

HEURISTIC DESCRIPTIVE CASE STUDY OF MATH AND LANGUAGE ARTS TEACHERS'  
PAST AND CURRENT EXPERIENCES IN THE IMPLEMENTATION OF THE MISSOURI  
LEARNING STANDARDS

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by  
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ABSTRACT

Teacher retention and attrition continues to be relevant areas of concern for school districts as many reports are surfacing correlating the performance of students with the attrition rate of teachers. The focus of measuring teacher effectiveness based on the results of standardized test may be one factor increasing attrition causing added stress to teachers. This descriptive case study was conducted in a Midwestern school district utilizing in-depth multiple data to examine the relationship of teachers' stress levels before the introduction of the Common Core State Standards, during the transition of the standards, and after their implementation with a focus on the teachers' intention to leave or stay. The central questions were: (1) What experiences are described by math and language arts teacher narratives regarding the implementation of the Missouri Learning Standards? (2) How do math and language arts teachers perceive the support of school leadership in the implementation of the Missouri Learning Standards? The findings supported the reviewed literature in that school leadership plays a vital role in supporting teachers in implementing new standards, but only in the capacity teachers and leaders can control. Implications for practice and recommendations for further research are included.

## APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of the School of Education, have examined a dissertation titled “Heuristic Descriptive Case Study of Math and Language Arts Teachers Past and Current Experiences in the Implementation of the Missouri Learning Standards” presented by Jeff Blackford, candidate for the Doctor of Education degree, and certify that in their opinion it is worthy of acceptance.

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## DEDICATION

to my Mother and Father  
who made me who I am

to my Wife  
who believed in me

to my Children  
who make me proud

to my Granddaughter  
who has taught me to stop and smell the roses

## CHAPTER 1

### INTRODUCTION

Teacher retention and attrition continue to be relevant areas of concern for school districts and state departments of education throughout the country as many reports are surfacing correlating the performance of students with the attrition rate of teachers. According to the 2012-2013 survey of the National Center for Education Statistics (2015), approximately 20% of public school teachers with one to three years of experience either moved to another school or left the teaching profession. About 51% of public school teachers who left teaching in 2012 reported the manageability of their work load was better in their current position than in teaching. Additionally, 53% of public school leavers reported their general work conditions were better in their current position than in teaching (Goldring, Taie, & Riddles, 2014). Although the issue has been experienced across the United States, historically in underserved communities, the problems caused by teacher turnover are especially pronounced (Hanushek, Kain, & Rivkin, 2004; Ronfeldt, Loeb, & Wyckoff, 2013; Ingersoll, 2001).

Salary, working conditions, lack of support, and retirement are frequently the most recognized factors affecting teacher attrition (Lui & Meyer, 2005; Ingersoll, 2001). Education reform and the current focus of measuring teacher effectiveness based on the results of the scores on standardized test, especially in math and language arts, may be one factor that increases the likelihood of attrition caused by the added stress of accountability of teachers in these academic areas. If an increase in attrition rate is experienced, there will be an even greater shortage of an already stressed supply of quality teachers in math and language arts. The revolving door of teachers will certainly continue for those students

needing the most effective teachers. A growing body of research indicates student achievement is more heavily influenced by teacher quality than by students' race, class, prior academic record, or school a student attends (Darling-Hammond, 2000; Hightower, Delgado, Lloyd, Wittenstein, Selalrs, & Swanson, 2011; Rivkin, Hanushek, & Kain, 2005). According to the work of Hanushek (1992), the difference between being taught by a highly capable and a less than capable teacher can translate into a full grade level of achievement in a single school year. Beyond these potential short-term benefits, the research of Sanders and Rivers (1996) indicated teacher effects can be enduring and cumulative, whether they advance student achievement or leave children behind. Like other problems plaguing the nation's schools, the problem of teacher retention is most severe in hard-to-staff schools. To lessen the impact of teacher attrition from the implementation of the current standards based curriculum and high stakes testing, school leaders must be proactive and use strategies and guidance to support existing and new teachers in all academic areas.

### **The Problem**

At the center of the issue, the retention problem is an equity problem. The studies from the National Commission for Teaching and America's Future and the Alliance for Excellent Education indicate high-poverty schools experience a teacher turnover rate of approximately 20% per year, nearly 50% higher than the rate in more affluent schools (Burke, 2014). Much attention is given to urban schools, but rural low-economic schools face the same dilemma of teacher attrition. Many policymakers are especially concerned by the very high rate of attrition among the newest teachers. Research suggests that nearly half of new teachers leave the teaching profession within their first five years of teaching

(Ingersoll, 2003). The early exodus of teachers creates an undesirable ripple effect for school districts, administrators, fellow staff members and most importantly, students.

The impact of a lack of quality teachers is felt daily by the nation's students, but schools serving low-income students struggle to attract effective teachers. Shortages of highly effective teachers have a disproportionate effect on low-income students of color; they are about twice as likely to be assigned to inexperienced teachers (Darling-Hammond, 2007; Berry & Eckert, 2012) who on average make far smaller annual learning gains than more experienced teachers (Hanushek & Rivkin, 2004). Hanushek (2010) states the only attribute of teacher effectiveness that stands out is being a rookie teacher, and Hanushek asserts teachers in their first three years do a less satisfactory job than they would with more experience. This has an impact on schools serving highly disadvantaged populations, because the more-experienced teachers who leave these schools are generally replaced with new teachers. The net impact of inexperienced teachers on disadvantaged schools is unclear, because there is also some evidence that the experienced teachers who leave these schools are on average not the most effective teachers (Hanushek, 2010).

Many novice teachers leave the profession within their first few years of teaching (Inman & Marlow, 2004), and many experienced teachers leave the profession for reasons other than retirement (Ingersoll, 2003). Kopkowski (2008) of the National Education Association claims teachers quit for several reasons: Federal and state mandates, poor administrative support, student discipline, lack of influence and respect within the school system, underfunded and underpaid, and inadequate planning time are mentioned most often (Kopkowski, 2008). The present rate of attrition makes it difficult to maintain high teacher quality required by No Child Left Behind (NCLB) Act of 2001 (Pittinsky, 2005). This

persistent level of turnover is grave for schools and students and seriously compromises the nation's ability to ensure that all students have access to great teaching and learning. An excerpt from Dr. Martin Haberman's online article from The Haberman Foundation Website "Predicting the Future of Schools Serving a Diverse Students in Poverty" explains the crisis most clearly:

Schools reflect society they do not change it. The same economic, political and social forces which are decreasing the middle class, enabling some to move up but many more to slide toward poverty, are also exerted on the schools. The danger to our society is maintaining the myth that the miseducation of millions for over half a century merely results in personal tragedies. In truth, the miseducation of our youth is of such a magnitude that it is now a far greater danger to our society than terrorism or atomic proliferation or the national debt. For how long can we maintain a free society if dysfunctional school systems produce dropouts at a rate which creates a city the size of Chicago every two and one-half years? Jefferson stated it best; a society that would remain both ignorant and free wants something that never was or will be. (para. 18).

Socioeconomic status and out of school factors are expected to play a significant role in the success of schools along with experienced and caring teachers who possess subject matter competency and pedagogical skill.

Potential consequences of teacher attrition include a lack of teacher quality (Pittinsky, 2005) and a negative impact on student achievement (Ingersoll & Smith, 2003). Recruitment and retention of highly qualified teachers is essential for reducing attrition and enhancing school improvement effort (Darling-Hammond & Berry, 2006). Research regarding potential factors related to teacher attrition, such as stress, may be beneficial for administrators in identifying strategies to recruit and retain quality teachers. While there are several factors affecting teachers' intentions to stay in or leave the profession, stress may be one factor that magnifies the likelihood of attrition (Larwood & Paje, 2004). Education reform has increased the rigor for students and simultaneously increased accountability for schools, teachers, and administrators. According to the most recent Metropolitan Life

Insurance Company Teacher Survey stress among teachers has increased significantly since 1985.

In 1985—the last time this question was asked and when job satisfaction was also low—more than one-third (36%) of teachers said they felt under great stress at least several days a week. Today, that number has increased; half (51%) of teachers feel under great stress at least several days a week. Elementary school teachers experience stress more frequently. They are more likely than middle school or high school teachers to say they feel under great stress at least several days a week (59% vs. 44% vs. 42%). The increase since 1985 in the number of elementary school teachers who experience great stress at least several days a week is also noteworthy—59% today compared to 35% in 1985. (Markow, Macia, & Lee, 2013, p. 6)

With the added stress of high stakes testing and the pressure for students to perform well, teacher attrition rates will likely increase. The increase of attrition rates complementing a current short supply of teachers magnifies staffing concerns for school districts.

Administrators will be forced to hire teachers they may otherwise never place in a classroom.

This descriptive case study utilized in-depth multiple data to examine the relationship between math and language arts teachers' stress levels before the introduction of the Common Core State Standards, during the transition of the standards, and after their implementation with a focus on the teachers' intention to leave or stay in their current position. From this point forward within this document, the terms "Common Core State Standards" and the "Missouri Learning Standards" will be used interchangeably.

### **Purpose of the Study**

The purpose of this descriptive case study was to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core State Standards in a rural public school situated in the Midwest. Teacher



self-efficacy, defined as the teacher's confidence in their ability to promote students' learning (Hoy, 2000), was used as a conceptual framework to provide an understanding of their experiences. Case study is a broad term used to identify research that includes quantitative, qualitative, and mixed-method studies. It is a methodology utilized when the researcher wants to fully understand a bounded unit (Merriam, 2009; Stake, 1995) that must be explained, described, illustrated, or explored (Yin, 2009). The units of analyses, determined by research questions (Patton, 2015), were teachers' perceptions of the implementation of the Missouri Learning Standards, with a specific focus on the perceptions of elementary, middle school, and high school math and language arts teachers.

This study supports the elements of a descriptive case study with the purpose of gaining a deeper understanding of the teachers' perceptions, using multiple data regarding their experiences with the implementation of the Missouri Learning Standards within a bounded system composed of a limited number of participants (Creswell, 2013; Merriam, 2009; Yin, 2009). This allowed me as the researcher to focus on the problem and gain insight and meaning for those involved. The descriptive case study was utilized for two main reasons. First, one of the goals of all case study research is to develop an understanding of the bounded system (Merriam, 2009; Yin, 2009). Second, descriptive case studies aim to understand stages or phases in processes and to investigate a phenomenon within its environmental context (Gilgun, 1994). The descriptions of teacher sense of self-efficacy captured throughout the research process helped to describe participants' understandings of the effects of the implementation of the Missouri Learning Standards and how the standards contribute to a teacher's sense of self-efficacy in the school setting.

Self-efficacy is an important factor in determining teacher's effectiveness within the classroom setting. The literature suggested powerful effects from the simple idea that a teacher's belief in his or her ability to positively impact student learning was critical to actual success or failure in a teacher's behavior (Henson, 2001). Several research questions guided the inquiry.

### **Research Questions**

Research questions serve to guide and bound this case study within a rural public school that houses elementary, middle and high school students. The overarching or central questions were:

Central Question 1:

What experiences are described by math and language arts teacher narratives regarding the implementation of the Missouri Learning Standards?

Sub-questions:

- What factors or underlying themes in the narratives account for their views of the implementation of Missouri Learning Standards?
- How do math and language arts teachers describe their sense of efficacy following the implementation of the Missouri Learning Standards?

Central Question 2:

How do math and language arts teachers perceive the support of school leadership in the implementation of the Missouri Learning Standards?

Sub-questions:

- What leadership practice do they identify as significant to their sense of efficacy during the implementation of the Missouri Learning Standards?
- What leadership practices do they identify as significant to their sense of efficacy following the implementation of the Missouri Learning Standards?

The theoretical framework, the focus of the next section, will assist in the making meaning of participants' experiences, the essence of qualitative inquiry.

### **Theoretical Framework**

Teacher attrition has been a critical concern for the field of education for many years. Because of an increased teacher attrition and the lower supply of qualified teachers, high-need urban and rural schools are frequently staffed with inequitable concentrations of under-prepared, inexperienced teachers (Darling-Hammond & Post, 2000; Carroll, 2007). With the renewed focus on standards proposed to guide and evaluate their teaching, these teachers are likely to become even more stressed and to question their teaching abilities. Hence, I intended to gain an understanding of their experiences with the implementation of the Missouri Learning Standards and the potential increase of accountability stress associated with these standards. The conceptual or theoretical framework of this study guides the goals and purpose of the research. The term conceptual and theoretical framework are used interchangeably and each refers to the actual ideas and beliefs the researcher holds about the phenomena studied, whether they are written down or not; this may also be called the “theoretical framework” or “idea context” for the study (Merriam, 2009; Maxwell, 2013; Yin, 2009).

Maxwell (2013) describes the conceptual framework of the study as the system of concepts, assumptions, expectations, beliefs, and theories that support and informs the selected research and is a key part of the design. In defining the key concepts of the framework, the researcher can then frame the issue and narrow the topic to a manageable size. In general terms, Sinclair (2007) compares theoretical frameworks to maps or travel plans. She explains when planning a journey in unfamiliar country, people seek as much knowledge as possible about the best way to travel, using previous experience and the accounts of others who have been on similar trips. ‘Survival advice’ and ‘top tips’ enable them to ascertain the abilities, expectations, and equipment that may help them to have a successful journey with good outcomes, to achieve their objectives and return to base safely.

The theoretical framework involves the assumptions and experiences I brought to the study (Maxwell, 2013) that are based on the recognition of changes in teacher attitudes and their passions for teaching at the onset of the heightened status of accountability in high stakes testing and the top-down approach to standards based curriculum. My first assumption was the Common Core State Standards have contributed to a lower sense of teacher efficacy, which was a major contributing factor to teachers leaving the education field (Smith & Kovacs, 2011). Secondly, school leadership may not have provided a support system for the teachers during the transition and after the implementation of the Common Core State Standards which is related to their degree of comfort with the standards (Darling-Hammond & McLaughlin, 2011). Regardless of the transition during or after the Common Core State Standards, a lack of school leadership support will lead to increased teacher stress and burnout. The increases of stress and burnout will likely contribute to teachers leaving the profession all together (McCarthy, Lambert, Lineback, Fitchett, & Baddouh, 2015).

Based on my experiences as a school leader, the new and ever changing standards have caused unintended consequences and lowered teacher self-efficacy. The individuals suffering the most from this inadvertent outcome are the students in poverty and low socioeconomic communities (Ingersoll & Smith, 2003; Hanushek, Kain, & Rivkin, 2004).

There have been several studies conducted on factors contributing to teachers leaving the profession, but few have focused on the Common Core State Standards and, more specifically, the Missouri Learning Standards (Goldring, Taie, & Riddles, 2014). The first conceptual strand examined was the Common Core State Standards which from a historical perspective have evolved and transformed accountability of teachers, leaders, and districts. The next two conceptual framework strands addressed were teacher attrition and teacher self-efficacy. It is important to gain insight about attrition and develop an understanding of teachers' motivations to leave the profession or their positions. Deeply embedded within teacher attrition is teacher self-efficacy and the extent to which efficacy plays a role in teacher attrition. Finally, an examination of school leadership and the support structures needed for school change and improvement was a major conceptual strand. The management and organization of schools play a significant role in the creation of school staffing problems, but can also play a significant role in their solution. School leadership can improve teachers' support levels and contribute to lower rates of new teacher turnover, thereby diminishing school staffing problems and improving the performance of schools (Ingersoll & Smith, 2003). The conceptual strands communicated a sense of the interconnectedness between the teachers' self-efficacy, accountability, and principal leadership style, which are associated with teacher attrition.

## **The Common Core State Standards**

The model of standards based education emerged out of the sense of urgency generated by the seminal 1983 report: *A Nation at Risk: The Imperative for Educational Reform*. Standards based reform possesses a process driven conception of educational change that explicitly links schooling inputs and policy drivers to student outcomes in clearly defined mechanisms (Swanson & Stevenson, 2002). From the evolution of standards based curriculum, the Common Core State Standards eventually emerged. According to the Common Core State Standards Initiative, the standards are a set of high-quality academic benchmarks in mathematics and English language arts/literacy and other areas. These learning goals outline what a student should know and can do at the end of each grade. The standards were created to ensure that all students graduate from high school with the skills and knowledge necessary to succeed in college, career, and life, regardless of where they live (Common Core State Standards Initiative, 2014).

A Brown Center Report (Loveless, 2014), using the 2012 Michigan State University (MSU) research data conducted by Schmidt and Houang on the Common Core State Standards was important for endorsing the standard's prospective effectiveness. The MSU study used data from the National Assessment of Educational Progress (NAEP) which standardized tests administered uniformly are using the same sets of test booklets across the nation resulting in a common metric in all states. The results showed states with math standards like the Common Core State Standards, after controlling for other potential influences, registered higher NAEP scores in 2009 than states with standards divergent from the Common Core State Standards. The implication was the math standards of Common Core State Standards would boost state math performance on NAEP.

The Brown Center Report consisted of a two-part investigation. First, the ratings of state standards provided by Schmidt and Houang's study were examined using NAEP data that have been collected since their study was completed. The central question was whether the MSU ratings predicted progress on NAEP from 2009–2013. Second, a new analysis was presented, independent from the MSU ratings, comparing the NAEP gains of states with varying degrees of Common Core State Standards implementation. The two analyses offered exploratory readings about how the Common Core State Standards have affected achievement so far.

The Brown Center Report explained the problem as a statistically significant finding from an analysis of state-level NAEP scores, the variation among states being relatively small, often faded to insignificance when considered in the more practical, real world terms of how much math students are learning. The Brown Center Report claimed it is doubtful that even the most ardent Common Core supporter will be satisfied if the best Common Core State Standards can offer, after all the debate, the costs in tax revenue and the frustrations of a marginal three point NAEP gain related to implementation. The NAEP results on student achievement is the percentage of students within the total population, or in a particular student group, who meet or exceed expectations of what students should know and be able to do. Specifically, it is the weighted percentage of students with NAEP composite scores that are equal to, or exceed, the achievement-level cut scores specified by the National Assessment Governing Board (National Assessment of Educational Process, 2015). The 2012 Brown Center Report predicted, based on an empirical analysis of the effects of state standards, the Common Core State Standards will have little to no impact on student achievement. Supporters of the Common Core argue that strong, effective implementation of

the standards will sweep away such skepticism by producing lasting, significant gains in student learning (Loveless, 2014). So far, there are no indications of such an impressive achievement as predicted by the supporters of the Common Core State Standards

To increase likelihood of state adoption of the Common Core State Standards, the federal government dangled large sums of money to “encourage” state adoption and spark a competition among the states to acquire these funds. Most states agreed to adopt the standards, but some states have nullified their agreement and have elected to opt out of the federal initiated top-down approach to learning (Bidwell, 2014). Missouri is one of the states to adopt the nationwide standards, but have renamed the standards as the Missouri Learning Standards. To this day, Missouri recognizes the nationwide standards as their base curriculum; however, there has been a growing opposition across the state to the mandated standards (Missouri Coalition Against the Common Core, 2015; Newman, 2014). Among the opposition are teachers, who are often concerned about the challenges of meeting these new expectations.

### **Teacher Self-Efficacy**

Albert Bandura (1986) offered a formal definition of self-efficacy: “Perceived self-efficacy is defined as people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performance” (p. 391). In Bandura’s 1989 study, he furthered his research stating self-efficacy beliefs affect thought patterns that may be self-aiding or self-hindering depending on the individual and the degree of self-efficacy. When faced with difficulties, people who are beset by self-doubts about their capabilities slacken their efforts or abort their attempts prematurely and quickly settle for mediocre solutions, whereas those who have a strong belief in their capabilities exert greater



effort to master the challenge (Bandura A. , 1986; Jacobs, Prentice-Dunn, & Rogers, 1984; Bandura & Cervone, 1983). Perceptions of self-efficacy play a key role in human functioning as these affect behaviors not only directly but also by their impact on other determinants such as goals and aspirations, outcome expectations, affective proclivities, and perceptions of obstacles and opportunities in the social environment (Bandura, 1997).

The doctrinally charged No Child Left Behind Act of 2001 required each state to have standards on which students would be tested with a demanding and intricate accountability system accompanying it (Anderson, 2004). Accountability is a concept that clusters political and institutional arrangements and exchanges. Although there are many varieties of accountability in education (moral, professional, fiscal, market, bureaucratic, and legal), the term has come to mean the responsibility of a school (district, teacher, or student) to parents, taxpayers, or government (federal, state, city, or district) to produce high achievement test scores (Smith & Frey, 2000). The pressures of high stakes testing and accountability impact students, parents, administrators and teachers, which are the focus of this study.

Valli and Buese (2007) studied the impact of policy implementation and accountability on the tasks elementary teachers fill inside and outside the classroom by examining the changing roles of fourth and fifth grade teachers over a four-year period. Data sources included interviews and observations with the teachers and principals between 2001 and 2005. The teachers were all appropriately licensed, many had advanced degrees, and they were primarily white women with varying experience. Valli and Buese's findings suggest that teachers' roles were impacted by the policies of NCLB and determined role expectations increased, intensified, and expanded. These changes had unanticipated, and

often negative, consequences for teachers' relationships with students, pedagogy, and sense of professional well-being. Teachers' roles changed as the Annual Yearly Progress expectations grew, particularly in schools where student populations had the greatest need for academic growth. Teachers were swept up in a flow of mandates that consumed their thinking, their energy, and for some their love for teaching (Valli & Buese, 2007).

Several other studies are consistent with Valli and Buese' findings. Leithwood, Steinbach, and Jantzi's (2002) study of government accountability measures connected to NCLB explains the largely negative motivations to implement government accountability policies and indicate differences in such motivation between teachers and school-level administrators. These results also implied that some forms of school leadership may serve as antidotes to negative teacher motivations when such motivations are caused by shortsighted and abrasive government implementation strategies. Other research found that teachers' response to accountability policies largely depended on their beliefs about student and their own capacity; in other words, teachers did not respond to the accountability policies in ways that would lead to improved instruction and learning when they had low expectations of students' abilities or of their ability to influence learning (Abelmann, Elmore, Even, Kenyon, & Marshall, 1999). Finally, the policies served to challenge teachers' sense of professionalism (Leithwood et al., 2002) and, when the more extreme sanction of reconstitution was implemented, the change had a negative effect on teachers' sense of self-worth (King & Malen, 2003).

### **Teacher Attrition**

Over the past few decades there has been a vast amount of research on teacher attrition and the findings vary widely. The practice of analyzing and defining teacher

attrition may include teachers exiting the profession, teachers changing status from year to year, or teachers transferring from district to district. These three aspects of teacher attrition may be applied inclusively, individually, or in combination resulting in varying rates of teacher attrition from study to study and dependent upon the definition used. For this study, the definition of teacher attrition will be determined as “movers” (teachers who switched schools) and “leavers,” teachers who leave the profession temporarily or permanently. Regardless of the definition, the impact of early exodus of teachers from the profession has been a longstanding problem. If the revolving door continues, school districts are likely to find it difficult to support the development of teachers which ultimately affects student learning (Darling-Hammond & Sykes, 2003).

There is growing consensus among researchers and educators that the single most important factor in determining a student’s performance is the quality of his or her teacher (Haynes, 2014). The difference between being taught by a highly capable and a less than capable teacher can translate into a full grade level of achievement in a single school year (Hanushek, 1992). Sanders and Rivers (1996) argued that the single most important factor affecting student achievement is teachers, and teacher effectiveness can be enduring and cumulative. The specific data used in this study were restricted to the cohort of students who were second graders in 1991-1992, third graders in 1992-1993, fourth graders in 1993-1994 and fifth graders in 1994-1995. Using these data, teacher effects were estimated from a longitudinal analysis by using a statistical mixed model process that provided shrinkage estimation for the teacher effects. Sanders and Rivers found that with appropriate measurements of teacher effectiveness, administrators can minimize the near permanent

delay of academic achievement of many students resulting from experiencing continual ineffective teachers.

Trimble, Davis, and Canton (2003) claim the administrators' role in addressing teacher quality is by remediating or dismissing marginal teachers and rewarding and affirming their outstanding teachers. This action will have the greatest impact on educational reform. Legal complications and other difficulties, however, may entice administrators to avoid acting with ineffective teachers (Beteille, Kalogrides, & Loeb, 2009). Administrators' reputations are subject to public scrutiny. Administrators open themselves to the task and difficulties of defending a non-renewal, and in the process, they may face teachers' unions whose lawyers defend the rights of teachers to remain on the job (Trimble, Davis, & Clanton, 2003).

Ingersoll (2007) analyzed data from the Schools and Staffing Survey (SASS) and its supplement, the Teacher Follow-up Survey (TFS). Both surveys were conducted by the National Center for Education Statistics of the U.S. Department of Education. To date, four independent cycles of SASS have been completed: 1987-1988; 1990-1991; 1993-1994; 1999-2000. Each cycle of SASS administers survey questionnaires to a random sample of about 53,000 teachers, 12,000 principals, and 4,500 districts, representing all types of teachers, schools, districts and all 50 states. Ingersoll's findings were after five years, between 40% and 50% of all beginning teachers left teaching altogether. Ingersoll adds not all this attrition results in a permanent loss of teachers. One form of this revolving door is represented by temporary attrition; teachers who leave teaching, but return in later years. From the viewpoint of those managing at the school-level, temporary and permanent

attrition have the same effect. In either case, attrition results in an immediate decrease in staff which usually must be replaced.

The effects of teachers leaving the profession or migrating to other districts is compounded by an already shortage of teachers in specific subject areas (Ronfeldt, Loeb, & Wyckoff, 2013). Students in grade levels with a higher turnover score (teachers leaving) have lower achievement scores in English language arts and math and these effects are particularly strong in schools with more low-performing and ethnically diverse students. Moreover, Ronfeldt, et al. (2013) suggest that there is a disruptive effect of turnover beyond changing the distribution in teacher quality. The inability of schools to adequately staff classrooms with qualified teachers has since been cast as a major educational problem, received widespread coverage in the national media, been the target of a growing number of reform and policy initiatives and the subject of a substantial body of empirical research (Ingersoll, 2001). The staffing problems for public education has created a wide range of recruitment initiatives. Programs such as “Troops for Teachers” and alternative certification programs have emerged to increase the supply of teachers. According to Ingersoll (2007), throwing more teachers into the workforce is not sound policy.

These findings have large implications for current policy-they suggest prescriptions must focus less on recruitment and more on retention. In short, recruiting more teachers will not solve the teacher crisis if large numbers of those teachers then leave. The image that comes to mind is of a bucket rapidly losing water because of holes in the bottom. Pouring more water into the bucket will not be the answer if the holes are not first patched. (p. 6).

Although there are many initiatives and programs in place to attract more prospective teachers into the field, inevitably schools in the most challenging circumstances experience more difficulty in recruiting teachers. Yet, not all researchers and policymakers agree there is a teacher shortage. In analyzing teacher shortages, the usual data cited are

from the U.S. Department of Education's Digest of Education Statistics. The statistics show in 1970 there were 2.06 million public school teachers, or one for every 22.3 students. In 2011 there were 3.38 million public school teachers or one for every 16.3 students. These numbers seem to indicate that there is no teacher shortage and class sizes are not too big. Ingersoll (2004) agrees, that there are not enough teachers produced in every field; however, there are overall “more than enough prospective teachers produced each year in the U.S” (Ingersoll, 2004). According to Snyder and Dillow (2012) a projected 3.7 million full-time-equivalent elementary and secondary school teachers were engaged in classroom instruction in fall 2011. This number has risen 7 percent since 2001. In comparison, public school enrollment rose 4 percent during the same time. Using this 2011 data, public teacher supply has increased by 3 percent more than public school enrollment. Teacher supply during the most recent data and time has outpaced public school enrollment (Snyder & Dillow, 2012).

An analysis by Ingersoll (2004) contends the conventional wisdom is the teacher shortage in the United States is due to a simple imbalance between supply and demand caused by large numbers of teacher retirements, increased student enrollments, and an insufficient supply of new teachers. Instead, Ingersoll reveals it is true both student enrollments and teacher retirements have increased since the mid-1980s. Most schools have job openings, but a significant number of schools have been unable to find enough qualified teachers.

### **School Leadership**

Leadership, as defined by most educators, consists of relationships that influence organizational members to work toward achieving organizational goals. Definitions of leadership may vary, but a central element in many definitions is the process and ability to

influence. Many scholars and researchers recognize leadership as an essential component of school success and school improvement. International research evidence has consistently reinforced the importance of leadership in securing and sustaining improvement (West, Harris, & Hopkins, 2000). Effective leaders exercise an indirect, but powerful influence on the effectiveness of the school and on the achievement of students (Leithwood & Jantzi, 2000).

Waters, Marzano, and McNulty (2003) demonstrated a substantial relationship between leadership and student achievement. For the meta-analytic study of leadership practices, the researchers reviewed more than 5,000 studies that purported to examine the effect of leadership on student achievement. Of these 5,000 studies, they found only 70 published since 1978 reported standardized, objective, and quantitative measures of student achievement, such as those provided by state-adopted norm-referenced tests, with achievement as the dependent variable and perceptions of leadership as the independent variable. The 70 studies created a sample size of 2,894 schools, 14,000 teachers, and more than 1.1 million students. Ratings of principal leadership were correlated with more than 1.4 million student achievement scores. The research indicated the average effect size (expressed as a correlation) between leadership and student achievement is .25, which means that as leadership improves, so does student achievement.

The 2004 Wallace Foundation research led by Kenneth Leithwood organized a study using a framework from empirical research in sociology and in organizational and industrial psychology (Rowan B. , 1996). The framework assumes that variation in workplace performance is a function of the capacities, motivations, and commitments of workplace personnel, the characteristics of the settings in which they work, and the external

environment. Leaders play critical roles in identifying and supporting learning, structuring the social settings and mediating the external demands.

A significantly expanded version of this framework served as the organizer for the Wallace Foundation's review of literature (Leithwood, Louis, Anderson, & Wahlstrom, 2004). Features of both state and district leadership, policies, practices and other characteristics interact and exert a direct influence on what school leaders do; they also exert influence on school and classroom conditions, as well as on teachers' professional communities. Leithwood, et.al. (2004) used measures of student learning available from districts and schools, including state-collected data and proxy variables such as student attendance and retention rates. The researchers concluded there seems little doubt district and school leadership provide a critical bridge between most educational reform initiatives and their consequences for students. Leithwood, et al. (2004) noted:

Of all the factors that contribute to what students learn at school, present evidence lead to the conclusion that leadership is second in strength only to classroom instruction. Furthermore, effective leadership has the greatest impact in those circumstances (e.g., schools "in trouble") in which it is most needed. The evidence supports the present widespread interest in improving leadership as a key to the successful implementation of large-scale reforms. (p. 14)

The importance of strong and effective leadership within the school environment cannot be underestimated. Great schools do not exist apart from great leaders and in today's climate of high expectations and accountability, school leaders are under significant pressure to continually improve teaching and learning as indicated by standardized testing and achievement scores.

### **Design and Methods Overview**

This descriptive case study sought to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their



experiences with the implementation of the Missouri Learning Standards through the utilization of direct and indirect observations of teacher interactions, external documents, and semi-structured interviews with teacher participants. The intent of this study was to encourage school leaders to recognize struggling teachers with low self-efficacy and provide support structures for these teachers to ensure longevity in the teaching profession and stability for the students.

Researchers approach a topic with a particular methodology, not because they necessarily prefer the methodology, but because the methodology is the best one for that instance. According to Yin (2009) a case study design should be considered when: (a) the focus of the study is to answer “how” and “why” questions; (b) the researcher cannot manipulate the behavior of those involved in the study; (c) the researcher wants to cover contextual conditions because they believe the conditions are relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context. For this study, the case study methodology has emerged as the appropriate tool. The qualitative case study is an approach to research that enables exploration of a phenomenon within its context using a variety of data sources. This ensures that the issue is not explored through one lens, but rather through a variety of lenses, which allows for multiple sides of the phenomenon to be revealed and understood (Creswell, 2013). Yin (2009) went further to say that the technical definition consists of two parts: a case study is an empirical inquiry 1) that investigates a contemporary phenomenon in depth and within its real-life context, especially when 2) the boundaries between phenomenon and context are not clear (p. 18). Another defining characteristic of a case study is the use of multiple sources of evidence, converged through triangulation of data, investigators, theory, or methods (Patton, 2015).

A predicted hallmark for this case study research was the use of multiple data sources, a strategy which also enhances data credibility (Yin, 2009; Patton, 2015). Unique in comparison to other qualitative approaches, within case study research, investigators can collect and integrate quantitative survey data, which facilitates reaching a holistic understanding of the phenomenon being studied. In case study, data from these multiple sources were then converged in the analysis process rather than handled individually. Each data source is one piece of the “puzzle,” with each piece contributing to the researcher’s understanding of the whole phenomenon. This convergence added strength to the findings as the various strands of data were braided together to promote a greater understanding of the case. Although the opportunity to gather data from various sources was extremely attractive because of the rigor that can be associated with this approach, there were dangers. One of the greatest challenges for researchers is the collection of overwhelming amounts of data that require management and analysis. In a case study, data from these multiple sources were organized and then compared or mapped out in the analysis process (Creswell, 2013). The tradition of case study is further explored in Chapter 3, Methodology.

Purposive sampling using established criteria was utilized to select the site and teacher participants. Purposive sampling relies on the judgement of the researcher when it comes to selecting the units (e.g., people, cases/organizations, events, pieces of data) that are to be studied. The goal of purposive sampling was not to randomly select units from a population to create a sample with the intention of generalizing from that sample to the population of interest. The main goal of purposive sampling was to focus on characteristics or criteria of a population that are of interest, which will best enable the researcher to answer the research questions (Patton 2015). The site for the study was a rural public school situated

in the Midwest. The participants for this study consisted of a combination of six elementary, middle, and high teachers from one school in the district where the study was conducted. Each teacher selected in this case study served as a single case in this holistic multiple case study.

The research design purposefully selected teachers who met the initial criteria of at least two or more years of experience. Additionally, teachers must have been teaching math or language arts before, during, and after the implementation of the Missouri Learning Standards and taught in the general education setting. Furthermore, the school studied was identified as high performing as measured by state standards and was awarded “accredited” by the state of Missouri.

The initial process of data collection utilized three methods: semi-structured interviews, documents, and observations of teachers. One-on-one interviews with teachers helped to define teacher self-efficacy before, during, and after implementation of the Missouri Learning Standards. In addition to interviews, I reviewed and extracted meaning from various internal and external documents to gain additional insight into the varied support of leadership and colleagues. Personal documents consisted of a descriptive story prompts focusing on teacher feelings, attitudes, and experiences with the implementation of the Missouri Learning Standards. The final source of data was direct observations of teacher interactions with leaders in their building to construct meaning of the nature of support for implementation of standards and to expand on the meaning glean from interviews and documents.

In qualitative studies, the data collection and analysis occurred simultaneously. Case study data analysis generally involves an iterative, spiraling, or cyclical process that

proceeds from more general to more specific observations (Creswell, 2013; Silverman, 2005; Palys, 1997). Data analysis may begin informally during interviews or observations and continue during transcription when recurring themes, patterns, and categories become evident. Yin (2009) describes the following techniques for analysis: pattern matching, linking data to propositions, explanation building, time-series analysis, logic models, and cross-case synthesis. Through the application of qualitative data analysis, the data can “speak for themselves” through the emergence of descriptive themes. Once written records are available, analysis involves the coding of data and the identification of salient points or structures. Further description of the design of the study, including limitations, validity, and reliability is addressed in Chapter 3.

### **Significance of the Study**

The residual effect of the 1983 *Nations at Risk Report* and the top-down approach of implementing standards based curriculum has sparked great interest due to rapid changes and reforms in public education. The *Nations at Risk Report* stated public schools in the United States lacked rigorous standards and were failing. The Business Roundtable (BRT) initiated a campaign to return curriculum to the so-called basics (such as phonics) require schools to meet high standards and be held accountable. These reforms were to be guided by experts from the business world who understood the economy (Johnson, Johnson, Ferenga, & Ness, 2008). The Common Core State Standards were developed to provide high standards that are consistent across states and provide teachers, parents, and students with a set of clear expectations to ensure that all students have the skills and knowledge necessary to succeed in college, career, and life upon graduation from high school, regardless of where they live. Missouri policymakers along with many other states adopted the Common Core

State Standards in math and language arts. To include other core subjects, Missouri also restructured curriculum standards in science, history, and government and renamed the standards reform as Missouri Learning Standards. These standards are aligned to the expectations of colleges, workforce training programs, and employers and mirror the Common Core State Standards.

To keep highly-qualified teachers engaged in the profession, it is important to understand the factors that may have an impact on teachers increasing or decreasing self-efficacy (Fullan, 2007; Margolis & Nagel, 2006). Teachers who believe they can teach all children in ways that enable them to meet these high standards are more likely to exhibit teaching behaviors that support this goal (Protherone, 2008). School leaders must provide opportunities for teachers to develop a sense of self-efficacy. According to Goddard, Hoy, and Hoy (2000), it is not enough to hire and retain the brightest teachers, they must also believe they can successfully meet the challenges of the task at hand. Because teachers spend a significant amount of time with students and have the greatest capacity to positively impact student achievement, school leaders must seek to understand the relationship between teacher self-efficacy and student achievement (Moore & Esselman, 1992; Ross, 1992). These tasks are further evidence of the study's significance and the need to provide teachers continuous support to develop and build self-efficacy. The identification of critical factors regarding the implementation of the Missouri Learning Standards using the conceptual framework of teacher self-efficacy will provide principals, university certification/training programs, and local districts with valuable information related to the relationship between standards and efficacious behaviors of teachers.

In this chapter, I introduced the problem of teacher attrition and how attrition impacts students and schools that are already having difficulty in filling vacancies with qualified and effective teachers, especially in math and language arts. I argued the latest standards based initiative has created a toxic environment for teachers and administrators in an era of high stakes accountability. As standards are implemented, there will be even more pressure placed on teachers whose students do not perform adequately on standardized Common Core assessments. This could lead to many teachers being fired or released. The intense pressure and scrutiny that teachers will be under will create stress and teacher burnout which could lead to many good, young teachers leaving the field. There is also a chance that many veteran teachers will choose to retire rather than make the necessary changes. Teachers leaving the profession will create an even greater strain on an already inadequate supply of teachers in specific content areas.

I have also rationalized school leaders face the same scrutiny as teachers and although school leaders are under the same extreme pressure to produce results on standardized test, it is also the leader's obligation to encourage, build capacity and include teachers in the decision-making process. School leaders must recognize struggling teachers and create avenues to support teachers in and outside the school building through innovative and effective efficacy building strategies. These strategies must support, encourage, involve, and most of all empower teachers through the adversities of standards based reform.

I have outlined the theoretical framework that served as a structure of the literature review. As the study proceeds during the field stage, I am likely to add other theories and concepts garnered from meanings participants bring to the study. The design of the fieldwork described in chapter 3 will be clear about my role as the observer and the tension

between outsider and insider perspective. Patton (2015) describes the approaches as either etic, which is an outsider's perspective, or emic which is an insider's perspective. My goal was to experience the setting as an insider accentuates the participant part of participant observation. At the same time, I must be aware of being an outsider. Patton claims the challenge is to combine participation and observation to become capable of understanding the setting as an insider while describing it to and for outsiders. As the researcher, I expect to become capable of thinking and acting within the two different groups, one in which I am involved in, to some degree, and one in which I am studying. In chapter two, the literature review is included, followed by an in-depth discussion of the methodology. As a result of field study, chapter 4 presents the findings of the study, and I concluded with implications of the findings and future research.

## CHAPTER 2

### REVIEW OF THE LITERATURE

The current research presented in the literature review emphasizes a qualitative approach, since most of the recent research on current standards reform has been documented through discussions and interviews with educators. The emphasis of the literature review will be on how legislative top down approaches for implementing the standards taught has evolved from idea to practice and the challenges educators have endured. Current research has focused primarily on the effects and attitudes produced by the Common Core State Standards, successfully creating a punitive atmosphere in an era of accountability (Valli & Buese, 2007; Finnigan & Gross, 2007). Much of the focus has been on the outcome of mandates on achievement and school climate, but not on the process of how the standards based reform has affected teacher self-efficacy. The sources of information for this review included journal articles, books, working papers, consortium reviews, state and national reports, online resources, and conferences with Missouri and National School leaders, legislation, and court documents.

In my initial data searches, I focused on several topics starting with No Child Left Behind, Common Core State Standards, and Missouri Learning Standards. In this search, I used Google Scholar and ERIC databases producing over 2,000 hits. Most articles discussed key terms such as alignment, state standards, accountability, testing, academic achievement, achievement gaps and mandates, with less focus on the effects of Common Core State Standards and teacher self-efficacy. I would anticipate the reason for the lack of literature is due to the recent introduction of the Common Core standards to states, the beginning of 2010. In some states the standards have not been fully implemented and have even slowed in



implementation during a growing opposition to the standards (Missouri Coalition Against the Common Core, 2015; Newman, 2014). A few states have never accepted or even abandoned the standards and refused federal dollars for education.

Limiting my searches to 2010 and newer, I found several articles focusing on the practices and best methods of teaching the Common Core State Standards and since the standards have only been developed for math and language arts, all articles were concentrated in these content areas. In further searches of these databases and broadening my data range, I input key words such as Common Core State Standards and teacher self-efficacy, resulting in 125,000 sources. I then narrowed this search by including teacher attrition and retention resulting in 101 sources. The search on the Common Core State Standards implementation and the effects on teacher self-efficacy, resulted in barely a handful. Searches on the effects of the Missouri Learning Standards and teacher self-efficacy resulted in zero sources. My last search was on the topics of school leadership in relation to teacher attrition and retention resulting in over 17,000 sources. This subject area provided several reviews to support the theme of school leadership and its relation to teacher attrition and retention.

This data search was beneficial as background information on the topics of standards based reform, teacher's attrition, teacher's self-efficacy, and school leadership as a foundation for viewing our current operating mode. There was a lack of research in other areas such as the Missouri Learning Standards, however, standards based reform and effects on teacher's self-efficacy became viable topics to explore. The literature review presented here is intended to provide historical and foundation knowledge for understanding participants' experiences. Revealing the perceptions and realities of teachers and school

leaders may lead to a greater understanding of unintended consequence of education reform, providing a basis of hope through a vision of school leadership for implementing strategies to support teachers' struggles in an era of high accountability.

Although the literature covers a wide variety of theories and concepts related to standards based reform, this review will focus on four major themes which emerged repeatedly throughout the literature reviewed: standards based reform and impact on education, teacher turnover and attrition, teacher self-efficacy, and leadership theories. Specific factors attributing to teacher attrition and turnover such as retirement, recruitment, and teacher preparation programs will not be covered in this review.

Public education has shifted toward a system of accountability that holds students and the adults who teach them responsible for their academic progress at nearly every turn. Fueled by sweeping federal education accountability reforms such as the No Child Left Behind initiative and the current Race to the Top, schools are being forced to increase academic standards, participate in high-stakes testing, and raise evaluation standards for teachers and principals. These results-driven reforms are intended to hold educators accountable for student learning and accountable to the public, however the reforms have also created a punitive and stressful environment.

### **Standards Based Reform**

The reform model of standards-based education emerged out of the sense of urgency generated by the seminal 1983 report *A Nation at Risk: The Imperative for Educational Reform*. The report mentioned "standards" on numerous occasions.

Our goal must be to develop the talents of all to their fullest. Attaining that goal requires that we expect and assist all students to work to the limits of their capabilities. We should expect schools to have genuinely high standards rather than minimum ones, and parents to support and encourage their children to make the most

of their talents and abilities. (National Commission on Excellence in Education, 1983, p. 14)

From the *Nation at Risk Report*, standards based reform has been a maturing movement and since the 1990s, the term standards-based reform (SBR) has been used extensively in discussions of educational policy.

The *Nations at Risk Report* used strong and colorful language to deplore the state of American education, led to policy debates about how to raise expectations for both student and teacher performance, and emphasized the need to monitor student achievement in a systematic way (Wixson, Dutro, & Athan, 2003). However, supporters and critics of standards based reform added varying attributes to the movement. As Wilson and Floden (2001) observed, the slogans of standards and SBR spread widely in the 1990s, but the meaning varied across contexts. Further complicating the situation, educators and policymakers have used other terms, including “systemic reform,” “standards-based accountability” and “curriculum alignment” to describe similar ideas that differ somewhat in emphasis or evolution (Hamilton, Stecher, & Yuan, 2008). Standards-based education is a process for planning, delivering, monitoring and improving academic programs in which clearly defined academic content standards provide the basis for content in instruction and assessment (Ohio Department of Education, 2011). All conceptions of standards-based reform incorporate some or all the following six features (Hamilton, Stecher, & Yuan, 2008, p. 12):

- Academic expectations for students (often described as indicating what students should know and can do).
- Alignment of the key elements of the educational system to promote attainment of these expectations.

- The use of assessments of student achievement to measure outcomes.
- Decentralization of responsibility for decisions relating to curriculum and instruction to schools.
- State and district support and technical assistance to foster improvement of educational services.
- Accountability provisions that reward or sanction schools or students based on measured performance.

Several key terms are addressed in each of these features, but the overall goals of standards based reform are teachers know exactly what students need to learn, what to teach to, where to improve, and what to work on with colleagues. Clear common learning standards are essential to standards based reform's focus and coherence (Schmoker & Marzano, 1999).

The beginning of the federal government's role in SBR is typically traced to President George Bush's Education Summit with the Governors, held in Charlottesville Virginia, in 1989. The meeting was to devise a strategy to improve student achievement and to make U.S. students competitive with their peers around the globe while also promoting greater uniformity across the states. The meeting resulted in a set of six National Education Goals that were intended to guide policy and practice, and two of these goals proposed ambitious outcomes for student achievement in core academic subjects (Hamilton, Stecher, & Yuan, 2008). These goals were reflected in an education plan called America 2000, spearheaded by the first President Bush and his Secretary of Education, Lamar Alexander, to develop voluntary world-class standards and voluntary national tests (McDonnell, 2005). The bill never became law, but some of its ideas were included in 1994 legislation titled Goals 2000: Educate America Act and were supported by funding provisions included in the

1994 reauthorization of the Elementary and Secondary Education Act, called Improving America's Schools Act (Jennings, 2008). It is important to note that these efforts were significantly shaped by input from governors and other state policymakers as well as from professional organizations; they should not be viewed as purely federal initiatives.

Federal, state, and professional interaction is evident in the establishment by President George W. Bush and the governors of a group to monitor the nation's progress toward the National Education Goals. This group, known as the National Education Goals Panel and consisting of governors, administration officials, and members of Congress, in turn, called for the creation of a group to advise government officials on whether and how to create a national system of standards and assessments that could be used to promote the goals and measure progress toward meeting them. The resulting group, the National Council on Education Standards and Testing, included representatives from the education, business, and policy communities. Its 1992 report, *Raising Standards for American Education*, argued for increased system wide coherence and alignment, and issued a call for the development of a national system of standards and assessments. The current Common Core State Standards evolved from these early standards based initiatives.

### **The Common Core State Standards**

In 2009, President Barack Obama signed the American Reinvestment and Recovery Act (ARRA) which provided more than 90-billion dollars for education, nearly half of which goes to local school districts to prevent layoffs and for school modernization and repair. The act also included funding for the Race to the Top initiative, a 4.35-billion-dollar program designed to induce reform in K-12 education. The Obama Administration was committed to reforming America's public schools to provide every child access to a

complete and competitive education. President Obama presented states with an unprecedented challenge and the opportunity to compete in a “Race to the Top” designed to spur systemic reform and embrace innovative approaches to teaching and learning in America’s schools. He stated:

America will not succeed in the 21st century unless we do a far better job of educating our sons and daughters... And the race starts today. I am issuing a challenge to our nation’s governors and school boards, principals and teachers, businesses and non-profits, parents and students: if you set and enforce rigorous and challenging standards and assessments; if you put outstanding teachers at the front of the classroom; if you turn around failing schools – your state can win a Race to the Top grant that will not only help students outcompete workers around the world, but let them fulfill their God-given potential (President Barack Obama, July 24, 2009).

President Obama’s American Reinvestment and Recovery Act with the Race to the Top initiative coincides with the Common Core State Standards. The state-led effort to develop the Common Core State Standards was launched in 2009 by state leaders, including governors and state commissioners of education from 48 states, two territories and the District of Columbia, through their membership in the National Governors Association Center for Best Practices and the Council of Chief State School Officials. State school chiefs and governors recognized the value of consistent, real-world learning goals and launched this effort to ensure all students, regardless of where they live, are graduating high school prepared for college, career, and life (CommonCore.org, 2014). As the latest educational movement to sweep the nation, the Common Core State Standards have received an unprecedented amount of support in the initial unveiling of the standards as evidenced by their rapid adoption in all but a handful of states.

### **Missouri Learning Standards**

Missouri was one of the 45 states to initially adopt the Common Core State Standards. In 2013, to reduce a growing political backlash and an increasing Common Core

public and educator frustration, Missouri rebranded the Common Core standards' name and called them the Missouri Learning Standards. Although there was a name change to make the standards sound more local, Missouri retained all the Common Core components and features. Mirroring the concepts and ideas of the Common Core, the Missouri Learning Standards define the knowledge and skills students need in each grade level and course for success in college, other post-secondary training and careers. Missouri policy makers attempted to align the newest standards as much as possible with an older version of practicing standards. The older version was called the Show-Me standards and had been in place and practiced for nearly ten years. The education department intent in aligning the two versions of standards was to ease school districts and educators in the transition to the new expectations of the Missouri Learning Standards.

The Missouri Learning Standards give school administrators, teachers, parents and students a roadmap for learning expectations in each grade and course. They are key to the Missouri Department of Elementary and Secondary Education (DESE) becoming one of the top 10 states for education by 2020. DESE launched the Top 10 by 20 initiative in 2010 which is a major improvement effort that aims for student achievement in Missouri to rank among the top 10 performing states by 2020 in 2011. According the Missouri State Board of Education, the success of Missouri students depends on both a solid foundation of skills and the ability of students to apply their knowledge and skills to the kinds of problems and decisions they will likely encounter after they graduate. The board proclaims the key to the success in transforming education in Missouri will reside in the ability to focus on a few goals with a few strategies that are done with precision and fidelity, hence the Missouri Learning Standards. Consistent with the best current research available, the strategies and

actions focus on: leadership, collaborative culture and climate, teaching/learning practices, assessments to inform teaching and learning, effective use of data, and parental and/or community engagement (DESE, 2015).

The current Missouri standards have evolved over time. They continue to evolve as society demands change. Table 2.1 displays the event timeline of standards based reform from 1983 to the development of the current Missouri Learning Standards.

Table 2.1

*Timeline of Standards Based Reform*

Date	Author	Publication	Description
1983	National Commission of Excellence	Nation at Risk Report	This document proclaimed that a "rising tide of mediocrity" existed in American schools, noting a decline in SAT scores and relaxed graduation requirements in core academic subjects for secondary school students.
1986	National Assessment of Educational Process	Assessment Design	Established benchmarks to gauge students' achievement and administered the first test in eight southern states. In 1987, an expansion of NAEP was proposed to include state-by-state.
1989	President Bush and National Governors Association		Agreed on the need to overhaul the nation's education system by creating a set of goals that focus on eliminating illiteracy, reshaping curriculums and holding teachers accountable for their performance.
1989	National Council of Teachers of Mathematics	Curriculum and Evaluation Standards for School Mathematics	First standards based document.

*(table 2.1 continues)*



<b>Date</b>	<b>Author</b>	<b>Publication</b>	<b>Description</b>
1991	George H. W. Bush	America 2000. An Educational Strategy	Called for the development of high standards and a national system of examinations. Voluntary national standards were planned in mathematics, science, history, the arts, civics, geography, and English.
1993		Massachusetts Education Reform Act	Requires a common curriculum and statewide tests (Massachusetts Comprehensive Assessment System). Other states follow Massachusetts' lead and implement similar, high-stakes testing programs.
1994	Bill Clinton	Goals 2000	Supports state efforts to develop clear and rigorous standards for what every child should know and can do, and support comprehensive state and district wide planning, and implementation of school improvement efforts focused on improving student's achievement to those standards.
1992	Amended	Higher Education Act	Requires institutions and states to produce report cards about teacher education. (Standardized test)
2001	George W. Bush	No Child Left Behind Act	The law, which reauthorizes the ESEA of 1965 and replaces the Bilingual Education Act of 1968, mandates high-stakes student testing, holds schools accountable for student achievement levels, and provides penalties for schools that do not make adequate yearly progress toward meeting the goals of NCLB.
2009	Barak Obama	American Reinvestment and Recovery Act	Provides more than 90-billion dollars for education, nearly half of which goes to local school districts to prevent layoffs and for school modernization and repair. It includes the Race to the Top initiative, a 4.35-billion-dollar program designed to induce reform in K-12 education.

*(table 2.1 continues)*

<b>Date</b>	<b>Author</b>	<b>Publication</b>	<b>Description</b>
2009	Council of Chief State School Officers and the National Governors Association	Common Core Standards	A state-led effort coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers is launched. It is expected that many, perhaps most, states will adopt them.
2013	Missouri Department of Elementary and Secondary Education	Missouri Learning Standards	Define the knowledge and skills students need in each grade level and course for success in college, other post-secondary training and careers. These grade-level and course-level expectations are aligned to the Show-Me Standards.

Education reform in the United States since the 1980s has been largely driven by the setting of academic standards that can be used to guide all other system components. Rather than norm-referenced rankings, a standards-based system measures each student against the concrete standard. Curriculum, assessments, and professional development are aligned to the standards. With this new vision, students may expect an intellectually powerful education, in which teaching, assessment, and the provision of supports for learning are to be closely linked. The optimism of leaders and policymaker's is in the notion school and parents will share the same high expectations of students.

### **Benefits of the Common Core State Standards**

The Common Core State Standards for mathematics and for English language arts and literacy are explicit in their focus on what students are to learn. The focus is envisioned to be “the content of the intended curriculum,” and not on how the content is to be taught, which is often referred to as “pedagogy and curriculum.” The math standards are explicit in the intention to be more focused than current state standards: “To deliver on the promise of

common standards, the standards must address the problem of a curriculum that is ‘a mile wide and an inch deep.’ These standards are a substantial answer to that challenge”

(Common Core State Standards Initiative, 2010b). The ideology of the Common Core State Standards is to teach less concepts, however, each concept will be taught at a much deeper level to obtain greater student understanding.

The Common Core State Standards provide a consistent, clear understanding of what students are expected to learn, so teachers and parents know what they need to do to help them. The consistency provides students with expectations that are clear to parents, teachers, and general public (CommonCore.org, 2014). The Common Core standards released in 2010 represent an unprecedented shift away from disparate content guidelines across individual states in the areas of English language arts and mathematics (Porter, McMaken, Hwang, & Yang, 2011). The standards are designed to be robust and relevant to the real world, reflecting the knowledge and skills that our young people need for success in college and careers. To be relevant to the real world, the standards are internationally benchmarked and with American students fully prepared for the future, our communities will be best positioned to compete successfully in the global economy (Common Core State Standards Initiative, 2010b). A single set of national standards taught throughout the United States will allow for collaboration among states on best practices, instructional materials, and professional development. The collaboration will be a cost sharing in the collective learning and knowledge to teach the standards (CommonCore.org, 2014). The clear and consistent standards provide coherence among educators and districts, however as with any change there are challenges.

The Common Core State Standards impact on students, teachers, and school leaders has not yet been realized. The true impact Common Core State Standards will have on schools and education will not be known for several years (Loveless, 2014). It is certain this shift to a national set of standards will be revolutionary and will also be highly debated. As educators and stakeholders begin to recognize the significance of the Common Core, the debate will heat up even more.

### **Common Core Impact on Teachers**

Teachers are widely acknowledged as the most important school-related factor influencing student achievement and principals are the key factor in building and sustaining a school culture in which both teachers and students can succeed (Markow, Macia, & Lee, 2013). Teachers will feel the pressures of the Common Core State Standards and many teachers will have to change their approaches altogether in the classroom in order for their students to succeed on the Common Core State Standards assessments. The teachers will have some guidance as the standards provide teachers with consistent goals and benchmarks to ensure students are progressing on a path for success in college, career, and life (CommonCore.org, 2014). The standards will provide consistent expectations for students who move into their districts and classrooms from other states (CommonCore.org, 2014). They will provide teachers the opportunity to collaborate with other teachers across the country as they develop curricula, materials, and assessments linked to high-quality standards (CommonCore.org, 2014). Teachers will be required to create lessons that include higher level thinking skills and writing components in order to prepare students for the Common Core State Standards. Having a firm understanding about what the Common Core State Standards are as well as how to teach the standards are necessary if a teacher is going

to be successful with the Common Core. Teachers will likely need to rewrite current curriculum and align with the new standards.

For many teachers, curriculum has become a prescribed set of academic standards, instructional pacing has become a race against the clock to cover the standards, and the sole goal of teaching has been reduced to raising student test scores on a single test, the value of which has scarcely been questioned in the public forum (Tomlinson, 2000). The transition to the Common Core State Standards has not been smooth. In a 2011 survey conducted by the Center of Education Policy, about two-thirds of the districts in adopting states cited inadequate or unclear state guidance on the Common Core State Standards. Many districts face challenges due to inadequate or unclear state guidance about modifying teacher evaluation systems to hold teachers accountable for students' mastery of the standards, creating local assessments aligned with the Common Core State Standards, and aligning the content of educator induction programs to the Common Core (Kober N. , 2011). In the same report, about three-fourths of the districts in Common Core State Standards-adopting states cited inadequate funds to carry out all aspects of standards implementation. The Common Core State Standards have impacted teachers on their approach in classroom lesson planning and deliverance to students. These factors are important to the leaders of these teachers as they attempt to provide leadership and support to teachers through standards implementations.

### **Common Core Impact on the School Leader**

The role of the principal has changed in definition and perception over the last decade. Today's principal is deeply involved with instruction, curriculum, accountability as well as management of the school site. As pressure for improving student performance in the

current standards based accountability environment swells and test results are increasingly scrutinized, school principals are being urged to focus their efforts on the core business of schooling—teaching and learning (Markow, Macia, & Lee, 2013). Instructional leadership, not just by the principal, but by a wider cast of individuals in both formal and informal leadership roles can play a central role in shifting the emphasis of school activity more directly onto instructional improvements that lead to enhanced student learning and performance. By contrast, the status quo in most schools is diffuse attention to instruction scattered amidst a variety of environmental, social and organizational distracters that lead to fragment and uneven instructional focus (Supovitz & Poglinco, 2001).

In a 2013 report developed by Metropolitan Life Insurance Company spearheaded by Markow, Macia, and Lee most principals say that their responsibilities today have changed compared to five years ago and the job has increased in complexity. Seven in 10 (69%) principals disagree with the statement that a school principal's responsibilities today are very similar to his or her responsibilities five years ago. In schools where most students are not performing at or above grade level in English language arts and math, principals are more likely to hold this view than principals in schools where most students are performing at or above grade level (76% vs. 65%). Moreover, three-quarters (75%) of principals agree the job of the principal has become too complex, a view shared by principals regardless of demographic characteristics such as school level, school location, the proportion of low-income or minority students or the proportion of students performing at or above grade level in English language arts and math (Markow, Macia, & Lee, 2013).

The impact of the Common Core State Standards will not be known for several years. Debates for and against will be ongoing and controversy over the actual value of the

standards reform will likely be debated. Most states have adopted the Common Core and are in the process of fully implementing the standards. Educators will likely have a learning curve and an adjustment to the standards and curriculum. The significance of high stakes testing will increase and the financial impact of new curriculum for schools will be high. The obstacles will be challenging for all stakeholders and public education will shift as more challenges ascend from the implementation. Ultimately, the success of the endeavor will rely on the efficacy of the teacher.

### **Teacher Self-Efficacy**

Motivation and self-efficacy share related attributes in meaning, but there is a distinct difference between the two. Motivation is the combination of desire and drive to act whereas self-efficacy is the belief the individual has about the capability to successfully do something. Teachers with a strong sense of efficacy tend to exhibit greater levels of planning and organization (Allinder, 1994). They also are more open to new ideas and are more willing to experiment with new methods to better meet the needs of their students (Berman, Bass, M, Pauly, & Zellman, 1977; Guskey, 1988; Stein & Wang, 1988). Efficacy beliefs influence teachers' persistence when things do not go smoothly and their resilience in the face of setbacks. Greater efficacy enables teachers to be less critical of students when they make errors (Ashton & Webb, 1986). These teachers will put forth a high degree of effort to meet their commitments, and attribute failure to things which are in their control, rather than blaming external factors. Teachers with low self-efficacy, on the other hand, believe they cannot be successful and thus are less likely to make a concerted, extended effort and may consider challenging tasks as threats that are to be avoided (Tschannen-Moran & Hoy, 2007). Thus, teachers with poor self-efficacy have low aspirations which may result in

disappointing teaching performances becoming part of a self-fulfilling feedback cycle (Margolis & McCabe, 2006). Although motivation and self-efficacy are closely related, for this literature review the focus will be on self-efficacy.

Despite the pre-existence of Rotter's 1966 social learning theory and the research of the RAND Corporation, the birth of self-efficacy is most often credited to Albert Bandura. The concept of self-efficacy lies at the center of psychologist Albert Bandura's social cognitive theory. Bandura developed a model of self-efficacy that entailed two types of expectations: outcome expectancy and efficacy expectancy (Bandura, 1977). Bandura's theory emphasizes the role of observational learning, social experience, and reciprocal determinism in the development of personality. Since Bandura published his seminal 1977 paper "*Self-Efficacy: Toward a Unifying Theory of Behavioral Change*," the subject has become one of the most studied topics in psychology.

In earlier work, Bandura described self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3). In later theorizing, Bandura defines self-efficacy as the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations (Bandura, Barbaranelli, Caprara, & Pastorelli, 1994). Bandura and other researchers have continually demonstrated self-efficacy can have an impact on psychological states, behavior, and motivation. According to Bandura (1977; 1997), judgements of self-efficacy are based on four principal sources of information. These sources, also known as determinants, include mastery experiences, vicarious experiences, verbal persuasion, and physiological state. Of the four determinants mastery experiences influence self-efficacy the most and the authentic experience, whether success or failure is



attained, is the foundation of mastery experiences. Similar to mastery experiences, vicarious experience is founded in theory of seeing similar others perform the same task. People seeing others complete the task successfully can raise their own self-efficacy, but seeing others fail can lower their self-efficacy. Another determinant, verbal persuasion, is widely used to get people to believe they possess capabilities that will enable them to achieve what they seek. Verbal persuasion can boost the confidence of people attempting or completing a task. Lastly, people gauge their degree of confidence on their emotional experience as they contemplate or engage in a task. This source of efficacy is known as the physiological state. Anxiety, stress, arousal, and mood states can provide the person information on their efficacy beliefs. Table 2.2 further explain Bandura's sources of self-efficacy.

Table 2.2

*Bandura Determinants*

<b>Determinants</b>	<b>Definition</b>	<b>Characteristics</b>	<b>Explained</b>
Mastery Experiences	Mastery experience is one's personal experience with success or failure.	Provides the strongest information on efficacy beliefs and provides direct performance information.	A teacher with a positive experience of a good performance on a previous math lesson will influence the perception of one's ability to teach.
Vicarious Experiences	Vicarious experience is observing others perform threatening activities without adverse consequences and by demonstrating that the activity is "do-able" with a little effort and persistence.	Behavioral modeling and gaining successful enactive mastery has an increase of self-efficacy.	Teachers can enhance their vicarious experience through live modeling (observing others perform an activity), or symbolic modeling.

*table 2.2 continues*

<b>Determinants</b>	<b>Definition</b>	<b>Characteristics</b>	<b>Explained</b>
Verbal/Social Persuasion	Verbal and social persuasion is creditable communications and feedback. Teachers can be motivated by using verbal feedback to convince or encourage them to accomplish their tasks.	Creditable (trustworthy) feedback or communication by others. (expertise)	People are led to believe they can successfully accomplish a task or behavior using suggestion, exhortation, or self-instruction. Teachers use words such as “you can do it” for encouragement. Bandura pointed out that negative messages have an even greater effect on lowering efficacy expectations than do positive messages to increase it.
Physiological Feedback	Physiological and emotional arousal is an external stimulus that leads to a physiological reaction. Fear, anxiety, increase heartbeat are symptoms that often occur when teachers face challenges that require competence to overcome.	<ul style="list-style-type: none"> <li>• Physiological State: Physical State</li> <li>• Psychological State: Vulnerability to stress, fear, and anxiety.</li> <li>• Emotional Arousal: Proactive Aggression – Non-emotional (cold-tempered)</li> <li>• Reactive Aggression: Response to a provocation or threat</li> </ul>	Emotional arousal can be mitigated with repeated symbolic exposure that allows people to practice dealing with stress, relaxation techniques, and symbolic desensitization. Teachers can enhance perceived self-efficacy by diminishing emotional arousals such as fear, stress, and physical agitation since they are associated with decreased performance, reduced success, and other avoidance behaviors

Self-efficacy has generated research in areas as diverse as medicine, athletics, media studies, business, social and political change, psychology, psychiatry, and education. Self-efficacy has been especially prominent in studies of educational constructs such as academic achievement, attributions of success and failure, goal setting, social comparisons, memory, problem solving, career development, and teaching and teacher education (Alderman, 2013).

In general, researchers have established that self-efficacy beliefs and behavior changes and outcomes are highly correlated and that self-efficacy is an excellent predictor of behavior. Initially, the self-efficacy theory was applied only to students in traditional K-12 classrooms. Through numerous studies, student self-efficacy proved to be a deciding factor in student success (Moore & Esselman, 1992; Ross, 1992; Tschannen-Moran, Woolfolk, & Hoy, 1998; Poulou, 2007). The depth of this support prompted Graham and Weiner (1996) to conclude that, particularly in psychology and education, self-efficacy has proven to be a more consistent predictor of behavioral outcomes than have any other motivational constructs (Graham & Weiner, 1996). Clearly, it is not simply a matter of how capable one is, but of how capable one believes oneself to be effective. For teachers, self-efficacy is a significant factor in teaching and student learning.

### **Teacher Self-Efficacy Theories**

The study of teacher efficacy began with RAND researchers' evaluation of whether teachers believed they could control the reinforcement of their actions (Armor, Conroy-Oseguera, Cox, King, McDonnel, Pascal, & Zelman, 1976). The Rand Corporation study identified teacher efficacy as one of 25 characteristics related to student achievement (Dembo & Gibson, 1985). In the evaluation of education projects, it was found that teachers' sense of efficacy was positively related to the percentage of the project goals achieved, the amount of teacher changes, the continuity of project materials and methods, and the improvement of student performance (Dembo & Gibson, 1985). This early work was founded on Rotter's (1966) locus of control theory, and it was assumed that student learning and motivation were the relevant reinforcers of teaching action (Rotter, 1966). Historically,

Bandura and Rotter are the pioneer researchers of teacher efficacy and have influenced current relevancy of this area in education.

Bandura's theory of self-efficacy was extended to include the realm of teacher beliefs and behaviors. Earlier research suggested that a teacher's confidence in their ability to perform the actions that lead to student learning is one of the few individual attitudinal characteristics that predict teacher practice and student outcomes (Kagan, 1992; Poulou, 2007; Tschannen-Moran, Woolfolk, & Hoy, 1998). Bandura (1993) argues a person's belief about whether one can perform certain actions (self-efficacy) is not the same phenomenon as the belief about whether those actions affect outcomes (locus of control) (Tschannen-Moran, Woolfolk, & Hoy). Later research has shown that "perceived self-efficacy and locus of control bear little or no empirical relationship to one another, and ... perceived self-efficacy is a strong predictor of behavior" (Tschannen-Moran, Woolfolk, & Hoy). Researchers have provided extensive reviews of teacher efficacy research, showing consistently that teachers' self-efficacy beliefs indeed relate positively to their behavior and student success (Holzberger, Phillip, & Kunter, 2013).

Consistent with the general design and model of self-efficacy, Tschannen-Moran and Hoy (2001) defined teacher efficacy as a teacher's "judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (p.783)." In a broad sense of terms, teacher efficacy refers to teachers' belief in their ability to influence valued student outcomes. Although teacher efficacy is easily confused with actual teaching effectiveness, teachers' efficacy beliefs may underestimate, overestimate, or accurately reflect actual teaching effectiveness. To sum up two decades of debate about the meaning and assessment of

teacher efficacy, “teacher efficacy remains a conceptually elusive construct” which is “difficult to assess with certainty” (Herbert, Lee, & Williamson, 1998). Unfortunately, researchers' interpretations of these theories have significantly muddied the efficacy waters regarding the theoretical formulation of teacher efficacy and the psychometric attempts to measure the construct (Henson, 2001).

### **Teacher Self-Efficacy – Empirical Studies**

This analysis used a collection of data from table 2.2 located in the appendices and synthesizes existing research to discuss how teachers' self-efficacy, teacher attrition, and student achievement are related. The goal is to briefly review the theoretical foundation of each study and critically evaluate attempts at measuring teacher self-efficacy effects. The purpose is to advance awareness about perceived teacher's self-efficacy and develop an understanding of the impact teacher-self efficacy has on teachers, students, and school leaders. Five studies have been analyzed for comparisons.

A common argument that a strong sense of teacher efficacy is better than a weak one stems from several studies indicating that teachers with a strong sense of teacher efficacy are more likely to engage in novel teaching practices. In a longitudinal investigation that assessed the efficacy of prospective and novice teachers, Hoy and Spero (2005) instructed 53 elementary teachers in a master level cohort to complete three instruments that yielded four measures of efficacy. The Gibson and Dembo (1984) short form was utilized and produced two independent dimensions of general teacher efficacy and personal teacher efficacy. The researchers utilized Bandura's (1997) teacher self-efficacy scale for measurement. Hoy and Spero found that there were significant increases in efficacy during student teaching, but significance of efficacy declined during the first year of teaching. The

study suggests changes in efficacy during the first year of teaching were related to the level of support received by school leaders.

Similar to the Hoy and Spero (2005) investigation, Knoblauch and Hoy (2008) designed a study to examine the change in preservice teachers' efficacy beliefs following the student teaching experience, with a focus on how student teachers' sense of efficacy may vary regarding school settings (rural, suburban, or urban). Student teachers' perceptions of their school's collective teacher efficacy and their cooperating teacher sense of efficacy were also examined to see what effects, if any, these two elements had on the student teachers' developing efficacy beliefs. The research participants included 102 student teachers. All three setting groups exhibited significant increases in teachers' sense of efficacy following student teaching. Urban student teachers exhibited significantly lower perceived collective efficacy than teachers in other settings. Considering the findings from Hoy and Spero and Knoblauch and Hoy, the question to be answered are urban school teachers receiving necessary support in relation to suburban and rural schools? Knoblauch and Hoy suggest little research has been done to determine what effect, if any, urban or rural student teaching placement would have on the efficacy beliefs of student teachers. Most of the research examining student teachers' efficacy beliefs has been conducted in suburban settings and there is a lack of research on other student teacher placements.

Tschannen-Moran and Hoy (2007) claims among the sources of teachers' self-efficacy beliefs, mastery experiences are postulated to be the most potent. Thus, it seems likely that other sources of self-efficacy would play a larger role early in learning when fewer mastery experiences are available. Tschannen-Moran and Hoy explored several potential sources of teachers' self-efficacy beliefs to see if differences could be found

between novice and experienced teachers. The contextual elements Tschannen-Moran and Hoy explored included teachers' rating of the abundance of available teaching materials and various forms of verbal persuasion such as the interpersonal support from administrators, colleagues, parents, and community members. They also examined mastery experiences in the form of teachers' satisfaction with their past teaching performance as a source of efficacy judgments. Among the 255 novice and career teachers who participated in the study, contextual factors such as the teaching resources and interpersonal support available were found to be much more salient in the self-efficacy beliefs of novice teachers. Among experienced teachers, for whom an abundance of mastery experiences were available, contextual factors played far less important of a role in their self-efficacy beliefs. Hoy and Spero's (2005) and Knoblauch and Hoy's (2008) studies focused on new or student teachers; whereas, the focus of the Tschannen-Moran and Hoy study was the self-efficacy of veteran teachers. Thus, the studies indicate novice teachers are more vulnerable to deficit self-efficacy beliefs than veteran or career teachers.

There have been studies in several countries discovering the relationship of teacher self-efficacy and student achievement. In an Italian study by Caprara, Barbanelli, Steca, and Malone (2006) teachers' self-efficacy beliefs were examined as determinants of their job satisfaction and students' academic achievement. Over 2000 teachers in 75 Italian junior high schools were administered self-report questionnaires to assess self-efficacy beliefs and their job satisfaction. Students' average final grades at the end of junior high school were collected in two subsequent scholastic years. The results from the Caprara et al. (2006) study further corroborate the contribution of teachers' self-efficacy beliefs on their job satisfaction and provide new elements that attest to the influence that their perceived self-efficacy has on

the ability to effectively handle various tasks, obligations, and challenges related to their professional roles which all affect students' academic achievement at the school level. The results from the Caprara study correlate with previous investigations in this empirical review.

Studies linking teacher motivation and efficacy to accountability era, specifically the common core, have been difficult to find, however studies linking previous standard initiatives to teacher self-efficacy are more available. Finnigan and Gross (2007) hypothesize that No Child Left Behind Act (NCLB) and previous performance-based accountability policies based on sanctions would motivate school staff to perform at higher levels and focus attention on student outcomes. This study promoted the premise that policy maker initiatives can be linked to teacher performance associated with implementing standardized testing. Finnegan and Gross used data from expectancy and incentive theories to examine if teacher motivation levels change because of accountability policies and policy mechanisms related to teacher motivation. Through a combination of qualitative and quantitative data collected from ten of Chicago's low performing schools, Finnegan and Gross found that the value teachers placed on their professional status and their goals for students tended to focus and increase their efforts, but low morale had the potential to undercut the sustainability of teachers' responses. Although teacher individual motives did not appear to change, they become overshadowed by decreased expectancies and associated demoralization. Although teachers had internal motives (solidary and purposive) that drove them to respond to the accountability policies, causing them to value the policy outcomes, their expectations that they could accomplish the goal decreased the longer they were on probationary status. The result is that motivation decreases rather than increases for teachers



in schools that struggle the most. This study reaffirms accountability policies, such as No Child Left Behind, can have counterproductive results which suggest that stringent policies deteriorates the initial motivational responses of individuals in the schools that persistently struggle.

A complication in interpreting the results across these five studies is the range of instruments used to measure teacher efficacy beliefs. Apart from the two studies by Knoblauch and Hoy (2008) and Tschannen-Moran and Hoy (2007), no two studies utilized the same instrument for measuring teacher efficacy beliefs. In all cases, the instruments used were designed by the authors. This variation in instruments makes synthesizing results across studies difficult. This is especially true given that scores on different measures of teacher efficacy beliefs have been found to be at best moderately positively correlated (Tschannen-Moran, Woolfolk, & Hoy, 1998). Hence, it is unclear whether these instruments measured the same construct. Moreover, given that studies linking teacher efficacy beliefs and attrition focus on a variety of factors, it is difficult to determine the extent to which results from such studies apply to the factors attributing to teacher attrition.

### **Assessing Teacher Self-Efficacy**

During the last three decades, several researchers have attempted to measure teacher self-efficacy, resulting in short, and general measures as well as long, detailed ones. Although the study of teacher self-efficacy started with RAND researchers' notions, incorporating Rotter's social learning theory, the conceptual theory originating from Bandura (1977, 1997) gave rise to the development of several teacher self-efficacy measures. People develop efficacy differently and Bandura (2006) claims the one-size-fits all approach to measuring self-efficacy usually has limited explanatory and predictive value because most

of the items in an all-purpose test may have little or no relevance to the domain of functioning. Although efficacy beliefs are multifaceted, social cognitive theory identifies several conditions under which they may co-vary even across distinct domains of functioning (Bandura, 1997). Mastery experiences that provide significant knowledge to one's capacity to effect personal changes can produce a restructuring of efficacy beliefs that is spread across diverse realms. The realms of functioning require scales being developed to produce measurements from a variety of domains of self-efficacy. Multi-faceted scales for evaluating teacher efficacy may therefore enable researchers to choose subjects and domains more worthy of focus and hence produce effective teachers.

Tschannen-Moran and Hoy (2001) suggested that to be useful and generalizable, measures of teacher efficacy need to tap teacher's assessments of their competence across the wide range of activities and tasks they are asked to perform. Based on their model (Tschannen-Moran, Woolfolk, & Hoy, 1998), they noted that a valid measure of teacher efficacy must assess both personal competence and an analysis of the task in terms of the resources and constraints in particular teaching contexts. Tschannen-Moran and Hoy (2001) introduced a new instrument to measure teacher efficacy, comprised of three subscales: (1) efficacy for instructional strategies, (2) efficacy for classroom management, and (3) efficacy for student engagement. This model describes the sources of efficacy (i.e., mastery experience, vicarious experience, verbal persuasion, and physiological cues) as influencing task analysis and competence assessments from which efficacy beliefs are derived and, subsequently, as influencing teachers' goals and persistence, which in turn affects teaching behaviors. Despite its potential for understanding teachers' cognitions and behaviors, teacher efficacy is an "elusive construct" that is difficult to adequately assess (Tschannen-

Moran & Hoy, 2001). This difficulty has been exacerbated by the varied definitions and conceptual frameworks that have simultaneously laid claim to the term teacher efficacy (Fives & Buehl, 2010). Although teacher efficacy may be elusive to define and measure, several studies have attempted the task of measuring efficacy, its effects on student achievement, and the relationship of teacher efficacy with teacher attrition.

The author analyzed seven studies linking teacher efficacy, student achievement, and attrition for this literature review. It is from this analysis a correlation between teacher efficacy, student achievement, and attrition can be identified. Within these studies, it would stand to reason novice and experienced teachers' self-efficacy beliefs would be correlated with their motivation and goals and belief in their ability to reach and teach students. Tschannen-Moran & Hoy (2007) indicates teachers' self-efficacy is a little idea with big impact. Teachers' judgment of their capability to impact student outcomes has been consistently related to teacher behavior, student attitudes, and student achievement. If the teacher feels they cannot reach their students, they will likely leave the profession. Teachers are responsible for making a difference in the lives of the children they teach. So, it is critical to analyze the effect of teacher self-efficacy and to consider the development of self-efficacy in a teacher. Research has indicated just as self-efficacy can contribute to a high level of student achievement, lack of or lower self-efficacy will have the adverse effect (Bandura, 2012; Alderman, 2013).

Despite the measurement confusion, teacher efficacy still emerged as a worthy variable in educational research. Researchers have found few consistent relationships between characteristics of teachers and the behavior or learning of students. Teachers' sense of efficacy...is an exception to this general rule (Woolfolk & Hoy, 1990). Teachers who set

high goals, who persist, who try another strategy when one approach is found wanting, in other words, teachers who have a high sense of efficacy and act on it are more likely to have students who learn (Shaughnessy, 2004). The idea that teachers' self-beliefs are determinants of teaching behavior is a simple, yet powerful idea and can drive teachers in staying or leaving the teaching profession. Thus, leaders must work to support teachers during and after the implementation of any new standards reform.

### **Teacher Attrition**

During the past two decades, teacher turnover rates have been of great concern for the education community and has encouraged an intensified focus to understand the phenomenon. The most recent research has dramatically increased an understanding of teacher retention and attrition (Boyd D. , et al., 2011; Hanushek, Kain, & Rivkin, 2004; Ingersoll & Smith, 2003; Johnson, 2006; Guarino, Santibañez, & Daley, 2006). Most public and private entities that hire employees must deal with the fact personnel will always be coming and going regardless of the situation. However, a high turnover rate can have disastrous effects on any organization. "Attrition" and "teacher turnover" are both terms many school districts use regarding this phenomenon. Although some turnover is inevitable and reasonable levels of turnover may promote innovation, (Macdonald, 1999) in schools with high turnover, a revolving door atmosphere stifles the development of relationships and programs that foster learning (Ingersoll, 2001). School districts and human resource departments tend to use the terms attrition and teacher turnover interchangeably, however there are distinct differences.

## **Turnover and Attrition**

A school's teaching staff is not static. Teachers come and go, and the patterns of their movements between schools and into and out of the profession have undergone radical changes over the past 50 years. According to Boe, Cook, and Sunderland (2008) teacher turnover refers to major changes in a teacher's assignment from one school year to the next. The researchers clarify teacher turnover includes three components, the most studied of which are leaving teaching employment (commonly referred to as attrition) and moving to a different school (commonly referred to as school transfer or as teacher migration). A third component is teaching area transfer such as the transfer of a teacher from an assignment in special education to one in general education (Boe, Cook, & Sunderland, 2008). The rates of attrition often depend on the definition. This dissertation explored teacher attrition by examining teachers transferring from one district to another and those exiting the profession all together.

To fully explore and analyze the issue of teacher attrition, identifying and interpreting the complexities of the definition becomes important. Every four years the National Center for Educational Statistics (NCES) conducts a teacher attrition and mobility survey and follows the initial inquiry with a teacher follow-up survey. The NCES survey identifies teacher movement as "stayers" which are teachers who were teaching in the same school in the current school year as in the base year, "movers" which are teachers who were still teaching in the current school year, but had moved to a different school after the base year and lastly, "leavers" which are teachers who left the teaching as a profession after the base year. Stayers, movers, and leavers have distinct predictors as to why they may stay, move, or leave the teaching profession.

## **Predictors of Turnover**

There have been several studies analyzing attrition patterns using individual teacher characteristics as predictors of turnover and attrition. Ingersoll's (2001) analysis of NCES data claims the age of teachers is the most salient and statistically significant predictor of the likelihood of teacher turnover. Both younger (less than 30 years) and older (greater than 50 years) teachers are more likely to depart than are middle aged teachers (Ingersoll, 2001). The NCES data also revealed math and science teachers are not more likely to depart than other teachers, male teachers are less likely to depart than are female teachers, and teachers of color are less likely to depart than white teachers. Although the analysis revealed differences in attrition rates in these teacher characteristics, Ingersoll claims content expertise, gender, and race are small and not statistically significant.

School characteristics play an important role in teacher turnover. Many studies have found that teachers are prone to leave schools serving high proportions of low-achieving, low-income, and students of color for more economically and educationally advantaged schools (Loeb, Darling-Hammond, & Luczak, 2005). Studies conducted by Smith and Ingersoll (2004) and Hanushek, Kain, and Rivkin (2004) suggested that teachers from schools with a high proportion of students of color or a large fraction of students who are eligible for free and reduced-price lunches are more likely to leave. Hanushek et al. (2004) discovered Texas public school teachers prefer teaching dominant white students and middle- class students regardless of the teachers' gender, race, and experience level. However, African-American teachers favor schools with higher shares of black student enrollment (Hanushek et al., 2004). Concurrent with the research reported here, Goldhaber, Gross, and Player, (2011) also found North Carolina teachers who transfer and leave

teaching are less effective than those who remain. These studies have consistently identified teachers in schools serving high concentrations of low-income, low-achieving, students of color are more likely to leave than their counterparts in other schools. If high rates of turnover are caused largely by student demographics, then policy strategies to correct the problem are limited.

### **Effects of Teacher Turnover**

There have been a multitude of studies on why teachers are leaving, but few studies on the overall organizational effects of teacher turnover. Organizational conditions can play a significant role in teacher turnover and an emerging body of literature has reexamined the study of teacher turnover by exploring whether poor working conditions that prevail in low income schools might be a more powerful driver of teacher turnover than student demographics (Johnson, Kraft, & Papay, 2012). Research indicates teacher turnover rates can be high, particularly in schools serving low income, non-White, and low-achieving student populations. Nationally, about 30% of new teachers leave the profession within 5 years, and the turnover rate is about 50% higher in high-poverty schools compared to more affluent ones (Darling-Hammond & Sykes, 2003; Ingersoll, 2001; 2003). Teacher turnover rates also tend to be higher in urban and lower-performing schools (Hanushek, Kain, & Rivkin, 2004). The results from this study align with a growing body of research examining the organizational characteristics of the schools in which teachers work (Boyd, Grossman, Ing, Lankford, Loeb and Wyckoff, 2011; Ladd, 2011).

The attention to teachers and what teachers might contribute to student achievement grew out of studies that identified teachers as the most important school level factor in student's achievement (Hanushek, Kain, & Rivkin, 2004; Hanushek, 2010; Darling-

Hammond, 2000). These studies indicate the high turnover rates of teachers in schools with substantial populations of low-income and students of color are driven largely by teachers fleeing the dysfunctional and unsupportive work environments in the schools to which low-income and students of color are most likely to be assigned (Johnson, Kraft, & Papay, 2012). Low-income and schools that serve students of color recruit, hire, train, and lose teachers on a continual cycle. This cycle is referred to as the “revolving door of teacher turnover” (Ingersoll, 2001, p. 501). Chronic teacher and staff turnover can negatively affect professional development, class size, scheduling, curriculum planning, collegiality, and a variety of other factors, adding a significant degree of chaos and complexity to schoolwide operations and potentially harming student learning across classrooms and teachers.

The attention to teachers and what they might contribute to students’ learning grew out of several convincing studies that identified the teacher as the most important school-level factor in students’ achievement (Hanushek, 2010; Ronfeldt, Lankford, Loeb, & Wyckoff, 2013; Hanushek, Kain, & Rivkin, 2004). The benefits associated with being taught by good teachers are cumulative (Sanders & Rivers, 1996). Research indicates the achievement gap widens each year between students with most effective teachers and those with least effective teachers (Hanushek & Rivkin, 2004; Sanders & Rivers, 1996). This suggests that the most significant gains in student achievement will likely be realized when students receive instruction from good teachers over consecutive years. The contribution of teachers was shown to be especially important for low-income students, who tend to have fewer learning supports outside of school.

In a longitudinal study beginning with the 2001-2002 school year and spanning eight years, Ronfeldt, Lankford, Loeb, and Wyckoff (2013) observed 850,000 grade four and five



students who attended New York City public schools. The researchers then compared test scores for students within the same grade and school over different years, their math scores were 8.2 to 10.2 percent of standard deviation lower and their English language arts scores were 4.9 to 6.0 percent of a standard deviation lower in years where there was 100 percent teacher turnover when compared to no teacher turnover. Other key findings from the research included the following:

- Reducing teacher turnover from 40 percent to 0 percent increased student achievement in math by 2 percent to 4 percent of a standard deviation; (p. 16)
- When measuring student achievement results across grade levels within the same year and school to rule out the effects of other factors, such as a new school principal, student test scores were 7.4 percent to 9.6 percent of a standard deviation lower in math and 6.0 percent to 8.3 percent of a standard deviation lower in English language arts; and (p. 15)
- Students of teachers who remained in the same grade and school from one year to the next were harmed by turnover. (p. 22)

Teacher effectiveness matters significantly and suggest that low-income students lucky enough to have three very good teachers in a row in elementary schools earn test scores that, on average, are like middle class children (Rivkin, Hanushek, & Kain, 2005). Conversely, almost all children, regardless of their socio-economic status, will be harmed academically by exposure to ineffective teachers over three consecutive years. Although one focal point of the No Child Left Behind (NCLB) Act of 2002 was to address students to be taught by highly qualified teachers, the policies states developed in response to NCLB's call have not achieved this goal (Floch, Martinez, O'Day, & Stecher, 2007).

## **Cost of Turnover**

According to a 2014 report by Marianna Haynes of the Alliance for Excellent Education group, roughly half a million U.S. teachers either move or leave the profession each year and attrition costs the United States up to \$2.2 billion annually. This high turnover rate disproportionately affects high-poverty schools and seriously compromises the nation's capacity to ensure that all students have access to skilled teaching (Haynes, 2014). In another study by the National Commission on Teaching and America's Future (NCTAF), estimates were that the national cost of public school teacher turnover could be over \$7.3 billion a year. The NCTAF's estimate, which is based on the cost generated by teachers who leave their school or district during a given year, does not include the district's cost for teachers who move from school to school within a district in search of a better position. The estimate also does not include any federal or state investments that are lost when a teacher leaves. If these costs were considered, the true cost to the nation would be far more than \$7 billion (Carroll, 2012).

NCTAF utilized cost data from its five-district study and demographic data from the National Center for Education Statistics (NCES). The demographic data allowed NCTAF to determine the number of teachers, schools, and districts in urban and non-urban settings. From the NCES 2011-2012 data, there are 3,477,000 teachers in public schools in the United States. 1,229,398 teachers taught in urban public schools with greater than 15,000 students and 2,217,602 taught in non-urban public schools with less than 15,000 students. NCES data also determined there are 14,838 public school districts and 95,726 public schools in the United States. Of the public-school districts, 850 are urban and 13,533 are non-urban. Public

school data included 29,886 urban schools and 65,840 non-urban schools which total the 95,726 public schools in the United States.

The cost of teacher leavers was calculated using district data on turnover and resources allocated to deal with turnover. Teachers who left the district altogether were considered leavers. In terms of costs, districts, along with a small subset of schools in each district, were asked to report time and money spent on activities associated with teacher leavers including: recruitment, hiring, administrative processing, professional development, and separation. Urban districts spent \$8,750 per a teacher leaver while non-urban had cost of \$6,250 per teacher leaver. Urban schools had \$70,000 cost in teacher leavers and non-urban school cost of \$33,000. By multiplying the number of teachers by the national average leaver rate of 12.5%, NCTAF generated the number of district leavers. Multiplying the number of leavers by the district cost per leaver generated a national district cost of attrition of \$3.08 billion. When the number of schools was multiplied by the school cost of attrition, the national school cost of attrition equaled \$4.26 billion. Together, the school and district costs resulted in a national cost of teacher turnover of \$7.34 billion. Table 2.4 list annual estimated cost of teacher turnover computed by NCTAF (Carroll, 2012):

Table 2.3

*Cost of Teacher Turnover in Selected Districts*

<b>School District Annual Cost of Teacher Turnover</b>	
Atlanta, Georgia	\$10,920,000
Baltimore, Maryland	\$19,013,750
Boston, Massachusetts	\$13,020,000

*table 2.3 continues*

**School District Annual Cost of Teacher Turnover**

Cleveland, Ohio	\$12,538,750
Dallas, Texas	\$28,892,500
Detroit, Michigan	\$26,565,000
Denver, Colorado	\$14,988,750
Fairfax, Virginia	\$28,350,000
Hartford, Connecticut	\$4,462,500
Houston, Texas	\$35,043,750
Los Angeles, California	\$94,211,250
Louisville, Kentucky	\$18,208,750
Memphis, Tennessee	\$21,866,250
Miami, Florida	\$47,775,000
Nashville, Tennessee	\$14,393,750
New York City, New York	\$115,221,250
Oakland, California	\$12,005,000
Philadelphia, Pennsylvania	\$29,662,500
Pittsburgh, Pennsylvania	\$8,890,000
Prince Georges County, Maryland	\$23,292,500
Richmond, Virginia	\$6,072,500
San Francisco, California	\$11,865,000
Seattle, Washington	\$10,596,250
Washington, D.C.	\$16,598,750

(Carroll, 2012)

Low performing schools rarely close the student achievement gap because they never close the teaching quality gap, they are constantly rebuilding staff (Barnes, Crowe, & Schaefer, 2007; Milner, 2013, 2011). Barnes et al. (2007) claims an inordinate amount of their capital both human and financial is consumed by the constant process of hiring and replacing beginning teachers who leave before they have mastered the ability to create a successful learning culture for their students. Teacher turnover is also likely to have a significant fiscal impact as schools and districts must fund additional recruitment programs, implement interview and hiring procedures, and provide additional professional development—not to mention the loss in experience and expertise (Guin, 2004). Because teacher attrition rates in these at-risk schools are chronically high, turnover costs become a drain on already scarce resources that could otherwise be invested to improve teaching effectiveness and student growth.

Decades of educational research have documented that a sense of community and cohesion among families, teachers, and students is important for the success of schools (Smith & Ingersoll, 2004). The idea that organizational capacity matters is consistent with research on “effective” schools, which demonstrates that factors such as staff trust and instructional cohesiveness influence student achievement (Guin, 2004; Leithwood & Jantzi, 2000). High rates of teacher turnover may have a significant negative effect on school health and climate, complicating the ability of schools to plan and implement new programs, conduct professional development, and provide support systems for school faculty. Smith and Ingersoll (2004) claim teacher turnover can inhibit the development and maintenance of a learning community; in turn, lack of community in a school may have a negative impact on teacher retention, thus creating a vicious cycle. Hence, the assumption underlying the

analysis is high rates of beginning teacher turnover are of concern not only because they contribute to school staffing problems and perennial shortages but because this form of organizational instability is likely to be related to organizational effectiveness. These negative reactions may lead to withdrawal and eventually attrition. Conversely, low rates of staff turnover may increase the capacity of schools to plan over time, implement new programs, and strengthen collaboration and teamwork among staff members making school climate a significant factor in teacher turnover.

### **Employee Turnover in Other Fields and Implications for Teachers**

Research on turnover and attrition in the education field predominately focuses on teachers and administrators as movers or leavers, however, there is extensive research from various fields on employee turnover and attrition. The research on employee turnover, including public and private entities, is extensive and has been examined in a variety of aspects of employee stability, turnover, and mobility with, at times inconsistent findings (Caves, 1998; Schubert & Anderson, 2015; Hancock, Allen, Bosco, McDaniel, & Pierce, 2013; Hausknecht & Trevor, 2011). According to Martinez-Garcia and Slate (2009) regularly running throughout all the literature is the premise employee turnover is important because of its link to the performance and effectiveness of organizations. Ingersoll claims researchers have found that a low level of employee turnover is normal and efficacious in a well-managed organization. Too little turnover of employees is tied to stagnancy in organizations; effective organizations usually both promote and benefit from a limited degree of turnover by eliminating low caliber performers and bringing in “new blood” to facilitate innovation (Ingersoll, 2001). The research also indicated high levels of employee turnover are both cause and effect of ineffectiveness and low performance in organizations.

Researchers and policymakers should not jump to the conclusion that across the board reductions in teacher attrition are desirable. Reductions may benefit students for some teachers to leave, particularly those teachers who are ineffective in improving student achievement. Eliminating first-year teacher attrition could be detrimental to student achievement. Even if assumed that leavers would be replaced by first-year teachers who on average are less effective than second-year teachers, that extra year of experience does not offset the weak achievement gains of many of the first-year teachers who leave (Boyd, Grossman, Ing, Lankford, Loeb, & Wyckoff, 2011).

There have been several responses by states and districts to slow teacher turnover and attrition with poor teacher retention as a major contributor to the problem. National research demonstrates the importance of addressing school conditions to improve teacher retention. Teachers who leave schools cite opportunities for a better teaching assignment, dissatisfaction with support from administrators, and dissatisfaction with workplace conditions as the main reasons they seek other positions (National Center of Education Statistics, 2004). Teachers indicate that a positive, collaborative school climate and support from colleagues and administrators are the most important factors influencing whether they stay in a school (Loeb, Darling-Hammond, & Luczak, 2005). Districts must create a supportive climate and collaborative culture. A survey of 2,000 educators from California found that 28 percent of teachers who left before retirement indicated that they would come back if improvements were made to teaching and learning conditions. Monetary incentives were found to be less effective in luring them back (Futernick, 2007). However, Johnson (2000) recommends states and districts implement increase salaries for all teachers and

develop differentiated pay scales that reward expert teachers and those who take on specialized roles and responsible roles.

A 2008 study of teacher retention found that teachers left their schools primarily because of management breakdowns, challenging relationships (administrators and colleagues as well as students and parents), and the loss of creativity and control in their classrooms (Reichardt, Snow, Schlang, & Hupfeld, 2008). Ingersoll (2001) recommends adopting policies that include teachers in school-based decision making. Increased faculty control over school policymaking and greater teacher autonomy in the classroom are both associated with increased teacher commitment. Darling-Hammond (2000) recommends creating high-quality induction programs for new teachers, requiring districts to offer these programs, and providing funding to support the programs and recommends developing peer review systems that focus on improving the performance of new teachers and providing professional development opportunities are targeted to the needs of individual teachers.

The research suggests if policymakers and education leaders do not understand the nature of the teacher shortage, the solutions that they develop will be ineffective in addressing that problem and may even create new problems in their wake (Voke, 2003). Voke claims if states and districts react to news about the teacher shortage by developing programs that simply attract more candidates to the profession and quickly prepare them to enter the classroom, then they risk wasting valuable resources and undermining the quality of education that children receive; all programs must be designed to produce teachers who have the skills, knowledge, and commitment necessary to teach effectively in high-need areas. Similarly, if states and districts do not address the role that high teacher turnover plays relative to the teacher shortage, and they do not develop policies and initiatives that address



the causes of high turnover in schools, then they will not effectively address the problem, and they will undermine efforts to provide all students with a quality education (Voke).

Retaining and recruiting effective teachers is critical to student and district success.

Although there are several reasons why teachers leave the profession, ultimately it's up to school leaders to strategically recruit great teachers, provide them with the ongoing support they need to succeed in the classroom, and offer them creative ways to make teaching a satisfying, lifelong career.

### **School Leadership**

Leadership studies historically went together with studies of elites, but today the field of leadership focuses not only on the leader, but also on followers, peers, work setting/context, and culture, including a much broader array of individuals representing the entire spectrum of diversity, public, private, and not-for-profit organizations, and samples of populations from nations around the globe. Leadership is no longer simply described as an individual characteristic or difference, but rather is depicted in various models as dyadic, shared, relational, strategic, global, and a complex social dynamic (Avolio 2007, Yukl 2006). Leadership was considered an art, for which some fortunate people had an inbuilt genius; the rest could only engage in admiring post-game analyses. Leadership cannot be isolated in a field or category. From the beginning of time, leadership and human behaviors have been connected concepts. Many anthropologists, historians, political scientists, and authors in the popular press conceptualize leadership as a political process.

The consistency with which management and psychological scientists have developed a worldview of leadership devoid of politics reflects how narrow their unidisciplinary perspective is and how inaccurate their narrative of leadership theory (Rost,

1993). While educators can learn from other settings, educational leadership and management must be centrally concerned with the purpose or aims of education. Leadership evolution and history can be a broad and extensive study, however, for the purpose of this literature review, the focus will be school leadership. I first start with defining school leadership, include a discussion of transactional and transformational leadership (make the distinction between the two here) and their influence on education. Next, school leadership is centered on performance within the organization, student achievement, and retention of teachers.

### **What is Leadership?**

The concept of leadership is a complex one and understanding the nature of leadership can be most elusive. There is a wide and ever growing variety of theories to explain the concept and practice of leadership and most everybody has a feel for what the term means, at least in a general sense. The field of educational leadership has many competing perspectives and an inevitable lack of agreement on the exact nature of the discipline. One key debate has been whether educational leadership is a distinct field or simply a branch of the wider study of management. The focus of this literature review is school leadership; however, it is necessary to define leadership in a broader sense and then to streamline the focus towards transactional and transformational school leadership. The concept of leadership, regardless of the organization or institution, private or public, has a common framework and structural relationship and connects in a variety of ways. Maxwell (1998) suggest that leadership must be earned:

Leadership is influence – nothing more, nothing less. People have so many misconceptions about leadership. When they hear that someone has an impressive title or an assigned leadership position, they assume that he is a leader. Sometimes that's true. But titles don't have much value when it comes to leading. True

leadership cannot be awarded, appointed, or assigned. It must come from influence, and that can't be mandated. It must be earned. (p. 16).

Other definitions support Maxwell's concept of influence in regards to leadership.

Leithwood, Day, Sammons and Hopkins (2006) describe their generic definition of leadership as not just effective leadership but the definition is very simple, then; it is about direction and influence. Leithwood et al. (2006) further explain stability is the goal of what is often called management. Improvement is the goal of leadership. Brady and Woodward (2005) also include the character of the leader: "Leadership is the influence of others in a productive, vision-driven direction and is done through the example, conviction, and character of the leader" (p. 7).

There is no agreed definition of educational leadership and Yukl (2002) argues the definition of leadership is arbitrary, and very subjective. Some definitions are more useful than others but there is no "correct" definition (Yukl, 2002). School and district leadership means creating powerful, equitable learning opportunities for students, professionals, and the system, and motivating or compelling participants to take advantage of these opportunities (Editorial Projects in Education Research Center, 2004). Most theories view leadership as grounded in one or more of the following three perspectives: leadership as a process or relationship, leadership as a combination of traits or personality characteristics, or leadership as certain behaviors or, as they are more commonly referred to, leadership skills. In virtually more dominant theories there exist the notions that, at least to some degree, leadership is a process that involves influence with a group of people toward the realization of goals. To influence others to realize personal or organizational goals, different leadership styles have been adopted. The most recognized and researched leadership styles are transactional and transformational.

## **Transactional Leadership**

Transactional leadership is centered on exchanges and based on two factors: contingent rewards and management by exception. Contingent rewards are the exchanges between leaders and subordinates in which effort by subordinates is exchanged for specific rewards, such as salary and benefits, bonuses, or other incentives. Distinguished historian James MacGregor Burns was instrumental in developing the interdisciplinary fields of leadership (Kennedy, 2012). According to Burns (1978) true leaders induce followers to act in accord with the values and the motivations of both leaders and followers. It is a dynamic relationship that, at its best, finds leaders engaged in a process of raising the consciousness of followers, or, at a minimum, engages both leaders and followers in a common enterprise. Leadership is meaningless without its connection to common purposes and collective needs (Burns). Burns identified transactional leadership as taking place when one person takes the initiative in contacting others for an exchange of valued things. This type of leadership is best described as the politics of exchange, in which, for example, a public official bargains jobs for votes (Burns). Some educators might wonder about applicability of political philosophy to the field of education, but Burns says leadership is leadership wherever you find it.

Building on the work of Burns, Bernard Bass (1985) based his theory that transactional leaders are assumed to clarify for their employees the tasks that must be accomplished and their responsibilities, reward employees for achieving the specified performance levels and take corrective action when necessary. Transactional leadership is a two-way influence: a social exchange in which both the leader and follower give something and get something in return (Hollander, 1978). The two-way influence may be either reward

or punishment. Bass proclaims the work to either receive reward or punishment is a transaction. In many instances, however, such transactional leadership is a prescription for mediocrity. This is particularly true if the leader relies heavily on passive management-by-exception, intervening with his or her group only when procedures and standards for accomplishing tasks are not being met (Bass, 1990).

Burns and Bass' foundations for transactional leadership theory are quite similar, however Bass' research incorporates Maslow's (1954) hierarchy of needs. Bass criticized Burns' work as exclusionary of followers' needs. He notes that transactional leaders contribute confidence and desire by clarifying required performance and how needs would be satisfied as a result (Bass, 1985). Burns was more concerned about simplistic exchanges between the leader and follower and the extent to which transactional leaders lead with moral and ethical behaviors. Today, researchers study transactional leadership within the continuum of the full range of leadership models (Bass & Riggio, 2006). They realize that leadership is always situational, meaning that it is context driven.

Transactional leadership has remained the organizational model for many people and organizations. Transactional leadership in the educational setting is still being practiced, but not in the frame and structure as Bass has described as legitimate power. A recent example of transactional leadership occurred in Washington D.C. public schools under the direction of Michelle Rhee, chancellor of the school district in 2010. Teachers and principals with high scores on standardized test were rewarded monetarily and with continued employment while teachers and building leaders with lower test scores were fired. The increase of teacher and building leader accountability of student achievement mirrors the rewards-punishment model of the transactional leadership theory.

## **Transformational Leadership**

Transformational leadership theory is leadership that creates positive change in the followers whereby they take care of each other's interests and act in the interests of the group. In this leadership style, leaders enhance the motivation, moral and performance of their follower group. Burns (1978) first brought the concept of transformational leadership to prominence in his extensive research into leadership styles.

Essentially the leader's task is consciousness-raising on a wide plane. The leader's fundamental act is to induce people to be aware or conscious of what they feel - to feel their true needs so strongly, to define their values so meaningfully, that they can be moved to purposeful action. (Burns, 1978, p. 43-44).

Burns defined a transformational leader as one who raises the followers' level of consciousness about the importance and value of desired outcomes and the methods of reaching those outcomes. Bass (2008) furthered the definition as the transformational leader convinces followers to transcend their self-interest for the sake of the organization, while elevating the followers' level of need on Maslow's (1954) hierarchy from lower-level concerns for safety and security to higher-level needs for achievement and self-actualization. Together, heightened capacity and commitment are held to lead to additional effort and greater productivity (Barbuto, 2005; Leithwood & Jantzi, 2000).

Bass' research interest was in the extent to which a leader influences followers. Followers go after a leader because of trust, honesty, and other qualities and the stronger of these are the loyalty they have for the leader. Transformational leaders elevate people from low levels of need, focused on survival (following Maslow's hierarchy), to higher levels (Kelly, 2003; Yukl, 2002). They may also motivate followers to transcend their own interests for some other collective purpose (Feinberg, Ostroff, & Burke, 2005) but typically help followers satisfy as many of their individual human needs as possible, appealing

notably to higher order needs. The theory is based on an organizational culture conducive to leader and follower relationships. The leader recognizes followers with higher order needs and interacts with them in ways that lead to transformation. Not only is the leader a role model but this individual challenges the existing order, the revolutionary being a stark example of this. While leaders may have democratic motives in mind, they often assume a transaction leadership style at the same time, directing the followers to achieve certain goals. Although there have been few studies of such leadership in schools and the definition of transformational leadership is still vague, evidence shows that there are similarities between transactional and transformational leadership styles, whether in a school setting or a business environment (Leithwood & Jantzi, 2000).

### **Transformational Leadership in Education**

Transformational leadership is considered a new practice; however, the premise has been around for decades. It is only in the last ten years that it has been given a title.

Transformational leadership calls for increased levels of faculty commitment. It also emphasizes the goals of the institution. The leader is hoping that all members offer more support and greater effort toward meeting these goals. A transformational leader exhibits many skills, which produce results. This person hopes to develop school objectives, offers professional development opportunities, focuses on values, demonstrates and enforces high expectations, and encourages other team members to provide important input in decision-making.

Transformational leadership has been globalized as how teachers and principals can respond to the demands of reform to achieve appropriate and effective learning outcomes through turning the school into a ‘high reliability learning community’ (Leithwood, Jantzi,

& Steinbach, 1999). A central feature of transformational leadership is direction setting through the building and communicating of a commitment to a shared vision, and a positive response to high performance expectations (Leithwood, Jantzi, & Steinbach, 1999). This is to be achieved not just through structures and systems, but by enabling the follower to ‘feel’ the leadership:

Charismatic school leaders are perceived to exercise power in socially positive ways. They create trust among colleagues in their ability to overcome any obstacle and are a source of pride to have as associates. Colleagues consider these leaders to be symbols of success and accomplishment, and to have unusual insights about what is important to attend to; they are highly respected by colleagues. (Leithwood, Jantzi, & Steinbach, 1999, p. 57)

The effects of transformational leadership on organizational learning in the context of school improvement efforts were examined by Leithwood, Jantzi, & Steinbach (1999). Leithwood’s collective learning process was based on relevant theoretical literature. Accounts of leadership and other conditions that foster collective learning draw on evidence from seven studies carried out by Leithwood and colleagues. Four of these studies were about team learning and leadership, and three of the studies were about whole-school learning and leadership. The researchers concluded “transformational leadership practices were helpful in fostering organizational learning; in particular, vision building, individual support, intellectual stimulation, modelling, culture building and holding high performance expectations.” Furthermore, evidence about the relationship between transformational leadership and organizational improvement and effectiveness were found more than any other effects. The evidence suggested that transformational leadership stimulates improvement.



## **School Leadership Influence on School Performance**

Schools depend on leadership throughout the organization to shape productive futures through a process of self-renewal (Senge, Cambrom-McCabe, Lucas, Smith, Dutton, & Kleiner, 2000). The importance of high quality, effective leadership has been shown to be one of the major contributing factors leading to high performance in schools (Hallinger & Heck, 1999; Sammons, 1995). School leadership and school performance have a direct correlation to each other. Ubben and Hughes (1992) found that principals can create a school climate that improves the productivity of both teachers and students and that the leadership style of the principal fosters or restricts school effectiveness. Hallinger and Heck (1999) reviewed over 40 empirical studies conducted between 1980 and 1995 and concluded that principals exercised a measurable and statistically significant, though small, indirect impact on school effectiveness and student achievement. Similarly, Witziers, Bosker, and Kruger (2003) found that school leadership does have a positive and noteworthy effect on student achievement. Waters, Marzano, and McNulty (2003) reported that effective school leadership substantially increases student achievement. Using a path analysis, Kruger, Witziers, and Slegers (2007) found school leaders indirectly influence student outcomes and school culture.

On the other hand, some studies found no relationship between school leadership styles and effectiveness of schools. Leithwood and Jantzi (2005) examined the two types of student outcomes that were conceptualized as dependent variables in the review. Transformational leadership effects on academic achievement were mixed but tending toward positive with a quite promising but limited amount of evidence (Leithwood & Jantzi). Also, the evidence of transformational leadership effects on students' engagement in

school, while still modest in amount, is uniformly positive (Leithwood & Jantzi). Using Bass and Avolio's 1994 Multifactor Leadership Questionnaire, Niedermeyer (2003) found no relationship between leadership styles (transformational, transactional and laissez-faire) and improved student achievement. It was concluded, however, that transformational leadership was related to increased teacher satisfaction, greater perception of principal effectiveness, and increased willingness on the part of teachers to give extra effort. This conclusion was in line with Avolio's (1999) finding that transformational leadership generally generates greater follower effectiveness and satisfaction than transactional leadership, although effective leaders certainly perform using the two styles.

### **School Leadership's Impact on Student Achievement**

In a review of literature for the American Educational Research Association, Leithwood and Riehl (2003) concluded that school leadership has significant effects on student learning, second only to the effects of the quality of curriculum and teachers' instruction. Case studies of exceptional schools indicate that school leaders influence learning primarily by galvanizing effort around ambitious goals and by establishing conditions that support teachers and that help students succeed (Togneri & Anderson, 2003). In contrast to the idea by Leithwood and Riehl, in studying school improvement and student achievement, individuals should understand leadership and administration means working with and through other individuals to achieve organizational goals. Leadership does have a direct effect on student achievement. Leithwood (2004) proclaims we must first acknowledge significant limitations in the research-based knowledge about the nature of current school-leaders' impact. But, based on the number of studies alone, one can

reasonably conclude that current school-leaders can have a significant influence on the basic skills' achievement of students (Leithwood, Begley, & Cousins, 1994).

When working towards achieving organizational goals, school leadership must consider organizational behavior. Organizational behavior according to Owens and Valesky (2011) is defined as “a field of social-scientific study and application to administrative practice that seeks to understand and use knowledge of human behavior in social and cultural setting for the improvement of organizational performances” (p. 259). In the review of the evidence, Leithwood, Seashore-Louis, Anderson, & Wahlstrom, (2004) suggests that successful leadership can play a highly significant and frequently underestimated role in improving student learning. Specifically, the available evidence about the size and nature of the effects of successful leadership on student learning justifies two important claims. First, leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school. Second, leadership effects are usually largest where and when they are needed most. The influence school leadership has on student success is greatly underestimated and impacts teacher retention.

### **School Leadership Impact on Teacher Attrition**

Studies find that principals' leadership (or lack thereof) often determines whether teachers are satisfied with their jobs and whether they stay (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2008). Grissom and Loeb (2009) depart from an emphasis on leadership orientations and beliefs to a focus on actions and skills. They use survey data on principals' self-reports of effectiveness, triangulated with assistant principals' assessments of their principal's effectiveness, and find that principals' organization management skills consistently predict student achievement growth and other measures of school success. In

contrast, the other principal skill domains they identified such as instruction management, internal relations, administration, and external relations were not associated with measures of school success.

According to Viadero (2008) effective and supportive leadership also crops up consistently as the single most important issue in the working-conditions surveys that Barnett Berry's Center of Teaching Quality has helped conduct in Arizona, Kansas, Mississippi, Nevada, North Carolina, Ohio, and South Carolina. Berry (2012) proclaims good teachers will not work for bad principals, and good principals will see to it that school restrooms are clean and student-discipline policies are enforced. The Center for Teaching Quality survey involving more than 150,000 teachers show that teachers also value time to prepare and collaborate with other teachers, having a say in what gets taught and how, having opportunities for professional development, and adequate facilities and resources. Such factors also emerge in the Teacher Follow-up Survey, a nationally representative study the U.S. Department of Education conducts every four years to supplement the data it collects through its Schools and Staffing Survey. Leadership is needed to address the problems and challenges that learners, students and teachers encounter in the schools. The issue is more than simply who makes which decisions, rather it is finding a way to be successful in collaboratively defining the essential purpose of teaching and learning and then empowering the entire school community to become energized and focused. In schools where such a focus has been achieved, teaching and learning were found to be transformative for everyone (Sager, 1992).

## **Summary**

The review of literature presents the most current literature in the areas of education reform, teacher self-efficacy, teacher attrition, and school leadership and introduces the reader to some of the most salient issues in these areas. It is evident this line of research still has a long way to go with the continuation of new education reforms on the horizon. The review included numerous studies showing the relationship between teacher self-efficacy, attrition rates, and school leadership. The literature pointed to the positive leadership traits or behaviors that are associated with an increase supportive environment for teachers during the implementation of reform initiatives. Reform initiatives continue to affect teacher efficacy and without proper support structures from school leaders and policy makers, an increased attrition rate of teachers will likely occur in an already strained supply of effective teachers, specifically math and language arts. Further research clearly needs to include the effects of attrition rates from a full spectrum as it is not unique to certain subject areas, school size or location, or any socioeconomic characteristic. The lack of having qualified teachers in all classrooms is a serious omission; districts from all sizes and socioeconomics engage in attrition rates in varying degree. More research is needed to be able to answer the questions policy makers, administrators, and teachers have regarding high stakes testing and the era of accountability in regards to teachers leaving the profession. Research of this nature will help school leaders and policy makers develop more appropriate support structures to retain quality teachers in the classrooms.

## CHAPTER 3

### METHODOLOGY

Teacher attrition is another way of describing the turnover rate of teachers in the education profession. This phenomenon can have disastrous effects on students' abilities to learn, cause financial strains on our schools, and lower the standards of our children's education. The exit of teachers from the profession and the movement of teachers to better schools are costly phenomena, both for the students, who lose the value of being taught by an experienced teacher, and for schools and districts that must recruit and train their replacements (Alliance for Excellent Education, 2005). Hence, the purpose of the heuristic descriptive case study was to gain a deeper understanding of middle and high school math and language arts teachers' experiences related to self-efficacy as they implemented the Missouri Learning Standards in a rural Midwest public school. Improving teachers' self-efficacy in this area may improve classroom experiences for teachers and students and encourage the retention of the newest and even the most veteran teachers in the profession. Two central questions aligned with sub-questions guided the methodology:

Central Question 1: What experiences are described by math and language arts teacher narratives regarding the implementation of the Missouri Learning Standards?

Sub-questions:

- What factors or underlying themes in the narratives account for their views of the implementation of Missouri Learning Standards?
- How do math and language arts teachers describe their sense of efficacy following the implementation of the Missouri Learning Standards?

Central Question 2: How do math and language arts teachers perceive the support of school leadership in the implementation of the Missouri Learning Standards?

Sub-questions:

- What leadership practice do they identify as significant to their sense of efficacy during the implementation of the Missouri Learning Standards?
- What leadership practices do they identify as significant to their sense of efficacy following the implementation of the Missouri Learning Standards?

These questions are significant for helping teachers acquire efficacious behaviors, knowing that the decisions they make regarding curriculum, instruction, and assessment are contributing factors for learning; hence student achievement. Hanushek (1992) estimates that the difference between having a good teacher and having a bad teacher can exceed one grade-level equivalent in annual achievement growth. Likewise, Sanders and Rivers (1996) argue that the single most important factor affecting student achievement is teachers, and the effects of teachers on student achievement are both additive and cumulative. Because of attrition, students lose the value of being taught by an experienced teacher, and schools and districts must recruit and train their replacements (Alliance for Excellent Education, 2005). Schools serving low-income students struggle to attract effective teachers. Shortages of highly effective teachers have a disproportionate effect on low-income and students of color; they are about twice as likely to be assigned to inexperienced teachers (National Center of Educational Statistics, 2000) who on average make far smaller annual learning gains for students than more experienced teachers (Hanushek, Kain, & Rivkin, 2004). Understanding

teachers' experiences with the implementation of the Missouri Learning standards as they relate to teacher self-efficacy could potentially influence school leaders and change their current practices, ensuring needed support for helping teachers cope with education reform.

The methods of this study are fully explained in this chapter. My goal was to identify and describe teacher experiences in implementing the Missouri Learning Standards.

Interviews were the primary research method used to gather insight into the dynamics of their experiences, with documents and observations used to form the crystallization of the study. Crystallization provides a deepened, complex, thoroughly partial understanding of the topic by adding symmetry and substance with an infinite variety of crystallized shapes (Ellingson, 2009). In this chapter, I place emphasis on the rationale for the selection of qualitative inquiry for the research design as well as the assumptions surrounding the methodology and my role as the researcher. Data collection, analysis procedures, and management of data in addition to limitations and ethical considerations are also detailed in this chapter.

### **Rationale for Qualitative Research**

Qualitative methodology can be viewed as a prerequisite to experimental design (Bedner & Kaul, 1994), referring to research that produces findings without the use of statistical procedures or other quantifiable measures (Strauss & Corbin, 1990). To provide research significance, qualitative researchers argue that meaning is situated within a perspective or context. Identification and description of central concepts and variables are appropriate initial steps to qualitative studies. Where quantitative researchers seek causal determination, prediction, and generalization of findings, qualitative researchers instead look for illumination and understanding (Hancock, Ockleford, & Windredge, 2009). For the



purpose of this study, the need to know the “why” and “what” of the phenomenon (Patton, 2015) greatly outweighs the need to obtain measurable outcomes. The qualitative researcher aspires to obtain meaning from the phenomenon rather than building hypotheses prior to the investigation. In this way, the researcher can better comprehend the human experience (Bogdan & Biklen, 2007). According to Yin (2009), when a researcher seeks to understand group and individual experiences, qualitative research can be extremely useful, especially in the field of education.

In qualitative research, there are many ways to design a study. I elected to use the major perspective of case study (Yin, 2009; Stake, 1995) to explore the meaning and phenomenon of teachers’ experiences guided by the theoretical tradition of phenomenology. Case study allows the researcher to explore individuals or organizations, simple though complex interventions, relationships, communities, or programs (Yin) and supports the deconstruction and the subsequent reconstruction of various phenomena. This study seeks to provide insight into the experiences of math and language arts teachers using teacher efficacy as a conception framework for during and after the implementation of the Missouri Learning Standards. Six cases are described and analyzed to understand the issues and the challenges that arise when new education standards are implemented. My focus was on the factors that facilitate or hinder the process, and the benefits to teachers who are provided strong leadership and support during these reforms. The theoretical tradition of case study, the major design element of the study, was used for describing phenomena of interest.

### **Theoretical Tradition of Case Study**

I chose case study methodology to be the major technique for this qualitative study. Case studies are not a new form of research and the fields of sociology and anthropology are

credited with the primary shaping of the concept as we know it today. Case study research has drawn from several other areas as well including the clinical methods of doctors, the casework technique being developed by social workers, and the qualitative descriptions provided by quantitative researchers like Robert Park (Jena, 2010).

Park was an ex-newspaper reporter and editor who became very influential in developing sociological case studies at the University of Chicago in the 1920s (Deegan, 2001). He researched, in part by case study method, the boundary maintenance and sources of conflict between communities of immigrants in Chicago. Park considered that many of his sociologist contemporaries were misguided in their attraction to an objective science, for their methods could not go beyond the superficial empirical facts. As a newspaper professional he coined the term "scientific" or "depth" reporting: the description of local events in a way that pointed to major social trends. He believed that sociology sought to arrive at natural, but fluid, laws and generalizations regarding human nature and society. Park considered the field worker as a stranger in networks of affiliation, the details of which were to be discovered if possible by methods such as case study, document collection, unstructured interviews, observation, and participant observation. Park encouraged students to get out of the library, to quit looking at papers and books, and to view the constant experiment of human experience. His work shaped the development of the case study approach in qualitative research.

Case study design involves detailed, in-depth data collection involving multiple sources of information rich in context (Creswell, 2013). Merriam (2009) describes a case study design as employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a

specific variable, in discovery rather than confirmation (Merriam, 2009). Patton (2015) proclaims a single case study is likely to be made up of many smaller cases, the stories of specific individuals, families, organizational units, and other groups. Critical incidents and case studies of specific bounded activities, like a celebration, may also be presented within the larger case. The case study process typically centers on presentation of specific cases and thematic analysis across cases (Patton). The six cases, I studied fit the collective case study approach (Creswell) designed to focus on the phenomenon and convey the issue.

Qualitative research in a case study design explores an occurrence using a variety of data to reveal and understand the phenomenon in question (Patton, 2015; Yin, 2009). This approach should be considered when a clearly identifiable case is present along with specified boundaries that allow the researcher the opportunity to gain an in-depth understanding of the case (Creswell, 2013; Patton; Yin). Creswell suggested that case studies are prevalent throughout the field of education, and researchers typically use case studies as the research design when the objective is to explore a program or a process in more depth. This is due to case studies largely being defined by an interest in a specific phenomenon in its real-life context.

To researchers unfamiliar with case study methodology, there is often a misunderstanding about what a case study is and how case study findings can inform professionals in decision making. There are two key approaches that guide case study methodology; one proposed by Stake (1995) and the second by Yin (2009). Both seek to ensure that the topic of interest is well explored, and that the essence of the phenomenon is revealed, but the methods they each employ are quite different. Baxter and Jack (2008) explored the study design of each methodologist and summarized Stake identifying case

studies as intrinsic, instrumental, or collective and Yin differentiates between single, holistic, embedded, and multiple-case studies. Yin argues that the system can be studied with one of three types of case studies, depending on the purpose: exploratory case studies, explanatory case studies, and descriptive case studies. Exploratory case studies are often used to define the framework of a future study. Fieldwork and data collection are conducted prior to the final designation of study questions and hypotheses within this type of case study (Merriam, 2009; Patton, 2015; Yin, 2009). Explanatory case studies, on the other hand, seek to define how and or why an experience took place. Their purpose is to suggest explanations for an experience or to provide generalizations (Yin). Finally, the descriptive case study is used to develop a document that fully illuminates the of an experience (Stake, 1995). These are often used to present answers to a series of questions based on theoretical constructs (Yin). A prerequisite for researchers who seek to use this approach is the ability to ask good questions, be a good listener, be adaptive, have a strong understanding of the topic being studied, and be objective to the evidence collected (Yin). If the researcher can accomplish this task, then the intended outcome to create a rich dialogue around the phenomenon may be achieved (Miles, Huberman, & Saldana, 2014; Patton; Yin) as conveyed through the descriptive approach which is appropriate for the descriptive case study.

Using the descriptive case study, my purpose was to gain a deeper understanding of teachers' experiences related to self-efficacy in implementing the Missouri Learning Standards in the school district's initial phase of Missouri standards implementation and the present-day experiences of teachers in the implementation within a bounded system comprised of a limited number of participants (Creswell, 2013; Merriam, 2009; Yin, 2009).

This allowed me as the researcher to focus on the problem and gain insight and meaning for those involved. This type of study was selected for several reasons: First, one of the goals of all case study research is to develop an understanding of the bounded system (Merriam; Yin) which in this instance involves teachers' experiences related to efficacy and the Missouri Learning Standards which can be considered as a bounded system of particularities. What teachers are expected to teach, how they teach, and what assessments are used? Second, descriptive case studies answer theory-based questions (Miles, Huberman, & Saldana, 2014; Yin). The descriptions of teacher self-efficacy and the school leadership support behaviors developed throughout the research process will help to describe teacher understanding of self-efficacy as well as their perceptions of how school and district leaders contribute to efficacious behaviors in the school setting. Such phenomena call for understanding the essences of these experiences through phenomenology.

### **Theoretical Tradition of Phenomenology**

Phenomenology is rooted in early 20th-century European philosophy and involves the use of thick description and close analysis of lived experience to understand how meaning is created through embodied perception (Sokolowski, 2000; Stewart & Mickunas, 1974). The phenomenological approach was developed with aim of gaining a deeper understanding of the nature or meaning of our everyday experiences (Creswell, 2013; Moustakas, 1994; Patton, 2015). The phenomenological inquiry is particularly appropriate to address meanings and perspectives of research participants for this study. The major concern of phenomenological analysis is to understand "how the everyday, inter-subjective world is constituted" (Schwandt, 2000) from the participants' perspectives. Phenomenology examines how human beings make sense of experiences and change these experiences into

consciousness (Patton). This discipline differs from other human sciences because it makes a distinction between appearance and essence.

In phenomenology, reality is comprehended through embodied experience. Through close examination of individual experiences, phenomenological analysts seek to capture the meaning and common features or essences of an experience or event. The truth of the event, as an abstract entity, is subjective and knowable only through embodied perception; we create meaning through the experience of moving through space and across time (Starks & Trinidad, 2007). Phenomenology supports the re-examination of a taken-for-granted experience and, through examining the qualities of the experience, allows us to identify its essence. Therefore, the goal of phenomenological research is not to describe a grand theory or develop a model, but to describe accurately a person's 'lived' experience in relation to what is being studied. I propose to use phenomenology to investigate teachers' direct experiences with the phenomenon of interest; they 'live the experience' of teaching and working with implementation of the Missouri Learning Standards rather than knowing this experience second hand. I worked to capture the core, the very heart beat of their experiences through thick description as their experiences unraveled.

### **Theoretical Tradition of Heuristic Inquiry**

Heuristics is a form of phenomenological inquiry that bring to the fore a personal experience and insights of the researcher (Patton, 2015). Patton proclaims there are two focusing or narrowing elements of heuristics inquiry within the larger framework of phenomenology. First, the researcher must have personal experience with and intense interest in the phenomenon under study. Second, others who are part of the study must share an intensity of experience with the phenomenon. Heuristic inquiry focuses on intense human

experiences, intense from the point of view of the investigator and participants (Douglas & Moustakas, 1985). To execute heuristics inquiry, the researcher is required to have a direct experience of the phenomenon in question (Moustakas, 1990) to discover its essence and meaning.

Heuristic inquiry was developed by Clark Moustakas who extensively wrote about it in his book, *Loneliness*, published in 1961. Heuristic inquiry attempts to discover the nature and meaning of phenomenon through internal pathways of self-using the processes of self-reflection, exploration, and elucidation of the nature of phenomenon that is being studied (Douglas & Moustakas, 1985). The word heuristics originated from the Greek word *heuriskein*, meaning “to discover or to find” (Moustakas, 1990, p. 9). Heuristics is concerned with meaning, not measurements; with essence, not appearance; with quality, not quantity; with experience; not behavior (Douglas & Moustakas, 1985, p. 42). As such, it encourages a researcher to explore openly and pursue the creative path that originates inside of one’s being and that discovers its direction and meaning within oneself.

The rigor of heuristic inquiry comes from systematic observation of and dialogues with self and others as well as in-depth interviewing of co-researchers (Patton, 2015). Heuristic inquiry does not exclude the researcher from the study; rather, it incorporates the researcher’s experiences with the experiences of co-researchers (or participants). Heuristic inquiry is not a process without order. Instead, it requires the researcher to engage in a disciplined pursuit of fundamental meanings connected to significant human experiences (Patton). According to Patton, heuristic inquiry is grounded in phenomenology but Patton identifies the differences in four major ways (Patton, 2015, p.119):

1. Heuristics emphasizes connectedness and relationship, while phenomenology encourages more detachment in analyzing an experience.
2. Heuristics leads to reporting essential meanings and personal significance, while phenomenology emphasized definitive descriptions of the structures of experience.
3. Heuristics concludes with a “creative synthesis” that includes the researcher’s intuition and tacit understandings, while phenomenology presents a distillation of the structures of experience.
4. Whereas phenomenology loses the persons in the process of descriptive analysis, in heuristics the research participants remain visible in the examination of the data and continue to be portrayed as whole persons. Phenomenology ends with the essence of experience; heuristics retains the essence of the person in experiences (Douglas & Moustakas, 1985, p. 43).

It is the researcher who creates the story that depicts deep meanings and essences of unique human experiences (Moustakas, 1990). Such research is inherently personal and it allows for participants to have their stories understood and their voices heard. Furthermore, when participants are chosen for a heuristics study, they are not viewed as mere subjects in the study but as important co-researchers who are an integral part of the heuristic process (Moustakas). Heuristic inquiry is an extremely demanding process, involving disciplined self-commitment, rigorous self-searching and self-reflection, and ultimately a surrender to the process. The capitulation to the process included the teachers as participants for the study and myself as the school leader.



As a school leader, I brought personal involvement in the phenomena under study. This involvement provided personal experiences during the Common Core State Standards implementation and experiences after the standards implementation. These experiences, although the results may be different, are shared by the participants in the study. The parameters identified for selection of the participants provides the personal experiences and insight in the phenomenon from a perspective other than mine. Hence, as the research instrument, I was cognizant of the assumptions I brought to the study which shaped the intuitive nature of my being. Understanding and illuminating my role was an important element of this task.

Moustakas (1990) describes the heuristic process as five basic phases of phenomenological analysis. These phases include: (1) immersion, (2) incubation, (3) illumination, (4) explication, and (5) creative synthesis. Each phase of the process is described below (Moustakas, 1990, p. 27-37):

1. Immersion is the stage of steeping oneself in all that is of contacting the texture, tone, mood, range, and content of the experience. The researcher's total life and being are centered on the experience. Patton (2015) concludes the researcher becomes totally involved in the world of the experience questioning, mediating, dialoging, daydreaming, and indwelling.
2. Incubation is a time of "quiet contemplation" where the researcher waits, allowing space for awareness, intuitive or tacit insights, and understanding. In the incubation stage, the researcher deliberately withdraws, permitting meaning and awareness to awaken in their own time. This stage leads to a clear and profound awareness of the experience and its meaning (Patton, 2015).

3. In the phase of illumination, expanding awareness and deepening meaning bring a new clarity of knowing. Critical textures and structures are revealed so that the experience is known in all its essential parameters. Patton suggest themes and patterns emerge, forming clusters and parallels.
4. In the explication phase, other dimensions of meaning are added. This phase involves a full unfolding of the experience (Patton, 2015). Through focusing, self-dialogue, and reflection, the experience is depicted and further delineated. New connections are made through further explorations into universal elements and primary themes of experience. The heuristic analyst refines emergent patterns and discovered relationships.
5. Creative synthesis is the bringing together of the pieces that have emerged into a total experience, showing patterns and relationships. This phase points the way for new perspectives and meanings, a new vision of the experience. The fundamental richness of the experience and the experiencing participants is captured and communicated in a personal and creative way.

This outline of heuristic analysis can do no more than hint at the in-depth living with the data that is intended. The purpose of this kind of disciplined analysis is to elucidate the essence of a phenomenon for an individual or a group (Patton, 2015). Emulating the heuristic process, I opened new knowledge that was embedded and integrated within myself through understanding of self in relation to and in context of the personal experiences of this phenomenon. It was my hope others, including the participants, will find new knowledge and understanding in this experience as well.

## **Researcher's Role**

My role as the researcher was carefully thought out for an effective study.

Researchers are advised to carefully consider their reasons for conducting a study (Maxwell, 2013). Maxwell explains there are personal, practical, and research purposes. Researchers first need to be aware of their personal reasons for carrying out a study, their subjective motives, for these will have important consequences for the trustworthiness of a study. I had an interest in this study as I have experienced educational reform and witnessed teachers' dispositions change due to the continual top down approach of standards implementation and taking "teaching" out of teaching. Since the researcher is the primary "instrument" of data collection and analysis, reflexivity is deemed essential (Merriam, 2009; Stake, 1995).

Patton (2015) posits:

The qualitative analyst owns and is reflective about her or his own voice and perspective; a credible voice conveys authenticity and trustworthiness; complete objectivity being impossible and pure subjectivity undermining credibility, the researcher's focus becomes balance – understanding and depicting the world on all its complexity while being self-analytical, politically aware, and reflexive in consciousness. (p. 47)

Experts contend through reflection researchers may become aware of what allows them to see, as well as what may inhibit their seeing (Russell & Kelly, 2002). This entails careful consideration of the phenomenon under study, as well as the ways a researcher's own assumptions and behavior may impact the inquiry. While it is neither possible nor necessary to purge one's self of personal goals and concerns, Maxwell contends that it is crucial to be aware of these concerns and how they shape the research, and to think about how best to deal with their consequences.

There should be two perspectives of phenomenological analysis of the perception of lived experience: from the people who are living through the phenomenon, and from the

researcher, whose has great interest in the phenomenon (Husserl, 1970). To return to the things themselves, (Husserl), the researcher cannot impose the meanings for the learners because they are the absolute sources of their own existence living through the learning environment. However, it seems to be impossible to detach personal interpretations from the things that are personally interesting. Thus, the researcher must be aware of his or her own experience while engaged with interviews and the analysis of data.

Reporting of any case study can be a difficult task for researchers due to the complex nature of this approach. It is difficult to report the findings in a concise manner, and yet it is the researcher's role to put a complex phenomenon into a format that is easily understood by the reader and bring about a vivid description of the people and places being reported upon (Merriam, 2009; Patton, 2015). The goal of the report is to describe the study so the reader feels as though they have been an active participant in the research and can decide whether the study findings could be applied to their own situation (Yin, 2009). It is important that the researcher describes the context within which the phenomenon is occurring as well as the phenomenon itself (Patton).

The results of the study may be used by school leaders to gain a better sense of teacher self-efficacy from a teacher's point of view during education reforms or implementation of new or different standards. They may then use this insight to address teachers' immediate and long-term needs. The administrator may choose to reflect upon the study and the feedback provided regarding their leadership and support behaviors and change their current practices. Other administrators may use the results to better understand self-efficacy and how their leadership behaviors and support factors may potentially affect it. What follows is the design of this study including the setting, sources of data, and the

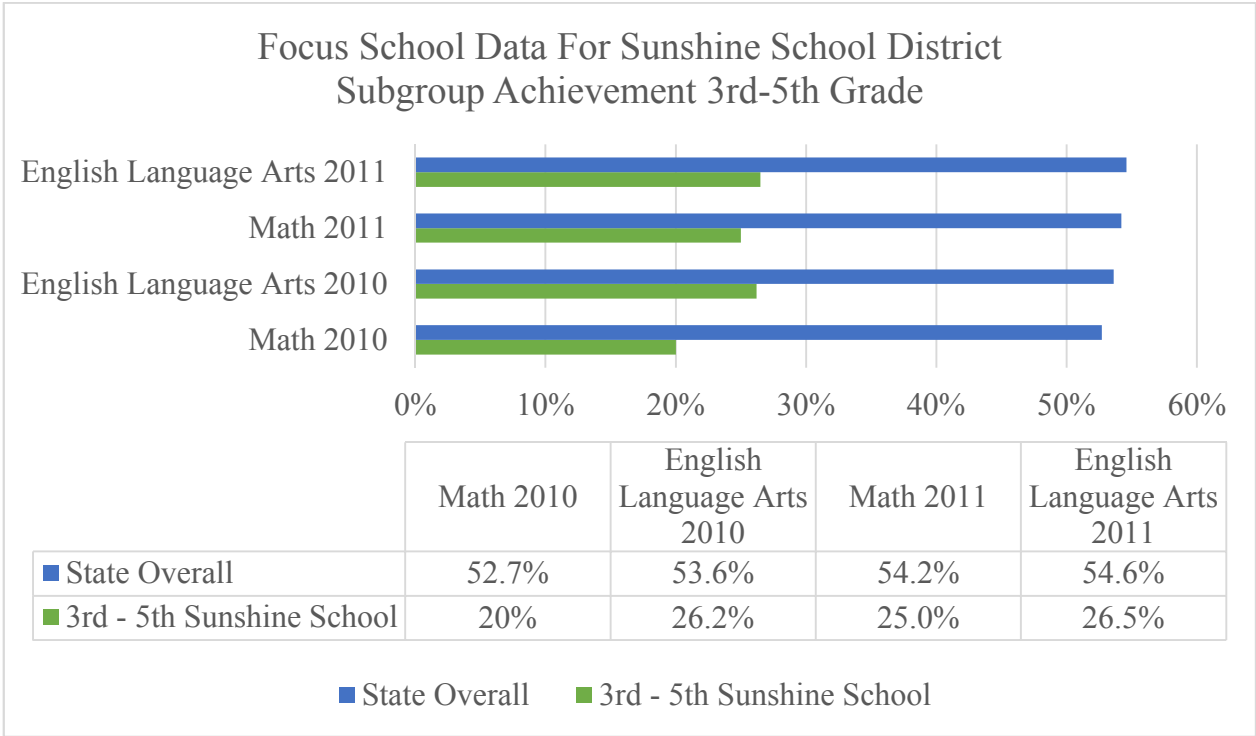
methods to be used in obtaining the data, how the data was analyzed, and how the data was reported to expose a credible representation of teacher experiences with the implementation of the Missouri Learning Standards.

## **Design of Study**

### **Setting and Participants**

The selected site was a rural K-12 public school district situated in the Midwest. The Sunshine School District was as two schools, elementary and a middle/high school, however all students are in one continuous building and share the same campus facilities. The selected district was established in 1880 with strong traditions of simple life. There is a wide gap between the families with money and the families in poverty. The middle class is nearly nonexistent. This disparity leads to an approximated 74% free and reduced lunch count. The K-6 school has been identified as a focus school by the Missouri Department of Education in the 2011-2012 school year and has carried that status to the 2015-2016 school year. The criterion the State used for focus determination are districts having the largest within-school gaps between the highest achieving subgroups and the lowest achieving subgroups or has a subgroup with low achievement in data year 2010 and 2011. The Sunshine School District was identified as a focus school because of having a subgroup with low achievement. The following Figure 3.1 displays the data used to determine focus status of Sunshine School District (Missouri Department of Elementary and Secondary Education, 2015).

Figure 3.1



*Focus School Data*

The 7-12 school did not have the focus status and holds the status as accredited. Missouri has not recognized any status or distinctions of achievement for districts since the full implementation of the Missouri Learning Standards. This is mainly due to the lack of assessment preparation which is used to grade Missouri school districts. The identities of the school and individuals was eliminated and pseudonyms assigned to ensure anonymity. All participants did have experience in their positions and the building; however, age or gender was not being a criterion for selection. The sampling techniques described in the next section enabled me to select participants for this study who provided the most useful information, resulting in thick description.

## **Selection of Participants**

For this study, I used purposeful sampling which is generally used in case study research; sampling procedures and case selection involve, defining the characteristics or typicality of the case (Creswell, 2013; Miles, Huberman, & Saldana, 2014). Criterion sampling involves selecting cases that meet some predetermined criteria of importance (Patton, 2015). Because attrition may deeply affect longitudinal case studies based on just one or two participants, sampling carefully was crucial. Multiple cases are often preferable to single cases, particularly when the cases may not be representative of the population from which they are drawn and when a range of behaviors/profiles, experiences, outcomes, or situations is desirable. As the researcher, using criterion sampling, I utilized the district's information system and personnel records to identify the potential participants who meet the following criteria: (a) at least three years of teaching experience; (b) have taught math or language arts during and after the implementation of the Missouri Learning Standards (c) currently hold a valid teaching certificate within their certification; and (d) teach in the general education setting. This list was utilized to recruit potential participants for the study.

Additionally, purposeful sampling strategies was utilized to alleviate concerns regarding small sample size. By selecting a minimum of six participants, I could reasonably cover the phenomenon being studied (Patton, 2015). The participants for this study consisted of a combination of no less than six elementary, middle and high school teachers from one school in the district where the study was conducted. Each of the potential teachers selected for this study served as a single case in this multiple-case study.

The designated study followed the principles of the Belmont Report and the University of Missouri-Kansas City Institutional Review Board to provide protection to

research participants. To better understand the requirements, this means that individuals have a right to decide for themselves whether to participate in research. I did not use information about people without first getting their informed consent. I took special care with people who were unable to understand or who were particularly susceptible to coercion. The participants in the study was in the same district as I am. I was cognizant of my role and influence as Superintendent of Schools. I did not use my status to persuade participation in the study and assured participants of no repercussions if they choose not to participate

All teachers who met the specified criteria was provided with a participant information letter (Appendix A) and a Consent for Participation in a Research Study form (Appendix B). The participant information letter explained who I was as the primary investigator and the purpose of the research. After the passing of one week, I placed a follow-up phone call to all potential participants and developed a list of those who showed interest in participating in the study. My goal was to identify at least ten teachers that met the criteria and had six to commit to the study. If more than six teachers committed to the study, a random computer generated draw would have been used to reach the desired number of participants.

### **Data Collection: Documents, Interviews, and Observations**

A trademark of case study research is the use of multiple data sources, a strategy which also enhances data credibility (Yin, 2009; Patton, 2015). Potential data sources may include, but are not limited to: documentation, archival records, interviews, physical artifacts, direct observations, and participant observation. Unique in comparison to other qualitative approaches, in case study research, investigators can collect and incorporate



quantitative survey data, which helps to fully illuminate the phenomenon being studied (Patton). In a case study, data from these multiple sources are then united in the analysis process. Each data source represents one piece of the puzzle that ultimately contributes to the researcher's understanding of the whole phenomenon (Merriam, 2009; Miles, Huberman, and Saldana, 2014; Patton). The connections between the data add strength to the findings as the numerous strands of data are merged together to promote a greater understanding of the case. The following section briefly summarizes the data sources that to be analyzed: documents, interviews, and observations.

### **Documents**

Within the realm of qualitative research, documents serve an important tool and resource in data collection. Patton (2015) posits:

Records, documents, artifacts and archives, what traditionally been called “material culture” in anthropology, constitute a particularly rich source of information about many organizations and programs. In contemporary society, all kinds of entities leave a trail of paper and artifacts, a kind of spoor that can be mined as part of field work. (p. 376).

Bogdan and Biklen (2007) have identified several documents in educational settings that are commonly used in qualitative inquiry. Beyond written materials a researcher might utilize pictures, diagrams, photographs, videos, television programs, interactive websites, and software (Bogdan & Biklen; Patton). There are usually many documents written by participants that are available to an educator in the school setting. The main task for an educator turned inquirer is to identify, locate, and gain access to such materials. Documents, according to Bogdan and Biklen, are materials that can be developed by the researcher in the form of personal documents; identified as official documents of an organizations; and accessed as popular culture documents that entertain, persuade, and enlighten the public.

Documents are a valuable source of information and provide visible facts that save the researcher from unfounded conclusions (Bogdan & Biklen, 2007). Scott (2014) identified four criteria to solve the methodological problems associated with the use of documentary data. First, he recommended that the researcher look for authenticity, seeking evidence that the document is genuine and of unquestionable origin. Next he encourages the researcher to examine the documents for credibility to ensure the evidence is free from error and distortion. Additionally, he recommended that the researcher determine if the documental data is typical or representative of the norm. Finally, the researcher should look for meaning when seeking to establish that the evidence is clear and comprehensible. Existing records often provide insights into a setting or group of people. Patton (2015) stated that documents or records can provide the evaluator with information about many things that cannot be observed. Lincoln and Guba (1992) define a document as any written or recorded material not prepared for the purposes of the evaluation or at the request of the inquirer. They suggested that documents can be divided into two major categories: public records and personal documents.

Documentary techniques are used to categorize, investigate, interpret and identify the limitations of physical sources, most commonly written documents, whether in the private or public domain (Payne & Payne, 2004). Personal documents can include individuals' letters, diaries, notes, drafts, files, and books. Private documents include those that are produced by private organizations for internal purposes such as minutes of meetings, personnel records, budgets and memos (Bogdan & Biklen, 2007). Public documents include those that are produced for public consumption, such as annual reports, media statements or articles in newspapers (Payne & Payne).

For the purposes of this study, I analyzed two documents categorized as official external documents. The first document was titled; Common Core State Standards in 2014: Districts' Perceptions, Progress, and Challenges. A notable feature of the selected document was that individuals have given attention to compiling the information, so the data was in their language or the language of the organization (Creswell, 2013). The report was developed by the Center of Education Policy (CEP) based in Washington D.C., at the George Washington University's Graduate School of Education and Human Development. The report reflects the implementing of the Common Core State Standards at the very time when mounting criticisms and attempts in some states to derail the standards are mounting. The second official document was titled; Teachers' Views of the Common Core State Standards and its Implementation. The document abstract proclaims the need to continue to study the many facets of educational changes remains critical, especially from the perspective of the teachers experiencing such changes firsthand. The document utilized a survey study to address teachers' views and support towards the Common Core State Standards and its implementation, their anticipated effects, and how its operation has affected their teaching, their anticipated effects, and their thoughts to leave the profession prematurely. The following section highlights interviews, the major source of data for the propose study. While documents are considered unobtrusive data (Patton, 2015), interviews are more instructive and require carefully designed protocol.

## **Interviews**

Qualitative researchers seek to describe the meanings of central themes within a studied topic (Miles, Huberman, & Saldana, 2014; Patton, 2015). Interviews are of interest for researchers in the overall qualitative research design. Interviews provide in-depth

information pertaining to the participants' experiences and viewpoints on a topic (Creswell, 2013). Patton says that qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit. Interviews satisfy the researcher's need to obtain information to understand the meaning of what participants are saying (Kvale & Brinkmann, 2009). Interviews can be coupled with other information to provide the researcher with a well-rounded collection of data for analysis (Patton).

Maxwell (2013) emphasizes interviews can provide additional information missed during observations and can be used to check the accuracy of the observation. Accordingly, interviews provide a source for data crystallization and add validity to one's research (Ellingson, 2009; Patton, 2015; Maxwell). Interviewing is an efficient and valid way to capture and understand a participant's unique perspective; it allows the researcher to delve deep into the studied phenomena. Patton (2015) posits,

We interview people to find out from them those things we cannot directly observe. The issue is not whether observational data are more desirable, valid, or meaningful than self-reported data. The fact is we cannot observe everything. We cannot observe feelings, thoughts, and intention. We cannot observe how people have organized the world and the meanings they attach to what goes on in the world (p. 426).

According to Lofland and Lofland (1995), an in-depth interview does not follow a rigid form. This allows participants to offer open responses; it also is designed to bring about rich, detailed information for analysis. The goal of most qualitative studies is to gather an accurate understanding of experiences, and open-ended interview questions seem to produce the best results toward this goal. Patton (2015) contends that the purpose of asking open-ended interview questions is to gather and understand the perspectives of other people without influencing their responses through pre-selected questions. The value of the open-

ended question to the researcher is the distinct and unique response of each participant (Maxwell, 2013; Lofland & Lofland; Patton, 2015)

The interview process utilized in this study was a semi-structured, open-ended, in-depth interview method, which permitted the interviewees and the researcher the opportunity to expand and clarify information shared (Creswell, 2013; Kvale & Brinkmann, 2008; Patton, 2015). An interview guide was created to ensure that the same general areas of information were collected from each interviewee. The interview guide (Appendix C) provided more focus than the conversational approach but still allowed for some degree of freedom and adaptability in obtaining information from the interviewee (Merriam, 2009; Patton). As Patton recommended, the prepared interview guide lists questions to be explored and suggests probes for follow-up when responses invited further examination. Using an interview guide helped to keep interviews focused and somewhat structured.

Prior to the scheduled interviews, a letter was mailed to the participants outlining the purpose of the study, risks, benefits, information to be collected, and how the data would be used (Patton, 2015). This letter (Appendix A) explained that participation was voluntary and confidentiality was ensured. Information was also provided regarding the process of the interviews, and any questions from the interviewees about the process was addressed prior to beginning each interview. Each participant was offered the opportunity to meet at a convenient location on school grounds of their choosing. Interviews were held during the school day, and all six interviews were conducted over a four to six-week period. Interviews lasted approximately thirty to forty minutes each. Each interviewee participated in a minimum of one interview (30-45 minutes) and a follow-up interview (30 minutes) for participants to review transcripts from previous interview and to clarify any answers or gaps

in the research study. Interviews were digitally recorded using the Android Voice Recorder App, and each of these were transcribed verbatim by listening to a phrase and then typed that phrase into a Word document, making note of every filler word, restart, and completed thought. Participants were then provided transcripts of their interviews for review and revision if needed to clarify their positions. The semi-structured, one-on-one questions helped to acquire a teacher's past and present experiences in implementing the Missouri Learning Standards in comparison to that of other teachers. The interview guide contained approximately ten initial questions regarding implementation and leadership support during and after the implementation of the Missouri Learning Standards. Examples of the interview questions were;

1. Over the past three to four years there has been an evolution and adjustment to the Common Core State Standards (Missouri Learning Standards).  
Describe your experiences with the implementation of the common core?
2. What strategies have you incorporated in your classroom to teach the Missouri Learning Standards?
3. Teacher self-efficacy is defined as individual teachers' beliefs in their own abilities to plan, organize, and carry out activities required to attain given educational goals. Describe what this might mean for you as you teach the standards?

The following section highlights how observations, the third data source, was conducted during the study.

## **Observations**

Observation, collecting data by watching attentively, is a fundamental practice in qualitative research. Patton (2015) outlines the purpose of observational data as the need to describe the setting, activities, participants, and the perceived meaning from the participants. As the observer, the researcher clearly defines the options regarding their involvement and how that may be perceived by the participants of the study.

Angrosino (2005) separated qualitative observation into three basic types. Participant observation involves a researcher interacting with and often establishing significant rapport with research participants, joining them in their everyday lives. Reactive observation takes place in controlled settings, such as experiments, with participants being aware of being observed but interacting only minimally with the observer. Unobtrusive or nonreactive observation is conducted without the awareness of those being observed. According to Brayboy and Deyhle (2000), the researcher must be cognizant of how their presence impacts the data collected, stressing the need to be aware of how those we study view us as well as how we view them. The position of the researcher is discussed as either “insider” or “outsider” as it relates to their relationship with the participants. For the purposes of this study, I assumed the role of an onlooker observer with an outsider perspective (Brayboy & Deyhle, 2000; Denzin & Lincoln, 2013; Patton, 2015). The purpose of observations was to understand teacher experiences in implementing the Missouri Learning Standards as well as their interaction with students during the instruction. This enabled me to crystallize the emerging findings. The observations occurred in the participants’ natural setting of the classrooms and included teachers interacting during regularly scheduled meetings and professional development. During the observation, I attempted to record how the teacher’s

reactions to and with the Missouri Learning Standards during class, specifically noting behaviors found associated with implementing and teaching the standards in math and language arts. These behaviors and other factors that affect teacher efficacy was the focus of my observations with the use of an observation guide aligned to the research questions and the conceptual framework of self-efficacy described in the data analysis section (see Appendix D). I observed for the following elements as outlined in the observation guide (a) the activities, (b) the classroom climate/environment, (c) teacher instructional behaviors, (d) the interactions among teachers and the students, (e) students' interactions with other students (e) observation of nonverbal communication of the teacher and students, and (f) comments regarding what did not happen (Patton). During my observation, I was careful not to identify students and only pointed out the behaviors observed. For example, students were working on a group assignment that entailed collecting water usage information and making observation. The teacher provided students with a set of instructions that entailed the following. Students were working in groups of five and all appear to be engaged in the project.

Bogdan and Biklen (2007) proposed that after each observation the researcher find a quiet place where they can chronologically and methodically record their observations, with the key being their attention to detail. Similarly, Patton (2015) emphasizes the importance of writing the conversations contained in observations in a prompt manner. These preliminary notes generally form an outline for when the researcher sits down at the end of the day to type out complete notes. Bogdan and Biklen suggested that the researcher record ideas, strategies, reflections, and hunches, as well as note patterns that emerge within a given set of field notes. Due to the nature of my topic, experiences of teacher in implementation of the



Missouri Learning Standards, I compared the interviews with my own experiences before critiquing the data to seek new perspectives.

Documents, interviews, and observations have been described as the three primary data sources for this study. These multiple sources enabled me to understand various facets of the phenomenon, with each data source contributing to the contextual meanings of standards from the documents that shaped the participants' meanings captured in the interviews and observations. Qualitative research assumes that data are mediated directly by the researcher rather than through questionnaires, surveys, or other data collection instruments. Using the primary data sources of documents, interviews, and observations, this approach assumed each participant will bring various interpretations and values to the process and the study will direct the attention to the individual's perceptions, values, and interpretations. As described earlier, each data sources represents one piece of the puzzle that ultimately contributes to the researcher's understanding of the whole phenomenon through the perspectives of the participants. The following section summarizes the data analysis procedures.

### **Data Analysis Procedures, Process, and Analysis**

The major technique to be used in this research was case study. As in any other qualitative study, the data collection and analysis will occur simultaneously. Yin (2009) described the following techniques for analysis: pattern matching, linking data to propositions, explanation building, time-series analysis, logic models, and cross-case synthesis. In contrast, Stake (1995) described categorical aggregation and direct interpretation as types of analysis. Patton (2015) identified the major challenge of qualitative analysis as making sense of all the data collected. One must be able to sift through an

enormous amount of information, reducing it to important codes, looking for patterns to identify as themes in the data. According to Schlechty and Noblit (1982), researchers can use interpretation to do one of the following: “make the obvious obvious, make the obvious dubious, make the hidden obvious.” Lincoln and Guba (1985) described the interpretation of data as lessons learned. The interpretation of data can be based on the researcher’s insight, intuition, or a combination of their personal views in contrast with a social science idea (Creswell, 2013). In my study, I used several data analysis procedures to find meaning in the participants’ experiences, making the hidden obvious which will require multiple data analysis procedures.

### **Data Analysis Procedures**

I used a conceptual framework based on key concepts and theories from self-efficacy to make meaning of participants’ perceptions of the implementation of the Missouri Learning Standards. Self- efficacy entails what individuals believe they can accomplish using their skills under certain circumstances (Snyder, Lopez, & Pedrotti, 2010). The basic principle of Self-Efficacy Theory is individuals are more likely to engage in activities for which they have high self-efficacy and less likely to engage in those they do not (van der Bijl & Shortridge-Baggett, 2001). Bandura (1977) recognizes four key concepts of the Self-Efficacy Theory that will comprise the conceptual framework for making meaning of participants’ sense of self-efficacy. These include:

- **Performance Outcomes:** Performance outcomes, or past experiences, are the most important source of self-efficacy. Positive and negative experiences can influence the ability of an individual to perform a given task.

- **Vicarious Experiences:** People can develop high or low self-efficacy vicariously through other people's performances. A person can watch another perform and then compare his own competence with the other individual's competence.
- **Verbal Persuasion:** Self-efficacy is also influenced by encouragement and discouragement pertaining to an individual's performance or ability to perform. Using verbal persuasion in a positive light generally leads individuals to put forth more effort; therefore, they have a greater chance at succeeding.
- **Physiological Feedback:** People experience sensations from their body and how they perceive this emotional arousal influences their beliefs of efficacy.

The conceptual framework of self-efficacy was used with heuristic inquiry to describe teachers' experiences with the implementation of the Missouri Learning Standards. Through the data sources, my goal was to find patterns of how the standards impacted, if any, participants' self-efficacy. I examined each case to find patterns in the data using within-case and cross-case analysis to find patterns among the various cases.

A central component of the analysis process used in this case study research was within-case analysis. The aim of within-case analysis was to develop an in-depth understanding of the contextual variables which might have bearing on the case (Creswell, 2013; Miles, Huberman, & Saldana, 2014). Within-case analysis allowed me the opportunity to be thoroughly immersed in the data within a single case. The within case analysis process fostered the emergence of meaning through patterns noted in the data. The description of the

data led to interpreted themes which provided a holistic understanding of the case (Creswell). Each of the single case studies engaged in a cross-case analysis.

Cross-case analysis is a research method that facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies (Allport, 1962). Teacher self-efficacy was closely analyzed since teacher efficacy is an important characteristic and one strongly related to teacher's success in teaching. Cross-case analysis enabled me as the researcher to "build abstractions across cases" (Creswell). The emerging themes and patterns of teacher's self-efficacy in the cross-case analysis formed and crystalized the foundation of this study. The process for identifying patterns and ultimately themes is the focus of the next section.

### **Data Analysis Process**

Within the design of the study, my objective was to identify self-efficacy patterns and what these patterns describe as behavioral choice, the extent of effort, and persistence when facing difficulties, and how these might influence performance behaviors as well as psychological functioning (bandura, 1977). Hence, my goal was to determine how standards implementation may affect teacher self-efficacy and potentially influence teachers' decisions to leave the profession. Achieving this goal entailed multiple steps in the data analysis process.

Data analysis incorporated each of the heuristic phases. During the immersion phase I was captivated in the teachers' experiences as they share their views and experiences. I also began to include and reflect on my own experiences with the implementation of the standards as a school leader. I waited, permitting meaning and awareness of the experiences and emerging themes. This was the incubation phase. After self-reflection during the

incubation phase, I followed with the illumination phase. This phase was a time when critical textures and structures were revealed and themes and patterns emerged, forming clusters and parallels in the data. As the data analysis proceeded, new connections made through further explorations into universal elements and primary themes of experience. A refinement of emergent patterns and discovered relationships were essential in the explication phase. The final phase for the heuristic analyst was the creative synthesis phase. During this phase I brought together the pieces that have emerged into a total experience. The fundamental richness of the experience and the experiences and the experiences of the teachers was captured and communicated in a personal and creative way. These experiences are described and detailed in chapter four.

### **Data Analysis**

Pattern matching involved a process of descriptive coding, interpretive coding, and theme identification. Miles, Huberman and Saldana (2014) discuss descriptive and interpretive codes, each providing a deeper understanding of the data. Through data collection procedure and the iterative process of analysis, returning again and again to the data to confirm findings, I moved beyond the descriptions of the “what” to explanations of “how” and “why” within the phenomena. Miles, Huberman, and Saldana (2014) posit that the process of coding is analysis. They describe codes as tags or labels for assigning units of meaning and discuss these codes as descriptive and interpretive, each providing a deeper understanding of the data (Miles, Huberman, & Saldana).

This qualitative study used an enumerative and thematic coding process to pinpoint, examine, and record patterns or themes within data. This coding occurred during the phase of illumination in heuristic inquiry. To analyze the collected data from the documents,

interviews, and observations and to dissect it meaningfully, I followed the coding process as described by Grbich (2013), and Miles, Huberman, and Saldana (2014). This part of the analysis involved how I differentiate and combine the data retrieved from all sources and the reflections I noted throughout the process. The data was examined utilizing (Miles, Huberman, & Saldana, 2014) analytic method to determine authenticity, credibility, and clarity. This analytical method took place during the explication phase of heuristic inquiry where a narrowing down of the data occurs. The analytic method includes assigning codes to the data, sorting and sifting through these coded materials to identify similar phrases or relationships, isolate patterns and processes, noting reflections and gradually elaborating a small set of assertions for theming the data, and comparing those generalizations with a formalized body of knowledge (Miles, Huberman, & Saldana). Finally, I used creative synthesis to provide thick concrete descriptions to understand the phenomenon studied and draw interpretations about meaning and significance of the emerged themes (Patton, 2015). This data analysis process allowed me, the heuristic analyst, to ground my research in my personal experiences and feelings around the topic of the inquiry.

Constructing themes or patterns, searching for evocative moments to capture, and identifying invocations of power in discourse all constitutes examples of good strategies, and crystallization requires engaging in at least two (Ellingson, 2009). Crystallization seeks to produce knowledge about a phenomenon through generating a deepened, complex interpretation (Ellingson). All good qualitative research should provide an in depth understanding of a topic, since “thick description” forms the hallmark of qualitative methods (Geertz, 1973).

This study was bounded by in-depth data collection from multiple sources such as observations of participants' behavior, a review of documents, and interviews of participants using semi-structured, open-ended questions (Merriam, 2009; Patton, 2015). I have provided an explanation of the data analysis procedures, process, and analysis which involved the use of a conceptual framework of self-efficacy for making meaning of the data, and the application of within-case and cross case analysis with heuristic inquiry as an overarching lens. My shared experiences with participants associated with the implementation of Missouri Learning Standards are essential to heuristic inquiry. Data analysis skills involved coding the data and identifying important themes. I was also aware of the limitations of the study, issues of validity and reliability, and ethical considerations.

### **Limitations, Validity, Reliability, and Ethical Considerations**

In qualitative research, bias affects the validity and reliability of findings and distorts the truth. From a qualitative researcher's perspective, Patton (2015) suggest we are challenged by postmodern critiques of knowledge to be clear about and own our authorship of whatever we propound, to be self-reflective, to acknowledge biases, and limitations, and to honor multiple perspectives while accepting incredulity and doubt as postmodern responses to ourselves (p. 65). Qualitative researchers try to acknowledge and consider their own biases as a method of dealing with them. Creswell (2013) stated, "All researchers bring values to a study" (p. 18) which often results in bias. In qualitative research, bias is inevitable. Seale (1999), states the trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability (p. 266). In this study, validity and reliability strategies addressed potential bias issues.

## **Validity**

Validity refers to the likelihood that what is detected is, in fact, the effect of interest (Bickman & Rog, 2009). Brinberg and McGrath (1985) describe validity is not a commodity that can be purchased with techniques. Rather, validity is, like integrity, character and quality, to be assessed relative to purposes and circumstances. Patton (2015) notes systematic data collection, rigorous training, multiple data sources, triangulation, and external reviews are techniques aimed at producing high-quality qualitative data. The high-quality data are then poised to be credible, trustworthy, authentic, balanced, and fair to people studied (Patton). Many qualitative researchers have developed their own concepts of validity and have often generated or adopted what they consider to be more appropriate terms, such as, quality, rigor and trustworthiness (Davies & Dodd, 2002; Lincoln & Guba, 1985). For the purpose of this study, I will use the term “validity” exclusively.

## **Reliability**

Reliability can be addressed in qualitative research in several ways (Silverman, 2005). Creswell (2013) noted in qualitative research, reliability often refers to the stability of responses to multiple coders of data sets. When judging (testing) qualitative work, Strauss and Corbin (1990) suggest that the usual canons of good science...require redefinition to fit the realities of qualitative research. In contrast, Stenbacka (2001) argues that since reliability issue concerns measurements then it has no relevance in qualitative research. She adds the issue of reliability is an irrelevant matter in the judgment of quality of qualitative research. To broaden the spectrum of conceptualization of reliability and revealing the similarity of reliability and validity in qualitative research, Lincoln and Guba (1985) state: Since there can be no validity without reliability, a demonstration of validity is sufficient to



establish the reliability. Patton (2015) with regards to the researcher's ability and skill in any qualitative research also states reliability is a consequence of the validity in a study. Validity and reliability can only be judged if a very detailed account of the context or setting within the study took place and a thorough description of the procedures from the beginning to the end is given (Brink, 1993). This check of validity and reliability is better defined as "thick description."

In this study, I identified three potential threats to the validity and reliability: 1) the accuracy of the data collected; 2) the interpretation of the data through my lens as a school leader (bias); 3) sample population relative to the study (external validity). To check and establish validity in the study, I analyzed the research questions from multiple perspectives known by researchers as crystallization. Crystallization can be done through the convergence of data sources, evaluators, perspectives, or methods (Ellingson, 2009). The process of crystallization allows the case study findings or conclusions to be more accurate and convincing when based on multiple sources of data (Ellingson; Patton; Yin). It is through this process that I described teachers' experiences of implementation of the Missouri Learning Standards. A crystallization of different data sources was utilized to increase the validity and reliability of my study and allowed me to overcome any intrinsic bias I may bring. Based on Patton's (2015) work, I utilized the following while crystallizing data sources: (a) comparing observations with interviews; (b) looking for repetitive responses regarding a given topic; (c) comparing the varied perspectives of participants; and (d) comparing analyzed documents with interviews and observations.

## **Ethical Considerations**

Ethical issues should always be considered when undertaking data analysis. Because the nature of qualitative observational research requires observation and interaction with groups, it is understandable why certain ethical issues may arise. Rossman and Rallis (2003) describe four theories of ethics: 1) The ethics consequences - What happens because of this action? What are the probable consequences to whom and under what circumstances? 2) The ethic of rights and responsibilities - All people have fundamental rights that may not be denied, even for the greatest good for the greatest number; 3) The ethic of social justice - Use of the principles of fairness and equity to judge which action are right or wrong; 4) The ethics of care - What effect does the action have on human relationships in a specific context or a given dilemma? Although different ethics exist, the belief that they will direct us to act as we would want others to act in any given situation - in ways that test humanity as ends as well as means (Rossman & Rallis).

The Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) was published in the United States to provide a concise account of the mandate for review of research involving human research participants. The report utilizes the expression "basic ethical principles" and refers to those general judgments that serve as a basic justification for the many ethical prescriptions and evaluations of human actions. Three basic principles, among those generally accepted in our cultural tradition, are particularly relevant to the ethics of research involving human subjects: the principles of respect of persons, beneficence, and justice. The first idea, respect for persons, alludes to the notion that individuals should be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection. The principle

of respect for persons thus divides into two separate moral requirements: the requirement to acknowledge autonomy and the requirement to protect those with diminished autonomy. Beneficence refers to the researcher's responsibility to consider all risks associated with participation and seek to minimize any harm while maximizing any benefits that may occur because of participation. Finally, justice suggests that the researcher should determine participants based on a set of fair procedures and outcomes rather than convenience (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research).

In addition to the Belmont Report, the University of Missouri-Kansas City Institutional Review Board (IRB), mandated by the National Research Act, guided my actions in conducting the research. The fundamental responsibility of the review board is to assure that all ethical issues have been fully addressed in the protection of human subjects who volunteer to participate in research studies. To fulfill the responsibility of being an advocate for the research subject, the IRB reviews all protocols for research using human subjects, guided by three overriding principles: 1) inform subjects about the nature of the study and to ensure that their participation is voluntary; 2) ensure that the benefits of the research outweigh the risks; 3) ensure the risks and benefits of research are evenly distributed among the possible subject populations. I obtained written consent from participants signifying that not only were they willing to participate in the study, but are aware of the research purpose, procedures, goals, risks, and possible benefits outlined in the documentation. In addition, their participation remained voluntary and should they choose to no longer participate, they were welcome to do so free of judgment. The ethical consideration of participants seeks to ensure privacy and confidentiality, and ultimately to

develop positive relationships that allowed me as the researcher to foster trust and confidence as it relates to my research. Participants were assigned pseudonyms from the beginning and actual names was not be used in any part of the research. All forms, notes and communication of any kind was stored and secured at a location in the office of the principal investigator, Dr. Loyce Caruthers, for a seven-year period.

### **Summary**

This chapter has provided a rationale for approaching this research as a descriptive case study. My role as the researcher was defined followed by a description of the setting, participants, and sampling procedures. The research design was described including the methods for data collection, and data procedures, processes, and analyses. Limitations of the study were outlined including a discussion of related validity, reliability, and ethical concerns. My goals for the first three chapters of this dissertation was to (a) introduce the problem, purpose, research question, theoretical framework, and significance of the study; (b) describe the foundation knowledge or research literature surrounding the study; and (c) present the methodology or design of the study for understanding teachers' experiences related to self-efficacy as they implement the Missouri Learning Standards. The subsequent chapters will report on the findings of the study, implications of the findings, and future research.

## CHAPTER 4

### FINDINGS

The purpose of this descriptive case study was to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core State Standards (CCSS). Teacher self-efficacy, defined as the teacher's confidence in their ability to promote students' learning (Hoy, 2000), was used as a conceptual framework to provide an understanding of the teachers' experiences. The units of analyses, determined by research questions (Patton, 2015), were teachers' perceptions of the implementation of the Missouri Learning Standards, with a specific focus on the perceptions of elementary, middle school, and high school math and language arts teachers.

Ensuring all students have access to quality teachers is a universal struggle. The high poverty urban districts and the rural low economical schools face the dilemma of staffing quality teachers. There is a growing consensus among researchers and educators the single most important factor in determining a student's performance is the quality of his or her teacher (Hanushek, Kain, & Rivkin, 2004; Rowan, Correnti, & Miller, 2002). Teachers not only play an important role in the education quality and student learning outcomes, but also in conveying cultural and social values. With a teacher attrition rate higher than new teachers entering the profession (Future, 2003; Ingersoll, 2007), districts are certain to face staffing dilemmas and all students' education will become influenced by this dire situation. Perhaps no group has felt the pressures of the CCSS greater than teachers. As the standards become entrenched in education policies, teachers will face more pressure than ever for students who do not perform adequately on the assessments (Jacob, 2005; Amrein &

Berliner, 2002; Linn, 2000). This could lead to many teachers being fired or fear for their jobs. The intense pressure and scrutiny teachers subjected to will create stress and burnout which could lead to many good teachers leaving the education field.

This study was a multi-case study integrating the theoretical traditions of heuristic inquiry and narratology that helped to explore the experiences of six teachers in implementing the Missouri Learning Standards. The teacher experiences were sought in a time between the initial implementation of the CCSS and their current experiences with the renamed CCSS as the Missouri Learning Standards. Purposeful and criterion sampling were used to identify participants, each constituted a case study. Standards initiatives are not new in education and during this study the CCSS have been renamed due to the negative trends toward nationalized standards. Jamie, one of the cases of the study, stated “In seven years I have experienced four changes in the standards. I just rolled with the punches.” As the researcher, for over a period of six months, I used in-depth interviews, observations, and documents to explore math and language arts teachers’ past and present experiences in implementing the Missouri Learning Standards in the classroom.

As a current practicing school leader, the problem I addressed in this study was the experiences of teachers in a rural district regarding the presumption that implementation of standards within the current accountability environment has an adverse effect on teacher-efficacy, stress, and burnout that could lead to attrition. The overarching questions and sub-questions pursued were:

Central Question 1:

What experiences are described by math and language arts teacher narratives regarding the implementation of the Missouri Learning Standards?

Sub-questions:

- What factors or underlying themes in the narratives account for their views of the implementation of Missouri Learning Standards?
- How do math and language arts teachers describe their sense of efficacy following the implementation of the Missouri Learning Standards?

Central Question 2:

How do math and language arts teachers perceive the support of school leadership in the implementation of the Missouri Learning Standards?

Sub-questions:

- What leadership practices do they identify as significant to their sense of efficacy during the implementation of the Missouri Learning Standards?
- What leadership practices do they identify as significant to their sense of efficacy following the implementation of the Missouri Learning Standards?

The research questions supported the exploration of their experiences and allowed the six teachers to tell me about their lived experiences during the implementation of the standards in their classrooms and to draw implications that might be shared with others, the focus of chapter five. This chapter tells their stories.

### **Telling the Story**

The use of crystallization in the research empowers the researcher to confirm the findings and to view the phenomenon through multiple lens. Crystallization provides a

deepened, complex, thoroughly partial understanding of the topic by adding symmetry and substance with an infinite variety of crystallized shapes (Ellingson, 2009). Crystallization was applied in this study through multiple data of document analysis, observations, and interviews that occurred over a six-month period. The analysis process involved immersion, whereby I was immersed in the data collected and then suspended the immersion to reflect on the analysis experience and attempt to identify and articulate the patterns and themes noticed (Cohen & Crabtree, 2006). This process continued until all data sources were examined and themes emerged. My own experiences were integrated with data analysis through heuristic inquiry.

Profiles of individuals in observations and interviews constituted a single case for each of the six teacher participants. With-in case analysis consisted of coding interviews and observations for each case; extracting categories and patterns for each case (Merriam, 2009) through descriptive coding, interpretive coding, and pattern themes (Miles, Huberman, & Saldana, 2014). I then used cross-case analysis which allowed me to go deeper in identifying the concluding common themes of in-depth interviews and observations across the six cases to illuminate their alignment with the documents and answer the research questions.

First, to tell the story of the data, I report on the documents that supported the use of rich background information for my research. Documents, according to Bogdan and Biklen (2007), are materials that can be developed by the researcher in the form of personal documents; identified as official documents of an organization; and accessed as popular culture documents that “entertain, persuade, and enlighten the public” (p. 138). The documents I chose were categorized as an official report related to CCSS. Following the



findings from the documents, I present each case with the intent of telling the stories of teachers' experiences with the Common Core, constructed from the in-depth interviews and observations of the participants. I used cross-case analysis which presented a depiction of common themes and interpretive codes identified in the six cases. I also compared the themes from the cases with the documents. Finally, I bring all the data together, documents and cases to answer the research questions.

### **Documents**

For this study, I chose to analyze and code two documents categorized as official documents. According to Yanow (2007) documents can provide background information prior to designing the research project or prior to conducting interviews. They may corroborate observational and interview data or they may refute them, in which case the researcher is "armed" with evidence that can be used to clarify or, perhaps, to challenge what he is being told, a role that observational data may also play (Yanow, 2007, p. 411). The internet search for documents, specifically for the Missouri Learning Standards and teacher experiences, revealed no results. However, documents linking the CCSS and experiences of teachers, leaders, and districts with the implementation of the standards provided the background information and data needed for the proceeding interviews and observations. The first document coded for the study was a report released by the Center of Education Policy in 2014 that sheds light on a wide range of issues including district perceptions of the standards themselves, implementation progress, and common challenges to the published date of the document. The second document was a survey study conducted in 2015 exploring teacher views of the CCSS and its implementation. Through the activity of coding the documents and searching for patterns, five major themes emerged, eleven

interpretive codes developed within the themes, and eighty-nine specific descriptors for the interpretive codes.

The documents revealed five themes and although depending upon the number of descriptive codes found related to identified interpretive codes, some themes presented a richer description. Table 1 included the varied presence of the interpretive codes leading to the themes identified in the two documents. The interpretive codes required at least ten occurrences, but no more than 27 to be considered a moderate presence. Interpretive codes with more than 27 occurrences were considered strong in presence.

Table 4.1

*Document Analysis*

S = Strong Presence (28 or more occurrences)

M = Moderate Presence (at least 10 but no more than 27 occurrences)

<b>Documents</b>	Document 1	Document 2
<b>Theme: Challenges</b>		
Interpretive Codes		
<i>Implementation</i>	S	S
<i>Teacher Stress</i>	M	M
<b>Theme: Resources</b>		
Interpretive Codes		
<i>Professional Development</i>	S	M
<i>Opposition</i>	S	-
<b>Theme: Teacher Perspectives</b>		
Interpretive Codes		
<i>Teacher Attitude</i>	-	S
<i>Teacher Demographics and Characteristics</i>	-	M
<i>Teacher Efficacy</i>	-	M
<i>Teacher Attrition</i>	-	M
<b>Theme: Leadership</b>		
Interpretive Codes		
<i>Professional Development</i>	-	M

*table 4.1 continues*

Documents	Document 1	Document 2
<b>Theme: Political Landscape</b>		
Interpretive Codes		
<i>Teacher Stress</i>	-	M
<i>Assessment Preparation</i>	-	S

The first document coded was titled: *Common Core State Standards in 2014: Districts' Perceptions, Progress, and Challenges*. The report was developed by the Center of Education Policy (CEP) based in Washington D.C., at the George Washington University's Graduate School of Education and Human Development. The report was researched by Diane Stark Renter, CEP's deputy director, and Nancy Kober, CEP's editorial consultant. There were two themes that emerged from the analysis of this document: **challenges** created by the Common Core and the **resources** associated with their implementation.

**Challenges.** Throughout the document, the theme of the many **challenges** created by the CCSS were prevalent. The challenges were of various types and involved state leaders, school districts, school administrators, and teachers. During the creation of the document, many states and school districts were at a critical phase of implementing the CCSS. This was at the very time mounting criticism and attempts in some states to disrupt the standards adoption and implementation caused much uncertainty about the future of the standards. The current negativism and backlash four years after the introduction of the Common Core has created its own set of challenges, however at the time of this document, the criticisms were only in their infancy. There were two interpretive codes for the theme of **challenges**. These included the factors of the *implementation* that created the challenges and the impact these challenges had on teachers in the form of *stress*.

The interpretive code, *implementation*, developed from the document and tied directly to the theme of **challenges**. Descriptors for this interpretive code included the changes of curriculum and instruction, rigor, teacher preparation, and technology infrastructure. In any change, there are always challenges needing addressed for true change to occur. The curriculum and instructional changes initiated by the Common Core brought about many other challenges that were intertwined and built from each other. The document stated:

Many of the challenges districts cite in implementing the CCSS are interrelated. For example, professional development affects teachers' ability to teach a CCSS-aligned curriculum. Teacher preparation and curriculum implementation affect student performance on assessments. And funding affects most aspects of implementation.

In a survey by the Center of Education Policy (2012) all the CCSS-adopting states have developed or are developing comprehensive state implementation plans, and most are requiring districts to implement the standards. The clear majority of these states were revising curriculum materials or creating new materials aligned with the standards (resources), and adopting and implementing new assessments aligned with the standards. The survey further explains states were likely to encounter challenges over the next few years as they undertake the complex, long-term process of implementing all aspects of the CCSS. The immediate challenges included funding for resources (change in curriculum) and teacher professional development. At the time of the survey, resistance to the CCSS did not pose to be a challenge.

The second interpretive code was the added *teacher stresses* the standards have imposed. To determine the progress and effect of the standards implementation, policymaker's incorporated new assessments aligned with the standards, a new teacher evaluation, and other accountability measures to ensure the standards were implemented.

Implementation of the standards ultimately hinged on adequate appropriations to support professional development for teachers and other staff, new investments in curriculum, tests, technology and other instructional supports, and in many cases changes to state accountability systems (e.g., linking student and teacher data, and using student test scores to evaluate teachers) were all items under the review of elected state policymakers (Jochim & Lavery, 2015). As states implemented the Common Core, assessments were also realigned to measure student progress and to measure the teachers who taught them resulting in the perception that poor student test scores indicated poor teaching and instruction.

States adopting the Common Core were also to install effective accountability systems that incentivize, support, reward, and sanction districts, schools, and teachers. According to the American Center of Education Policy (2014) test developers and assessment policymakers have an increasingly daunting task in the era of the CCSS. While the standards themselves remained the backbone of the K-12 policy system, assessments were clearly an integral component affecting the implementation of standards in the classroom. Given the wide array of uses for test scores measuring student progress and proficiency, measuring school performance, and informing low and high stakes decisions about individual teachers, test quality is paramount (Polikoff, 2014). The fundamental question becomes how much emphasis is given in using teacher evaluation data to reward or sanction teachers and how much to use the same data to leverage teachers' learning opportunities to improve instruction (Bell, 2012). Regardless of the significance in using students' results from standardized test scores in teacher evaluations, a result driven environment exists.

**Resources.** The second theme emerging from the document was **resources**. As society changes and the demands and needs of people change, a change in policy, instruction, and curriculum is needed to keep pace. Change is inevitable and resources are necessary for a successful change. Changes are taking place rapidly against the backdrop of the shift from an industrial economy to one based on the instantaneous global traffic of information. Per Jorgensen (2006), today's schools are not designed to prepare children for our explosive knowledge economy or its demand for outcomes over process; the traditional model of teachers dispensing discrete, disconnected bodies of information (curricula) presented in isolation from the other subject areas, is increasingly obsolete to prepare children for our world. Change in education policy can be interpreted two ways: as a risk, insult, or threat to the traditions and autonomy of teachers; or, simultaneously, as an opportunity for reflection and improvement. There were two interpretive codes for the theme of **resources**. These interpretive codes included *professional development* and *opposition to the standards*.

The interpretive code of *professional development* used to accommodate change included specific descriptors such as collaboration, support from state education agencies, political community outreach activities, and public support. For true education reform to occur, Common Core advocates knew support structures needed to be in place before full implementation of the standards could be obtained. Collaboration was one strategy the advocates thought would be the most beneficial for the Common Core initiative. The document suggested:

By having the same set of academic standards across many states, advocates for the Common Core hope to create opportunities for collaboration on implementation including cross-state collaboration and the potential to realize economies of scale related to instructional material and professional development tools and strategies.

The survey results suggest this is occurring to some extent; the clear majority of districts reported partnering with at least one other entity to implement the Common Core.

The transition to the CCSS seemed to be most successful when teachers were highly engaged in the process and had time to collaborate and leverage their collective professional expertise to bring all students to higher levels of literacy (Nelson, 2014). Collaboration in education can be described as teams of teachers who work interdependently to achieve common goals, goals linked to the purpose of learning for all, for which members are held mutually accountable (Dufour, Dufour, Eaker, & Many, 2006). A survey conducted by the National Center of Education Literacy (2013) claimed the educators' most powerful professional learning experiences come from collaborating with their colleagues and when collaboration is the norm, educators reap a host of benefits, including higher levels of trust and the quicker spread of new learning about effective practices. Principals and other school leaders play a critical role in facilitating effective staff collaboration by modeling and providing tools, training, and time. Providing teachers with real training and templates and meaningful opportunities to work together to implement strategies that will improve student learning were vital components of any strategy to implement any new standards or education reform.

The second interpretive code for the theme of **resources** was the *opposition* accompanying the implementation of the Common Core. The descriptors contributing to the non-support factors included resistance, negative push back, outside influences, and the criticisms toward the Common Core. The implementation of the Common Core was a major change to education policies in the United States and with any education reform there will be resistance. With any new standards implementation, there is no guarantee of stronger

student achievement or school performance (Polikoff, 2014). Major challenges await any academic standards on the implementation, assessment, and accountability fronts. As established in the literature review, change is inevitable and not everyone likes change and would rather maintain the status quo, which, creates resistance. To achieve traction in classrooms, states adopting these standards were uncomfortable in their attempts to address curriculum, teacher preparation, assessment, and accountability (Polikoff, 2014; Kober & Rentner, 2012). Each creating the very essence of resistance. The resistance to the common core has grown on every front and the efforts are increasingly fragile due to resistance from states, schools, and both the political left and the right.

The second document coded was a survey study addressing the teachers' views and support toward the CCSS and its implementation, their anticipated effects, and how its operation has affected their teaching. The survey also addressed the teachers' views of the anticipated effects of their thoughts about leaving the profession prematurely. The document was published in 2015 by the Educational Review Journal with Routledge as the journal's publisher. Research on educational change clearly establishes the role of how teachers' job satisfaction plays in their commitment to educational change (Ma & MacMillan, 1999). Teachers' perceptions are linked to both the adoption of changes (Ashton and Webb, 1986; Smylie, 1988) and performance at the school and individual levels of performance (Bandura, 1993; 1997; Goddard, Hoy, and Hoy, 2000). Teachers are at the forefront and heavily involved, willingly or not, in any education reform movements. The themes emerging from the document included **teacher perspectives, leadership, and political landscape.**

**Teacher Perspectives.** **Teacher perspectives** and their views on the implementation of the CCSS was the first theme identified in the document. Teachers are a highly valuable



part of the education equation and play a critical role in any education reform movement. Schools are in constant state of transformation (Hinde, 2003) and individual teachers adapt or provide the impetus for that transformation all the time (Richardson & Placier, 2001). Any proposed change may seem dictatorial or draconian and in conflict with their long-held progressive student-centered ideas (Margolis & Nagel, 2006). When change comes from social and psychological implications, it is sometimes difficult to tell who is being innovative and who is being resistant (Marris, 2014, p. 6). This tension arises particularly because change alone may not be progressive and education policymakers, administrators, and teachers may view an initiative quite differently. There were four interpretive codes for the theme of **teacher perspectives**. These included *teacher attitude* towards the implementation, *teacher demographics and characteristics*, *teacher efficacy* associated with the Common Core, and *teacher attrition*.

The interpretive code of *teacher attitude* toward the implementation of the Common Core is supported by the descriptors including teacher perceptions, condition of teaching, teacher pushback of the Common Core, and teacher support for the Common Core. Teachers played a critical role in standards implementation and their input went relatively disregarded in the formation of the standards. The document stated:

Teachers have been largely absent from the process of creating the CCSS, but they are squarely in the middle of classroom implementation. Given the importance of teacher perceptions to the success of educational change, empirical examinations of those perceptions are warranted. Existing surveys of teacher perceptions regarding the CCSS have focused primarily on teacher awareness, preparedness and opinions regarding the quality of the CCSS and curricular alignment.

The aim of the study in the analyzed document was to seek a deeper understanding of teacher views towards the implementation of the CCSS in relation to other conditions of teaching. With respect to this study, teachers form perceptions of the CCSS by drawing

upon many years of standards-based reform efforts. In turn, teachers will adjust their everyday practice to comply with any new policy demands. In this way, teachers will shape the ultimate outcome of the CCSS. For change to occur, teachers undergo a complex process in which they try to make sense of a new policy and understand what the policy requires of them. Teachers then attempt to fit these policies into their preexisting, everyday school contexts, but in doing so, teachers also modify these policies (Schmidt & Datnow, 2005). Thus, policies transform teaching practice, and teachers transform policies throughout the implementation process, ultimately affecting the capacity of a new policy to successfully achieve its original goals (Coburn, 2004; Honig, 2006; Palmer & Rangel, 2011). Each teacher will have different perceptions of the Common Core and either help or hinder the standards implementation.

The second interpretive code for the **teacher perspective** theme was *teacher demographics and characteristics* influencing the teachers' perceptions of the Common Core. Descriptors supporting the interpretive code of teacher demographics and characteristics included teachers growing greener and less experienced, teacher pool has more elementary teachers, and teacher pool has more early career teachers (Ingersoll, Merrill, & Stuckey, 2014).

Teacher demographics are changing. Ingersoll's (2014) data confirms this trend—the teaching force has gotten older and teacher retirements have steadily increased. But Ingersoll's analyses also show this trend is largely over, and the continuing stream of reports with dire warnings of an aging teaching force are simply repeating an old story that is no longer true. The teaching workforce is becoming less experienced and as the proportion of older, veteran teachers increased, so has the proportion of beginning teachers. The Ingersoll

study revealed the increase in beginning teachers is largely driven by the ballooning trend, that is, by the huge increase in new hires. Most of these new hires are young, recent college graduates; however, a significant number are older but inexperienced beginning teachers. The last trend identified by Ingersoll was the teaching workforce becoming less stable. From 1988-89 to 2008-09, annual attrition from the teaching force rose by 41 percent, from 6.4 percent to 9 percent. But these overall figures mask large differences in overall turnover among different types of teachers and different locales, revealing the need to disaggregate data. The Ingersoll data show in 2004-05, 45 percent of all public-school teacher turnover took place in just one quarter of the population of public schools and high-poverty, high-minority, urban, and rural public schools have among the highest rates of turnover. According to Ingersoll, what does impact their decisions were school working conditions the degree of autonomy and discretion teachers were allowed over issues that arose in their classrooms, and the level of collective faculty influence over school-wide decisions that affect teachers' jobs.

The interpretive code of *teacher efficacy* was also associated with the theme of **teacher perspectives** toward the Common Core. Descriptors linked with the interpretive code of teacher efficacy included teacher de-professionalization, accountability, and how stress contributed to teacher self-efficacy in varying degrees. The document states:

Malik, Mueller, and Meinke (1991) explored grade level and years in the profession as variable that increased teacher stress, they reported that grade level taught accounted for more variations in the responses. A common belief may be that elementary teachers in the United States, specifically those teaching lower than third grade level, are less critical of changes in policy when it comes to high-stakes testing since students in kindergarten, first, and second grade are not required to participate in state-wide accountability testing.

In the era of accountability, high-stakes testing adds to teacher stress. According to the New York State Education Department (2004) policy brief, teachers find themselves: engaging in more test preparation; feeling under greater self-reported stress to have their students do well; and in aligning their instructional plans to the items and core content the assessments were designed to test for. A 2014 National Education Association (NEA) survey concluded most teachers reported feeling considerable pressure to improve test scores. Seventy-two percent replied they felt “moderate” or “extreme” pressure from both school and district administrators. From fellow teachers and parents however, a large majority of respondents said they felt very little or no pressure. The fact that increasing numbers of parents nationwide no longer want their children to be exposed to a one-size-fits-all education approach may help explain the disparity between them and school officials. The NEA survey found that 75 percent of teachers were satisfied with their jobs. However, the data also indicated toxic testing environments contribute to lower job satisfaction and thoughts of leaving the profession. Despite the high level of overall satisfaction, nearly half (45 percent) of surveyed member teachers have considered quitting because of standardized testing. Teachers are dedicated individuals and many succeed in focusing on the positive, but the fact testing has prompted such a high percentage of educators to contemplate such a move underscores its corrosive effect on the profession.

The final interpretive code for the theme of **teacher perspectives** regarding the Common Core was *teacher attrition*. Descriptors supporting this interpretive code were teacher grade levels taught, teacher years of experience, and teachers leaving the profession. The document stated:

Unfortunately, nearly 50 percent of all American teachers leave the profession within the first five years of the career (Ingersoll, 2007), a fact that not only represents a

serious dissatisfaction with conditions of teaching, but also represents a huge investment on the part of the taxpaying public. Teachers were leaving the profession at an even higher rate than normal perhaps due to the psychological stress of standards and assessments created by non-teacher policymakers (H. 2012). In reports from the national study that mirrors the present, the factor of whether a teacher felt that leadership was open (i.e. supportive of professional growth, willing to provide autonomy) provided indications as to whether teachers of any amount of experience were considering leaving the profession.

The literature review explained teachers leave the profession for a variety of reasons.

During the past two decades, teacher turnover rates have been of great concern for the education community and has encouraged an intensified focus to understand the phenomenon. The most recent research has dramatically increased the understanding of teacher retention and attrition (Boyd, et al., 2011; Hanushek, Kain, & Rivkin, 2004; Ingersoll & Smith, 2003; Johnson S. M., 2006; Guarino, Santibañez, & Daley, 2006). Most public and private entities that hire employees must deal with the fact personnel will always be coming and going regardless of the situation. However, a high turnover rate can have disastrous effects on any organization. "Attrition" and "teacher turnover" are both terms many school districts use regarding this phenomenon. Although some turnover is inevitable and reasonable levels of turnover may promote innovation (Macdonald, 1999) in schools with high turnover, a revolving door atmosphere stifles the development of relationships and programs that foster learning (Ingersoll, 2001).

**Leadership.** The second theme manifesting from the document was **leadership**. The concept of leadership is a complex one and understanding the nature of leadership can be most elusive. The field of educational leadership has many competing perspectives and an inevitable lack of agreement on the exact nature of the discipline. The concept of leadership, regardless of the organization or institution, private or public, has a common framework and structural relationship and connects in a variety of ways. Leithwood, Day, Sammons and

Hopkins (2006) described their generic definition of leadership was about direction and influence. Leithwood et al. (2006) further explained stability was the goal of what is often called management. Improvement was the goal of leadership. Brady and Woodward (2005) also included the characteristics of the leader: “Leadership is the influence of others in a productive, vision-driven direction and is done through the example, conviction, and character of the leader” (p. 7). There is no agreed definition of educational leadership and Yukl (2002) argued the definition of leadership is arbitrary and very subjective. The interpretive code deriving from the theme of **leadership** was *professional development* provided by leaders in the implementation of the Common Core.

The interpretive code of *professional development* was supported by the descriptors such as classroom autonomy, ownership, social relationships, trust, support, professional growth, exclusion in development of the standards, and decision making. The document stated:

We depicted the theme lack of agency to meet students’ needs, in the “narrow interpretation and autocratic implementation of the CCSS” and how it “impacted agency” of the teachers and limited their mission “as classroom instructors and adults who care for the well-being of their students when school leadership drastically restricted their professional autonomy over teaching methods and the selection of materials.”

Teacher autonomy is a complex aspect of teachers’ working conditions because it requires educators to balance the need for cohesion and structure in school systems against the need for independence in instruction (Campbell, 2006; Ingersoll, 2006). Research found teacher autonomy is positively associated with teachers’ job satisfaction and teacher retention (Guarino, Santibañez, & Daley, 2006). Teachers who perceive they have less autonomy are more likely to leave their positions, either by moving from one school to another or leaving the profession altogether (Berry, Smylie, & Fuller, 2008; Boyd, et al.,

2011; Ingersoll, 2006). The National Center of Education Statistics (2015) survey conducted by Sparks and Malkus compared survey data from 2003–04 with data from 2007–08 and finding larger percentages of teachers perceived low autonomy in 2007–08, with still larger percentages in 2011–12. Perceptions of autonomy shifted from high too low for teachers who taught in low-poverty schools and who taught in towns. In 2003–04, larger percentages of these teachers perceived high autonomy than low autonomy. In 2007–08 and again in 2011–12, the reverse was true; larger percentages perceived low autonomy than high autonomy (Sparks & Malkus, 2015).

**Political Landscape.** The final theme identified from the document was **political landscape** of the Common Core. Public education is by necessity an extension of our political system, resulting in schools being reduced to vehicles for implementing political mandates. For example, during the past thirty years, education has become federalized through dynamics both indirect ("A Nation at Risk" spurring state-based accountability systems) and direct (No Child Left Behind and Race to the Top) (Thomas, 2012). Federal initiatives are continually evolving and state governments are constantly weighing policies on testing, standards, and curriculum. Districts must enact rules in response to these policies, as well as to address local concerns. The current reforms respond to an explicit national agenda. The link between education and economic productivity; the danger American schools and students had gone 'soft' and the imperative for everyone in the system to work harder. Policymakers were exhorted to shore up student standards, particularly at the secondary school level; to tighten entry to the teaching profession; to lengthen the time spent in school; and to reward teacher and student performance (Hannaway & Crawson, 1988).

The interpretive codes for the **political landscape** theme included *teacher stress* and *assessment preparation*.

The interpretive code derived from the theme of **political landscape** was the *teacher stress* connected with the Common Core implementation. The descriptors for this interpretive code included private trust influence, nationalization of the standards, standardized test, corporate business interest, high stakes testing, and corporate creator of the standards. The document proclaimed:

The creation of the CCSS was led by the National Governors Association Center for Best Practice and the Council of Chief State School Officers. The two working groups that comprised the primary writing teams for the grade and subject specific criteria set in the CCSS included six test-makers from the College Board, five from the test publishing company, ACT, and four from Achieve Inc., an educational reform organization with a focus on college-and-career readiness standards, assessment, and accountability.

Diane Ravitch (2014) emphasized the education reform movement must be defined in terms of its ideology, its strategies and its leading members. Ravitch explained the “reformers” say they want excellent education for all; they want great teachers; they want to “close the achievement gap”; they want innovation and effectiveness; they want the best of everything for everyone. “Reform” is a misnomer, because the advocates for this cause seek not to reform public education but to transform it into an entrepreneurial sector of the economy. Ravitch insisted the reform movement is a corporate reform movement, funded to a large degree by major foundations, Wall Street hedge fund managers, entrepreneurs and the US Department of Education. Ravitch continued and justified her conclusions by explaining the Gates Foundation is by far the largest foundation in the United States and possibly the world. It underwrote “advocacy,” by subsidizing almost every major think tank in Washington, D.C. The Gates Foundation supported the creation, evaluation and



promotion of the CCSS, which have been adopted in almost every state. Corporate America is alive and well in public education and its influences on reform movements are growing.

The second interpretive code, *assessment preparation* had supporting descriptors including bureaucracy, political controversy, reform movement, and states' influence. Bureaucracy has been a part of education and reform movements for decades. Bureaucracy is a rational, efficient way of completing tasks and rewarding individuals based on their contributions; however, it can also represent an impersonal, inefficient, cumbersome organization unresponsive to human needs (Ballantine & Hammack, 2015). According to the work of Max Weber (1946) the main elements of a bureaucratic organization comprise of division of labor, administrative hierarchy, specific rules of procedure, formalized and effective neutral role relationships, rationality of total organization and positions held by individuals in the organization. In any bureaucratic organization, there will be expected problems. For example, in a public school the top down approach to standards, lack of autonomy among teachers, and bureaucratic personalities created issues for all stakeholders resulting in negative responses. Educational bureaucracies may be composed of groups of corporate entities, policymakers, administrators, teachers, and community groups all pushing their own agenda. Meyer and Rowan (1977) claimed educational bureaucracies present themselves not as units servicing education but as organizations that embody education purposed in their collective structure. As their purposes and structures are defined and institutionalized in the rules, norms, and ideologies of wider society, the legitimacy of schools and their ability to mobilize resources depend on maintaining congruence between their structure and these socially shared categorical understandings of education (Meyer & Rowan, 1977). Religious, cultural, and ethnic groups can feel marginalized and alienated

when they are forced to conform to bureaucratic structures. Bureaucracy can be a vehicle for much needed social change, likewise it can also be a vehicle of social injustice.

I have provided an analysis of key documents related to the implementation of the standards which serves as relevant background knowledge and provides a picture of the political landscape. The units of analyses, determined by research questions were teachers' perceptions of the implementation of the CCSS, with a specific focus on the perceptions of elementary, middle school, and high school math and language arts teachers. In the next section a brief overview of the interviews and observations with emerging themes are discussed. Next, I conduct a with-in case analysis of the observations and interviews for each of the six cases followed by a cross case analysis of the six cases that brings together findings from all three data sources: interviews, observations, and documents.

### **Within-case Analysis**

I approached the research to better understand teacher experiences with the implementation of the Common Core specifically teacher self-efficacy and the support factors that may have helped or hindered the transition to the Common Core. I incorporated spoken narrative through in-depth interviews and observations with six participants to support my conclusions and incorporated with-in case analysis approach to logically portray the outcomes of my research. Through my research, I have attempted to portray a holistic perspective of the phenomena regarding the implementation of Common Core standards. Four themes emerged in the data collected from the interviews and observations. These themes were: **resources, engagement strategies, student preparation and development, and assessments**. The findings related to the within case analysis were delineated by participant and provided a narrative description for the reader as it related to each theme.

This within case analysis provides numerous opportunities for readers to learn from the experiences of the teachers and develop a better understanding of teachers' experiences with standards initiatives and education reform.

The profiles of the six participants are described in detail in the introduction of each case, followed by the themes identified in each. Data from each document were also used to understand teacher experiences with the Common Core. Finally, cross-case analysis was conducted, compared with the themes from the documents, and used to answer the research questions. All four themes were found in the six cases in varying degrees. Although depending upon the number of descriptive codes found related to identified interpretive codes, some themes presented a richer description. The themes were fully defined and grounded in the literature supporting theoretical sensitivity and validity of the findings in the first case analysis. In some cases, the themes are the same but the interpretive codes are different; these may also be grounded in the literature. Table 4.2 included the varied presence of the interpretive codes leading to the themes identified in the six cases. The interpretive codes required at least four occurrences, but no more than eleven to be considered a moderate presence in the interviews and observations. Interpretive codes with more than eleven occurrences were considered strong in presence.

Table 4.2

*With-in Case Analysis*

S = Strong Presence (12 or more occurrences)

M = Moderate Presence (at least 4 but no more than 11 occurrences)

<b>Interviews and Observations</b>	Sally	Heather	Gary	Jamie	Debbie	Shauna
<b>Theme: Resources</b>						
Interpretive Codes						
<i>Climate</i>	M		M	-	-	-
<i>Instructional Tools</i>	-	M	M	-	M	M
<i>Professional Development</i>	S	M	M	M	M	M
<b>Theme: Engagement Strategies</b>						
Interpretive Codes						
<i>Instructional strategies</i>	M	M	M	M	M	M
<i>Classroom mgt. strategies</i>	M	-	M	M	-	-
<b>Theme: Student Preparation and Development</b>						
Interpretive Codes						
<i>Depth of Knowledge</i>	M	M	M	M	M	S
<i>Content of lessons</i>	-	M	-	M	-	M
<i>Student Learning gaps</i>	S	M	M	-	M	M
<i>Student mental maturity</i>	M	-	-	-	M	M
<i>Student motivation</i>	-	M	S	-	M	-
<b>Theme: Assessments</b>						
Interpretive Codes						
<i>Summative assessments</i>	M	M	M	-	-	-
<i>Teacher stress</i>	S	M	S	M	M	S
<i>Assessment preparation</i>	M	S	M	S	M	M

**Case 1: Sally**

Sally was a white female teacher who taught middle school math and had less than ten years of teaching experience. Sally traveled a nontraditional path in becoming a teacher. She obtained a Bachelor in Science degree in hospitality and restaurant management before

earning her master's in teaching. Sally was then able to pass the state exam which provided her with a middle school math endorsement. She was an extremely animated teacher displaying a true passion for all students' success in her interview and classroom observation. The layout of her classroom included assigned student desks aligned in rows and columns and all facing a smartboard at the front of the room. On the day of the observation, Sally was using her smartboard extensively and manipulating math equations while students observed and participated. Surrounding her smartboard were white boards with the day's algebra lesson plans, objectives listed, and practice problems. There were five computers facing the walls on the side and back of the room. These computers were used for individual instruction and monitoring students taking advanced online courses. Her classroom climate was learning conducive as there was a large number line graph painted on the wall, posters referencing area, perimeter, geometry and fractions, and shelving that included textbooks and calculators. The classroom climate was also inspirational with scattered posters on the walls inspiring students to seek a future in math and how math can be used in their everyday life.

**Resources.** The theme of **resources** was evident throughout my interactions with Sally. In the context of classrooms, resources are physical demonstration aids, students' contextual understandings, teacher subject expertise, and structured organization of materials, ideas, and activities (Kurdziolek, 2011). The points of contact at which students interact with these resources (noting that students themselves can be a resource) are where knowledge construction occurs. The research on resources indicates they are not self-enacting, that is, they do not make change inevitable. Differences in resource effect on student achievement depend on how they are used (Cohen, Raudenbush, & Ball, 2002;

Grubb, 2008). Classroom instruction can be described by the relationships and interactions between teachers, students, materials, and their environments. Instruction, therefore, is not something done by a teacher to their students, but rather a process in which knowledge is collectively and collaboratively built through and with classroom resources (Kurdziolek, 2011). The data gathered during the observation process underscores the importance of Kurdziolek's work in resources and provides the bridge between teacher instruction and student learning. Similar factors were noted during the interview leading to the interpretive codes of *climate* and *professional development*.

The interpretive code, *climate* linked to the theme of **resources** with a moderate occurrence from the observation and was noted during the Sally's interview. The descriptors creating the climate in the classroom were found in other themes across data resources, however in a limited fashion. Climate included descriptors such as smartboards, whiteboards, desk, shelves, content specific posters, and posters of inspiration all contributing to the classroom climate.

During the observations, Sally used the technological assistance of the smartboard for lesson instruction. Students were seated at their desks and most were actively participating in the lesson using and observing the digital technology. As I observed, I was amazed at how students were using technology as a major resource in their learning and how technology has changed the classroom over the past decade. During the interview, Sally mentioned the use of technology in the classroom and the changing learning styles of her current eighth grade students and how the digital age has affected teaching and learning:

And they are so dependent on calculators and they feel like they must have something in their hands always (pointing at her phone) because otherwise they are just functioning. I've never had that with a group of kids before and their lack of organizational skills doesn't help any of the other skills.

As noted above in the introduction, Sally had several references for math operations throughout her room for students to use or refer to during instruction. As I sat down with Sally to begin the interview, I could not help but notice the large painting of a number line graph on the wall and the posters displaying math operations. The posters and number line graph were major contributors to the climate of the classroom.

Within the interpretive code of *professional development*, Sally's interview revealed the professional development received during the implementation of the Common Core did help but there was not enough time to fully understand the changes, especially for teachers in a small school. Professional development was a highly-discussed topic during the interview. Sally stated:

I went to several workshops but not enough to transition to all those changes. When you go to a one-day workshop and you're in and out of five or six sessions, they can't cover everything you need to teach especially for a teacher that teaches 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> grade math. I can only go to so many things, so I had to pick.

Sally went further and discussed the initial administrative support received in the form of professional development:

Well, I was a new teacher and had taught one year and then they (Common Core) came out. I picked new textbooks as a new teacher and the teacher that was here was leaving and you know how it is when you're out the door. And the new teacher that came in was not very good and was released half way through the year. I didn't have a lot of confidence. I didn't have the support. I mean, I had a lot of support from my principal and he was very supportive but he's not a math teacher so he could only do so much and he would help me any way he could. He would get me any tool he could. We went through a lot of transition at that time. Administration wise, the principal was new, we didn't have a superintendent starting out that school year. I mean, there was a lot.

Sally and I then discussed her experiences with collaboration during the implementation of the Common Core. Many studies have reported positive outcomes of collaboration for teachers, including improved efficacy (Shachar & Shmuelewitz, 1997),

more positive attitudes toward teaching (Brownell, Yeager, Rennells, & Riley, 1997), and higher levels of trust (Tschannen-Moran & Hoy, 2001). Shachar and Shmuelewitz (1997) also reported higher levels of self-efficacy were associated with increases in teacher collaboration. Benefits to students were presumed to result from the positive changes experienced by teachers. School leaders play a critical role in advocating collaboration and allowing the necessary time for collaboration through scheduling. Sally stated:

In the beginning, there was no collaboration because we didn't have another math teacher. The second year we had one and there was more collaboration and more help. We haven't had a strong foundation of math in the lower upper grades because of the transitions and a lot of transition was not made, in my opinion.

**Engagement Strategies.** The theme of **engagement strategies** was evident throughout my interactions with Sally, specifically in the observations. Student engagement is concerned with the interaction between the time, effort and other relevant resources invested by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of students and their performance (Trowler, 2010). It is obvious today's students live in a world engaging them differently than the world their parents experienced. Student learning has changed over the last twenty years in response to their engagement within a technology rich society and changes in the student's upbringing surrounded by constant technological advances. With changing engagement of students, teaching strategies must also evolve. Teaching strategies refer to methods used to help students learn the desired course content and can develop achievable goals in the future. Teaching strategies identify the different available learning methods to enable teachers to develop the right strategy to deal with the target group identified (Armstrong, 2013). The interpretive codes leading to the development of this theme were *instructional strategies* and *classroom management strategies*.



Within the theme of **engagement strategies**, the interpretive code, *instructional strategy* developed and had a moderate occurrence. The descriptors for this interpretive code included discussion strategies, question and answer strategies, teacher centered instruction, projects, and using multiple sources for instruction. In the observation field notes for Sally I had scribed her instructional strategy as:

Sally would work the math problems on the smartboard and simultaneously allow student volunteers to solve the problem. The students were reviewing for the state test and there was much interaction between Sally and the students. The math problems retrieved from the field notes included pay and salary equations.

During the interview, Sally stated she needed to use multiple methods of instruction to prepare students for the state test:

I think the biggest thing I have incorporated in my classroom is I've tried to teach everything in more than one way. There is more than one way to do most math problems and so I tried to teach them to look outside the box and I've tried to do it forward and backward because sometimes they give you the answer and sometimes they give you the problem. So, you must do both directions now, is what I've learned.

Sally understood to prepare all students for the state accountability test, she must use multiple methods and strategies. In observance of Sally, she did select multiple strategies that best fit her students. As an administrator and experienced in completing many teacher evaluations, teachers should be tapping into different strategies throughout the year, and there should be evidence in the classroom to support the teacher is well adept in being flexible with using multiple methods for student engagement. By the evidence in the observation, the Common Core has increased Sally's instructional strategy toolbox.

*Classroom management strategies* was an interpretive code with a moderate occurrence for the theme of **engagement strategies**. Marzano, Marzano and Pickering (2010) state effective teaching and learning cannot take place in a poorly managed

classroom. If students are disorderly and disrespectful, and no apparent rules and procedures guide behavior, chaos becomes the norm. In these situations, both teachers and students suffer. During the observation of Sally, I had noted how the layout of the classroom aligned the desks in rows and columns and students were in assigned seats. Sally used proximity strategies in her classroom and instilled a “withitness” characteristic that is typically only gained by years of experience in teaching. Withitness is defined as the teacher’s ability to know what is going on in the classroom and to be able to desist behavior accurately and in a timely manner (Kounin, 1970). Students knew the procedures and routines; however, I had noted that no classroom rules were posted. The interview did not reveal any descriptors for classroom management strategies.

**Student Preparation and Development.** The theme of **student preparation and development** was evident throughout my interactions with Sally. For this study, student preparation and development is defined as the change, growth, and development of students. Jones and Abes (2011) define student development as some kind of positive change that occurs in the student (e.g. cognitive complexity, self-awareness, racial identity, or engagement) (p. 153). The interpretive codes leading to the development of this theme were *depth of knowledge*, *student learning gaps*, and *student mental maturity*.

*Depth of knowledge* was an interpretive code with a moderate occurrence resonating with the data obtained from the observation and interview for the theme of **student preparation and development**. Critical thinking and review were descriptors for the depth of knowledge interpretive code. According to the supporters of the Common Core, the standards call for teachers to prepare students with rich content knowledge and relevant thinking skills essential for the success after high school and in the 21<sup>st</sup> century. The

Common Core shuns the previous low expectation standards that claimed memorization of facts provided a sufficient education for succeeding in this complex new world. Not only are teachers expected to differentiate their instruction but also to increase the variety of depth of knowledge questioning which improves student critical thinking skills. Sally stated:

My eighth-grade class, they (policymakers) tried to push geometry this year but every geometry question that the kids told me about after the test all gave them the answer and they had to use the formula and go backwards to find the radius, or the length, or the height, or they just didn't give them the shape and find the volume or the area.

I did not observe Sally's eighth grade class during this lesson but did observe her seventh-grade class. Recollecting from my observation field notes, Sally reviewed with her students' sample test questions similar to what the state test expected. One such question was:

George earns \$455 per week. George receives a 20% pay raise. How can George calculate his new weekly pay rate? Select all calculations that will result in Georges new weekly pay rate.

Divide \$455 by 0.20  
Divide \$455 by 1.20  
Divide \$455 by 0.20  
Divide \$455 by 1.20  
Solve for x:  $x/455=120/100$   
Solve for x:  $455/x=20/100$

The depth of knowledge and rigor of the question challenged the students by evidence of the many blank stares. I had personally thought the question was unreasonable and wondered how seventh graders were supposed to identify with the question since very few understood "earnings" and "raises" because they have not experienced this real-life concept. I believe they could do the operation of the math, but to truly identify with the problem, I felt was remote.

*Student learning gaps* in their education was the next interpretive code with a strong occurrence for the theme of **student preparation and development**. Descriptors identified

with *student learning gaps* included student transition, student's lack of prior skill, mastery of the standard, and rigor. Student learning gaps should not be confused with achievement gaps or opportunity gaps. Learning gaps occur when students may not master a standard or miss a long period from school. Achievement gaps refer to the unequal or inequitable distribution of educational results and benefits, whereas opportunity gap refers to the unequal or inequitable distribution of resources and opportunities. During the interview, Sally stressed extensively of how some learning gaps in the students' education was just now surfacing. The sudden shift from one set of standards to the Common Core left students with specific holes in their learning only to be discovered two years later. Sally explained if a subtler transition to the standards were made rather than such a drastic change, these gaps could have been less. Sally stated:

I think now I am seeing some of those gaps. The kids that I have now, because they just jumped to this transition, and the students missed stuff. And I feel especially with math when transitioning should start at the lower grades with the transition and work up. Not to say...okay next year we are going to start teaching this way. What happens with all those holes and gaps? You can't fill in all those gaps if you just transition overnight. They were too fast and too straight across the board.

The sudden transition to the Common Core created gaps in student's education and with an accelerated learning pace teachers have difficulty in finding time to fill those gaps. Students who do not grasp or have not been taught a concept are soon to fall behind and never completely master the concept. Sally discussed student mastery of the standards:

It was a pretty drastic transition to these standards from what we had previously taught and the whole concept of these standards is to master a skill and students can master that skill and carry it on...They went straight into the Common Core and we are going to make them master the skill then I don't think they should move on until they master that skill because in math everything builds on itself. I'm not saying to hold them back in a grade but math should be a progression and until you succeed in the progression you shouldn't go on to the next step.

The interpretive code, *student mental maturity*, was identified in the interview and observation data with moderate occurrence. It can be argued that high standards, even if they are beyond the reach of many students, will still be useful in raising performance of all students. However, the overall perception of school ineffectiveness will remain. The standards, if legitimately tested, will result in a substantial proportion of students failing to meet them thus feeding the narrative of school failure (Newkirk, 2013). Given the experience with the unrealism of the No Child Left Behind demand for 100 percent proficiency, it seems unwise to move to a new set of unrealistic expectations. Learning gaps in student education creates a reluctant learner and the learning in math, reading, or writing, no longer becomes a skill but a task or a chore the student perceives as too complex to complete for the teacher.

**Assessments.** The fourth and final theme identified from Sally's interview and observations were **assessments**. Assessment is the process of gathering and discussing information from multiple and diverse sources to develop a deep understanding of what students know, understand, and can do with their knowledge because of their educational experiences; the process culminates when assessment results are used to improve subsequent learning (Huba & Freed, 2000). Assessment is an integral part of instruction, as it determines whether the goals of education are being met. The interpretive codes leading to the development of the assessment theme were *summative assessment*, *teacher stress*, and *assessment preparation*.

The interpretive code *summative assessment* resonated with moderate occurrence from the data gathered and tied to the theme of **assessments**. Summative assessments are used to evaluate student learning, skill acquisition, and academic achievement after a

defined instructional period, typically at the end of a project, unit, course, semester, program, or school year. Descriptors for summative assessment included MAP test, smarter balanced questions, and practice test related to the state testing. From the field notes taken during Sally's observation, the class was working through sample questions provided by the smarter balanced consortium. The smarter balanced consortium creates Common Core aligned tests to be used in several states and provides sample questions for teachers and students. Sally had difficulty in navigating through the online questions due to the lack of user friendly tools needed to move objects around, make a graph, or highlight. Sally commented to the class the tools for the test will be just like they used on Study Island. Study Island is an online resource Sunshine School District purchases as a supplement to regular classroom instruction. Sally had handouts of the test and each student followed along as Sally progressed through each problem. In my observation field notes one problem was very challenging for the class. The basis of the problem was pay rate and determining a new pay after a percentage raise. The students did not appear to grasp the concept as many had a confused look. I asked Sally if she thought the students understood and she stated "No. They just couldn't identify with the problem and could not relate to the question." If the smarter balanced test questions are like the practice questions, students will likely struggle in finding the answer.

The interpretive code *teacher stress* emerged with strong occurrence from the data collected in the observations and interview. Stress among teacher educators has the potential to impact their own performance, learning success of the students, and even the education system. The data gathered in Sally's interview and observation revealed descriptors of teacher stress. These descriptors for the interpretive code of teacher stress included

accountability, motivation, time, political, and teacher confidence. In discussion with Sally about the causes of teacher stress, she elaborated on the accountability of the teaching profession and how the evaluation system has changed since the Common Core. Sally commented:

There are parts of the evaluation system that are unrealistic like one of my evaluations during algebra class. I had eighteen students and I am to make sure each of the eighteen answer or acknowledge me in some way and that's very challenging in math because if I have a student that doesn't get it at all and everyone else does, if I ask them they won't answer true...I know they don't want to feel stupid, so there are pros and cons to the evaluation system and a little of that needs to be at the discretion of the principal and teacher. But I do understand why they have it because it must be clear cut.

In the era of accountability, Sally's last sentence indicated her frustrations and stress of the accountability acknowledging the current evaluation system must be clear cut. In the past teacher evaluations were subjective in nature but are now quickly changing to objective based with the incorporation of the results from state student test scores being used more extensively in the evaluation process. Sally and I discussed her self-confidence and self-efficacy considering the new evaluation system:

They (new standards and evaluation system) have affected my self-efficacy. As organized as I am and as well as I thought I could teach anything, I never had less confidence or lack of self-confidence as I do right now. Because there are sometimes I think can I even do this anymore. I've found that more this year than I think I ever have, but I also had the most challenging students than I ever had.

From her interview excerpt, Sally's lack of motivation to continue to teach was evident.

Darling-Hammond and Sykes (2003) suggested the increased focus on assessment and accountability has deterred some teachers from continuing in the profession. Kersaint, Lewis, Potter, and Meisels' (2005) study revealed paperwork and assessment was of medium importance across all demographic groups for leavers and stayers in the teaching profession. This factor was related to the volume of paperwork that must be completed

and/or the additional stress associated with high stakes accountability or other assessment measures.

*Assessment preparation* also connected to the theme of **assessments** and occurred moderately in the interview and observation. Classroom autonomy and continual changing of the standards were the descriptors contributing to the interpretive code. Sally indicated the standards were too vague and led to her confusion on what content to prepare the students for:

I still don't feel like they are clear enough. They are very vague and leave too much to your imagination. So, you don't know for sure what will be tested. I don't feel like there is a clear path to what I am supposed to teach.

My interpretation of Sally's comment was she wanted to be told what to teach; however, this view was in direct opposition to the other participants in the study as they felt the standards were too restrictive and took away classroom autonomy. In cross analysis of the 2015 document, scripting and loss of classroom autonomy was supported:

In response to uncertainty, many districts and schools turned to an autocratic and top down approach to CCSS implementation that robbed teachers of professional agency by scripting curriculum, marginalizing teachers from the decision-making process, and adding to the risk-reward imbalance created by the state. In some schools, surveillance, threats and shame added to the teacher's humiliation and deprofessionalization.

Supporters of the Common Core explained teachers know best about what works in the classroom (Common Core State Standards Initiative, 2014) and the Common Core standards were to establish what students need to learn but did not dictate how teachers should teach. Instead, schools and teachers were to decide how best to help students reach the standards. The standards, as written, were up to the discretion of the classroom teacher in interpreting what to teach. The supporters of the CCSS and teachers in the classrooms have obviously, a different view of classroom autonomy created by the CCSS.



Preparing for the standards aligned assessments have also challenged Sally.

According to Sally, a combination of vagueness and the learning gaps in students during the transition have contributed to Sally's feelings of frustration:

I can't teach everything they (students) were supposed to learn and what they should know now. My seventh graders that didn't come in with a good foundation are just struggling and there is nothing for those kids because they are now in this funnel and this is the way we go and this is what we do and there is no choice and I don't think that's right because every kid, especially in math, is not going to get everything on the same level. I don't think every kid should have algebra (pass the state test) to graduate high school. I think we are not doing some of these kids' justice and I think you will see a higher graduation dropout in the future if we are going to keep pushing these kids to do things they are not capable of doing.

Opposition for the Common Core has gained momentum and states are beginning to withdraw from the initiative (Jochim & Lavery, 2015). As the opposition mounted, changes occurred in the initiative's implementation which has a clear impact on teachers and students. Some states have denounced the standards altogether, whereas others, Missouri for instance, has simply renamed them. The political landscape weighs heavy on the future of the standards. Jochim and Lavery (2015) described the politics involved as the centrality of implementation to understanding political conflict; and ultimately, the prospect of repeal suggested the use of politically insulated bodies, like state boards of education, were at best a temporary solution for avoiding a fight. Implementation of complex policies like standards-based reforms often requires changes to related systems and these provide new and existing opponents opportunities to voice their concerns and pick up legislative allies. Teachers, administrators, and school districts are caught in the crossfire of a political landscape and as the battles escalate, more changes in standards implementation or change in the standards themselves will occur leaving teachers attempting to hit a moving target.

## **Case 2: Heather**

Heather was a white female teacher who currently teaches high school language arts and has ten years of teaching experience. Heather, much like Sally, traveled a nontraditional path to education by obtaining a Bachelor of Arts degree in literature and cultural diversity and then her Masters in Arts of teaching and learning. She was encouraged to go into teaching by a former teacher who inspired her when she was a student. Heather was from the town of the district she taught and has strong roots in the community. The layout of her classroom included six tables each with four chairs which gave me the impression of a cooperative learning environment involving student teamwork and collaboration. The classroom had book shelves which were organized and included literature and grammar textbooks and outside reading books. On the bottom shelf was a large variety of board games including Risk, Clue, Monopoly and several others. Centered on the wall was a smartboard along with one white board. Her desk was to the side of the smartboard and in the corner of the room facing the students. Behind her desk on the wall, Heather had past student pictures, family pictures, and a plaque for teacher of the year award along with a plaque for Honorary Member of the FFA. The other walls had posters for student reference including writing structures, paragraph development, and Shakespeare.

**Resources.** The theme of **resources** was present throughout the data collected from Heather. The theme of **resources** encompasses the materials, ideas, and activities in a classroom setting. The interpretive codes of *instructional tools* and *professional development* emerged from Heather's interview and observation.

The interpretive code of *instructional tools* had a moderate occurrence in Heather's interview and observation and supported by descriptors such as textbooks, reading books, and literature worksheets. There were several literature books on shelves of various content,

sizes, and thickness. These books were a collection of several short stories amassed in one book. Most of the textbooks were post Common Core and referenced the standards throughout the pages. During our interview, Heather discussed the Common Core changes and the new textbooks purchased during the implementation. Heather stated:

I don't know if someone was wanting to sell new textbooks or what because quite honestly we bought those new textbooks (pointing at the books on the shelf) and I wish I had my old ones back. I do. Yes...I know they have the Common Core listed and I know it says to say this and do this but most of the stories and stuff, my kids liked the old ones better and I did to. There was nothing wrong with them and they were in great shape, but everything went to the Common Core.

According to the National Center of Education Statistics (2015) expenditures for public elementary and secondary education across the nation was \$527.1 billion. Of this amount the data table from the research statistics indicated eight percent of the total expenditures (\$42 billion) was in supplies. Of the \$42 billion in supplies, eight billion was directly attributed to textbooks. Anytime there is a change in standards, schools have the task to realign their curriculum to match the new standards. This required school districts to spend large sums of money on textbooks that are not necessarily, as in Heather's case, any better. Key findings in the Center of Education Policy (2014) document analyzed for this case study stated more than 80 percent of district leaders agreed implementing the Common Core would require new or substantially revised curriculum materials and new instructional practices. The new materials and trainings would require districts to spend heavy sums of money to have curriculum aligned with the new standards and to meet assessment needs.

*Professional development* was an interpretive code with moderate occurrence for the theme of **resources**. Sustained and intensive professional development for teachers is related to student achievement gains (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009) and effective professional development is intensive, ongoing, and connected to

practice; focuses on the teaching and learning of specific academic content; is connected to other school initiatives; and builds strong working relationships among teachers (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). Heather's experiences with the implementation of the Common Core were varied. She went to a conference prior to the implementation of the Common Core and was quite confused by the proceedings.

I was sent to a conference when all of this was getting ready to come out and quite honestly I was lost. I thought, oh my God, I don't even understand what they are talking about. And then when I got down there nobody else did either. Even the people that were talking about the Common Core didn't even know what the Common Core was.

The workshop may have only increased Heather's confusion regarding the standards however, it did provide some basic background of the Common Core. In my experiences as an education leader, professional development must not only be effective and relevant, but also be applied in the classroom. Sending teachers to a conference or workshop or having others come to the district to provide teacher learning is only a fraction of what is needed for full effectiveness. Implementing teacher learning in the classroom and seeing positive results in student achievement is the true measure of effective professional development.

**Engagement Strategies.** The theme of **engagement strategies** was present in the data collected from Heather. The theme was more prevalent in Heather's observation than her interview. Student engagement research linked higher levels of engagement in school with improved performance, and researchers have found student engagement a robust predictor of student achievement and behavior in school, regardless of socioeconomic status (Klem & Connell, 2004). The interpretive code of *instructional strategy* resonated from the theme of **engagement strategies**.

The interpretive code *instructional strategy* occurred moderately and was supported by descriptors such as student discussion and collaboration. During the observation, Heather incorporated student discussion and student collaboration in her lesson. There was a shared discussion between Heather and her students concerning a story they had just read. Although the conversation was teacher centered, students were conversing with each other over the theme of the story. The class discussion then turned to questions by students to Heather concerning the final test the class was preparing to take in a few days. There was never a mention of any standards or objectives related to the Common Core during the entire observation.

**Student Preparation and Development.** The theme of **student preparation and development** was apparent from Heather's interview and observation data. According to the Common Core Institute, the standards were to be much more rigorous than previous standards. The document analyzed in this case study from the Center of Education Policy (2014) confirmed this claim. One of the key findings was 90 percent of school leaders in adopting states agreed the Common Core standards were more rigorous than their state's previous math and ELA standards and would lead to improved student skills. Although the standards have challenged the students and promoted a much deeper thinking and depth of knowledge, the swiftness of the implementation may have created learning gaps in students' education leaving teachers scrambling to fill those gaps. The interpretive codes emerging from Heather's interview and observation were *depth of knowledge*, *content of the lesson*, *student learning gaps*, and *student motivation*.

The interpretive code, *depth of knowledge*, had a moderate occurrence and was supported by descriptors including interpret, review, explain, and revise. During the

observation, Heather explained the format of the final test the class was to take in a few days. Heather used phrases such as: “we have been reviewing all year,” “explain the meaning and content,” and “fully explore each paragraph.” These phrases used by Heather demonstrated her use of depth of knowledge key words such as review, explain, and explore. During the interview Heather shared that she was constantly “going back” and reviewing personification with all her classes since personification is a major objective in the Common Core. Continual review of the content covered and differentiating the instruction can help all students understand the content of the lesson (Sabban, 2006).

*Content of the lesson* had a moderate occurrence in Heather’s observation and aligned with the theme of **student preparation and development**. Heather’s class had read a short story from the Holt-McDougal textbook. As I was observing the interactions between Heather and her students and listening to the discussion of the story, I noticed the textbook company referenced the Common Core and suggested students use the strategies of text analysis and figurative language. Regardless of the suggestions in the textbook, neither of these strategies were ever mentioned by Heather or the students.

The interpretive code, *student learning gaps* developed from the data collected from Heather’s observation and interview with a moderate occurrence. Student learning gaps were supported by descriptors such as mastery of the standard and different learning styles. Heather explained she felt as if the Common Core’s goal of every student being college and career ready as unrealistic and did not fit every student’s need.

I think they focus too much on college and career ready. I don’t think they care if they are college or career ready. Some of the things we are having them do doesn’t have anything to do with it. I tell the kids they don’t have to go to a four-year college to be successful.

Heather then proceeded by giving an example of a former student that did not go to college and is very successful today. My interpretation of Heather's statement was not all students will be on the same path. Some will go to a four-year college, some will go to a two-year college, some will go to a trade school, while others may just use their skills and knowledge they acquired from high school to be successful as was in the case with Heather's example. The push for all students to be college and career ready and continue their education or skill may be the goal but it is not necessarily the case for every student and a predictor of student failure in society.

*Student motivation* was the last interpretive code emerging from the data collected supporting the theme of **student preparation and development**. Student motivation had a moderate occurrence. During the interview, Heather discussed the subject of high stakes testing and the emphasis of state test scores, especially with the Common Core initiative and the corresponding federal mandates included in the teacher evaluations. Heather explained several factors affecting student motivation on high stakes testing. Heather stated:

The first couple of years I worried about it because the first year their scores were terrible and it was the state paper test (before online testing). I want my kids to do well, but just because my kids didn't do well on a test doesn't mean I didn't do my job. I can't control that they didn't go to bed last night or I can't control they don't care and it doesn't matter if they like me or not. The experts believe I can motivate all kids to take the test seriously and do their best. But if the kid doesn't want to take the test, if they had a fight with their mom and dad, or if they are hangover...I have had kids come in here hungover and I can't control that.

Student motivations were nothing new and as established in the chapter two literature review, motivation and self-efficacy are closely related. Bandura (1986) defined a personal control system as comprising self-efficacy and outcome expectations. Self-efficacy theory originally referred to an individual's perceived capabilities to control his or her performance in emotionally taxing or otherwise difficult situations (Bandura, 1977). The theory has since

been expanded to include perceived capabilities to control such self-referent activities as cognitive processes, emotions, and self-regulated behaviors. The indication was most motivation comes from within.

Although perceived control over outcomes was important, it does not guarantee that students will be motivated or will learn (Schunk, 1991). Students might believe their teacher will be pleased if they make a high grade on the next exam (positive outcome expectation), but they may seriously doubt their capabilities to learn the material on the exam (low self-efficacy). Students who feel capable of learning and performing well in school expect, and usually receive, outcomes commensurate with their high performances (e.g., good grades and honor roll) (Schunk, 1991). According to Schunk (1991) self-efficacy and outcome expectations were separable in situations where outcomes are poorly linked with performance quality (e.g., teacher gives all students high grades, regardless of performance).

**Assessments.** The final theme identified in Heather's interview and observation was **assessments**. The Common Core has brought on a variety of new assessments and has placed greater emphasis on the assessment results and tying the results directly to teacher evaluations. The document analysis from the Center of Education Policy (2014) for this case study revealed the following:

Many states are implementing or will soon introduce systems for evaluating teachers and principals based on their students' mastery of the Common Core, among other measures. Students, too will be affected, not only because they will be expected to learn and pass tests on more rigorous academic content but also because many postsecondary institutions are considering using scores on Common Core aligned assessments to make decisions about such issues as which students need remedial courses.

The interpretive codes supporting the theme of **assessments** were *summative assessments*, *teacher stress*, and *assessment preparation*.



The interpretive code, *summative assessments*, emerged in moderate occurrence from the data collected in Heather's interview and observation. Descriptors for *summative assessments* include Common Core and the MAP test. Heather felt there was an injustice to the students and the teachers by placing so much emphasis on the state testing. During the interview, Heather's frustrations emerged on the required state testing for all students.

Heather stated:

If I have a student and if the student has an IEP and has had their work modified all year long or they don't read above a third-grade level and their testing at a sophomore level, and they've had help all year long, my test is the one test nothing can be read to them. So, you have modified their work all year long and have given them work at their reading ability and you want them to take this test at the tenth-grade level and this child can't read above a 3<sup>rd</sup> grade level. It doesn't matter what I do, they are not going to pass this test.

*Teacher stress* was the next interpretive code supporting the theme of **assessments** and occurred moderately in the interview and observation. Accountability, student failure, and the political nature of the standards were descriptors for teacher stress. The high stakes testing has created worry and self-doubt for Heather. During the interview, Heather claimed she always worries about if she has covered all the material for students to succeed on the test. She felt better about the prior standards, but also realized the current standards were basically like the previous standards, only more condensed. After the state testing was over, Heather claimed she always asked her students if she had covered the content that was on the test they just had taken. The students supportively told her she had. Although Heather downplayed the importance of state assessments during the interview, the worries and stress of student success on high stakes testing was evident. Malik, Mueller, and Meinke (1991) reported grade level and years in the profession are variables increasing teacher stress. The researchers reported grade level taught accounted for more variation in the responses. A

common belief was elementary teachers in the United States, specifically those teaching lower than third grade level were less critical of changes in policy when it came to high stakes testing since students in kindergarten, first, and second grade were not required to participate in state wide accountability testing.

*Assessment preparation* was the final interpretive code for the theme **assessments** and had a strong occurrence. Descriptors for this interpretive code included classroom autonomy, constantly changing standards, and teacher confusion. During the interview, Heather responded to my probing questions concerning the changes occurring with new standards implementation. Heather stated:

Because even in the ten years I have been teaching, can you change anything anymore? Can you just leave us alone? (Referencing “you” as federal and state policymakers)

Heather continued:

I asked a veteran teacher (name withheld) when she was teaching and I was in school did they change everything like this? She said no, we were left alone. She stated I was a better teacher because I was left alone. Very few of you kids couldn’t read and I had more achiever than non-achievers because instead of just pushing you through the system, I could focus on each individual student needs.

Heather remarked about her experience with a professional development workshop before the actual standards were released that led to even more confusion. Heather claimed the state education people providing the training did not know the content or wording of the standards or the differences between the current and new Common Core standards. At the time of the workshop, she felt lost and didn’t understand what the trainers were talking about. After the Common Core standards were released and she could look them over carefully, she did not understand why the Common Core had created such a commotion among the education community. She stated the Common Core creators just took existing

standards and rolled them into one. To Heather, the Common Core English language arts standards were not as earth-shattering as she was led to believe.

### **Case Three: Gary**

Gary was a white male teacher with over five years of experience teaching high school math. Gary spent a few years in the private industry as a software engineer and worked with several different firms before starting his teaching career. He earned a Bachelor's degree in mathematics before obtaining his Masters of Arts in teaching. The layout of the room included student individual desk in groups of three and the desks were situated so the students were facing each other. There was a smart board in the front of the room along with whiteboards displaying student classroom work and participation. The teacher's desk was located across the room opposite the entry door with pictures of his family on the wall directly behind the desk. On the remaining walls and the spaces between the white boards, Gary had posters explaining how math surrounds us and pictures demonstrating how math is used in everyday life along with posters displaying math operations step by step for various math functions, calculations, and problems. There was a large math clock with math symbols for the numbers and hands that further solidified the classroom climate. Posted at the front of the room were four classroom rules easily visible for the students. Gary's room was an interior room of the building and did not have any windows. Improvising, Gary had taken a large picture of a beach view looking out a window and had it hanging on a wall. The classroom climate was learning conducive and visitors can tell by his displays what subject was being taught in the classroom.

**Resources.** The theme of **resources** was discovered in Gary's interview and observation data. Teachers use a variety of resources in their classrooms to provide similar

outcomes for each student. These resources may include print resources (textbooks, worksheets, etc.), visual resources (overheads, models, etc.), audio resources (compact disc, recordings, etc.), and with the rapid development of technology, digital resources (computers, laptops, etc.). As a school leader, I have witnessed an extraordinary change in the classrooms as resources have shifted towards digital and web based materials instead of the traditional paper and print. The change in resources have been a direct reflection of the changes in society. The interpretive codes supporting the theme of **resources** included *climate*, *instructional tools*, and *professional development*.

The interpretive code, *climate*, had a moderate occurrence in Gary's observation and did not occur in the interview data. Climate was supported by descriptors such as smart board, desk, teacher artifacts, and items within the classroom creating encouragement, inspiration, and motivation. The posters on the walls added to the climate of the Gary's classroom. These posters included references for students in operations of a variety of math equations and calculations along with posters of inspiration and examples of how math can be used in everyday life. One such poster included pictures of a thermometer, clock, a speed limit sign, 25 percent sale item signage, a calendar, and many other items so students could relate their learnings to the real world. Bringing authenticity and connection to the real world in the classroom, as represented in Gary's posters, only strengthens student learning.

*Instructional tool* was an interpretive code for the theme of **resources** and had a moderate occurrence. Instructional tool descriptors included textbooks, calculators, and content specific worksheets. During the interview, Gary discussed some of the changes he had to make with his instructional methods and materials. Gary stated:

I just started teaching right before the Common Core began so I changed a lot of things, but you can always improve as a teacher. One of the biggest things is having to reference multiple materials, not just in that subject, but across strands of math.

In my field notes from the observation I had noted Gary's classroom was using a Holt-McDougal textbook dated 2011. These textbooks were pre-Common Core and had no reference or indications of any Common Core standards. During the interview Gary explained the coming year the math department was to receive new textbooks; however, the department was to be very cautious of their selection since there was strong speculation the math standards were to change again.

The final interpretive code for the theme of **resources** was *professional development* having a moderate occurrence. Descriptors for professional development included professional growth motivation, teacher preparation, administrative support, and workshops. During the interview, I asked Gary how the changes of the Common Core affected his teaching. Gary stated:

I don't know if it has affected my teaching, but it's affected my professional development. I don't pursue any of the stuff on my own because there is no need to become a master of a new teaching strategy. I can't go out and learn a cool technique to teach the kids and bring it to the classroom. Because, like this year, the paperwork is that we must do it exactly this way. There is no room for inventiveness anymore.

Karp (2014), skeptical of standards imposed from above, explained too many standards projects have been efforts to move decisions about teaching and learning away from classrooms, educators, and school communities, only to put them in the hands of distant bureaucracies. Standards have often codified sanitized versions of history, politics and culture reinforcing official myths while leaving out the voices, concerns, and realities of students and communities. Karp insisted whatever positive role standards might play in truly collaborative conversations about what schools should teach and children should learn has

been repeatedly undermined by bad process, suspect political agendas, and commercial interests.

**Engagement Strategies.** The theme of **engagement strategies** emerged from Gary's interview and observation. Teachers creating a culture of achievement in their classroom, developing interactive and relevant lessons and activities, and being encouraging and supportive to students are approaches that can foster student engagement in the classroom. Teachers giving students more control of the classroom through choices about tasks, reporting formats, or learning goals allow students to take control of their learning and make decisions that ensure personal interest in their assignments (Marzano & Pickering, 2010). The interpretive codes for the theme of **engagement strategies** included *instructional strategies* and *classroom management strategies*.

*Instructional strategies* linked to the theme of **engagement strategies** and had a moderate occurrence. The descriptors for instructional strategies included using varied question and answer techniques and multiple sources for instruction. During the observation, Gary provided the students with a quick review of the content before distributing a chapter test scheduled for that day. The review was predominately teacher centered with students answering review questions asked by Gary. The engagement level of the students was noticeably low; however, I could tell the students knew the routine of the test taking procedures and there was very little, if any, student test anxiety. During the interview Gary explained how the Common Core has restricted his review strategies. Gary stated:

The Common Core has narrowed and refined what it is I can teach in my classroom. It is also restricted some of my strategies I can use. Because, in the end, the assessments that are given and we (teachers) are graded upon are the ones I must match up to or it doesn't look like I taught or my students didn't learn.

Supporters of the Common Core claimed the standards emphasize what kids should learn and empowered teachers to focus on the “how” (Common Core State Standards Initiative, 2014). This statement was opposite from how Gary felt the standards have impacted his classroom strategies.

Another interpretive code with moderate occurrence for the theme of **engagement strategies** was *classroom management strategies* with descriptors of classroom routines and teacher proximity. Of the six participants in this research, Gary was the only one with clearly posted classroom rules. They were:

- Be Ready
- Be Responsible
- Be Respectful
- Have Pencil and Paper

It did appear the last rule was added at some point later than the first three since it was in different type and font. There were not any consequences listed if the rules were broken which in most cases of posted classroom expectations, consequences are included if the expectations are not met. The use of rules is a powerful, preventive component of classroom organization and management plans. Rules establish the behavioral context of the classroom by specifying what behaviors are expected of students, what behaviors are reinforced, and consequences for inappropriate behavior (Oliver & Reschly, 2007). If rules are stated or worded positively to describe the expected behavior, rather than what not to do, problem behavior is more easily prevented (Kerr & Nelson, 2002). Gary’s rules followed this format.

**Student Preparation and Development.** The theme of **student preparation and development** resonated from Gary’s interview and observation data. The interpretive codes of *depth of knowledge*, *student learning gaps*, and *student motivation* linked with this theme. Many standard reform initiatives have been undertaken over the past 30 years and the

Common Core standards were another attempt to improve public education. Each initiative brings different challenges to school districts, teachers, and students. One such initiative from federal legislation, the No Child Left Behind Act, attempted to boost the performance of all public schools. This act, established nearly two decades ago, mandated increased student testing to verify the effectiveness of individual public school's progress and instructional practices. While this act had ideal intentions, many have realized the initiative merely distracted students from learning, while emphasizing a new focus on testing and progress scores (Chen, 2016). The greater emphasis on using student test scores and constantly changing standards have created a moving target for teachers and adversely effected student preparation for the real world by creating learning gaps in their education.

The interpretive code, *depth of knowledge*, developed from the theme of **student preparation and development**. Depth of knowledge had a moderate occurrence with most the occurrences identified in the observation. I observed Gary reviewing with the students before taking a chapter test. The class was a group of sophomores and the content focused on slope and line equations. Gary had used the words explain, identify, and calculate in his review. These key words represent level one, recall, and level three, strategic thinking, from Webb's (1997) depth of knowledge model used to analyze the cognitive expectations demanded by standards, curricular activities and assessment tasks. Webb's model assumes curricular elements may all be categorized based upon the cognitive demands required to produce an acceptable response. All four levels of depth of knowledge are important for student learning and effective teachers continually utilize from each level in assessing student's cognitive learning.



The interpretive code, *student learning gaps*, was apparent in the theme **student preparation and development** with a moderate occurrence. Descriptors for student gaps included mastery of the standard, rigor, and lack of prior skill. During Gary's interview, he commented on students' gaps and time needed to fill those gaps.

Originally, if you didn't have a student with a skill you would back fill and build that skill so you could move on. Now it's, for instance, I'm not teaching the 7<sup>th</sup> grade but everything I teach in high school is all in one class. All the geometry, all the algebra, everything all at once.

My interpretation of Gary's comment was he recognized the standards have changed the structure of the upper level classes and if students do not have a solid foundation or have gaps in their education there is not enough time to fill those gaps and cover the required material. I further probed during the interview to clarify Gary's thoughts, he commented on student development as related to time:

We must hit this standard and get it in and if the students want to explore it further there is no freedom for student to explore. There is nothing else to do. It is time to move on. We have another standard to hit because there will be another question on that test that you are going to get hit with. There is no time to develop a deep understanding of math.

From Gary's interview data, the possibility of the fast-paced content and teaching to the test may have been significant factors creating student learning gaps and as Sally suggested, not the implementation of the standards themselves.

The interpretive code of *student motivation* was evident within the theme of **student preparation and development**. *Student motivation* had strong occurrences in Gary's interview and observation. Student interest in the subject, life goals, and no fear of failure were descriptors for the interpretive code of student motivation. During the interview, Gary showed a real concern for student motivation and how difficult it was to motivate all students to learn, especially if the student has no desire to even be at school. From the

previous interpretive code, student learning gaps, Gary had discussed the restrictions the standards placed on students by not allowing them to explore topics that may be of interest to them, mainly due to time and the pressure to cover all standards. Student learning gaps may be influenced by student motivation. Gary explained it was unrealistic to expect an average student with a passive interest in school and math to master all the math strands. He further explained his use of projects for certain learners:

I know a lot of projects I have done when I first started teaching have been cut. My hands-on tactile learners seem to grasp those types of projects and succeeded. Those projects don't fit anymore. Tactile learners aren't good at filling in the test, but that's what they are graded on now.

Gary elaborated on issues with motivating students to learn higher level math. He gave an example of teaching algebra II to every student even though only five percent are going to be in a career where algebra II skills would be useful. Gary rationalized some student paths toward a skill route (welding, construction, etc.) not needing such an advanced math class would likely benefit from a math class more suited for them and their area of interest. In the past Gary claimed he could have focused on actual math the students would have used and they would have been more motivated. These students would be able to connect their learning to real world applications and become much more involved in the learning. Through Gary's explanation, he understood students learn differently, however, the mandated standards have eliminated some of Gary's strategies to teach certain students different content. If students are interested and become engaged, regardless of the strategy, learning will occur (Marzano & Pickering, 2010).

Gary had several ideas concerning *student motivation*, and the interpretive code had a strong occurrence in the interview as compared to other interpretive codes. Gary shared an interesting and intriguing point on student motivation. Gary stated:

The real problem is student motivation. American students don't starve. American students don't sleep in the street, so they don't feel the need to be educated other than some of them want to do things in life, but they don't know what kind of work is involved to do it. My own children are spoiled. They have always had a roof, a meal, and they don't feel that if they fail math or any other subjects that they are going to work in the field the rest of their life. They don't see old workers with scars on them. We don't have that in America.

During the interview, I could sense the passion Gary had about student motivation and I could tell he had serious thoughts in explaining the phenomena. Whether to agree or disagree with Gary's thoughts and ideas on student motivation was not as important as acknowledging the lack of student motivation could compound issues in the classroom, regardless of any standards reform.

**Assessments.** The final theme developing from the interview and observation data from Gary's case was **assessments**. The interpretive codes of *summative assessments*, *teacher stress*, and *preparation of assessments* supported the theme of **assessments**.

The interpretive code, *summative assessment*, resonated from the theme of **assessments** with a moderate occurrence. Descriptors for summative assessment included state test, MAP test, finals, and End-of-Course exams. To better gauge the effectiveness of the Common Core standards, policymakers placed more emphasis on assessments and made strong attempts to have a universal or common assessment for all students. The anticipated timelines for fully implementing the Common Core varied across the states which delayed assessments and their results. The Center of Education Policy (2014) document analyzed for this case study claimed the response patterns for districts achieving milestones such as implementing curriculum, teacher preparation, and adopting Common Core aligned textbooks and instructional materials did not expect to achieve these milestones until 2014-2015 or later. The document claimed although states planned to administer Common Core

aligned assessments in school year 2014-2015, more than half of districts did not expect to have technological infrastructure for these assessments in place until 2015-2016 or later.

The interpretive code of *teacher stress* evolved from the theme of **assessments** and had a strong occurrence. As described earlier, Gary explained the Common Core had narrowed and refined what he teaches and restricted some of his strategies. Gary reverberated that in the end the state assessments given was the ones the teachers were graded upon, so teachers must teach to the test. If the students do not score well on the state assessments the perception was teachers did not do their job and the result will likely end in repercussions for those teachers. Although Gary never mentioned in the interview if the accountability of the testing added to his stress, it is evident he is very much aware of the degree in which test scores were counted into his job performance. When I asked Gary about his self-efficacy and related stress of the standards implementation, Gary noted:

I adjust to whatever I'm thrown. Everything continues to change and will change. There will be another set of standards and each time I adjust to whatever is coming up. If that's what they want, then I give them what they want. I just don't like it.

Gary's description of "giving them what they want" was unfortunate and the use of "them" indicates the loss of classroom autonomy. Gary no longer sees teaching as an art, but a job he is expected to do. Teaching to the test should not have influence negatively driving Gary's desire and passion to teach. Popham (2001) claimed the purpose of most educational testing was to allow teachers, parents, and others to make accurate inferences about the levels of mastery that students have achieved with respect to a body of knowledge, such as a series of historical facts or a set of skills, such as the ability to write kinds of essays. Although the data used from testing should be used to determine student mastery, the testing, as in Gary's case, had added stress and a loss of classroom autonomy.

The interpretive code of *assessment preparation* developed from the theme of **assessments** and had a moderate occurrence. Descriptors for this interpretive code included political overreach and the constant change of the standards. During the interview, Gary responded to a question I had asked concerning the initial phases of the implementation and the effect it had on students. Gary used an interesting analogy of “little bubbles”:

They (students) all grow up in their own little bubbles so they never seem to notice anything that is going on behind them. Each class, if they saw what we see, I mean that’s for the people that make the standards remember their own little bubbles when they were educated, but they never stepped into a classroom and done a longevity study. They get that cross section look each time. They remember what it was like sitting in the chair, but they have never stood in front and thought how do I make all these different learners learn?

My interpretation on Gary’s comment was the policymakers, or “they” as Gary used, have disconnected themselves from the actual experiences in the classroom and wrote the standards without regard to actual classroom implications. This suggestion also resonated from the 2015 document analyzed for this case study. The document specifies in the creation of the Common Core Standards, though some authors of the standards had experience in education (Schneider, 2014), most represented a variety of corporate business interest. From the document content and Gary’s interview, the idea of people who created and wrote the standards may not have the best interest of students when writing the standards, but a greater interest in personal and/or corporate gain.

#### **Case Four: Jamie**

Jamie was a white female educator teaching middle school language arts at the time of the interview and observation, but has since left the teaching profession to pursue other career opportunities. Jamie had taught middle school language arts for seven years at the Sunshine School District before her departure. Jamie was an extremely pleasant person to

converse with and had a very calm demeanor about herself. Jamie's education background to the teaching profession was a nontraditional route. She received her Bachelor's degree in criminal justice and then obtained her Masters of Arts in the principals of teaching. Jamie's classroom had several bookshelves stocked with textbooks, reference books, and outside reading books. The students' desks were in rows and columns and all facing the front of the room toward the smart board. Jamie utilized a small podium to teach from stationed off to the side of the smart board. On each side of the smart board were clean white boards displaying the date, new announcements, and examples of sentences her classes had been examining. The teacher's desk was in front of the wall by the entrance door. There were several posters on her walls displaying reading, writing, and oral language strategies and by the appearance of her classroom and desk, Jamie was an extremely organized and structured individual.

**Resources.** The theme of **resources** was apparent from Jamie's interview and observation. The Center of Education Policy (2014) document analyzed in this case study described finding adequate resources to support all the activities necessary to implement the Common Core remained a major challenge for districts, just as it was when the Center of Education Policy last surveyed districts on the issue in 2011. In the 2014 survey, more than 90 percent of the districts reported experiencing major (67 percent) or minor (25 percent) challenges with finding adequate resources to implement the Common Core. The proportions were like Center of Education Policy findings in 2011 when 76 percent of district officials said inadequate funding was a major challenge and 21 percent deemed it a minor challenge. Implementation services such as professional development and training for teachers also proved to be inadequate in implementing the Common Core standards.

The interpretive code accompanying the theme of **resources** in Jamie's interview with a moderate occurrence was *professional development*. Descriptors for this interpretive code included workshops, teacher preparation, professional growth motivation, and state provided professional development. During Jamie's interview, I had asked a question concerning the support and training she received during the implementation phase of the Common Core. The district had sent Jamie to a workshop sponsored by the state. Jamie commented about the workshop:

There was lots of confusion. Nobody knew what was in the standards. Nobody knew how they were different than the ones in the past or the ones we currently have. I just wonder why do we need to reinvent the wheel? I guess I am frustrated because it all seems unnecessary.

Jamie's experience at the Common Core workshop added to her frustrations as a teacher in getting her questions answered and the support she desired. She proclaimed it was a wasted and frustrating day.

**Engagement Strategies.** The theme of **engagement strategies** emerged from Jamie's interview and observation. The interpretive codes supporting the engagement strategies included *instructional* and *classroom management strategies*. A balance of strategies provides for an effective classroom in which the use of instructional methods facilitates optimal learning by responding to the academic needs of individual students and the classroom group and the use of organizational and group management methods maximizing on-task behavior. An even broader view of classroom management encompasses both establishing and maintaining order, designing effective instruction, dealing with students as a group, responding to the needs of individual students, and effectively handling the discipline and adjustment of individual students (Emmer & Stough, 2001).

With a moderate occurrence, the interpretive code of *instructional strategies* supported the theme of **engagement strategies**. During the observation, I had noted the lesson as being teacher led for the most part; however, Jamie structured the lesson to provide a variety of learning opportunities for the students. Jamie requested the students to read a passage from the book to themselves and patiently wait until all students had looked up at her. She then proceeded to read the same passage to the students as they followed along. At that point, Jamie stopped and asked the students questions of what they thought the author was implying. She then initiated collaborative strategies of students sharing with the class or having them pair and share with a partner.

*Classroom management strategies* was the next interpretive code developed from the theme of **engagement strategies**. Classroom management strategies had a moderate occurrence. At the beginning of the observation, just as students were coming into the room, I immediately recognize the students knew the daily routine of collecting graded papers from a tray and taking their assigned seat. They quickly began searching their book bag for the classroom reading book. I had scribed in my notes the classroom was structured and collaborative and students knew the routine and seemed eager to get started with the lesson. Once the tardy bell rang, Jamie immediately took role and began with her lesson. An understanding of the daily routine and engagement in the lesson eliminated any student disruptions.

**Student Preparation and Development.** Another theme emerging from the data collected during the interview and observation was **student preparation and development**. The interpretive codes for this theme were *depth of knowledge* and *content of the lesson*. Preparing middle school students for high school has its own set of unique challenges. Part



of the challenge of middle school was the unmistakable range of student ability, more pronounced than in elementary schools, where one can only fall so far behind, or high schools, which generally offer tracked classes (Gootman, 2007). Differences among students were not limited to learning styles. Teachers, like Jamie, who regularly assess students' knowledge and preparation levels can modify semester plans as well as weekly lessons to best teach their students the skills and information necessary to succeed in class. From my experience as a school leader and being in several middle school classrooms, the most successful middle school teachers have acquired this skill, however, standards have scripted classroom content limiting teachers learning this important skill.

The interpretive code, *depth of knowledge*, culminated from the observation and had a moderate occurrence. Descriptors for the depth of knowledge interpretive code included interpret, connotation, and critical thinking. During the observation Jamie, had read the following excerpt: "They threw away no opportunities to do the master the mischief, but he kept ahead all the time." Jamie then followed the reading with a question to the students: Does the word opportunities have a negative or positive connotation? Why did Twain choose the word with this connection? Jamie was creating and developing critical thinking skills in the students. Jamie had downloaded online resources that were aligned with the Common Core and this lesson and teacher questioning was a result of her online resources.

*Content of the lesson* was another interpretive code resonating from the theme of **student preparation and development**. This code had a moderate occurrence. Jamie shared during her interview of how her content and lesson planning had changed with the Common Core. Jamie's frustrations with the standards emerged during the interview. She stated:

We are judged on a test and the emphasis is on a test and they continue to add test. They changed the English language arts in ninth grade end of course exam to no

writing and now it is multiple choice. I believe freshmen need to learn writing, but I can't teach it. There is zero motivation to teach writing because it's not tested on. The standards are not very flexible. There is still plenty of time to cover writing, but if 70-80% of the test is reading comprehension why teach writing? I just feel that's not the only thing important.

Jamie's lessons currently follow the Common Core curriculum. She felt the pressure from the accountability aspect of the test; however, her instincts as a teacher disagreed with the mandated grade level content she must teach.

**Assessments.** The theme of **assessments** was apparent from Jamie's interview and observation. Assessments were a cornerstone for the education reform movement and the process should have been for the sake of assessment as well as for instruction. The 2015 document analyzed for this case study explained with the adoption and implementation of the CCSS, American schools are undergoing what was arguably the most significant change in their history, a move towards national standards and assessments that has been commonplace in countries around the world for decades. The move towards national standards and assessments is a battle for what content was taught in the classrooms. The interpretive codes for assessment theme included *teacher stress* and *assessment preparation*.

*Teachers stress* was an interpretive code connected to the theme of **assessments**. Teacher stress had a moderate occurrence in Jamie's interview and observation. Descriptors such as time to teach to the test, political, teacher confidence, and accountability supported teacher stress interpretive code.

Jamie's stress originated from the continued feeling of loss in classroom autonomy.

Jamie shared:

Every time there is a change (in standards) it changes my confidence. I feel like there is no time, or enough time, to stop and reconsider what needs to be taught. I'm afraid that maybe I'm missing something or need to cover the concepts again.

Most Jamie's stress was a result of the accountability factor in the testing required by the standards. Our conversation continued and focused on the stress and her motivation to teach.

Jamie shared:

My motivation started dropping for sure when the standards came out. I know I can teach and my self-confidence was the same, but I guess motivation and efficacy are tied together. I always worry if I'm doing a good job. It's a snowball effect.

The final interpretive code identified from the theme of **assessments** was *assessment preparation*. This interpretive code had a strong occurrence during Jamie's interview and observation. Jamie shared her thoughts of the constant change of the standards.

When the standards first came out I did a lot of eye rolling. Mainly because this is another rebirth of the standards and in seven years of teaching I have experienced four changes in the standards. I think the standards are very similar to the others. Course level expectations, grade level expectations, Common Core, and now the Missouri Learning Standards. I just roll with the punches.

Later in the interview, Jamie continued to elaborate on her frustrations with the constant changing of the standards:

I wonder in five years what the standards are going to look like then. Will they be different? It's frustrating because why not stick with the standards rather than reinventing the wheel every two or three years.

Since the time of the interview and observation and after seven years of teaching, Jamie has left the teaching profession.

#### **Case Five: Debbie**

Debbie was a veteran teacher with over thirty years of teaching experience and currently teaches sixth grade students in all disciplines. Remarkably, she has taught families of three generations. Debbie earned her Bachelor's degree majoring in elementary education and has earned a lifetime certificate. Debbie's classroom was filled with over thirty years' book collections, artifacts, and items made from student projects and her own collections.

The arrangement of the student desks was paired side by side and in rows and columns. The students had assigned seating and Debbie's desk was in the front of the room facing the students. She had a smart board located on the front wall with a white board beside it. Next to her desk was an old round globe on a stand. This was a remarkable piece and obviously had a long history with Debbie and the students she taught throughout the years. I was astonished and taken away by the thirty plus years' collection of teaching resources and artifacts.

**Resources.** The theme of **resources** emerged from Debbie's data in the interview and observation. Resources are defined as "the physical demonstration aids, students' contextual understandings, teacher subject expertise, and structured organization of materials, ideas, and activities" (Kurdziolek, 2011). Debbie's classroom was filled with resources of every kind. On any topic or subject matter, I am sure Debbie had an item, past work, or a demonstration for the students to better understand the content. The interpretive codes evolving from the theme of **resources** was *instructional tools* and *professional development*.

The interpretive code, *instructional tools*, had a moderate occurrence from the data collected. During the interview, Debbie described how her teaching and her use of resources have changed over time. She could do several big projects in her classroom in which she believed the students would remember forever. Debbie indicated in our conversation those days are gone. Debbie explained:

Whereas now it's like all we do is book work and stuff like that. We do little things, but things we used to be able to do we can't. You weren't pushed to get through it. To get through these I must concentrate on the books and objectives they want us to have. That's what I noticed.

Debbie has seen several changes in education over her teaching career. Her autonomy in the classroom has withered over time which has eliminated her use and collection of instructional tools she has accumulated over several years of teaching.

The interpretive code of *professional development* was evident from the data collected. Debbie's years of experience have allowed her to take advantage of several professional development opportunities:

I have gone to quite a few workshops over the years. Several math workshops. I like the ones where the school sends several teachers. Then you don't feel like you are there all by yourself learning these things. I like those workshops because then you can go back and talk about what you have learned and work on those things. As where if you go by yourself you try to absorb it all but it doesn't seem like it sticks, but I don't notice them doing it now though.

Debbie understood the importance of professional development and teacher collaboration. Teacher effectiveness has less to do with individual attributes, and far more to do with the extent to which teachers work with each other and provide collective leadership for their schools and communities (Berry, Daughtrey, & Wieder, 2009). Mentoring has been shown to increase new recruits' pedagogical practices, teaching effectiveness, and retention; however, new studies suggest that teachers at any experience level stand to gain from collaborative work (Berry, Daughtrey, & Wieder, 2009). A collaborative environment only strengthens teachers and student achievement.

**Engagement Strategies.** The theme of **engagement strategies** evolved from the data collected in Debbie's interview and observation. As explained in prior cases, student engagement was concerned with the interaction between the time, effort, and other relevant resources invested by both students and their institutions intended to optimize the student experience and enhance the learning outcomes and development of students and the

institutions performance and reputation (Trowler, 2010). The interpretive code supporting the theme of **engagement strategies** was *instructional strategies*.

The interpretive code, *instructional strategies*, supports the theme of **engagement strategies** and had a moderate occurrence. During the observation, Debbie was reviewing with the students the previous day's reading assignment from their social studies book. Debbie would ask a question concerning the reading and students would raise their hand to answer. Most of the discussion was short lived; however, there was one question students were sharing their thoughts and ideas in a collaborative fashion. Most students were participating in the discussion but a couple of the students were so intrigued by my presence in the classroom they were completely distracted. Their engagement in the review was limited even though Debbie reminded them several times to focus on her and the discussion.

**Student Preparation and Development.** The theme of **student preparation and development** developed from Debbie's interview and observation. The interpretive codes included *depth of knowledge*, *student learning gaps*, *student mental maturity*, and *student motivation*. As described by the 2014 document for analysis in this case study, 90 percent of the district leaders in adopting states agreed the CCSS were more rigorous than their state's standards which has caused student performance on Common Core aligned assessments to be lower. This has sparked resistance from outside the educational system. The lower achievement scores indicated student preparation for the Common Core was a journey and time will be needed for student learning and mastering the concepts. According to the CCSS Initiative (2014) the standards focused on core concepts and procedures starting in the early grades, which gives teachers the time needed to teach them and students the time to master them. No set of grade-specific standards can fully reflect the great variety of abilities, needs,

learning rates, and achievement levels of students in any given classroom. Importantly, the standards provided clear signposts along the way to the goal of college and career readiness for all students (Common Core State Standards Initiative, 2014).

The Center on Education Policy (2014) document analyzed for this case study claimed district leaders experienced overcoming resistance to the Common Core as a major challenge. A large majority of districts in Common Core adopting states have conducted outreach activities to explain to stakeholders how the Common Core were more rigorous than previous math and English language arts standards (84 percent of the districts) and why student performance on Common Core aligned assessments may be lower than on previous state test. The efforts being undertaken by a large majority of districts to inform key stakeholders about the rigor of the Common Core and their impact on test scores may be direct response to the resistance.

*Depth of knowledge* was an interpretive code with moderate occurrence from the theme of **student preparation and development**. During the observation, Debbie was reviewing the previous day's reading in the social studies textbook. The review lasted approximately twenty minutes with a question and answer session. Debbie was reading the questions from her teachers guide and students were participating by answering them when called upon. The questions asked were open ended questions and students had to recall the information. The Common Core standards were written only for math and English language arts, so the questions from the Social Studies chapter did not have a Common Core stamp or pattern. Common Core supporters claimed the standards were more rigorous and therefore students needed to acquire and develop critical thinking skills to answer high level questions. As I observed the interaction between Debbie and her students, most of the

questions had a level one (recall) depth of knowledge which indicated students were not acquiring the critical thinking skills in the current state version of social study standards.

The interpretive code, *student learning gaps*, stemmed from the theme of **student preparation and development**. Student learning gaps had a moderate occurrence in the interview and observation. Student gaps refers to learning gap and should not be confused with achievement gap or opportunity gap. According to the glossary of education reform (2013) learning gap is closely related to achievement gap and opportunity gap, but learning gap is the difference between what a student has learned (i.e., the academic progress he or she has made) and what the student was expected to learn at a certain point in his or her education, such as a particular age or grade level. A learning gap can be relatively minor, the failure to acquire a specific skill or meet a particular learning standard for example, or it can be significant and educationally consequential, as in the case of students who have missed large amounts of schooling. One of the more consequential features of learning gaps is their tendency, if left unaddressed, to compound over time and become more severe and pronounced, which can increase the chances that a student will struggle academically and socially or drop out of school (Abbott, 2013). As students' progress through their education, remediating learning gaps trends can become more difficult because students may have fallen well behind their peers, or because middle school or high school teachers may not have specialized training or expertise in teaching foundational academic skills (Stevenson & Stigler, 1992).

Debbie's interview interconnected the interpretive code *student learning gaps*, with the interpretive code, *student mental maturity*. Student mental maturity had a moderate



occurrence in the interview and observation. Debbie explained she had great concern some of the standards were to advance for many of her students in sixth grade. Debbie stated:

For example, the box and whiskers, expecting sixth graders to understand it. We have it in none of our textbooks and the kids never see it in anything, but they want them to have it mastered and they are not ready to understand that concept. They are just not there. It's all right to introduce it, which I have done so for years.

I inquired for more detail about the student experiences with the standards by asking Debbie how the students are handling the change. Are they getting frustrated? Debbie asserted:

Yes, for most the students. The top students will get it, but now they are expecting all of them to have it, but they are just not there yet. That's what I have noticed in my students. I just think sometimes they are making it so difficult for the students that a lot of them are giving up. I thought I used to have more success with students when I didn't feel like I was constantly pushing them.

The interpretive code, *student motivation*, resonated from the interview and observation with a moderate occurrence. Descriptors for this interpretive code included student freedom to explore and student interest in the subject. The interview questioning provided detail of how Debbie has changed her lessons and strategies over time “by constantly pushing students” which she feels has negatively impacted student motivation. Debbie explained:

To me it has taken some of the joy out of teaching. I can't do those other things. I used to spend a month on Martin Luther King Jr. in January. I have all these activities and I can't do that anymore. I would pick different things every year and that's what the kids remember. I don't have time for those projects...To get through these (standards) I must concentrate on the books and objectives that they want us to have. Every year I tried to do something different (projects) so the kids could remember. I know they don't now.

My interpretation of Debbie's comments was the push for standards and standard mastery has lowered student motivation, mainly because students and teachers have little to say about what content was needed and can be taught in the classroom. A thirty plus year veteran in elementary education and stating they have “taken some of the joy out of

teaching” indicates her enjoyment of teaching is disappearing. This comment from a seasoned teacher should create a red flag to school leaders and policymakers.

**Assessments.** The theme of **assessments** was apparent from Debbie’s interview and observation. The interpretive codes of *teacher stress* and *assessment preparation* resonated from the theme and both having a moderate occurrence.

The interpretive code, *teacher stress*, contained specific descriptors such as accountability, job satisfaction, time to teach to the test, and the political aspect involved in the education process. As described in the previous theme of student preparation and development, Debbie indicated she felt as if she was constantly pushing the students to get through all the standards and objectives. The constant push along with other mandated requirements (current teacher evaluation components and district curriculum writing) has created additional stress to her daily life:

It’s difficult to do the curriculum writing and do this and work on all these things. It is very difficult. I spend a lot of hours and weekend time working on it because it seems like so much at once. But the new certification of teachers and how they are evaluated and all of that too? It’s just too much. I’ve had a lot of people complain about that they thought it was too much especially for the younger teachers because they have so many other things going on in their life where I don’t. I have a lot, but not as much as they do. My children are all grown.

The 2015 document analyzed for this case study reported teachers’ views of the Common Core and its implementation were significantly different for groups having different durations of teaching experience. The survey administrators used a pairwise comparison and reported the only significant difference within these groups was between teachers having three to five years of teaching experience and those having 21-25 years of experience. Those with fewer years of teaching experience had a more positive view of the Common Core than those having taught 21-25 years. No significant differences were present between any other

groups. The researchers for the study did not have an explanation as to why there are differences between the groups but does prompt them to explore this variable more.

Debbie has taught for several years and has lived through an evolution of the education system. Even with all the experiences, she still faces new challenges with every standards change. In support of Debbie's experiences, the document analyzed for this case study conveyed:

Ingersoll, Merrill, and Stuckey (2014) reported on seven trends in the American teaching profession, indicating that a transformation has taken place since their previous work (2003), specifically that the teaching profession is larger, grayer, greener, more female, more diverse by race consistent on academic ability and less stable. At the same time teachers were being asked on the significant task of implementing the CCSS and preparing their students for assessments that would allow interstate comparisons (Ingersoll et al's work, 2014) indicated that the present members of the teacher profession—grayer, greener, less stable—may face additional challenges.

Despite the continuous changes in the education system, Debbie continues to teach and impact students and their development as citizens.

*Assessment preparation* was the last interpretive code stemming from the theme of **assessments** in the data collected from Debbie's interview and observation. Preparation for assessment had a moderate occurrence and descriptors included restrictiveness of the standards and classroom autonomy. Debbie's change in eliminating her classroom projects as described earlier was also an indicator of a loss of classroom autonomy and the restrictiveness of the standards on what could be taught in the classroom. Debbie ended the interview by stating:

The kids, they remember the little things like this (referring to a grape juice analogy in the interview) but they don't remember the big projects like we used to do. But if you spend a whole month on Martin Luther King, those kids remember. All those things we did, I can't do that. We don't have the freedom. That's what I have noticed. A lack of freedom in teaching.

To further support Debbie's thirty plus years of education reform experiences, the 2015 document analyzed claimed by further reducing teaching to a technical process of means and ends, and substituting standardization for value judgments when pursuing equity, policy makers and reformers envisioned a future in which rigorous training and license requirements are no longer necessary to occupy the job of a teacher. Teachers existing in this larger context of education may very well opt for other professions or think more about leaving the profession regardless of years of experience or grade level taught. In response to uncertainty, many districts and schools turned to an autocratic and top down approach to the Common Core implementation that robbed teachers of professional agency by scripting curriculum, marginalizing teachers from the decision-making process, and adding to the risk-reward imbalance created by the state to. When teachers feel attacked on a macro or micro level, the results will not likely be good for students, schools, states, or teachers. Building on a positive momentum will necessitate overcoming the negative pushback on these and other initiatives.

### **Case Six: Shauna**

Shauna was a white female teacher who taught math and language arts to fourth and fifth grades. Shauna earned her Bachelor's degree in elementary education and her Master's in curriculum and instruction and has over ten years of teaching experience. The students' desks were in rows and columns and faced the front of the room towards a smart board centered on the wall. Shauna's room was part of a school built in the 1950s. Even though school visitors can tell the design was from decades ago, the district has could modernize the rooms with new electrical wiring, internet, flooring, and air conditioning. An additional item unique to the elementary classrooms as compared to the middle and high school was the

utilization of a sink with running hot and cold water in each room. There were several shelves filled with math and English language arts textbooks and workbooks and a wide variety of age appropriate reading books. Shauna had placed posters on the walls for students to reference for math computation or language structure. The teacher's desk was located at the front of the room along with file cabinets and shelving. The classroom had two large windows providing ample natural lighting beneficial for student learning and an overall positive climate.

**Resources.** The theme of **resources** developed from the data collected in Shauna's interview and observation. The theme of **resources** was supported by the interpretive codes *instructional tools* and *professional development*. As was in Debbie's case, Shauna had a wide collection of resources she accumulated over her teaching career. The greatest difference between Shauna and Debbie were the collections of aged artifacts and items used in the classroom over thirty years ago. Shauna's resources had come from a variety of sources including textbook companies, professional development opportunities, and a growing collection of online and internet searches.

Available *instructional tools* were an interpretive code used to support the theme of **resources**. Descriptors for this interpretive code included worksheets, textbooks, and computers and had a moderate occurrence in the interview and observation. Textbooks provided most Shauna's resources and she referred to them several times during the observation. However, it should be noted resources from online and internet access are becoming more commonplace in classrooms of today as represented in Shauna's classroom by the diverse collection of reading resources. Each student had their own textbook and worksheet on their desk as Shauna progressed through the math lesson. The textbooks were

pre-Common Core and did not have any mention of the CCSS. During our interview, Shauna shared her experiences with the implementation of the Common Core math standards and the resources available:

The main thing I noticed with the math is I had to literally go to the 5<sup>th</sup> grade teachers to get resources because our textbooks did not cover the things that were on the standards. So, I was going to either must go to the internet or go ask them, which I wanted to use our curriculum. I literally used the 5<sup>th</sup> grade textbooks and worksheets to teach some of the concepts in fourth grade. It seemed like everything was pushed down a grade level.

The Common Core standards were implemented at such a rapid rate the Sunshine School District could not find the necessary resources needed to teach the new standards nor did the district budget for new textbooks. Leaders influence student learning by helping promote vision and goals and ensuring that resources and process were in place to enable teachers to teach well. Resources may be in the form of tools, technology, or professional development (Leithwood & Riehl, 2003). For any educational change and reform to occur, school leaders must provide the necessary resources to all stakeholders. In defense of school leaders and administrators, planning and budgeting well in advance is needed to accommodate any educational changes, but when the changes occur rapidly, resources cannot keep up with the changes.

The interpretive code, *professional development*, emerged from the theme of **resources**. This interpretive code had a moderate occurrence with most the occurrences from the Shauna's interview. Shauna and I discussed the professional development she had received in implementing the Common Core standards. One professional development she had described was an in-service where the teachers collaborated and reviewed the state testing data. This practice allowed the teachers to identify areas for improvement and seek

strategies to increase student achievement as determined by the data. I asked Shauna to further explain her collaborative professional development:

They (administration) tried to make sure we had collaboration time. The other thing I can think of is we had opportunities to attend workshops through our professional development committee. I know that some schools have collaboration with other districts where you can talk to teachers that are teaching the same grade levels. We don't do that now though. If we do, it is because we have friends and we can call them.

I then asked Shauna if she thought collaboration between districts would be helpful and she claimed the district had tried this in the past, but there were mixed comments from the teachers. Some teachers liked it and benefited while others considered it as a waste of time. The Center of Education Policy (2014) document analyzed in this case study reported nearly all districts have collaborated with at least one other entity in implementing the Common Core. In carrying out specific Common Core implementation activities, higher proportions of districts were collaborating with other districts in their state and their state education agency than with nonprofits, institutions of higher education, or school districts in other states.

**Engagement Strategies.** The theme of **engagement strategies** was apparent from the collection of data in Shauna's interview and observation. There was only one interpretive code with moderate occurrence resonating from the theme of engagement strategies.

The interpretive code of *instructional strategies* supported the theme and used descriptors of student discussion, independent study, question and answer strategies, and using multiple sources for instruction. Shauna and I discussed concerns of how she had changed some of her instructional strategies since the Common Core.

We do a lot more graphic organizers, higher depth of knowledge questions, and more multi-step word problems in math. We review a lot and I have had to find additional resources and add to the resources I already have. I am not as textbook driven now as I was when the standards first came out. I know my standards now.

Shauna shared she had started the use of total participation strategies in her classroom this year. This strategy helped Shauna to make sure every student was with her and paying attention and participating. She was very adamant to the fact this strategy was a good thing.

**Student Preparation and Development.** **Student preparation and development** was a theme identified from the data collected in Shauna's interview and observation. For this study, student preparation and development was defined as the "change, growth, and development of students." The interpretive codes leading to the identification of this theme were *depth of knowledge*, *content of the lesson*, *student learning gaps*, and *student mental maturity*. Student preparation and development was closely related to the 1936 cognitive development theory developed by psychologist Jean Piaget. To Piaget, cognitive development was a progressive reorganization of mental processes because of biological maturation and environmental experience. Children constructed an understanding of the world around them then experienced discrepancies between what they already knew and what they discovered in their environment (McLeod, 2009). According to McLeod, because the theory is based upon biological maturation and stages, the notion of 'readiness' was important. Readiness concerns when certain information or concepts should be taught. According to Piaget's theory, children should not be taught certain concepts until they have reached the appropriate stage of cognitive development. Hence, Shauna, along with the other participants believe the development of children from a cognitive perspective eluded the Common Core creators.



The interpretive code of *depth of knowledge* developed from the theme of **student preparation and development** with a strong occurrence. The emergence of this interpretive code was evident in the observation. Shauna had fourth grade students solve word problems pertaining to area and perimeter of different geometrical figures. Students had to find values for  $y$  and other variables in several equations and the worksheets had several of these word problems for students to solve. An example of a word problem from the worksheet was “Kyle spent three hours each day for four weeks making up a song. Write and solve an equation to find the number of total hours Kyle spent making up his song.” I thought the depth and knowledge of the lesson and worksheet was impressive, especially for fourth graders who cruised through the problems without much hesitation.

Although the content and the expectations of the worksheet were impressive, Shauna expressed she had a great concern with the depth of knowledge in the Common Core math standards.

I teach fourth grade and in third grade they are just learning to multiply, so in fourth grade we spend a lot of time reviewing our multiplication facts, but then they are having to multiply three and four digit numbers by February? So, it’s a lot to push at them. Students just learned how to multiply and now we are having them add, subtract, multiply, and divide fractions. It’s hard on them. You must throw a lot at them and keep moving just to hit everything.

Shauna shared her concerns of students never mastering the concepts. Shauna and her students were constantly reviewing and Shauna stated she was hopeful the students would grasp everything.

*Content of the lesson* was another interpretive code supporting the theme of **student preparation and development**. Content of the lesson had a moderate occurrence. During the observation, I had noted students were reviewing the concept of finding perimeter and area of a rectangle and square. Shauna explained and encouraged the students to draw a

picture and label the sides of the object. The students practiced the procedure several times and each time Shauna called on individual students for their answers. Students had the correct answer nearly every time and I believed they had mastered the concept of perimeter and finding area. I do not know when the concept was introduced or how many class sessions Shauna had spent on teaching the concept, but the students had it mastered.

The interpretive code, *student learning gaps* stemmed from the theme of **student preparation and development**. This interpretive code had a moderate occurrence. The interview revealed data relating to Shauna's self-efficacy and student learning gaps.

I don't doubt my teaching ability. The thing I doubt the most is these students' ability to master these advanced concepts, especially at an accelerated pace. That's hard on them. Practice makes perfect and if you don't have the time to practice it will come back and bite you. Teaching takes time. Everything builds on itself. You just can't jump to the bigger concepts without having a foundation to build on.

Shauna described a real fear of learning gaps in students and mastering the standards before proceeding to the next level in the students learning. Piaget cognitive learning theory described this idea of student development. If students are unable to make a connection from past experiences with new experiences, they will not be able to fully understand the concept. Hence, as Shauna feels the pressures to cover all the standards at an accelerated pace, she may inadvertently leave some students behind that have not mastered a concept.

*Student mental maturity* was the last interpretive code resonating from the theme of **student preparation and development**. Student mental maturity had a moderate occurrence. Descriptors for this interpretive code included students grasping the concept and expectations of the student. Shauna began the interview by answering the question of describing her experiences with the present day Common Core. Shauna stated:

A little overwhelmed. The standards require children to learn an enormous number of objectives in a very short amount of time. I think it's overwhelming for them and the teacher.

Shauna and I discussed the rigor of the standards:

The rigor of the standards has increased in both areas (math and language arts). Before we were just reading to get information and answer simple questions about the story. Now we must explain what the theme is so it is much bigger concepts for them to grasp at eight, nine and ten years old.

I then asked Shauna of how the kids were handling this?

Most them can get that. Some of them, you don't know what they are going to say for an answer. It surprises you because sometimes your talented and gifted kids may be the ones that don't grasp that concept. You would think they would.

**Assessments.** The final theme developing from the Shauna's interview and observation was **assessments**. Classroom assessment and grading practices have the potential not only to measure and report learning but also to promote it. Indeed, recent research has documented the benefits of regular use of diagnostic and formative assessments as feedback for learning (Black, Harrison, Lee, Marshall, & Wiliam, 2004). The interpretive codes identified included *teacher stress* and *assessment preparation*.

The interpretive code of *teacher stress* had a strong occurrence within the theme of **assessments**. Descriptors included student achievement, student failure, accountability, time to teach to the test, and political bureaucracy of the standards. Shauna's stress was evident during the interview. She elaborated on how the new standards and accountability has increased her stress and made her begin to search for other opportunities out of education.

Shauna stated:

I felt like we were given an impossible task and I either wanted to get out of education or switch to a different grade or something else. I was the Title One teacher for a while and I still have that thought that maybe I need to move down a few grades and get away from it. Not that they don't have tougher standards, I know they do because I also do response-to-intervention in the afternoon so I see what they

are teaching in the lower grades and theirs are tougher than what I would expect them to have to learn. MAP testing is a big stressor for grades 3, 4, 5 and 6.

Shauna's thoughts of switching grades was supported in the 2015 document analysis used in this case study. The document findings included teachers views of the Common Core and its implementation was significantly different for groups based on the grade level at which a teacher most identified. The study used Scheffe's test of pairwise comparisons at a .01 level of significance. Views from those teaching pre-kindergarten to second grade were significantly different from those in groups teaching sixth through eighth and groups teaching ninth through twelve. A common belief may be that elementary teachers in the United States, specifically those teaching lower than the third-grade level, are less critical to change since students in kindergarten, first, and second grade are not required to participate in state wide accountability testing. Therefore, the accountability factor was not associated with testing, which in Shauna's interview she described as a big stressor.

The interpretive code, *assessment preparation*, was of moderate occurrence and linked to the theme of **assessments**. Shauna had over ten years of teaching experience and been through the state testing several times. Shauna remembered giving the paper style state testing and the district would set aside a whole week in the spring just to test students, but now the tests are online and most of Shauna's students were done with their testing in less than three hours. This gave Shauna anxiety and she explained that meant there were not very many questions on the test. She was afraid if a student was having an off day, then the scores would not reflect the real capabilities of that student. She did understand several days of testing was overwhelming for the students and they got tired of taking the test but the shorter test allowed less room for variables out of Shauna's control. She brought up many of these affecting student testing and performance including lack of medication, home life and

the events surrounding their home life, and student motivation. Many of these variables are difficult for any teacher to address and with high stakes testing and accountability measures for student scores, teachers, like Shauna, are left with the feeling of a no-win situation.

### **Cross-Case Analysis**

Cross-case analysis was defined as searching for patterns, similarities, and differences across cases with similar variable and outcome measures (Miles, Huberman, & Saldana, 2014). The ability to engage in such rich analysis only serves to better illuminate the study. Themes within the notes were reexamined, challenged, and amended throughout the process of coding the documents, interviews, and observations. The cross-case analysis directed me to look closely at the interrelated details of the cases with greater scrutiny. I categorized the similarities and differences in each case using the interpretive codes and descriptors and identified those thought to have importance and the ways in which they were related to each other. The refinement of the data permitted me to make further comparisons and more refinement. Through the process, the interpretive codes of formative assessments and collective student responses were eliminated. To create a hierarchal system, I then counted the occurrences of each interpretive code which resulted in the prevalent themes of the study to be identified. The dominant themes in the cross-case analysis were **resources**, **student preparation and development**, and **assessments**. Table 4.3 displays the data from the within case analysis with the integration of the document data. The commonalities of interpretive codes from each theme created a hierarchical system in which the dominant themes resonated.

Table 4.3

*Cross-Case Analysis*

<b>Interviews</b>	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
<b>Theme: Resources</b>						
Interpretive Codes						
<i>Climate</i>	-	-	-	-	-	-
<i>Instructional Tools</i>	-	X	-	-	X	X
<i>Professional Development</i>	X	X	X	X	X	X
<b>Theme: Engagement Strategies</b>						
Interpretive Codes						
<i>Instructional Strategies</i>	X	X	X	-	-	X
<i>Classroom Management Strategies</i>	-	-	-	-	-	-
<b>Theme: Student Preparation and Development</b>						
Interpretive Codes						
<i>Depth of Knowledge</i>	-	-	-	X	X	X
<i>Content of the Lesson</i>	-	-	-	-	-	-
<i>Student Learning Gaps</i>	X	X	X	-	X	X
<i>Student Mental Maturity</i>	X	X	X	-	X	X
<i>Student Motivation</i>	-	X	X	-	X	-
<b>Theme: Assessments</b>						
Interpretive Codes						
<i>Summative Assessments</i>	X	-	-	-	-	-
<i>Teacher Stress</i>	X	X	X	X	X	X
<i>Assessment Preparation</i>	X	X	X	X	X	X
<b>Observations</b>	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
<b>Theme: Resources</b>						
Interpretive Codes						
<i>Climate</i>	X	X	X	X	X	-
<i>Instructional Tools</i>	X	X	X	X	X	X
<i>Professional Development</i>	-	-	-	-	-	-
<b>Theme: Engagement Strategies</b>						
Interpretive Codes						
<i>Instructional Strategies</i>	X	X	X	X	X	X
<i>Classroom Management Strategies</i>	X	X	X	X	X	X
<b>Theme: Student Preparation and Development</b>						
Interpretive Codes						
<i>Depth of Knowledge</i>	X	X	X	X	-	X
<i>Content of the Lesson</i>	X	X	X	X	-	X
<i>Student Learning Gaps</i>	-	-	-	-	-	-
<i>Student Mental Maturity</i>	-	-	-	-	-	-
<i>Student Motivation</i>	-	-	-	-	-	-

table 4.3 continues

<b>Observations</b>	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
<b>Theme: Assessments</b>						
Interpretive Codes						
<i>Summative Assessments</i>	X	-	X	-	-	-
<i>Teacher Stress</i>	-	-	-	-	-	-
<i>Assessment Preparation</i>	-	-	-	-	-	-
<b>Documents</b>	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
<b>Theme: Challenges</b>						
Interpretive Codes						
<i>Implementation</i>	-	X	-	-	-	-
<i>Teacher Stress</i>	-	-	-	-	X	-
<b>Theme: Resources</b>						
Interpretive Codes						
<i>Professional Development</i>	X	X	X	X	X	X
<i>Opposition</i>	-	-	-	-	-	-
<b>Theme: Teacher Perspectives</b>						
Interpretive Codes						
<i>Teacher Attitude</i>	-	-	-	-	-	-
<i>Tchr. Demographic and Characteristics</i>	-	-	-	-	X	-
<i>Teacher Efficacy</i>	-	-	-	X	-	X
<i>Teacher Attrition</i>	X	-	-	X	-	-
<b>Theme: Leadership</b>						
Interpretive Code						
<i>Professional Development</i>	-	-	-	X	-	X
<b>Theme: Political Landscape</b>						
<b>Interpretive Codes</b>						
<i>Teacher Stress</i>	-	X	-	X	-	X
<i>Assessment Preparation</i>	X	X	X	X	X	X

**Resources** emerged as a dominant theme in the cross-case analysis. Resources were defined as physical demonstration aids, students' contextual understandings, teacher subject expertise, and structured organization of materials, ideas, and activities (Kurdziolek, 2011). Within the theme of **resources**, the interpretive code of *professional development* developed with a strong occurrence. Professional development included descriptors such as collaboration, state education agency workshops, administrative support, and teacher preparation.

**Student preparation and development** developed as a dominant theme from the cross-case analysis. Student preparation and development was defined in this study as the change, growth, and development of students. Throughout the data sources, student preparation and development emerged in varying degrees. The interpretive code, *depth of knowledge*, prevailed within the theme. Descriptors within the interpretive code from the interviews and observations included critical thinking, reviewing, and from the documents, rigor. The interviews provided the most occurrences of this interpretive code. It should be noted the theme of student preparation and development had the most interpretive codes of all themes, which made the total number of occurrences higher than other themes. Although there were more interpretive codes for this theme, student preparation and development was a resounding and consistent message throughout the interviews with the teachers, which I believe was important to this study in describing teacher experiences in implementing the standards.

**Assessments** was the final dominant theme identified from the cross-case analysis. Assessment was the process of gathering and discussing information from multiple and diverse sources to develop a deep understanding of what students know, understand, and can do with their knowledge because of their educational experiences. Assessment was an integral part of instruction, as it determines whether the goals of education are being met. The interpretive codes of *teacher stress* and *assessment preparation* resonated from this theme. Descriptors for the interpretive code of teacher stress included accountability, time, bureaucracy, and high stakes test results. The descriptors for assessment preparation included classroom autonomy, constant change, and teacher confusion.



## Conclusion - Research Questions

As a current practicing school leader, the problem I addressed in this study was the experiences of teachers' regarding the presumption that implementation of standards within the current accountability environment had an adverse effect on teacher-efficacy, stress, and burnout leading to attrition. The cross-case analysis of this study served to illuminate the findings in relation to the research questions. Themes and interpretive codes within the notes were reexamined, challenged, and amended throughout the process of coding documents, interviews, and observations. Analysis of the documents in conjunction with interview and observation data helped develop a holistic understanding regarding the experiences of the participants. There were two central questions in this study and each had two sub-questions. I will answer the sub-questions for the first central question and then the central question followed by the next sub-questions and conclude with the final central question.

The first sub-question was: What factors or underlying themes in the narratives account for teachers' views of the implementation of the Missouri Learning Standards? The theme of **assessments** evolved as a prevalent factor in the implementation of the Missouri Learning Standards. The document data analyzed for this case study revealed many states were implementing or will soon introduce systems for evaluating teachers and principals based on their students' mastery of the CCSS, among other measures. It should be noted the document was published during the implementation phase of the Common Core and since the publication of the document, high stakes testing results have been heavily incorporated in teacher evaluations which has strongly impacted the education system.

In the current era of accountability, teacher effectiveness was largely judged on a single state assessment. The interpretive code of *teacher stress* was a strong indicator

throughout the data sources for the theme of **assessments**. From the case analysis of the interviews, one participant stated:

I felt like we were given an impossible task and I either wanted to get out of education or switch to a different grade or something else. I was the Title One teacher for a while and I still have that thought that maybe I need to move down a few grades and get away from it.

Teachers are dedicated individuals and many succeed in focusing on the positive, but the testing and accountability have created more stress thus prompting a high percentage of educators to contemplate leaving the profession. Teachers considering leaving the profession, especially veteran teachers, accentuates testing's corrosive effect on the profession.

The bureaucracy and political landscape involved in the standards played a key role in the teachers' stress. The document data revealed with the adoption of the CCSS, American schools are undergoing what was arguably the most significant change in their history, a move toward national standards and assessments that has been commonplace in countries around the world for decades. For reasons researchers are still attempting to understand, the change to the CCSS has been controversial and is growing increasingly political with certain American political parties making the removal of the CCSS part of their platform. Teachers in this study were very much aware of the politics involved in the standards and the problematic political spillover into their classrooms.

The interpretive code of *assessment preparation* supported the underlying theme of **assessment** in the teachers' narratives in implementing the Missouri Learning Standards. Teachers felt they were losing classroom control of content and only following scripts they were mandated to teach. During the interviews and while discussing the standards implementation, teachers consistently used the word "they" referring to the policy makers

and the top down approach of the standards. One participant had over thirty years of teaching experience and has experienced many facets of teaching and witnessed the evolution of education as it is today. She described how things have changed over the years from using creativity and projects to a straight forward bookwork approach. She stated:

The kids, they remember the little things like this (referring to a grape juice analogy in the interview) but they don't remember the big projects like we used to do. But if you spend a whole month on Martin Luther King, those kids remember. All those things we did, I can't do that. We don't have the freedom. That's what I have noticed. A lack of freedom in teaching.

The standards are mired in controversy and are continually on the forefront of many political campaigns. The document data explained for reasons researchers were still attempting to understand, the change to the Common Core has been controversial and is growing increasingly political with certain American political parties making the removal of the Common Core part of their platform. As the participant stated, everything continues to change and will change, and in the era of high stakes testing, a moving target for the teachers has been created.

The second sub-question was to identify how math and language arts teachers described their sense of efficacy following the implementation of the Missouri Learning Standards. As the data unfolded from the documents and observations, a distinction between self-efficacy and motivation was apparent. However, data from the interviews suggested some of the teachers did not understand the differences between self-efficacy and motivation. The differences in these behaviors were established in the literature review and although motivation and self-efficacy shared related attributes in meaning, they are quite different. Motivation was the combination of desire and drive to act whereas self-efficacy was the belief the individual had about the capability to successfully do something. The

study was a focus on teacher self-efficacy in implementing the standards; however, the data resulted in a mix of motivation and self-efficacy findings from the participants. One case participant explained her self-efficacy as:

They (new standards and evaluation system) have affected my self-efficacy. As organized as I am and as well as I thought I could teach anything, I never had less confidence or lack of self-confidence as I do right now. Because there are sometimes, I think, can I even do this anymore? I've found that more this year than I think I ever have, but I also had the most challenging students than I ever had.

Another participant provided her thoughts of self-efficacy but referred to the student's ability:

I don't doubt my teaching ability. The thing I doubt the most is these students' ability to master these advanced concepts, especially at an accelerated pace. That's hard on them.

One of the case participant intertwined her self-efficacy and motivation:

My motivation started dropping for sure when the standards came out. I know I can teach and my self-confidence was the same...but I guess motivation and efficacy are tied together. I always worry if I'm doing a good job. It's a snowball effect.

Teachers have a demanding job and the continued deprofessionalization of their career will only lead to more teachers leaving the professions. Self-efficacy and motivation play key roles in teacher attrition. Low-income and schools that serve students of color recruit, hire, train, and lose teachers on a continual cycle. This cycle is referred to as the "revolving door of teacher turnover" (Ingersoll, 2001, p. 501). Chronic teacher and staff turnover can negatively affect professional development, class size, scheduling, curriculum planning, collegiality, and a variety of other factors, adding a significant degree of chaos and complexity to schoolwide operations and potentially harming student learning across classrooms.

As established throughout this case study, teachers were widely acknowledged as the most important school-related factor influencing student achievement, and principals were the key factor in building and sustaining a school culture in which both teachers and students can succeed (Markow, Macia, & Lee, 2013). The central question of explaining math and language arts teachers' experiences in implementing the Missouri Learning Standards were identified in the sub-questions. The data sources identified teacher stress as a driving factor in their experiences in implementing the Missouri Learning Standards. Teacher stress included accountability and evaluations, the use of high stakes testing results to determine teacher effectiveness, the time related in covering the standards, and the bureaucracy involved with the standards which has created a loss of teacher autonomy in the classroom. Teacher efficacy and motivation also shared in teacher experiences in the implementation of the standards. The data results were mixed on efficacy and motivation as some teachers stated they do not doubt their ability, others felt a lower sense of self-efficacy, while others described motivation and efficacy in the same context. The number of teachers leaving the profession will likely escalate as education policies are enacted. With continued push for high stakes testing and as policies are implemented, centralized control will become a common place in the education system.

The second central question to the study included two sub-questions. The first sub-question enquired what leadership practice do teachers identify as significant to their sense of efficacy during the implementation of the Missouri Learning Standards. Throughout the data sources, the theme of **resources** emerged as the prevalent factor of leadership practices teachers identified as significant during the implementation of the Missouri Learning Standards. Resources during any change or reform movement were imperative for changes

to occur. The document data revealed the clear majority of districts were facing major challenges in implementing the standards. These challenges include professional development, securing standards aligned curricula, preparing for the standards aligned assessments, and finding enough resources to support all the activities associated with implementing the standards. Many of the challenges districts cite were interrelated. For example, professional development affects teachers' ability to teach the standards aligned curriculum. Teacher preparation and curriculum implementation affect student performance on assessments and funding affects most aspects of implementation which reflects on the notion of a lack of resources during implementation.

The data revealed teachers identified resources as the theme and the interpretive code of *professional development* to support the theme in implementing the standards. Many of the participants identified school leaders had sent them to workshops prior and during the implementation phase of the standards. The effect of the professional development workshops varied. One participant stated:

I was sent to a conference when all of this was getting ready to come out and quite honestly I was lost. I thought, oh my God, I don't even understand what they are talking about. And then when I got down there nobody else did either. Even the people that were talking about the Common Core didn't even know what the Common Core was.

Another participant described the workshops as:

I went to several workshops but not enough to transition to all those changes. When you go to a one-day workshop and you're in and out of five or six sessions, they can't cover everything you need to teach especially for a teacher that teaches seventh, eighth, and ninth grade math. I can only go to so many things, so I had to pick.

The data revealed during the implementation of the standards revealed many resources related to the standards implementation were scarce and teacher preparation for the standards change was nearly nonexistent.

The second sub-question attempted to determine were the leadership practices teachers' thought significant to their sense of efficacy after the implementation of the standards. Like the aspects mentioned during the implementation, the theme of **resources** was prevalent in the data sources with the interpretive code of *professional development* in support of the theme. The literature review determined teacher sense of efficacy was influenced, positively or negatively, by their building leader. The document data revealed teachers who thought of leaving the profession asserted a major factor as being whether a teacher felt leadership was open (supportive of professional growth, willing to provide autonomy) and provided indications as to whether teachers of any amount of experience were considering leaving the profession. Teachers who do not feel supported by their leaders thought about leaving the profession 65 percent of the time.

The documents also revealed by having the same set of academic standards across many states, advocates for the Common Core had hoped to create opportunities for collaboration on implementation including cross-state collaboration and the potential to realize economies of scale related to instructional material and professional development tools and strategies. The survey results suggested this was occurring to some extent; the clear majority of districts reported partnering with at least one other entity to implement the Common Core, however the practice of entity collaboration has since deteriorated. A participant in the study discussed her building leader and collaboration:

They (administration) tried to make sure we had collaboration time. I know that some schools have collaboration with other districts where you can talk to teachers that are teaching the same grade levels. We don't do that now though. If we do, it is because we have friends and we can call them.

Another participant stated:

I have gone to quite a few workshops over the years. I like the ones where the school sends several teachers. Then you don't feel like you are there all by yourself learning these things. I like those workshops because then you can go back and talk about what you have learned and work on those things. As where if you go by yourself you try to absorb it all but it doesn't seem like it sticks, but I don't notice them doing it now though.

The final central question in this case study was to determine how math and language arts teachers perceive the support of school leadership in the implementation of the standards. The data sources identified professional development as a driving factor of teacher perceptions of support in the implementing of the standards. Professional development included workshops, teacher preparation, and collaboration as descriptors and resonated as the support factors teachers identified in implementing the standards. The data revealed mixed results in the teacher perceptions of supporting factors in implementing the standards. Teachers' experiences with workshops were revealed as both positive and negative, along with teacher preparation. One participant stated:

I feel like administrators have been supportive. They're in the same boat. There being told that their teachers must do this, so administrators must enforce it. There was plenty of preparation involved and administrators are the ones that provided all that support.

The data revealed collaboration as a major contributor to teacher perceptions of administrative support. School culture must be conducive to critical inquiry and provide opportunities for professional dialogue. The data identified school systems need to be in place to allow blocks of time for teachers to work and learn collaboratively and strategies supporting team planning, sharing, learning, and evaluating. Whether formal or informal, all systems of professional development must be flexible and able to respond to changing needs of teachers and professionals.



## **Summary**

The purpose of this descriptive case study was to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core. The six teachers indicated the standards have increased their stress and created less autonomy and control in their classrooms. The top down approach to the standards and the high stakes testing environment has played a major role in decreasing teacher motivation and has prompted educators, like Jamie, to leave the profession. As a school leader, I also feel the stress of the standards and accountability of student achievement. I am torn, like many teachers, between following government mandates and compliance or becoming noncompliant and using my own expertise to teach each child, but also knowing that I am risking my employment. As the frustration mounts and the feeling of having less control in determining what is best and right for each student, I too have considered leaving the profession.

## CHAPTER 5

### CONCLUSIONS AND RECOMMENDATIONS

The purpose of this descriptive case study specifically sought to understand and describe teacher experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core State Standards at the Sunshine School District. The theoretical framework for this qualitative study is unique by its heuristic approach. The heuristic method allowed me to describe the learning process in a manner that was reflective of my experience and free from judgment, making it the most appropriate method to examine the perspectives of teachers. The experiences and descriptions provided by the teachers in this study were used to answer the research questions, which were: What experiences are described by math and language arts teacher narratives regarding the implementation of the Missouri Learning Standards? And how do math and language arts teachers perceive the support of school leadership in the implementation of the Missouri Learning Standards?

As a novice researcher, I could develop my skills through direct application of the descriptive case study technique in a qualitative study. Patton suggests qualitative researchers rarely conclude, as “perfection breeds imperfections” (2015, p. 524). Therefore, rather than provide a conclusion, I attempted to provide a succinct review of my analysis of the data. This descriptive case study provides the reader with the potential for new knowledge as they interpret the vivid descriptions of the participants (Merriam, 2009). The descriptions provide sufficient detail and indicate the teacher participants in this study perceive leadership factors contribute to standards implementation but only in a marginal capacity. The combination of school leadership, state education agencies, and support from

colleagues offer the most sustenance for standards implementation while maintaining positive teacher self-efficacy and motivation.

My intent was to gain a deeper understanding of middle and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core State Standards. Theme analyses were conducted to determine if there were common components in the documents, observations, and interviews. The overarching themes were important topics in all data collection, which included challenges, resources, teacher perspectives, leadership, political landscape, student preparation and development, and assessments. Teachers in the interviews repeatedly indicated high stakes testing greatly increased teacher stress, and the loss of classroom autonomy has increased thoughts of leaving the profession. Teachers also indicated a major concern for student preparation and development as the standards have been implemented and established. The observations revealed several resources available to teachers; however, the interviews suggested teachers did not feel resources in the form of professional development and textbooks were effective with the standard initiatives. The documents disclosed school districts' challenges of the Common Core during the implementation phase and teacher perceptions of the Common Core two years after the standards were implemented. As I reflected on the findings, it was clear that effective professional development, supported by school leaders in collaboration with teachers in a democratic environment is needed for implementation of the core standards. School leaders and teachers have the greatest control over this aspect in educational system. Professional development should be practical, shared, timely, with induction and mentoring for new teachers and must take place in a collaborative environment created by school leaders.

Leadership, defined by most educators, is a relationship that influences organizational members to work toward achieving organizational goals. As established in the literature review, definitions of leadership may vary, but a central element in many definitions is the process and ability to influence. Many scholars and researchers recognize leadership as an essential component of school success and school improvement (Leithwood, Louis, Anderson, & Wahlstrom, 2004). International research evidence has consistently reinforced the importance of leadership in securing and sustaining improvement (West, Harris, & Hopkins, 2000). Effective leaders exercise an indirect, but powerful influence on the effectiveness of the school and on the achievement of students (Leithwood & Jantzi, 2000). School leaders play critical roles in identifying and supporting learning, structuring the social settings and mediating the external demands. External demands may include educational reform movements such as the Common Core initiative and the top down approach to standards implementation.

State and district leadership, policies, practices and other characteristics interact with one another and exert a direct influence on what school leaders do; they also exert influence on school and classroom conditions, as well as on teachers' professional community (Leithwood, Louis, Anderson, & Wahlstrom, 2004). The literature review concluded there seems little doubt district and school leadership provide a critical bridge between most educational reform initiatives and their consequences for students and teachers. The importance of strong and effective leadership within the school environment cannot be underestimated. Great schools do not exist apart from great leaders and in today's climate of high expectations and accountability, school leaders are under significant pressure to continually improve teaching and learning as indicated by standardized testing and

achievement scores (Defour & Mattos, 2013). School leaders committed to growing, developing, and supporting teachers can have a significant impact in the classrooms and resulting in greater student achievement.

School leaders face the challenges of creating opportunities for teachers to grow and develop in their practice which in turn can help students grow and develop their knowledge and ability to think critically. Challenges districts face included time constraints, relevancy of the professional development, and the availability of quality professional development. Teachers in this study extensively discussed the need for collaboration as a support factor in the era of accountability and high stakes testing. School leaders that develop an organizational emphasis on instructional improvement, promote a distinct and unifying vision of instructional quality, create a community in support for the vision, and restructure their own priorities, can attain the instructional emphasis that leads to notable improvement in student performance (Supovitz & Poglinco, 2001). School leaders practicing democratic style leadership are best suited to create the supportive and collaborative culture teachers and students need.

Democratic leadership remains as elusive to define as other styles but common descriptions include leadership that is distributive, collective, or shared. Regardless of the name, democratic leadership creates a culture of collaboration and an effective learning environment for all stakeholders. Democratic leadership does not mean everyone leads or everyone is a leader. Democratic leadership involves thinking of leadership in terms of activities and interactions that are distributed across multiple people and situations and like other leadership styles, generally involves taking risk in the face of uncertainty. One concept that distinguishes leadership from gambling is the allocation of the risk; leaders are people

who demonstrate willingness, at least at some critical moments, to internalize the cost of potential failure while externalizing the benefits that flow from success (Kane & Patapan, 2014). Leaders must be willing to sacrifice for the greater good and although leaders must be willing to take risk, does not mean just any risk. Leaders are leading for the common good and democratic leaders take risk in behalf of something larger than themselves. Although these risks are inherently on the leader, the democratic leader must continue to develop teams and share the school's common vision in a collaborative culture to empower stakeholders for a greater purpose.

School leaders practicing this style of leadership are challenged with the development of a culture within the school that embodies collaboration, trust, professional learning, and reciprocal accountability (Copland, 2003). Leadership distributed in the manner defined above demands a culture in which people work together in a collaborative, trusting manner. Allowing teachers having say in a democratic environment can be valued to the extent it increases teacher and students' motivation and results in greater student achievement. Schools enacting democratic principles such as shared intentional direction and a participative approach to leadership are more likely to foster greater professional learning among teachers (Woods & Kensler, 2012). A culture of collaboration and trust is the backbone of professional development and effective professional development leads to building and sustaining capacity for continuous school improvement.

### **Recommendations**

Based on the findings in this study, I offer several recommendations to district and building leaders who are seeking to retain high quality teachers during the era of high stakes testing and current education reform. The recommendations center around the main topic of

professional development, which if followed, could foster a collaborative and supportive environment where teachers feel they are respected and supported; this is the foundation of a democratic culture. Although resources and student preparation and development were significant factors in this research, I believe educators have much more control over professional development which will impact students regardless of any education reform or a change in standards. Teachers that have a positive and supportive environment, where democratic principles are apparent, exhibit a higher teacher self-efficacy and any increase to teacher self-efficacy will have a positive effect on retaining quality teachers in the classroom and in the profession. Students of low socioeconomic communities will greatly benefit from the stability of the teacher workforce.

### **Professional Development**

Teacher professional development is one of the keys to improving the quality of schools. The connection between student achievement and teacher quality is not a disputed issue. Student learning and achievement increase when educators engage in effective professional development focused on the skills educators need to address students' major learning challenges (Mizell, 2010). Many education reforms, such as the Common Core, rely on teacher learning and the improved instruction that ideally follows to increase student learning, so understanding what makes professional development effective is critical to understanding the success or failure of education reform. Coupled with other resources, such as a strong and relevant curriculum, shared leadership activities, high expectations for students, and a robust community and parent partnership, the better prepared and updated a teacher is the greater the academic achievement of students.

School leaders play a critical role in the growth and development of teachers and can foster a democratic environment conducive for teacher and student learning. Research has steadily converged on the importance of strong teacher learning communities for teacher growth and commitment, suggesting as well their potential contribution to favorable student outcomes (Little, 2012). School leaders must gain understanding that professional development most effective for teachers is focused on; teachers' real work, provides teachers with opportunities to make choices about their own learning, happens over time, includes induction programs with mentoring, and contributes to building a professional culture of collaborative learning is essential for quality schools. The following figure illustrates the recommendations I have set forth for effective professional development school leaders should practice to have the greatest impact in promoting a positive school culture.





Professional development that is practical in the classroom is critical for teacher learning. A real-world approach to professional development focuses on core content and the modeling of teaching strategies of the content intended to improve student learning. Teachers must be able to identify the connection of the professional development to their everyday classroom experiences and have it grounded into the day to day teaching practice in a continuous improvement cycle. School leaders can provide pertinent data to teachers to align their professional development with student learning. Data that can drive relevancy may be student achievement data, district and building goals for teaching and learning, or teacher and student needs. The data driven decision making process can then result in professional development that is practical and effective for the teacher by improving practices with a result of greater student learning. When teachers can identify their new learning and directly apply the learning to improve classroom instruction, the buy-in from teachers for instructional change will result in greater acceptance and less resistance.

Shared decision making has been proven to be an effective way of meeting the constantly changing standards and the challenges new standard implementations can create. Shared decision making is based on the premise that better decisions are made when the people functioning closest to the implementation of the decision participate in the decision-making process. Shared decision making provides opportunities for educators to explore ways to restructure delivery of instruction and serves to better meet the needs of students. In turn, teachers in such a democratic environment take ownership in decisions and become more supportive of any change initiative. The data sources in this study identified teacher autonomy as a major concern of teachers due to a continual top down approach to standards implementation. Teachers had little input in the Common Core development which has

caused great resistance to its implementation. Leaders allowing teachers to be part of the decision-making process can help instill some autonomy back into their classrooms. It is important for administrators to recognize that teachers, those closest to the students, understand and know what to do for student success. Establishing and practicing a distributed leadership model of shared decision making, where decisions can be made by the teachers, creates an environment where information is shared and decisions are made in the best interest of the students. School leaders should provide opportunities for teachers and encourage participation in the decision-making process concerning curriculum and classroom based instruction. Allowing teachers to have a voice will increase job satisfaction and enhance greater commitment to the school policies and allow the classroom autonomy teachers so desperately desire.

Not only should professional development be practical and shared, but also sustained over time. As with the cases in this study, the traditional one-day whole group (one size fits all) workshops proved to be ineffective as the teachers repeatedly stated they gained little if any knowledge from the workshops. Professional development that is focused and sustained over time provides opportunity for teacher and student growth. Establishing and maintaining a culture of ongoing learning is the core principle underlying sustainability, and creating a culture that is excited about learning is the strongest foundation for best practices in schools. Teachers implementing new strategies and practices are certain to meet challenges and failures and will quickly return to status quo. Mastery comes only because of continuous practice despite the challenges and teacher frustrations. Without support during this phase, it is highly unlikely teachers will persevere with the newly learned strategy.

Therefore, if school leaders want real changes in teaching practice, they must provide ample and ongoing support for teachers as they learn and incorporate new learning strategies and continually refine them for the greatest effect on student learning. Any real change in practice will almost always include periods of supported training, study, or research; sometimes involving risks, almost always doubt, but hopefully also elation and insight. Sustainability of professional development involves strong leadership to obtain continuing support and to motivate staff and others to be advocates for continuous improvement

Throughout the data and literature review, mentoring and induction programs resonated as highly effective tools to support and prepare teachers and to retain young teachers as they grow personally and professionally. Teachers' attrition is costly in many ways for schools, communities, and students. A sound induction program coupled with mentoring can curb teacher attrition regardless of how much classroom experience the teacher may have. There is a difference between induction and mentoring and school leaders must distinguish these differences. Induction program is a sustained professional development process while mentoring is an action that mentors do. A mentor is a single person, preferably a veteran in the profession, who is assigned to a new teacher and helps them through the first few years of teaching and ensures the induction program is fulfilled. Many teachers work autonomously in their classrooms and lack easy access to more experienced teachers. School leaders can address the concerns and difficulties faced by new teachers by providing induction programs to build a professional culture of collaboration and problem solving. School leaders, when possible, can get the greatest results of induction programs by assigning mentors from the same teaching field, allow extra time in the

schedule for collaboration and planning, and provide new teachers with the necessary resources to support their learning and experiences as educators. The life of a new teacher is dependent upon the district's articulated, coherent, induction and mentoring programs. Mentor teachers also benefit from induction programs by learning new strategies or filling a renewal of passion and self-worth which directly relates to self-efficacy. School leaders must be able to capitalize on induction and mentoring programs to have continual improvement in the classrooms.

Collaboration, a tool for democratic practice, is the cornerstone of any effective professional development. Collaboration may be two teachers working together teaching a single class, or it may be a group of teachers discussing a new learning strategy or professional practice. As technology continues to advance and change teaching and learning, collaboration may be a sharing of information with other teachers from around the world. Regardless, collaboration builds relationships, a support structure, and a community working together to achieve common goals through the sharing of knowledge, practice, and problems. The impact of collaboration is far reaching. When teachers work together in collaborative teams to gather evidence of student learning and analyze the evidence, they can identify and deploy the most powerful teaching strategies to address gaps in student learning, and the subsequent impact can be significant. Effective collaboration is frequent, ongoing, and a part of the daily routine. Democratic school leaders can support a collaborative environment by allowing time for teachers to collaborate. Leaders can create teams of teachers from the same grade, subject, or school to participate in activities to build an interactive learning community. As previously noted, schools that enact democratic principles such as shared intentional direction and a participative approach to leadership are

more likely to foster greater professional learning among teachers (Woods & Kensler, 2012). School leaders can model collaboration when working with colleagues, be open to feedback, and share decision making responsibilities. Collaboration is not always accepted and will face resistance. Teachers that have had success in teaching in isolation may view collaboration as an invasion of their pedagogy and a waste of time; however, a persistent and supportive administrator can ease the change in pedagogy.

School leaders must develop a positive culture that encourages continuous learning for teachers, which filters into the classrooms and provides a more positive educational learning environment for the students. A positive school culture is the underlying reason why the other components of successful schools can flourish (Habegger, 2008). School leaders that value the expertise of the teachers and allow the latitude to try new approaches, an unbroken cycle of continuous improvement will be observed in the building. A culture where the teachers feel their opinions matter and feel comfortable enough to take risks and try new methods. Therefore, the positive culture the school leaders create enable continuous improvement to occur.

School leaders practicing distributed leadership and shared decision making find the most success in developing a democratic culture. It is imperative for school leaders to provide professional development opportunities for faculty and staff and for them to share their experiences with colleagues. Faculty and staff need opportunities to learn about a range of topics, including strategies that address the various learning styles of students, local, state, and federal issues that may impact student learning, analysis of student data, and how to improve student achievement. School leaders and teachers may have little voice in distant policymakers' decisions on education and their top down approaches; however, school

leaders and teachers can control the environment in which the mandates are to be implemented and the strategies to implement the mandates. A positive school culture that practices shared decision making where trust in each other is paramount will provide internal support for teachers of thinking about leaving the profession due to stress, burnout, and autonomy.

### **Recommendations for Future Research**

This study examined the experiences of six teachers in a rural setting as they related their experiences with the implementation of the Common Core and the leadership support strategies that most benefited the implementation of the standards and their current practices. Other researchers may want to consider implementing the case study technique as a viable approach to research leadership support strategies for teachers. I suggest research that includes multiple cases across various school buildings and districts where income rates are higher than in the rural low socioeconomic setting selected for this study. For this research, I selected six participants from one rural low income setting. Thus, many of the examples were redundant as they chose to reflect on their experiences in implementing new standards and the leadership support behaviors that were or were not present. Selecting participants from multiple settings could potentially allow the researcher the opportunity to compare several teacher experiences in implementing new standards and support structures that were in place by school leaders. The potential for generalizing regarding the research findings and add value to this and future studies would occur. Likewise, the selected site provided a homogenous group of participants with five white females and one white male. Future researchers may want to consider how a diverse group of teacher participants might affect

the experiences in standards implementation. Perhaps the researcher would generate different meanings among the data collected.

There are additionally other possibilities for research besides simply repeating this study. This study is an inquiry into teacher perceptions of the Common Core but does so at an incipient stage of implementation and a stage approximately three years after the implementation. Since that time, controversy of the Common Core has escalated and states have renamed the standards or dropped the standards all together. The results of current political elections could ultimately affect the Common Core and the standards soon. Further insight could be gained by comparing participant responses from this study with responses later after the standards have been fully implemented. For instance, how will a new assessment system affect current teaching practice? What will happen to student achievement under the Common Core or the renamed standards adopted by the states? How will the present political and economic situations affect the funding and maintaining of the Common Core? How will teacher efficacy and motivation change soon? These questions and more are raised by this study and will only be answered by conducting further research.

Indeed, the study simply provided a glimpse into how the Common Core has penetrated and takes form in everyday classrooms. Although it has resulted in valuable information, the intentional value of this study is to raise more questions and to point out issues about the Common Core and the effects on teachers. If this modest study has inspired any further inquiries and conversation about the future of any standards initiatives and education policy effect on teachers, conducting it has been well worth the effort.

## **Final Thoughts**

The findings and conclusions in this study will be useful in my personal and professional growth as a practicing school leader. The in-depth research has strengthened my commitment to teachers and provide positive support as they strive for their own growth and development amidst an ever-changing field. Ultimately, as teachers develop and grow in a positive and supportive environment so do the students in their classrooms leading to an education that teaches the individual child. In the initial stages of this study I had two key assumptions. The first assumption was the Common Core State Standards contributed to a lower sense of teacher self-efficacy furthering teachers to leave the education field. The second assumption was school leadership may not have provided an important support system for the teachers during the transition to the standards and after the implementation of the Common Core. The lack of a support system would increase teacher stress and burnout and contribute to teachers leaving the profession. The continual exodus of teachers would have a negative impact on students and the individuals suffering the most from this inadvertent outcome are the students in poverty and low socioeconomic communities. The research data confirmed my assumption on the impact of teachers leaving the profession and creating challenges for districts in poverty or low socioeconomic communities; however, my assumption of a lower teacher self-efficacy due to the Common Core and the leadership support factors was not supported.

The veteran teachers in this study were adamant they had never doubted their ability to teach or had a lower self-efficacy, but had greater distaste for the deprofessionalization and the lack of classroom autonomy the standards initiatives have created. The scripted and one size fits all curriculum has tied their hands and not allowed them use their expertise and



experience in tailoring the curriculum for the individual student. As a practicing school leader and being in several classrooms, I understand the teacher frustrations the standards have created and enabled teachers and administrators to do what is best and right for their students. I have realized I must continue to support the teachers more than ever as they live through this cycle of the education reform, knowing the pendulum may swing the other way at some point. I must also lobby relentlessly to the state and federal policy makers that classroom decisions and decisions on students must return to those closest to the students. Conflicting data were apparent regarding leadership support factors needed to implement the standards. Many teachers in the interview stated their administration was very supportive in the initiative to implement the standards, however; the document data disclosed federal and state leaders did not provide the necessary support for a smooth transition. Although education reform movements will continue to occur, future researchers may be able to use similar conceptual frameworks and methods from this study to guide their research and find meaning about their phenomenon.

Lastly, although the aim of this study was to discover the stories of teachers who are culturally responsive in their pedagogy, I also emerged with a clearer understanding of the process of heuristic inquiry. Reading about this inquiry model and implementing it are completely different. I realize while acquiring new learning that I was struggling to find meaning about what I was doing. Each phase in heuristic inquiry became more meaningful as I moved out of one phase and into the next. Because I did not know what to expect, I could not predict how I would feel as I transitioned from one phase to another. To be true to the process, I learned I had to let go and immerse myself in not just the phenomena being studied, but the inquiry process as well. Thus, I arrived at the end process with new

awareness and longing to further seek meaning about what I learned. I am confident that what this process has offered me, it can offer to others.

## **APPENDICES**

### **APPENDIX A Information Letter**

Dear Participant,

You are being asked to take part in a research study. This study is being conducted at the school in which you are employed. The researcher in charge of this study is Dr. Loyce Caruthers.

The researcher is asking you to take part in this research study because you have met the following criteria: (1) three or more years of teaching experience; (2) have taught math or language arts during and after the implementation of the Missouri Learning Standards; (3) currently hold a valid teaching certificate; and (4) teach in the general education setting. Research studies only include people who choose to take part. This document is called a consent form. Please read this consent form carefully and take your time making your decision. The researcher will go over this consent form with you. Ask him to explain anything that you do not understand. Think about it and talk it over with your family and friends before you decide if you want to take part in this research study. This consent form explains what to expect: the risks, discomforts, and benefits, if any, if you consent to be in the study.

#### **Background**

Teacher retention and attrition continue to be relevant areas of concern for school districts and state departments of education throughout the country as many reports are surfacing correlating the performance of students with the attrition rate of teachers. Salary, working conditions, lack of support, and retirement are frequently the most recognized factors affecting teacher attrition (Lui & Meyer, 2005; Ingersoll, 2001).

Education reform and the current focus of measuring teacher effectiveness based on the results of the scores on standardized test, especially in math and language arts, may be one factor that increases the likelihood of attrition caused by the added stress of accountability of teachers in these academic areas. If an increase in attrition rate is experienced, there will be an even greater shortage of an already stressed supply of quality teachers in math and language arts. The revolving door of teachers will certainly continue for those students needing the most effective teachers.

This study will strive to specifically to understand and describe teacher' perceptions with the implementation of the Missouri Learning Standards as they relate to teacher self-efficacy. Teacher self-efficacy is defined as the teacher's confidence in their ability to promote students' learning (Hoy A. , 2000). Self-efficacy is an important factor in determining teacher's effectiveness within the classroom setting. The literature suggests that powerful effects from the simple idea that a teacher's belief in his or her ability to positively impact student learning is critical to actual success or failure in a teacher's behavior (Henson, 2001). This proposed study seeks to understand and describe teacher' perceptions with the implementation of the Missouri Learning Standards as they relate to teacher self-efficacy.

The researcher is interested in acquiring teacher participants who will be willing to share information. You will be one of 6 subjects in the study at your school.

### **Purpose**

The purpose of this study is to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core. Research regarding potential factors related to teacher attrition, such as stress, may be beneficial for administrators in identifying strategies to recruit and retain quality teachers. While there may be, several factors affecting teachers' intentions to stay in or leave the profession, stress may be one factor that magnifies the likelihood of attrition (Larwood & Paje, 2004). To lessen the impact of teacher attrition from the implementation of the current standards based curriculum and high stakes testing, school leaders must be proactive and use strategies and guidance to support existing and new teachers in all academic areas.

### **Procedures**

Your involvement will take place during the second semester of the 2015-2016 school year and will be completed by the end of the 2015-2016 school year. Your involvement will likely be completed over a 1-2-month time. The process of data collection will utilize two main methods: semi-structured interviews and in class observations of the 6 teacher participants. One-on-one interviews with the 6 teachers will help to define teacher self-efficacy and will provide an opportunity to acquire teachers' perceptions with the implementation of the Missouri Learning Standards.

This letter will outline the purpose of the study, risks, benefits, information to be collected, and how the data would be used. Your participation is voluntary and confidentiality will be ensured. Prior to the interview, you will have an opportunity to ask questions about the process. You will be offered the opportunity to meet at a convenient location on school grounds of your choosing. Interviews will be held during the school day, and all six interviews will be conducted the same week. Anticipated interviews will last approximately thirty to forty minutes each. You will participate in a minimum of one interview with a follow-up interview as needed to clarify information or address gaps in the collected data.

Interviews will be digitally recorded using the Android Voice app, and each of these will be transcribed verbatim. Transcriptions will not use actual participant names but pseudonyms to protect the identity of all participants, school building, and the school district. The recordings will be deleted once they have been transcribed. All letters of consent, notes, or communication of any kind will be stored on a university computer or campus central location to ensure proper data security and confidentiality measures are taken. Electronic files will be stored on a password protected computer in a locked office. Additionally, paper documents will be stored in a locked filing cabinet in locked office. This data will be saved for seven years after the completion of the research. Data will be used for the proposed study only and will not be saved or used for future research. If you withdraw from the study, previously collected data will be kept and used.

After 7 years, all electronic files will be permanently deleted and written materials will be destroyed using a shredder.

In addition to interviews, the researcher will review and extract meaning from various external documents to gain additional insight into perceptions and experiences with standards based reform. The final source of data will be direct observations of teachers in a classroom setting, which will be analyzed to support and expand meaning of the interview and document data.

Example:

Visit 1/Week 1

Collect external documents for review. These may include standards implementation, teacher surveys, district achievement data, etc.

Visit 2/Week 2

Initial 30-minute teacher interview, establish a relationship, purpose of the study, and collect initial data regarding perceptions of implementation of the Missouri Learning Standards.

Visit 3/Week 3

Observation of teacher in classroom setting.

Visit 4/ Week 4

Follow up interview (30 minutes) for participant to review transcripts from previous interview and to clarify any answers or gaps in the research study.

If you agree to take part in this study, you will be involved in this study for approximately 1-2 months and be asked to participate in a minimum of one 30 to 40-minute interview with one follow up interview to review transcripts and clarify any answers or gaps in the research study.

Participation in this study is voluntary and should you choose to no longer participate, you are welcome to do so free of judgment. When you are done taking part in this study, you will still have access to the research study and its results.

### **Risks and Inconveniences**

This research is minimal risk. That means that the risk of taking part in this research study are not expected to be more than the risks in your daily life. However, you may feel

uncomfortable talking about perceptions of standards based and leadership support during and after the implementation.

The researchers seek to ensure your privacy, confidentiality, and ultimately to develop positive relationships that will allow the researcher to foster trust and confidence as it relates to the intended research. There are no other known risks to you if you choose to take part in this study.

If you are uncomfortable in answering a question, you simply need to express your feelings. Taking part in this research study is voluntary. If you choose to be in the study, you are free to stop participating at any time and for any reason. If you choose not to be in the study or decide to stop participating, your decision will not affect any care or benefits you are entitled to. While we will do our best to keep the information you share with us confidential, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research Protections Program, and Federal regulatory agencies may look at records related to this study to make sure we are doing proper, safe research and protecting human subjects.

The results of this research may be published or presented to others. You will not be named in any reports of the results.

### **Benefits**

This study will seek to complement the current literature and body of research regarding teacher self-efficacy and standards based reform. Additionally, this study will potentially have important implications for school leader practice. This study will not directly benefit the teacher participants. However, other people may benefit in the future as it intends to help school leaders understand how teachers perceive support in standards based reform implementation. Additionally, professional development opportunities at the university and district level may be influenced and refined to build capacity among school leaders with the desire to improve teacher self-efficacy and thus positively impact student achievement.

### **Fees and Expenses**

This study will require no monetary costs to the participant.

### **Compensation**

Participants will not receive any type of compensation for participating in this proposed research study.

### **Alternatives to Study Participation**

The alternative is not to take part in the study.

### **Confidentiality**

While we will do our best to keep the information you share with us confidential, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research

Protections Program, and Federal regulatory agencies may look at records related to this study to make sure we are doing proper, safe research and protecting human subjects. The results of this research may be published or presented to others. You will not be named in any reports of the results.

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### **Voluntary Participation**

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### **In case of Injury**

There are no foreseen reasons to put safeguards in place to protect the physical health of the participants.

I hope you will see the importance of this proposed research study and agree to participate. If you are interested in participating, please contact me. My contact information:

Jeff Blackford  
Doctoral Student  
10014 Southwest County Road 7007  
Rich Hill, MO 64779  
(660) 624-3635

## **APPENDIX B**

### **Consent for Participation in a Research Study**

#### **HEURISTIC DESCRIPTIVE CASE STUDY OF MATH AND LANGUAGE ARTS TEACHERS' PAST AND CURRENT EXPERIENCES IN THE IMPLEMENTATION OF THE MISSOURI LEARNING STANDARDS**

##### **Request to Participate,**

You are being asked to take part in a research study. This study is being conducted at for which you are employed. The researcher in charge of this study is Dr. Loyce Caruthers.

The researcher in charge of this study is Dr. Loyce Caruthers. While the study will be run by her other qualified persons who work with her may act for her.

The researcher is asking you to take part in this research study because you have met the following criteria: (1) three or more years of teaching experience; (2) have taught math or language arts during and after the implementation of the Missouri Learning Standards; (3) currently hold a valid teaching certificate; and (4) teach in the general education setting. Research studies only include people who choose to take part. This document is called a consent form. Please read this consent form carefully and take your time making your decision. The researcher will go over this consent form with you. Ask him to explain anything that you do not understand. Think about it and talk it over with your family and friends before you decide if you want to take part in this research study. This consent form explains what to expect: the risks, discomforts, and benefits, if any, if you consent to be in the study.

##### **Background**

Teacher retention and attrition continue to be relevant areas of concern for school districts and state departments of education throughout the country as many reports are surfacing correlating the performance of students with the attrition rate of teachers. Salary, working conditions, lack of support, and retirement are frequently the most recognized factors affecting teacher attrition (Lui & Meyer, 2005; Ingersoll, 2001).

Education reform and the current focus of measuring teacher effectiveness based on the results of the scores on standardized test, especially in math and language arts, may be one factor that increases the likelihood of attrition caused by the added stress of accountability of teachers in these academic areas. If an increase in attrition rate is experienced, there will be an even greater shortage of an already stressed supply of quality teachers in math and language arts. The revolving door of teachers will certainly continue for those students needing the most effective teachers.

This study will strive to specifically to understand and describe teacher' perceptions with the implementation of the Missouri Learning Standards as they relate to teacher self-efficacy. Teacher self-efficacy is defined as the teacher's confidence in their ability to promote students' learning (Hoy A. , 2000). Self-efficacy is an important factor in determining teacher's effectiveness within the classroom setting. The literature suggests that powerful

effects from the simple idea that a teacher's belief in his or her ability to positively impact student learning is critical to actual success or failure in a teacher's behavior (Henson, 2001). This proposed study seeks to understand and describe teacher' perceptions with the implementation of the Missouri Learning Standards as they relate to teacher self-efficacy.

The researcher is interested in acquiring teacher participants who will be willing to share information. You will be one of 6 subjects in the study at your school.

### **Purpose**

The purpose of this study is to gain a deeper understanding of elementary, middle, and high school math and language arts teachers' perceptions regarding their experiences with the implementation of the Missouri Learning Standards pertaining to the Common Core. Research regarding potential factors related to teacher attrition, such as stress, may be beneficial for administrators in identifying strategies to recruit and retain quality teachers. While there may be, several factors affecting teachers' intentions to stay in or leave the profession, stress may be one factor that magnifies the likelihood of attrition (Larwood & Paje, 2004). To lessen the impact of teacher attrition from the implementation of the current standards based curriculum and high stakes testing, school leaders must be proactive and use strategies and guidance to support existing and new teachers in all academic areas.

### **Procedures**

Your involvement will take place during the second semester of the 2015-2016 school year and will be completed by the end of the 2015-2016 school year. Your involvement will likely be completed over a 1-2-month time. The process of data collection will utilize two main methods: semi-structured interviews and in class observations of the 6 teacher participants. One-on-one interviews with the 6 teachers will help to define teacher self-efficacy and will provide an opportunity to acquire teachers' perceptions with the implementation of the Missouri Learning Standards.

This letter will outline the purpose of the study, risks, benefits, information to be collected, and how the data would be used. Your participation is voluntary and confidentiality will be ensured. Prior to the interview, you will have an opportunity to ask questions about the process. You will be offered the opportunity to meet at a convenient location on school grounds of your choosing. Interviews will be held during the school day, and all six interviews will be conducted the same week. Anticipated interviews will last approximately thirty to forty minutes each. You will participate in a minimum of one interview with a follow-up interview as needed to clarify information or address gaps in the collected data.

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stored on a password protected computer in a locked office. Additionally, paper documents will be stored in a locked filing cabinet in locked office. This data will be saved for seven years after the completion of the research. Data will be used for the proposed study only and will not be saved or used for future research. If you withdraw from the study, previously collected data will be kept and used.

After 7 years, all electronic files will be permanently deleted and written materials will be destroyed using a shredder.

In addition to interviews, the researcher will review and extract meaning from various external documents to gain additional insight into perceptions and experiences with standards based reform. The final source of data will be direct observations of teachers in a classroom setting, which will be analyzed to support and expand meaning of the interview and document data.

Example:

Visit 1/Week 1

Collect external documents for review. These may include standards implementation, teacher surveys, district achievement data, etc.

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Visit 3/Week 3

Observation of teacher in classroom setting.

Visit 4/ Week 4

Follow up interview (30 minutes) for participant to review transcripts from previous interview and to clarify any answers or gaps in the research study.

If you agree to take part in this study, you will be involved in this study for approximately 1-2 months and be asked to participate in a minimum of one 30 to 40-minute interview with one follow up interview to review transcripts and clarify any answers or gaps in the research study.

Participation in this study is voluntary and should you choose to no longer participate, you are welcome to do so free of judgment. When you are done taking part in this study, you will still have access to the research study and its results.

### **Risks and Inconveniences**

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If you are uncomfortable in answering a question, you simply need to express your feelings.

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The results of this research may be published or presented to others. You will not be named in any reports of the results.

### **Benefits**

This study will seek to complement the current literature and body of research regarding teacher self-efficacy and standards based reform. Additionally, this study will potentially have important implications for school leader practice. This study will not directly benefit the teacher participants. However, other people may benefit in the future as it intends to help school leaders understand how teachers perceive support in standards based reform implementation. Additionally, professional development opportunities at the university and district level may be influenced and refined to build capacity among school leaders with the desire to improve teacher self-efficacy and thus positively impact student achievement.

### **Fees and Expenses**

This study will require no monetary costs to the participant.

### **Compensation**

Participants will not receive any type of compensation for participating in this proposed research study.

### **Alternatives to Study Participation**

The alternative is not to take part in the study.

### **Confidentiality**

While we will do our best to keep the information you share with us confidential, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research

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### **Voluntary Participation**

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### **In case of Injury**

There are no foreseen reasons to put safeguards in place to protect the physical health of the participants.

### **Contacts for Questions about the Study**

You should contact the Office of UMKC's Institutional Review Board at 816-235-5927 if you have any questions, concerns or complaints about your rights as a research subject. You may call the researcher Jeff Blackford at (660) 624-3635 if you have any questions about this study. You may also call him if any problems come up.

### **Voluntary Participation**

Taking part in this research study is voluntary. If you choose to be in the study, you are free to stop participating at any time and for any reason. If you choose not to be in the study or decide to stop participating, your decision will not affect any care or benefits you are entitled to. The researchers, doctors or sponsors may stop the study or take you out of the study at any time if they decide that it is in your best interest to do so. They may do this for medical or administrative reasons or if you no longer meet the study criteria. You will be told of any important findings developed during this research.

You have read this Consent Form or it has been read to you. You have been told why this research is being done and what will happen if you take part in the study, including the risks and benefits. You have had the chance to ask questions, and you may ask questions at any time in the future by calling Dr. Loyce Caruthers at (816) 235-1044. By signing this consent form, you volunteer and consent to take part in this research study. Study staff will give you a copy of this consent form.

\_\_\_\_\_  
**Signature (Volunteer Subject)**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name (Volunteer Subject)**

\_\_\_\_\_  
**Signature (Authorized Consenting Party)**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name (Authorized Consenting Party)**

\_\_\_\_\_  
**Relationship of Authorized Consenting  
Party to Subject**

\_\_\_\_\_  
**Signature of Person Obtaining Consent**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Printed Name of Person Obtaining Consent**

## **APPENDIX C**

### **Interview Questions**

#### **Current View:**

Over the past three to four years there has been an evolution and adjustment to the Missouri Learning Standards State Standards (Common Core State Standards). Describe your present experiences and feelings with the implementation of the Missouri Learning Standards?

What strategies have you incorporated in your classroom to teach the Missouri Learning Standards?

Teacher self-efficacy is defined as teachers' beliefs in their own abilities to plan, organize, and carry out activities required to attain given educational goals related to student achievement. Has the Missouri Learning Standards affected your self-efficacy in teaching the standards? Why or Why not?

Can you identify any administrative support factors that may or may not have helped after the implementation phase of the Missouri Learning Standards? Please explain

#### **Past View (initial is defined as experiences prior to current)**

Describe your experiences and feelings with the Missouri Learning Standards during its initial implementation?

Are the strategies you are currently using today different than the strategies used before the Missouri Learning Standards implementation?

In the initial phase, did the standards implementation affect your self-efficacy in teaching the standards? Why or Why not?

Can you identify any administrative support factors that may or may not have helped during the implementation phase of the Missouri Learning Standards? Please explain.

**APPENDIX D**  
**Observation Protocol**

Date: _____ Time: _____ Length of Activity ____ Minutes Site: EL MS HS Participant Pseudo Name: _____	
<b>Descriptive Notes</b>	<b>Reflective Notes</b>
Activities	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Classroom Environment: Climate	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Teacher Instructional Behaviors: Delivery of instruction	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Interactions of teachers with Students	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Interactions of students with other students	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)

Teacher comments: Expressed in quotes	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Student comments: Expressed in quotes	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Nonverbal communications	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Other relevant observations	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)
Unplanned events	(Reflective comments: questions to self, observations of nonverbal behavior, my interpretations)

**Table A1***Studies Linking Teacher Efficacy, Student Achievement, and Attrition*

<b>Publication Date &amp; Authors</b>	<b>Location, Sample Size &amp; Demographics</b>	<b>Impact of Efficacy</b>
(2007) Tschannen-Moran & Hoy	Ohio and Virginia, 255 graduate students, 1-29 years of experience	Teachers' self-efficacy is a little idea with big impact. Teachers' judgment of their capability to impact student outcomes has been consistently related to teacher behavior, student attitudes, and student achievement. We need to know more about how these beliefs are formulated and sustained throughout the teaching career. This study has demonstrated that, compared to career teachers, novice teachers' self-efficacy does seem to be more influenced by contextual factors such as verbal persuasion and the availability of resources. If future research confirms that teachers' self-efficacy beliefs are most malleable early in learning and are resistant to change once set, then it would behoove teacher educators and school leaders to provide preservice and novice teachers the kinds of supports that would lead to the development of strong, resilient self-efficacy beliefs.
(2005) Wheatley	Evidence based paper	In conclusion, those favoring progressive, meaning-centered reforms may feel confident that teachers' efficacy doubts will often aid these reforms. However, there is reason to doubt our existing knowledge of when and how such doubts are beneficial or problematic. This doubt should help motivate research that will help educators, researchers, and reformers develop a deeper and more usable understanding of the complex relationships between teachers' efficacy beliefs and educational reform.
(1996) Ross, Cousins, and Gadalla	Ontario Canada, 92 teachers, median of 11-19 years of experience.	The findings reveal that mathematics and science teachers were more likely to maintain perceptions of self-efficacy grounded in their level of preparation to teach these subjects and in the extent to the extent in which they perceived students to be engaged within classes.
(1996) Soodak & Podell	Urban New York, 310 Teachers, 1-33 years of teaching experience.	The distinction between personal efficacy and outcome efficacy is consonant with Bandura's notion of self-efficacy expectation and outcome expectation as independent aspects of self-efficacy. This distinction suggests that efforts to enhance teacher efficacy must consider whether low teacher



efficacy is due to teachers' lack of confidence in their skills or a sense of futility regarding the impact of their work.

(2002) Milner	Case studies and interview of a teacher.	Most empirical data suggest that mastery experiences (the successes and failures of completing specific tasks) best impacts teacher self-efficacy. However, this teacher discussed her students, parents, and colleague's verbal feedback as integral to her level of efficacy.
(2005) Snow-Renner & Lauer	113 standards studies since 2005	Districts have made considerable progress in supporting teacher learning by developing learning communities for teacher and another staff. They have addressed several policies and focused learning opportunities on instruction.
(2013) Marzano	Teaching Common Core. The Art and Science of Teaching Common Core	The various Common Core Standards planning-based shifts also require more thoughtful construction of units and lessons by individual classroom teachers. For example, ELA teachers must plan their units and lesson within them with an eye toward the specific informational and/or literary text that will be used (the second ELA shift). Ideally, both types of texts will appear in units so that the common information contained in the two forms might be compared. ELA teachers must also keep in mind the bigger picture of the sequence of texts (the third ELA shift) that students have already encountered in previous grade levels and will encounter in subsequent grade levels. In so doing, teachers can refer to text features to which students have previously been exposed and provide foreshadowing of features they will encounter in the future. Mathematics teachers must plan units and lessons with a firm awareness of the importance of focus (the first mathematics shift). Taking their lead from the school or district mathematics specialists, teachers must ensure that activities and assignments are understood by students as related to clear learning goals. In addition to units and lessons within them that have a clear focus, the mathematics teacher must plan for how units will fit together across the span of a year so that they gradually build to more sophisticated and integrated concepts (the second mathematics shift). Finally, the mathematics teacher must always plan with an eye toward real world applications of mathematics concepts and processing and take advantage of serendipitous events that provide opportunities for students to use what they are learning in real-world, authentic contexts.

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## VITA

Jeffrey Dean Blackford was born April 3, 1967, in Maryville, Missouri. He was educated in a local public school and graduated with high honors from North Nodaway R-VI High School. He received his Bachelor of Science Degree from Northwest Missouri State University with concentration in middle school science and business. Mr. Blackford worked four years at the North Nodaway School District teaching and coaching. Mr. Blackford continued his education at Northwest Missouri State University and in 2007 received his Master's in Secondary Leadership and in 2010 earned his Superintendency degree.

Mr. Blackford's experience in education includes five years of teaching, four years as a secondary building principal and has been an active superintendent for the past five years. He is the current superintendent at a public school in West Central Missouri.

Mr. Blackford began working toward his Doctoral in Education degree in January 2014 at University of Missouri – Kansas City and is planning to complete the program during the fall semester of 2016. Upon completion of his degree requirements, Mr. Blackford plans to continue his career in administration and to pursue teaching higher education courses specifically in leadership development and school finance.

Mr. Blackford is a member of the Missouri Association of School Administrators, Missouri-Kansas Leadership Forum, Missouri State Teachers Association, Missouri Association of Rural Educators, and the Missouri School Board Association.