire curricula successfully (mastery experience and physiological arousal). Finally, vicarious experience is certainly an area of deficiency which is troubling since, along with mastery experience, it is a more powerful influence on self-efficacy.

Three important findings from phase two of this study concerning teachers' self-efficacy in relation to their curricula were augmented by the data from phase one concerning teacher support for the policy. First, the possible relationship found during the analysis of the questionnaire data showing the further a stakeholder is from the teacher the lower the means in relation to that stakeholder also seemed relevant in the teacher interviews. Teachers seem to turn to administrators, colleagues, and students (i.e., the people they come face-to-face with on a daily basis) as the reference points for their work. Specifically, teachers turn to administrators and colleagues for support and they turn to students and administrators for affirmation. This finding combined with the lack of any interview data specifying the state, the public, or

lawmakers as sources of support or affirmation further supports the relationship. Teachers talk about their curriculum mainly in terms of the stakeholders that they most closely work with. The researcher got the impression that teachers view stakeholders in two categories: those they know (parents, students, colleagues, administrators for both buildings and district) and those they don't know (the public at large, lawmakers, the state). Teachers, overall, seem more genuinely concerned with their ability to teach their curricula in terms of how it affects those they know.

Second, the potential role conflict exhibited by many of the teachers during the interviews was particularly interesting since role conflict was one of the three theories used to develop the Accountability Policies Stressors and Supports Questionnaire. This potential role conflict, as evidenced in the interview data, also helped gain insight into the final point of this conclusion involving a disconnect between the quantitative and qualitative findings of the study.

Last, since the overwhelmingly positive interview data concerning teachers' liking their curricula was a stark contrast to the low support score of the questionnaire, something other than the standards themselves is most likely causing the low level of support for the policy. The apparent disconnect between the findings of the quantitative portion and the qualitative portion of the study allowed for discussion on what that could mean.

CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS, IMPLICATIONS

The purpose of this study was to investigate the extent of middle grades teacher support in three east Tennessee districts for the curriculum component of Tennessee's accountability policies. The study also explored how the policy influences teacher self-efficacy.

Chapter One of this study introduced the idea of possible unintended consequences of education policies, particularly those concerning accountability. A variety of such consequences have been uncovered in past research, including teachers teaching to the test, quick introduction of untested curricula and techniques, institutionalizing expectations of student achievement (Linn, 2000), conflicting policies and practices, unimplemented policies, and inappropriate policies (Marshall, 1998). This study found some of these same unintended consequences of Tennessee's curriculum component of its accountability policies, particularly teachers teaching to the test and institutionalizing expectations of student achievement. Those unintended consequences were indicated by the low support scores as measured by the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009) and could be heard throughout the interviews of science and social studies teachers.

Discussion

In Chapter 4, analysis was conducted seeking answers to two research questions: (1) To what extent do middle grades teachers in three east Tennessee districts (TCAP-tested subjects) support the curriculum component of state accountability policies?; and (2) What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy? Data were collected from the Accountability Policies Stressors and Supports Questionnaire (Berryhill et al., 2009),

document analysis, and interviews. The study was viewed through the lens of self-efficacy theory (Bandura, 1977).

Research Question 1

The findings of Research Question 1 indicate a low level of support. This finding corresponds with the literature presented in Chapter Two referred to as third generation policy implementation research, particularly with the studies that focused on teacher support for policy (Corbett & Wilson, 1990; Barksdale-Ladd & Thomas, 2000; Berryhill et al., 2009; Conley, 2003; Fullan, 2001; Jones & Eglay, 2004; MacPherson, 1996; Massel et al., 1997; McLaughlin, 1987; Porter et al., 1994; Senge et al., 1999; Wraga, 1999). Further, within those studies, three constructs were discussed that coincided with the findings of this study: teacher voice, teacher role, and teacher values.

Teacher voice. The low support scores found in this study support Fullan's (2001) argument that part of an education policy's success lies in its implementation phase and that it is important for policymakers to recognize teacher support during policy implementation. Fullan contended that change initiatives hold the potential for creating havoc for teachers, even when well-intentioned, due to a lack of respect for the process. The low support scores amplify his call for finding ways to garner teacher input by highlighting the importance of teacher voice.

Ultimately, teachers are essential to the success of any curriculum policy implementation as they are the primary intermediary implementers and must have both the capacity and the will to implement the policy (McLaughlin, 1987). The low teacher policy support scores found in this study indicate that the will of the implementers may not be at desirable levels. This finding, which implies a lack of teacher voice throughout the implementation of this policy, supports findings from third generation policy implementation research in which teacher voice was

important to the success of a policy's implementation but was not found to be often considered by policymakers (Massell et al., 1997; Porter et al., 1994). The finding also adds to the argument that a systemic way for teacher input to be addressed throughout a policy implementation could be beneficial as suggested by Massell et al., Porter et al., and Dewey (1977).

The data from the questionnaire that showed a possible relationship in which the further removed the teacher is from the stakeholder, the less support the teacher feels in reference to the policy reinforces the suggestions of Wraga (1999) and Senge and colleagues (1999) that policymakers should be more aware of policy implementers' interpretations of their innovations. Senge et al. contended that innovators should focus on "understanding how the larger culture, structures, and norms will react to their efforts" (p. 26). The finding supports this suggestion and highlights the importance of teacher voice.

Teacher role. This study captured evidence that the low support for the curriculum component of the state's accountability policies reflects potential confusion over teacher role, and thus, a "policymaking problem" (Corbett & Wilson, 1990, p. 321). Research conducted by Barksdale-Ladd and Thomas (2000) found that even when evidence of increased student achievement was found (i.e., higher test scores), teachers interviewed contended that students knew less. For example, current students could read for quick identification of resolutions or characterizations, but didn't know as much as former students who could read "for getting the whole picture" (Barksdale-Ladd & Thomas, 2000, p. 9). Teacher respondents in this study agreed with the statement that the curriculum component of the state's accountability policies makes them choose between what they think children need and what the state says they should do. Further, teacher respondents in this study disagreed with the statements that the curriculum component of the state's accountability policies supports their efforts in educating children and

helps them more effectively impart knowledge. These data reveal that the curriculum component of the state's accountability policies may be producing responses by professional educators "typified by practices that even the educators acknowledge are counterproductive to improving learning over the long term" (Corbett & Wilson, 1990, p. 321). This component of the state's accountability policies may be causing teachers to struggle over changing roles as Conley (2003) argued would happen as a result of complex reform initiatives. If so, this would support the argument made by Berryhill et al. (2009) that low support for a policy could be related to teachers experiencing role conflict, thus its use as one of the three theories guiding the development of the Accountability Policies Stressors and Supports Questionnaire. Further, the findings of this study revealed particularly low policy support scores on the items that Berryhill and associates claimed "reflected teachers' views of accountability policies helping them educate students, a construct closer to the core of the policies' impact on their daily work" (p. 5).

Teacher values. The findings of low teacher policy support for the curriculum component of the state's accountability policies in three east Tennessee districts' middle grades highlights the importance of policy alignment with stakeholders' values. Value alignment is an important theme in third generation policy implementation research. This study adds to the argument that policy implementation could be improved by factoring in teachers' values and perceptions to a design for policy adaptation or an acknowledgment of the interplay between accountability policies and teacher values by policymakers as called for by several researchers (Barksdale-Ladd & Thomas, 2000; Conley, 2003; Jones & Egley, 2004; MacPherson, 1996).

In this study, teacher respondents as a whole perceived that the curriculum policy does not support their efforts in educating children, does not help them more effectively impart knowledge, and does not make them feel as if students' academic performance will be improved.

This finding is supported by the critics of education accountability policies who sometimes claim that the implementation of such policies can cause more harm than good (Kortez, 2008; Linn, 2000; Ravitch, 2010). Though these critics are many times focused on the implementation of standardized tests, the findings of this study imply that middle grades teachers in the three participating east Tennessee districts may concur with this stance in reference to curriculum policy. Further, the finding supports the claim that consideration for the constructed way in which humans view a policy and how it can be tied to their values and contexts is necessary due to the power that policies can have to disenfranchise stakeholders (Guba & Lincoln, 1989).

Research Question 2

After examining the extent of support that middle grades teachers in TCAP-tested subjects from three East Tennessee school districts have for the curriculum component of state accountability policies, the second research question was addressed. The analysis employed the four major sources of self-efficacy as categories for analyzing the data collected for Research Question 2: What are Tennessee sixth grade science and eighth grade social studies teachers' perceptions of how the curriculum component of accountability policies influences their self-efficacy? These a priori categories were mastery experience, vicarious experience, verbal persuasion, and physiological arousal. Two additional categories were developed throughout the analysis (i.e., time constraints and instructional strategy focus). The findings are discussed in terms of both third generation policy implementation research and self-efficacy in relation to policy implementation.

Self-efficacy in relation to policy implementation. The positive influence on respondents' self-efficacy in regard to their high-level of focus on instructional strategies enhances the findings of Fuchs et al. (1992). Interview respondents in this study, much like the

respondents in the Fuchs et al. study, showed evidence of high self-efficacy in terms of capability to effectively handle what might appear to be competing forces. For example, respondents discussed both their ability to infuse multitudes of instructional strategies into a lesson while also discussing their abilities to prepare students for tests.

In this study, the teachers interviewed liked the content of their standards. They discussed many constructive points about their curricula which seemed to positively influence their self-efficacy from the source of physiological arousal. This finding partially supports the research of Barksdale-Ladd and Thomas (2000) that teachers interviewed liked having standards. However, this study's findings did not support the finding of Barksdale-Ladd and Thomas in that teachers interviewed for this study also liked the content of their particular standards.

This study found evidence of a mixture of positive and negative influences on self-efficacy from the source of verbal persuasion. Though teachers interviewed reported receiving verbal persuasion in the form of support from colleagues and administrators, the data showed an overall lack of verbal persuasion in the form of affirmations. This finding reinforces the importance of Ross's (1992) research concerning the effects of coaching on student achievement when combined with teacher self-efficacy. Further, the lack of vicarious experiences reported by teacher respondents may highlight the importance of Ross's findings as well.

The evidence of a negative influence on teacher respondents' physiological arousal in the form of frustration support the research of Berryhill et al. (2009). The use of self-efficacy theory as well as emotional exhaustion from teacher burnout theory as two of three guiding theories in the development of the Accountability Policies Stressors and Supports Questionnaire is supported based on the findings of this study.

The teacher respondents' negative influence on their self-efficacy caused by a perceived inability to cover their curricula in a manner that satisfied them is relevant to the entire body of literature surrounding self-efficacy of teachers. As curriculum implementation is a central part of teaching (Johnson, 2006) and mastery experience is the most influential source of self-efficacy (Bandura, 1977), this is an important finding. Designing curriculum in a way that ensures teachers' expectation of yearly success in its implementation could largely influence teachers' self-efficacy. This could provide a good place to start investigating conditions that enhance teacher self-efficacy as has been recommended by Hoy and Woolfolk (1993).

Policy implementation research. Teachers interviewed expressed frustration over their inability to cover their curricula in a manner that satisfied them due to time constraints. This frustration (physiological arousal) over their abilities (mastery experience) negatively influenced their self-efficacy in two of its major sources. According to the interview data, many of the interviewees responded to these negative influences with compliance-oriented behavior. This was evident when teachers interviewed claimed that how they decided what was most valuable in their curricula was based on each standard's emphasis on TCAP. This finding supports the argument of Conley (2003) who wrote that compliance-oriented behavior was possible when teachers felt that state objectives were unattainable. This also concurs with the findings of Porter et al. (1994) who found that even when teachers felt that the standards they taught were appropriate for their students, they also felt that outside variables, especially lack of student support and motivation, may still cause students to fail to meet those standards. Based on the findings of this study, time constraints caused the teachers interviewed concern over the quality of their teaching of the curriculum. Though respondents were asked about their teaching of curriculum and not student mastery of curriculum, the basic idea that teachers' agreement that

the standards were appropriate does not necessarily insulate them from having their self-efficacy negatively influenced during the policy implementation held true. In addition, the data from the interviews showing that many of the respondents allowed their implementation of the state curriculum policy to be guided by the inevitable assessment of their students' learning aligns with the argument of Koretz (2008) who contended that schooling suffers when teachers focus more on the measure than the goals of education.

This study's findings suggest that positive influences on teachers' self-efficacy through verbal persuasion may help regulate any negative impact of policy implementation. All of the teachers interviewed discussed support or affirmations that they received, whether it was from building administrators, district personnel, or colleagues. The findings of several researchers (Darling-Hammond & McLaughlin, 1995; Fowler, 2009; Smith & O'Day, 1990) helped track and describe ways for supporting compliance during a policy implementation, and the findings of this study imply that the use of verbal persuasion may also help. The finding that a general lack of vicarious experiences may negatively influence self-efficacy also supports Fowler's findings pointing to the importance of social networking structures for educators throughout a policy implementation.

The interview data in this study provided insight into how respondents viewed their influence in classrooms and communities. Respondents discussed students, parents, and colleagues more frequently and in-depth than they discussed policymakers, state-level education officials, or the public at large. The data indicated that local responses in this particular policy were important to the teachers interviewed supporting their identification as important for a successful policy implementation by Darling-Hammond and McLaughlin (1995) and Louis et al. (2005).

Though only mentioned by two teachers, learning communities appeared to enhance the policy implementation process, concurring with the findings of Coburn and Stein (2006) and Little (2003). Both respondents who discussed learning communities came from the same district, further enhancing the above argument for local or district-level responses to state policies (Darling-Hammond & McLaughlin, 1995; Louis et al., 2005).

Interview respondents in this study discussed the lack of time needed for implementing the curriculum policy in a way that coincided with their understanding of their standards and how children learn. This finding supported the findings of Schorr and Lesh (2003) and Spllane and Thompson (1997) who identified teacher understanding of content, understanding of how children learn content, and need for time and resources as necessary for a successful policy implementation.

Teachers interviewed demonstrated that their perception of the context of success in terms of curriculum policy implementation was defined primarily by test scores. This perception served to create role conflict within teachers evidenced in the interview data, and supports Conley's (2003) suggestion that differences in values can be exposed throughout policy implementation. As MacPherson's (1996) coined *educative accountability* encourages policymakers to support only accountability policies that have proved to support student learning, the evidence suggested that teachers perceive room for improvement in this area. Further, the argument for something other than mandated tests to be used as the measurement for student learning (Darling-Hammond, 2003; MacPherson, 1996) is relevant to this finding, as is McDonnell's (1991) prediction concerning the potential for failed policies. The interview data added to the argument made by Darling-Hammond (2003) and Fuhrman et al. (1988) about the importance of

understanding the context of a policy implementation, particularly accountability policies dealing with “central issues” (Fuhrman et al., 1988, p. 239). The evidence of role conflict in the interview data revealed a need for clear expectations of teacher role within accountability policies. Though previous research has focused more on the assessments involved with accountability policy (Barksdale-Ladd & Thomas, 2000; Corbett & Wilson, 1990; Jones & Egley, 2004), the concerns of the teachers in those studies were echoed during the teacher interviews of this study when discussing the curriculum component of Tennessee’s accountability policy, including Teacher 3B’s comment of, “...we teach the test. That’s what I do.”

Findings Viewed in Combination

Teachers interviewed indicated that they appreciated being given curricula by the state and supported the particular curricula they were required to teach. However, the questionnaire results indicated a low level of support for the curriculum policy. The implication here is that teacher participants had concerns about policy implementation. There is also a possibility that the low level of support for the policy indicates a failure for garnering teacher buy-in for the policy, as teachers’ role within accountability policies typically includes vast amounts of responsibility with very little power.

Though this study did not establish a measured relationship between teacher respondents’ support for the curriculum component of state accountability policies and teacher respondents’ self-efficacy, the study did identify negative influences on respondents’ self-efficacy which may be related to their low support for the policy. This finding concurs with Guskey’s (1988) findings which indicated the importance of teacher efficacy in school reform efforts involving policy implementation.

Teacher respondents in this study showed evidence of frustration. The frustration was perceived mainly due to time constraints disallowing adequate coverage of curricula in a manner they found satisfactory. This finding was relevant to the idea that accountability policies can become so stress-provoking that they can do more harm than good as discussed by Berryhill et al. (2009).

The finding of this study that respondents indicated support for their curricula but not the curriculum policy helps to fill a gap in the literature formed by accountability policy studies which have been investigated in whole instead of disaggregated into its individual components (i.e., curriculum, test, stakes). Though this study's findings concurred with the findings of Barksdale-Ladd and Thomas (2000) in that teacher respondents liked having standards, the findings deviated from these researchers' in that the respondents in this study were supportive of their particular standards. This difference in findings is particularly interesting in light of the research of Jones and Egley (2004) in which 79.9% of teacher respondents claimed that their state standardized test was taking the state in the wrong direction, and 54.1% of those cited negative effects on curriculum, teaching, and learning as to why.

Finally, the evidence of a potential-relationship between the distance of a stakeholder from the teacher and the support score of the policy combined with the interview data that evidenced teacher respondents' concern over the policy's influence on stakeholders close to them (i.e., students, parents, and colleagues) supports Darling-Hammond and McLaughlin's (1995) stance that reform efforts would only be successful if consideration for local responses specific to teacher and student needs was given. Their stance was also supported through other studies

(Coburn & Stein, 2006; Little, 2003; Louis, Febey, & Schroeder, 2005; Schorr & Lesh, 2003; Spillane & Thompson, 1997).

Recommendations

This study added to the knowledge base surrounding both teacher self-efficacy and teacher support for policy. Recommendations for further research in self-efficacy theory include concurrence with a recommendation made by Hoy & Woolfolk (1993) suggesting qualitative studies that map teachers' definitions of accomplishment and success to examine organizational factors that support these definitions. This may be investigated specifically with teachers' abilities in navigating accountability policies. This would help researchers discover ways to develop teacher efficacy as opposed to exploring its relationship with other variables. Further, to tie teacher self-efficacy in relation to accountability policies specifically to student achievement, a tool should be developed as current self-efficacy measurement tools do not readily lend themselves to the specific situation of accountability. Last, interviewing teachers from all tested subjects and grades would increase our understanding of how the curriculum component of Tennessee's accountability policies influences teachers' self-efficacy. Interviews could also provide information about the number and depth of standards that teachers find appropriate per subject and grade, which could be beneficial to any possible curriculum revision.

Recommendations for possible research in teacher support include a replication of this study with a larger sample of teachers. Further research could be conducted concerning the path-model that Berryhill and associates (2009) illustrated. In addition, additional research concerning the proximity of stakeholders to teachers impacting teacher support of an accountability policy may be warranted. A similar study could be replicated once Common Core is fully implemented in Tennessee. Finally, like MacPherson (1996) and Conley (2003), this

research points to a need for teachers to share their implementation realities with policymakers which should be factored in as part of the policymaking process. By using either the Accountability Policies Stressors and Supports Questionnaire or a similar instrument, policymakers could gain a relatively quick and inexpensive snapshot of teacher experience with or support for an accountability policy. In addition, though the interview data from this study shows that teachers have a difficult time viewing state standards and assessments separately, accountability policies can be studied more effectively in some cases when broken down into their two parts: standards and assessments. Further, with Tennessee's recent policy changes in how the assessments are used, arguably there are now three parts to consider when studying Tennessee's accountability policies: standards, assessments, and stakes.

Implications

The results of this study point to implications for teachers, parents, education leaders, policymakers, curriculum developers, and those responsible for curriculum-centered professional development. Efforts to increase teacher support for state accountability policies are needed based on the questionnaire data from three school districts in East Tennessee. The low support scores indicated room for improvement in the area of policy implementation, particularly when considering that interview respondents generally liked their curricula. In addition, the interview data indicated room for improvement in crafting a curriculum policy that positively influences teacher self-efficacy.

For teachers, the implication comes from a greater understanding of teachers' collective support for the curriculum component of Tennessee's accountability policies and how it influences teachers in relation to their self-efficacy. Teachers should recognize that though teachers may like their curricula, aspects of its implementation as a policy have led to low

teacher support. This knowledge could be used to provide input to policymakers and curriculum developers. Education leaders could use this knowledge for creating focused messaging, targeting encouragement, mediating areas of potential concern, enhancing instructional support, and providing professional development for teachers, particularly concerning implementation of curriculum policy.

This study has implications for parents as voters in local school board elections and in state Legislative elections. The perceptions of teacher participants as captured by the questionnaire may cause concern for parents, particularly the perceptions that the curriculum component of the state's accountability policies does not make teachers feel as if the state is helping them improve students' academic performance and makes them feel as if they have to choose between what they think children need and the what the state says they should do. Parents may use the information from this study when identifying and articulating their positions on accountability policies in Tennessee as voters.

Implications for those responsible for training teachers on implementing curriculum policies are currently relevant in light of Tennessee's recent adoption of Common Core Standards and local implementation of these standards. Teachers will need quality professional development to help them make the transition. The data from this study suggest that a focus on *how* teachers teach rather than on *what* they teach might benefit teachers. As some states and districts are trying to decide whether curriculum coaches, social media, or teacher workshops would be the best avenue for teacher training in Common Core, perhaps the bigger debate should be on the training content. This study's data suggest that teachers can create mastery experiences in their teaching when equipped with quality teaching strategies. Presentations of standards with strategies for instruction and assessment already included should be of central importance in

teacher training. Moreover, curriculum specialists should pay close attention to the stated goals of curriculum as it is being implemented. As the teachers interviewed exhibited confusion about whether they should be teaching children the skills necessary to be successful in life or teaching them how to be successful on TCAP, this conflict may be mediated from the onset of Common Core with focused and deliberate messaging. Finally, curriculum-related professional development provides a perfect opportunity for teachers to have vicarious experiences. Successful teachers from states that have already implemented Common Core could be highlighted in teacher professional development across the nation.

This study has implications for policymakers and curriculum developers. When developing or adopting curricula, consideration should be given to the number of standards per grade and subject as well as the cognitive level of standards. The amount of instructional time typically lost during a school year to assessments, review, building/district programs, and inclement weather should also be considered. Teachers are greatly concerned with the time it takes to adequately cover their curricula. A disregard for teacher time constraints can lead to negatively influenced self-efficacy through the sources of physiological arousal and, more importantly, mastery experience. Given the established link between teacher self-efficacy and student achievement, a negative influence on teacher self-efficacy could inadvertently negatively impact student achievement.

Policymakers and curriculum developers should also be sensitive to how far removed teachers are from the process of creating accountability policies. The results from the Accountability Policies Stressors and Supports Questionnaire suggested teachers' support for curriculum policy increases when considering other stakeholders that are nearest to them. As the majority of states are shifting to Common Core, policymakers and curriculum developers may

want to brace themselves for low teacher support based on the nature of the curriculum development process being further removed from teachers, parents, and building/district supervisors. Recommendations from this study as well as other researchers (Conley, 2003; MacPherson, 1996) regarding teacher input about their implementation realities as part of the policymaking process might be one way to combat any potential for low teacher support. It would benefit the policymaking process to also measure and consider teacher support for the other two pieces of accountability policies separately: assessments and stakes.

Finally, policymakers should be sensitive to how curriculum policy is crafted in terms of teacher interpretation of goals upon implementation. The possibility that teachers experience conflict concerning their role as teacher versus test preparer could be mediated by crafting policies that acknowledge and diffuse this potential conflict. Clear and consistent messaging throughout all components of accountability policies could provide teachers with a better understanding of the goals and how they are expected to achieve them. Additionally, teacher resources could be more targeted.

Conclusion

Self-efficacy has a well-researched connection to student achievement. Many studies have found, reviewed, or explored this relationship (Armor et al., 1976; Ashton & Webb, 1986; Berman et al., 1977; Borton, 1991; Cheung & Cheng, 1997; Muijs & Reynolds, 2001; Ross, 1992; Woolfolk Hoy & Davis, 2006). Self-efficacy theory provides a lens through which to view the findings of this study as policymakers and formal implementers may be interested in finding and crafting policy conditions that positively influence teacher self-efficacy for a potentially three-pronged benefit: a successful implementation, the support of teachers, and high student achievement.

Policy implementation research, specifically third-generation research, also served as context for this study. The lessons learned from policy implementation research are particularly relevant considering much of the nation, including Tennessee, is currently undertaking the transition to Common Core Standards and its ensuing curriculum. Studies in policy implementation are hinged by the assumption that student achievement will increase and at a faster rate when policy is well crafted. In the review of literature presented in Chapter Two, third generation policy implementation research was separated into two categories. The compliance category included studies that identified resources and strategies which encouraged a full implementation, with regard to the capacity of the implementers. The support category included studies that recognized implementers construct a social reality that may be in conflict with the goals of a policy and could be used to encourage the implementers' willingness. This study added to the literature in terms of both the capacity and the willingness of implementers.

The overarching lesson from this study pertains to the stated and implied goals of education accountability policies. The need for consistency is a key component. Whatever the goal, all pieces and messaging of an accountability policy should be consistent and should have consideration for teacher values as part of the policymaking process. Without consistency and avenues for teacher input, unintended consequences such as low teacher policy support, negative influences on teacher self-efficacy, and role conflict are likely to persist.

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APPENDICES

Appendix A: Permission to Use Figure

Self-efficacy figure - permission to use?



← REPLY

↩ REPLY ALL

→ FORWARD



Amy B. Dellinger <abdellinger@cox.net>

Sun 11/27/2011 1:28 PM

Inbox

mark as unread

To: Angelle, Pamela Ann; 'SHANNON STRAHAN' <shannon.strahan@knoxschools.org>;

Cc: Strahan, Shannon Lee;

Absolutely, my permission to use the figure is granted.

I am well, and hope you are also doing well.

Amy

Amy B. Dellinger, PhD

Owner and Principal Consultant

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President and Director of Research

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Appendix B: Accountability Policies Stressors and Supports Questionnaire (Berryhill, Linney, & Fromewick, 2009)

Please answer the following demographic questions (the demographic questions are not part of the Accountability Policies Stressors and Supports Questionnaire).

1. Do you currently teach a TCAP-tested subject (i.e. math, science, reading, language arts, or social studies) in grade six, seven, or eight?
2. How many total years of experience do you have teaching?
3. How many years of experience do you have teaching your current subject and grade?

Directions: Please click on the number that corresponds with your response to each item below.

1=strongly disagree

2= disagree

3= somewhat disagree

4= somewhat agree

5= agree

6= strongly agree

For me, the mandated curriculum portion of Tennessee's accountability policies to increase student academic performance:

25. Result in my getting more support from the state
26. Result in my getting more support from parents
27. Result in my getting more support from the school district
28. Result in my getting more support from my supervisor
29. Result in my getting more support from the public
30. Result in more pressure on me from the public
31. Result in more pressure on me from my supervisor
32. Result in more pressure on me from the state
33. Result in more pressure on me from parents
34. Result in more pressure on me from my school district
35. Make me feel like my job performance is being fairly evaluated by the public
36. Make me feel like my job performance is being fairly evaluated by my supervisor
37. Make me feel like my job performance is being fairly evaluated by lawmakers
38. Make me feel like my job performance is being fairly evaluated by my school district

- 39. Help me focus more on what I should be doing
- 40. Make me choose between what I think children need and what the state says I should do
- 41. Help me more effectively impart knowledge
- 42. Result in standards that make it difficult to teach students who have different abilities
- 43. Overall put more stress in my job
- 44. Overall ease the tasks I have in teaching
- 45. Overall provide more support for me in my efforts to educate students
- 46. Overall add a lot of burdens to my job
- 47. Make me feel the state is helping me improve students' academic performance
- 48. Set standards that just are not reachable for all students

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 and Leadership*, 4(5), 1-14. Reprinted with permission.

Appendix C: Permission to Use Accountability Policies Stressors and Supports Questionnaire



Joseph Berryhill <jberryhi@unca.edu>

Tue 7/12/2011 2:42 PM

Dissertation

mark as unread

Hi Shannon,

The measure you're referring to was one I created for my own dissertation, which was published in The International Journal of Education Policy and Leadership (available on-line - just Google it).

I have no problems if you use it, including on-line. I think the scoring is self-evident, once you see it in the article. What I found was that there wasn't much variance on most items concerning stress. Those concerning support had more, and thus a few of them were used in my model in my study.

I hope this helps.

Best regards,

Joseph Berryhill

On Tue, Jul 12, 2011 at 12:03 PM, Key Center <keyctr@unca.edu> wrote:

Key Center for Community Citizenship and Service Learning
University of North Carolina at Asheville
248 Highsmith Union

Appendix D: Exploring How the Curriculum Portion of Accountability Policies Impacts Teacher Self-Efficacy Interview Protocol

Interview Questions

Thank you for agreeing to be interviewed for this research project. I am going to ask you questions regarding the state curriculum that you teach and how it affects you. The data collected from this interview will be used to answer a research question for my dissertation.

1. Here is a copy of the standards that you are required to teach (*provide copy*). What are your perceptions about your ability to cover these standards in the time allotted? (E/B, K)(ME)
2. In the curriculum you teach, what parts of it would you say are the most valuable for your students? Why do you place high value to these parts? What parts are the least valuable? Why do you place low value to these parts? How do you choose what is most valuable? (O/V, K)(PA)
3. Is there a teacher who has served as a role model for you in terms of teaching the standards? How has this teacher helped you? (K)(VE)
4. What kind of support or affirmation have you received concerning your ability to teach your curriculum? (F)(VP)
5. Pick a standard you've recently taught. What did your lesson look like? Is there anything you would like to have done differently? (K, S)(ME)

Demographic Information

6. Years experience teaching
7. Years experience in current grade(s) and subject(s)
8. How many other teachers in your building teach the same grade and subject as you?

VITA

Shannon Strahan was born in Flint, MI and resides in Knoxville, TN. She completed a Bachelor of Science from Tennessee Tech University in Education in 1999. She then accepted a graduate assistantship through Tennessee Tech University working with the Preparing Tomorrow's Teachers to Use Technology Grant led by Dr. Maggie Phelps, Dr. Carl Owens, and Dr. Pat Jordan. During this time, she completed a Master of Arts degree in Instructional Leadership with an emphasis in Instructional Technology, graduating in 2001. She then became a teacher and primarily taught middle grades between 2001 and 2012. She completed a Doctor of Philosophy degree in Education from The University of Tennessee with a concentration in Leadership Studies in 2014.