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High School Teachers' Perceived Self-Efficacy in Teaching Literacy across the Curriculum in Tennessee First Core Region 1 High Schools

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by

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ABSTRACT

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At the high school level teachers are often departmentalized by their content area and do not teach subjects outside of their specialties. Common Core State Standards (CCSS) introduced literacy standards across the curriculum requiring reading and writing instruction in all courses. The adoption not only affected traditional literacy teachers but also science, math, social studies, and career and technical education teachers who may have had little or no training or experience in teaching literacy to adolescents. These teachers, because of little training or experience in teaching literacy, may feel unprepared for the CCSS literacy shifts or inadequate in delivering literacy instruction. This study was designed to explore teacher perceived self-efficacy after the implementation of new literacy standards in Tennessee. The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction across the curriculum. Data were collected through online, voluntary surveys using Likert scaling and one open-ended response question. The sample included Tennessee high school teachers from 3 counties in Tennessee First Core Region 1 high schools who had taught math, science, social studies, career and technical education, or ELA. This study found no significant difference based on self-efficacy and content area, level of teaching experience, or gender. There was also no significant difference based on literacy efficacy and level of teaching experience or gender.

There was a significant difference based on literacy efficacy and content area. ELA teachers were more significantly confident in teaching literacy than nonELA teachers.

DEDICATION

I would first like to dedicate this work to my husband Billy Keys and our beautiful daughter Madison. Billy, completing this doctoral program took sacrifice, and I would like to thank you for your willingness to stand by me and for your support when I did not see how I could do everything. Thank you for your help with Madison when I had to lock myself away and write, and thank you most of all for loving me when I was not kind. I love you. Madison, you may not know it because you are so young, but you inspire me. Looking at you everyday pushed me to do more. I want you to know that you really can accomplish anything you set your mind to do.

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CHAPTER 1

INTRODUCTION

In 2007 the U.S. Chamber of Commerce gave Tennessee an "F" for "Truth in Advertising" after a large percentage of students were proficient on state reading and math assessments but only a small percentage scored proficient on the National Assessment of Educational Progress (NAEP). This misalignment between state and national standards led to the adoption of Common Core State Standards (CCSS) in July 2010 to replace the Tennessee State Performance Standards (Tennessee Department of Education, 2014). CCSS introduced three main instructional shifts: building knowledge through content-rich nonfiction; teaching reading, writing, and speaking grounded in evidence from the text, both literary and informational; and practicing regularly with complex text and its academic language (TNCore.org, 2014). These literacy standards are currently under review in Tennessee; however, the new standards also call for literacy across the curriculum.

Statement of the Problem

At the high school level teachers are often departmentalized by their content area and do not teach subjects outside of their specialties. CCSS introduced literacy standards across the curriculum requiring reading and writing instruction in all courses. The adoption not only affected traditional literacy teachers but also science, math, social studies, and career and technical education teachers who may have had little or no training or experience in teaching literacy to adolescents. These teachers, because of little training or experience in teaching

literacy, may feel unprepared for the CCSS literacy shifts or inadequate in delivering literacy instruction.

This literacy shift could affect teachers' personal teaching efficacy by requiring them to teach content for which they have no background knowledge or mastery experience. Hoy and Miskel (2008) stated that self-efficacy is "an individual's judgment of his or her perceived capacity for performing a task" (p. 157) and an individual's belief in his or her self-efficacy is directly related to the individual's motivation, effort, perseverance, and resilience when completing a task; therefore, people with the same skill set but different self-efficacy beliefs could perform at different levels. Researchers found that teacher efficacy is one of the few characteristics that is consistently related to student achievement (Ashton & Webb, 1986; Woolfolk, Rosoff, & Hoy, 1990), and it is the strongest predictor of a teacher's commitment to teaching (Coladarci, 1992). Tschannen-Moran and McMaster (2009) stated that a teacher's self-efficacy has been linked to their classroom behavior, implementation of instructional change, as well as influencing student outcomes, efficacy beliefs, engagement, achievement, and motivation.

This study was designed to explore teachers' perceived self-efficacy after the implementation of new literacy standards in Tennessee. The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction across the curriculum.

Research Questions

The following research questions were investigated:

1. Is there a significant difference in teachers' perceptions of self-efficacy between ELA and nonELA high school teachers?
2. Is there a significant difference in teachers' perceptions of literacy instruction between ELA and nonELA high school teachers?
3. Is there a significant difference in teachers' perceptions of self-efficacy between apprentice and professional high school teachers?
4. Is there a significant difference in teachers' perceptions of literacy instruction between apprentice and professional high school teachers?
5. Is there a significant difference in teachers' perceptions of self-efficacy between male and female high school teachers?
6. Is there a significant difference in teachers' perceptions of literacy instruction between male and female high school teachers?
7. What literacy strategies do ELA and nonELA teachers use to teach literacy to adolescents in their classrooms?
8. What challenges do ELA and nonELA teachers feel they are facing with the new focus on literacy?

Significance of Study

The researcher analyzed two variables between ELA and nonELA high school teachers and apprentice and professional high school teachers. The variables included perceived self-efficacy and perceived ability to implement literacy instruction in the high school classroom. This study could provide insight for school leaders on teachers' perceived efficacy in teaching literacy across the curriculum. By analyzing data from this study school leaders could get a better

understanding of teachers' professional development needs and strengths and weaknesses in teaching the literacy standards.

Research on teacher efficacy and teaching literacy across the curriculum has shown a relationship between student literacy achievement and teacher efficacy (Armor et al., 1976; Corkett, Hatt, & Benevides, 2011), but there is limited research comparing ELA and nonELA teachers in terms of teacher efficacy and literacy instruction. Cantrell and Hughes (2008) stated, "little is known about the importance of teacher efficacy for literacy teaching as it pertains to content area middle and high school teachers" (p. 97). Tschannen-Moran and McMaster (2009) stated that one of the most powerful influences on receptivity to change is a teacher's attitude in the implementation of new instructional practices.

Definitions of Terms

Definitions of the following terms have been provided to help in the understanding of this study.

1. *Content-Area Reading:* Instruction that integrates reading, writing, talking, listening, and viewing strategies to help students better understand what they read in content area courses and develop content literacy (Ulusoy & Dedeoglu, 2011; Vacca, 2002).
2. *Content Literacy:* "The ability to use reading and writing to learn subject matter in a particular discipline" (Spor & Schneider, 1999, p. 223).
3. *Disciplinary Literacy*: Learning disciplinary concepts through how disciplinary knowledge is produced and consumed within the discipline (Moje, 2007)
4. *ELA high school teachers*: Teachers who currently teach English in grades 9 through 12

5. *General teacher efficacy*: A teacher's perception that all students can learn (Woolfolk et al., 1990).
6. *NonELA high school teachers*: Teachers who currently teach math, science, social studies, or career and technical education in grades 9 through 12
7. *Personal teacher efficacy*: A teacher's personal perception that he or she has an impact on student learning based on his or her instruction (Woolfolk et al., 1990).
8. *Self-efficacy*: A person's judgment of his or her capability to accomplish a task (Bandura, 1986).
9. *Teacher efficacy*: A teacher's personal perception that he or she can help students learn (Ashton & Webb, 1986).

Limitations and Delimitations

The population was delimited to high school teachers in the three counties in Tennessee First Core Region 1 high schools who taught math, science, social studies, career and technical education, or ELA. Participation in the study was voluntary and the results reflect only the responses of teachers who met the selection criteria and chose to participate. Also, definitions for literacy strategies were not provided on the survey. This could have led to inaccurate findings for research question 7.

Overview of the Study

This study is organized into five chapters. Chapter 1 contains an introduction to the study, statement of the problem, quantitative and qualitative research questions, significance of the study, definition of terms, and limitations and delimitations. Chapter 2 contains a review of

literature organized by topics related to the study such as self-efficacy, teacher efficacy, Tennessee education, literacy, and professional development. Chapter 3 includes research methodology, research questions, research design, and population of the study. Chapter 4 provides results of the study. Chapter 5 includes a summary of findings, conclusions, and recommendations for future research and practice.

CHAPTER 2

LITERATURE REVIEW

This study was designed to identify how confident East Tennessee high school teachers felt teaching literacy after the implementation of new high school literacy standards across the curriculum. The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction. This study analyzed two main variables between ELA and nonELA high school teachers and apprentice and professional high school teachers. The variables included perceived self-efficacy and literacy instruction. To better understand this study, the review of literature was completed on the following topics: federal education policy, Tennessee education, self-efficacy, teacher efficacy, adolescent literacy, content-area reading, disciplinary literacy, and professional development.

Federal Education Policy: A Brief History

The federal government's role in K-12 education has evolved since the founding of the nation. Before 1965 the federal government mainly ensured that each state set aside land and finances to support education (Cross, 2015). In 1965 after declaring war on poverty, President Lyndon B. Johnson signed the Elementary and Secondary Education Act (ESEA) into law stating that a full educational opportunity should be our first national goal (Cross, 2015; U.S. Department of Education, 2015a). This law offered new grants to districts serving low-income students, federal grants for new instructional materials such as textbooks, funding for special education centers, and scholarships for low-income college students. The law's focus was to

improve the quality of elementary and secondary education in the United States (U.S. Department of Education, 2015a).

In 1969 the nation held its first voluntary national assessments through the National Assessment of Educational Progress (National Center for Education Statistics, 2005). These assessments lead to "The Nation's Report Card" and later specific data for each state (Cross, 2015). In April 1983 the Reagan administration released *A Nation at Risk*, which stated that America's schools were failing and the nation's schools, colleges, and universities needed to be reformed (U.S. Department of Education, 1983).

In response to *A Nation at Risk*, Goals 2000 was passed in 1994, which required all states to adopt higher standards with standardized testing to keep Title 1 federal funding (Cross, 2015). This led to the reauthorization of ESEA with the No Child Left Behind Act (NCLB) built on the premise that all students would reach proficiency levels or better by the 2013-2014 school year. NCLB required states to have statewide accountability systems for all public schools mapping each school's adequate yearly progress (U.S. Department of Education, 2002). Through the required assessments NCLB put measures in place to expose achievement gaps among traditionally underserved students (U.S. Department of Education, 2015a). If a school did not meet the required guidelines of No Child Left Behind, corrective action would be taken after 2 years (U.S. Department of Education, 2002).

In 2012 the Obama administration began granting flexibility waivers to states that were not meeting the specific requirements of NCLB if the state created extensive plans designed to close achievement gaps, increase equity, improve instruction, and raise student outcomes (U.S. Department of Education, 2015a). Recognizing the unworkable requirements on schools and

educators, in 2015 the Obama administration passed a bipartisan bill, the Every Student Succeeds Act (ESSA), to fix NCLB (U.S. Department of Education, 2015a).

ESSA does require that states maintain high standards and accountability for college and career readiness, but the bill allows for more state control in determining student performance targets and school ratings based on multiple measures, while eliminating unnecessary testing. It empowers state and local decision makers to develop their own systems for school improvement rather than the regulations for corrective action in NCLB (U.S. Department of Education, 2015a).

Common Core Standards in Tennessee

After NCLB was passed in 2001 each state had adopted its own set of standards, assessment, and measurements for proficiency (Tennessee Department of Education, 2014). In 2004 the American Diploma Project reported that the high school diploma represented only a certificate of attendance to colleges and employers because most high school graduates needed remedial help in college, less than half attained a bachelor's degree, and most lacked basic skills to succeed in careers after high school. The report stated that grades measured attendance or effort rather than actual academic achievement and recommended that each state have exit exams that assessed real world standards.

In 2007 the U.S. Chamber of Commerce gave Tennessee an "F" for Truth in Advertising because Tennessee students were seeing high levels of proficiency on state assessments that did not align with their performance on the National Assessment of Educational Progress. In order to align standards with college and career expectations, Tennessee joined with 30 other states

participating in the American Diploma Project and adopted the Tennessee Diploma Project (Tennessee Department of Education, 2014).

In July 2009, after Achieve released reports urging states to adopt Common Core State Standards (CCSS), Tennessee joined the CCSS initiative (Tennessee Department of Education, 2014). Tennessee participated with state leaders from 48 states to create the Common Core State Standards (CCSS) to help standardize education between states. These state leaders, including governors and state commissioners from 48 states, recognized a need for real-world learning goals and wanted all students regardless of background to graduate from high school prepared for college, career, and life (Common Core State Standards Initiative, 2015).

In July 2010, the Tennessee State Board of Education unanimously adopted CCSS and began implanting the standards across K-12 education through three phases after receiving support through the federal "Race to the Top" grant. For the 2011-12 school year, K-2 began using the standards, and for the 2012-13 school year, grades 3-8 began using the standards. All grades began using the standards for the 2013-14 school year (TN Department of Education, 2014).

To help with implementation and to give teachers a deeper understanding of the expectations under the CCSS, Tennessee provided free training for teachers across the state as well as courses for school leaders and administrators. State Core Coaches, who were current Tennessee teachers, led the sessions. Tennessee also provided optional instructional resources to help teachers with the instructional shift (TN Department of Education, 2014).

CCSS were built through anchor standards for literacy and standards for mathematical practice. In literacy K-12 students have standards for reading, writing, speaking and listening, and language. In math the standards describe skills that teachers should develop in their students

such as problem solving, reasoning and proof, communication, representation, and connections. Both strands of standards observe what students should be able to do at the college level and were developed through a backwards design to reach the college and career readiness goal (Common Core State Standards Initiative, 2015).

Calkins, Ehrenworth, and Lehman (2012) stated that the CCSS offer a crucial wake-up call for Americans because:

> It is no longer okay to offer the vast majority of America's children with a fill-in-the-blank, answer the questions, read-the-paragraph curriculum that equips them to take their place on the assembly line. The assembly lines have closed down. Instead of continuing to provide the vast majority of students with a skill-and-drill education, the United States needs to provide all students with a thinking curriculum, with writing workshops, reading clubs, research projects, debates, think tanks, Model UN, and the like. (p. 9)

Calkins et al. stated that 25 years ago jobs requiring low-level skills made up approximately 95% of the economy, whereas today, those same jobs make up only about 10%.

Darling-Hammond et al. (2008) stated that between 1997 and 2002 the amount of new information produced in the world was equal to the amount produced over the entire history of the world. Students need new levels of literacy to manipulate the volume of information available to them. Calkins et al. (2012) stated that CCSS emphasize much higher-comprehension skills than previous standards, place an equal weight on reading and writing, emphasize reading complex texts, and convey that intellectual growth occurs through time, across years, and across disciplines. These standards call for proficiency, complexity, and independence as well as support cross-curricular literacy teaching.

Self-Efficacy

Self-efficacy is grounded in social cognitive theory – "an approach to understanding human cognition, action, motivation, and emotion that assumes that people actively shape their environments, rather than simply react to them" (Maddux & Gosselin, 2003, p. 218). Researchers often credit Albert Bandura as the first person to offer a specific definition concerning people's beliefs about self-control and the relationship between those beliefs and behavioral change (Maddux & Gosselin, 2003). Bandura (1986) defined self-efficacy as a judgment of a person's capability to accomplish a task.

These self-judgments are not interrelated, but are linked to specific situations or tasks (Bandura, 1997). Bandura stated that perceived self-efficacy changes based on the situation and task because it is not about how many skills a person possesses but what the person believes he or she can do with those skills in a variety of circumstances.

Bandura (1977) also stated that human behavior is influenced by a person's self-efficacy beliefs in two ways: outcome expectation and efficacy expectation. Bandura defined the two expectancies in this way: Outcome expectancy is a person's estimate that a certain behavior will lead to a specific outcome, and efficacy expectancy is the belief that one can successfully produce the desired outcome. Tschannen-Moran and Hoy (2001) agreed that outcome expectancy and efficacy expectancy are different expectations and should not be used interchangeably. They stated that efficacy expectancy is the more important of the two because it predicts how the person will perform on a given task.

Maddux and Gosselin (2003) showed the distinction between outcome and efficacy expectations by stating that efficacy was one's ability to mobilize resources to reach the desired goal. The outcome expectation is the goal. Coladarci (1992) illustrated outcome expectancy as a

teacher's belief that good instruction can outweigh the effects of low socioeconomics, and efficacy expectancy would be the teacher's confidence that he or she can produce the skillful instruction necessary to obtain the desired outcome.

Self-efficacy also has predictive influence because what people believe about themselves and their abilities impacts how they handle situations. People's self-beliefs influence how they view situations, optimistically or pessimistically, which could be self-enabling or self-debilitating (Bandura, 2012). Bandura (1997) stated, "Different people with similar skills, or the same person under different circumstances, may perform poorly, adequately, or extraordinarily, depending on fluctuations in their beliefs of personal efficacy" (p. 37). Bandura (1997) also wrote, "The outcomes people anticipate depend largely on their judgments of how well they will be able to perform in given situations" (p. 21).

Collins (1985) examined the relationship between fifth grade math students' self-efficacy and skill performance. He found that students who were highly efficacious were more successful on the assessment overall than students who doubted their mathematical abilities regardless of their observed mathematical skills. Bandura (1997) stated in relation to Collins's study, "Skills can be easily overruled by self-doubts, so that even highly talented individuals make poor use of their capabilities under circumstances that undermine their beliefs in themselves" (p. 37).

In addition to influencing outcomes, self-efficacy influences thought patterns, emotions, goals, motivation, and persistence in the face of adversity (Bandura, 1977, 1986, 1997, 2012). Maddux and Gosselin (2003) stated that self-efficacy affects self-regulation, psychological well-being and adjustment, physical health, psychotherapy, education, occupational choice and performance, and collective efficacy among groups and organizations.

Overall, there appears to be a relationship between a person's perceived self-efficacy of a task and the person's success in completing the task. Maddux and Gosselin (2003) stated that strong self-efficacy beliefs are essential for success because they lead to effective self-regulation and persistence. Tschannen-Moran and Johnson (2011) stated that self-efficacy beliefs become self-fulfilling prophecies because what we believe about ourselves is often more powerful than the skills we possess.

Sources of Self-Efficacy

Bandura (1997) introduced four main influences on self-efficacy beliefs: enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Maddux and Gosselin (2003) introduced a fifth source: imaginal experience.

Mastery experiences are the most influential source of self-efficacy (Bandura, 1997; Maddux & Gosselin, 2003; Tschannen-Moran & Johnson, 2011). Mastery experiences are one's personal experiences with a given task. Because these are personal attempts, success will most likely strengthen self-efficacy if the task is challenging whereas failure with the given task will most likely diminish it (Bandura, 1997; Maddux & Gosselin, 2003).

Vicarious experiences occur when people watch others perform a task and make a judgment on their personal ability to complete the same task. Although this source of self-efficacy is not as strong as mastery experience, it allows viewers to watch others succeed or fail at the given task. Bandura (1997) stated that viewers persuade themselves that if the other can accomplish the task, they should be able to accomplish it as well.

Verbal persuasion occurs when significant others express faith in the person's ability to complete a task (Bandura, 1997). This source of self-efficacy has limited power in its ability to

change a person's self-efficacy, but it could cause a greater effort in attempting the task (Bandura, 1997). Maddux and Gosselin (2003) stated that both mastery experience and vicarious experience are stronger sources to bring change to one's self-efficacy, and Bandura (2012) stated that verbal persuasion is a weaker source of self-efficacy because it has no authentic experiential base.

Physiological and affective states are how a person's body and mind appear to the person when undertaking a task. Maddux and Gosselin (2003) stated that people are more likely to doubt their confidence if they become aware of an unpleasant physiological or affective state. Fear reactions oftentimes cause stress, which can be debilitating to a successful outcome (Bandura, 2012). Bandura (1997) stated that to alter a person's efficacy beliefs through this fourth source, one must "enhance physical status, reduce stress levels and negative emotional proclivities, and correct misinterpretations of bodily states" (p. 106).

Maddux and Gosselin (2003) added a fifth source of efficacy, imaginal experience, where an individual imagines himself or herself completing the task successfully. Imaginal experience could be a psychotherapist leading a client through a walkthrough of a successful task or a person imagining the outcome on his or her own. In either situation, Maddux and Gosselin stated that the imagined experience is not likely to have a strong influence on self-efficacy.

Teacher Efficacy

Teacher efficacy refers to a teacher's personal belief that he or she can help students learn (Ashton & Webb, 1986). It is one of the few characteristics that is consistently related to student achievement (Ashton & Webb, 1986; Woolfolk et al., 1990), student motivation, and a student's

own sense of efficacy (Hoy & Spero, 2005). Teacher efficacy is also the strongest predictor of a teacher's commitment to teaching (Coladarci, 1992).

Two separate Rand Corporation studies in 1976 and 1977 first introduced the construct of teacher efficacy in educational research. The first study, by Armor et al. (1976), found a positive relationship between students' reading achievement and teachers' sense of efficacy. The second study, by Berman, McLaughlin, Bass, Pauly, and Zellman (1977), also found a positive relationship between teacher efficacy and percentage of projected goals achieved, amount of teacher change, continuation of both project methods and materials, and improved student performance.

Even though there appears to be a positive relationship between teacher efficacy and several other variables, some researchers disagree on the definition of teacher efficacy and believe that teacher efficacy is too complex to be grouped into one broad term (Woolfolk et al., 1990). Bandura (1997) stated that teacher efficacy is multifaceted and is more than a teacher's ability to teach his or her content. Teacher efficacy also included the teacher's perceptions of his or her ability to maintain classroom management, obtain needed resources, enlist parental involvement in academic activities, and counteract outside social influences. Teacher efficacy is situation specific and changed based on the school climate, available resources, student population, and principal leadership (Ashton & Webb, 1986; Goddard, Hoy, & Hoy, 2000; Tschannen-Moran & Hoy, 2007).

Woolfolk et al. (1990) wrote that some researchers divided teacher efficacy into a two-dimensional construct while others viewed it as a global construct. Woolfolk et al. argued that teacher efficacy was two-dimensional and characterized as general teaching efficacy and personal teaching efficacy. They defined general teaching efficacy as a teacher's belief that all

students can learn regardless of background and personal teaching efficacy as a teacher's belief that he or she can affect the students in his or her classroom. In this two-dimensional view of efficacy, general efficacy groups teachers collectively under the belief that teachers can impact student learning whereas personal teaching efficacy does not group teachers but is a personal belief by the teacher about his or her own instructional influence, which closely aligns with Bandura's definition of self-efficacy.

Ashton and Webb (1986) also divided teacher efficacy into two categories. They stated that there are two independent dimensions of teacher efficacy: sense of teaching efficacy and sense of personal teaching efficacy. Sense of teaching efficacy would align with Woolfolk et al.'s (1990) general teaching efficacy. When thinking about efficacy in this way, the two-dimensions of teacher efficacy could be viewed as two separate efficacy expectations using Bandura's self-efficacy terminology (Woolfolk et al., 1990).

Sense of Teaching Efficacy or General Teaching Efficacy

Sense of teaching efficacy refers to a teacher's belief that teaching influences student learning regardless of outside obstacles. Teachers with a low sense of teaching efficacy believe that some students cannot learn in school because of external obstacles, and a teacher can do nothing to alter this reality; on the other hand, teachers with a high sense of teaching efficacy believe that all students can learn regardless of obstacles (Ashton & Webb, 1986; Bandura, 1997). In addition, a teacher's sense of teaching efficacy affects how the teacher approaches his or her role as a teacher (Ashton & Webb, 1986),

Low sense of teaching efficacy. Ashton and Webb (1986) stated that teachers with low teaching efficacy believe that external obstacles such as family background, home life, and student ability influence student learning, and the teacher cannot overcome those external

factors. Corkett et al. (2011) stated that these teachers are more critical of struggling learners, spend less time assisting those who do not understand, and refer more students for special education services than teachers who have a high sense of teaching efficacy.

Ashton and Webb (1986) stated that low sense of efficacy teachers often experience a sense of universal helplessness where they do not believe that anything that they do will have an impact on student achievement, and as a result, they give up on low-achieving students and are unlikely to extend extra attention to struggling learners. Because they believe that they cannot remove the obstacles for struggling learners, they are unlikely to experience stress or guilt when their lowest students perform poorly. Instead of attributing classroom problems to their own failings, they assign blame to the student. They expect struggling learners to fail and are not surprised when they do.

In terms of classroom management, low sense of efficacy teachers define the classroom situation in terms of conflict. They put classroom discipline at the center of their thinking and teaching practices and tend to be disrespectful to their students. Controlling the class is their primary goal (Ashton & Webb, 1986). In an interview conducted by Ashton and Webb, one teacher stated that it was important to act like a teacher and avoid becoming too familiar with students. Teachers with a low teaching efficacy find security in the power of their teaching role. Ashton and Webb also found that low efficacy teachers use public embarrassment as one tactic to punish and discourage students who misbehave, and they use excommunication as another by sending potential threats from the room during instruction.

Additionally, Ashton and Webb (1986) found no single instructional strategy was employed exclusively by low efficacy teachers; however, many of the low efficacy teachers in their research did not pay attention to struggling learners as long as those students were well-

behaved. Based on their findings, the low efficacy teachers in this study gave attention to the higher-achieving students and ignored the lower-achieving students. Ashton and Webb cautioned that these actions run the risk of convincing students that they are not smart enough to learn in school.

High sense of teaching efficacy. Teachers with a high sense of teaching efficacy believe that all students can learn regardless of external conditions. These teachers are more willing to learn and implement new strategies to help students. They persist even when faced with student failure (Corkett et al., 2011). Bandura (1997) stated that teachers with high self-efficacy believe that difficult students are teachable through extra effort and appropriate instructional strategies. Teachers with a high sense of efficacy view struggling learners as "reachable, teachable, and worthy of teacher attention and effort" (Ashton & Webb, 1986, p. 85). They take pride in their ability to teach the students whom others find unreachable. These teachers feel that it is their responsibility to help struggling learners overcome the obstacles life has placed in their path (Ashton & Webb, 1986).

In terms of classroom management high efficacy teachers believe that disruptive behavior can be avoided by enforcing fair and clear classroom rules consistently. They establish warm, friendly relationships expecting students to behave well, and do not find the relationships challenging to their authority. Instead, they believe that these relationships strengthen their authority and make teaching more enjoyable (Ashton & Webb, 1986).

High efficacy teachers' classrooms are characterized by relative harmony. These teachers do not embarrass students and rarely employ excommunication as a classroom management technique. Their corrective remarks are firm and do not contain sarcasm. They keep their

students on task (Ashton & Webb, 1986). Ashton and Webb stated that high efficacy teachers have "with-it-ness" (p. 85).

Sense of personal teaching efficacy. Sense of personal teaching efficacy refers to a teacher's own judgment of his or her teaching competence and is not related to the teacher's perceptions of a student's ability to learn (Ashton & Webb, 1986). Corkett et al. (2011) stated that personal teacher efficacy is unstable because the teacher's efficacy changes based on the subject he or she is teaching, the students in the class, the teaching environment, the teacher's age, and the teacher's experience. Ashton and Webb (1986) stated that teacher's perceptions of his or her teaching efficacy influence classroom management and instructional strategies.

Teachers with low personal teaching efficacy avoid content for which they are unfamiliar and are preoccupied with their own sense of inadequacy rather than student learning (Ashton & Webb, 1986). They show a weak commitment to teaching, spend less time teaching content, and are predicted to be the most likely to leave the profession (Bandura, 1997). Ashton and Webb stated that teachers who doubt their effectiveness experience debilitating stress and personal helplessness. They share the blame for student failure, feel guilt, and suffer a loss to their professional self-esteem. They believe that the lowest-achieving student could learn if they were better teachers.

Teachers with a high sense of personal teaching efficacy tend to give more individual attention to students and accept students' feelings (Ashton & Webb, 1986). They tend to be more organized, keep students on task, and possess greater skills in instruction, questioning, explaining, and offering feedback (Mojavezi & Tamiz, 2012); however, Hoy and Spero (2005) show that there are also negatives to having a high sense of personal teaching efficacy. They

stated that high efficacy perceptions, despite poor performance, could result in avoidance rather than positive action.

Sources of Teacher Efficacy

Hoy and Spero (2005) stated that a teacher's experience during student teaching and the first year of teaching is the most powerful influence on a teacher's efficacy development. This aligns with Bandura's (1997) theory on the sources of efficacy. Mastery experience is the most powerful source of efficacy (Bandura, 1997; Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2007). Hoy and Spero stated that the perception that teaching has been successful often leads to a high personal sense of teaching efficacy while perceptions of failure often lead to a low personal sense of teaching efficacy. The perception of a teacher's teaching leads to predictions about future performances, which influence both the teacher's personal motivation and commitment.

Vicarious experiences are another powerful source of teaching efficacy for novice teachers because they gain confidence by watching others succeed in their field. If a credible model teaches students well, the novice teacher's efficacy increases because the novice believes that he or she could be capable of doing the same; however, if the credible model performs poorly, the novice teacher's efficacy decreases because if the model cannot succeed, how can the novice (Hoy & Spero, 2005)?

Although Bandura (1997) stated that verbal persuasion is a less influential source of efficacy, Hoy and Spero (2005) found verbal persuasion was a powerful source of efficacy to novice teachers if the persuasion was from students and experienced teachers. Engagement and enthusiasm from students and encouragement from experienced teachers led to higher self-

efficacy scores. They stated that feedback is an essential part of improving instruction and teaching; therefore, verbal persuasion is a powerful efficacy source for novice teachers.

Collective teacher efficacy also appeared to have an impact on individual teacher efficacy (Goddard et al., 2000). Goddard et al. defined collective efficacy as teachers' perceptions that the entire faculty could positively influence students. Tschannen-Moran and Hoy (2007) stated that teachers had stronger self-efficacy beliefs if they perceived a positive school atmosphere and a strong press for academic achievement within the school.

Lee, Dedick, and Smith (1991) found that sense of community in the school was the greatest predictor of teachers' efficacy levels. Ashton and Webb (1986) found that excessive role demands, poor morale, lack of recognition, inadequate salaries, and low status tended to diminish teacher efficacy.

If teachers have experienced a history of academic failure in a school, this failure tends to negatively affect their teacher efficacy. Tschannen-Moran (2007) stated that the history creates a continuous cycle of failure by producing lower effort and persistence due to a belief that the culture cannot change. This leads to low student efficacy and lower academic achievement, thus perpetuating the cycle.

Lastly, principal leadership also has been linked to teacher efficacy. Principals who inspire a common sense of purpose, control student disorder, provide teacher resources, buffer disruptive factors, allow teacher flexibility over classroom affairs, model appropriate behavior, and provide rewards for performance have all been linked to teachers with a stronger sense of self-efficacy (Tschannen-Moran & Hoy, 2007).

Adolescent Literacy

Gee (1996) defined literacy as using skills strategically to communicate and understand depending on social situations. Adolescent literacy is more than standardized test scores or the ability to read and write. It entails reading to learn in various subjects, which present ideas in different ways. It is gaining knowledge through comprehending various texts, learning new vocabulary, and communicating thoughts with others (Kamil et al., 2008).

Sturtevant et al. (2006) stated that adolescent literacy consists of an array of communication abilities and should be viewed as a tool for communicating and learning at advanced levels. Literacy is the means of communicating ideas to yourself or someone else. It is not content specific in that it should only be taught in one content area but should be taught in all content areas (Allan & Miller, 2000).

Botzakis, Burns, and Hall (2014) stated that because of the easy access to technology the definition of literacy in the 21st century is constantly evolving. Leu et al. (2007) stated that new literacies are required everyday as new information and communication technologies become available such as wikis, blogs, search engines, instant messaging, and online gaming, which require new contexts for literacy, learning, and life. Botzakis et al. stated that most young people read differently than previous generations due to new communication technologies. A Pew Research Report in 2013 found that 78% of adolescents in the United States had a cell phone with 48% of those owning a smart phone. The report also found that 93% of adolescents in the United States had access to a computer at home (Madden, Lenhart, Duggan, Cortesi, & Gasser, 2013). Leu et al. (2007) stated that with the influx of new information, students need to be able to read and comprehend as well as judge reliability. They need to be able to analyze what they were reading in order to form opinions and communicate their ideas.

High school graduates entering the adult world in the 21st century will need advanced levels of literacy to perform their jobs, run their households, act as citizens, and conduct their personal lives (U.S. Department of Education, 2007). They need to be able to build knowledge independently by comprehending different kinds of texts, mastering new vocabulary, and sharing ideas with others (U.S. Department of Education, 2008). They will read and write more than any other population in human history (U.S. Department of Education, 2007).

Sturtevant et al. (2006) stated that students who have strong literacy skills are equipped to achieve their future goals, whereas students who struggle to acquire literacy skills may find their options limited in our fast-paced technological society. Biancarosa and Snow (2006) stated that as the demand for unskilled labor decreased, unemployment has increased because those with low educational attainment do not have the advanced literacy skills necessary to succeed in a new technological age.

Even though unemployment rates continue to spike, and there are fewer jobs for unskilled workers, approximately 7,000 students still drop out of high school in the United States every day (Biancarosa & Snow, 2006). Not having the literacy skills to keep up with the curriculum was the most cited reason for dropping out.

The National Center of Education Statistics (NCES) annually reports the current conditions of education in the United States to policymakers. In 2015 the NCES reported that the average eighth grade reading score had improved in 2013 compared to its previous findings in 2011; however, only one-third of the nation's eighth grade students were reading on grade level.

In 2013 NCES reported that 78% of eighth grade students were at or above basic levels for reading performance with a basic level being defined as having a partial mastery of fundamental skills for that grade level. Of those 78% who were at or above basic levels, 36%

were at a proficient level for reading performance with proficient being defined as having competency over challenging subject matter for that grade level. Of all eighth grade students assessed, 64% were not proficient for their grade level and did not demonstrate the advanced literacy skills needed for their current grade level.

In 2015 the NCES stated that fourth grade scores were not measurably different from those previously reported in 2013 with approximately one third of the nation's fourth graders reading on grade level. In 2013 68% of fourth grade students scored at or above basic with 35% of those students at proficient. Of fourth grade students, 65% scored below proficient in 2013 for their grade level.

In 2015 the NCES stated that 12th grade scores were also not measurably different from those previously reported in 2009 with approximately one third of the nation's graduating class reading on grade level. In 2009, 75% of 12th grade students scored at or above basic with 38% of students scoring proficient. Of 12th grade students 62% did not score proficient for their grade level (U.S. Department of Education, 2015).

These NCES findings from 2015 suggested that approximately two thirds of America's students who tested did not have the advanced literacy skills needed for either college or career after high school. This supported Fang, Schleppegrell, and Lukin's (2008) findings that many adolescents lack advanced literacy skills necessary to succeed with over 8 million students in grades 4-12 struggling to comprehend texts in academic content areas.

Long-term NAEP data have shown that older students' improvements in literacy have not kept pace with the increasing demands for literacy in the workplace, and teachers in middle and high school classes should help students acquire more advanced skills to meet those future demands (U.S. Department of Education, 2008). Many adolescent students can accurately read

the words on the page but are incapable of comprehending what they have read. Biancarosa and Snow (2006) stated that struggling readers may have problems with fluency, but some lack the strategies needed for comprehension. Duke and Pearson (2002) listed the following as effective individual comprehension strategies: prediction, think aloud, text structure analysis, visual representations, summarization, and questioning. Biancarosa and Snow (2006) also stated that struggling readers may try to use comprehension strategies, but they are unable to generalize the strategies to content-area literacy tasks or lack the practice necessary with the comprehension strategies for comprehension to occur.

Early literacy learning strategies do not automatically lead to a later growth in literacy. Even though students may have strong early reading skills, these skills often do not translate to the complex skills needed in middle and high school to deal with specialized and sophisticated reading of literature, science, history, and mathematics. Most students need explicit instruction to understand specialized language conventions, disciplinary norms, and higher-level interpretive processes (Shanahan & Shanahan, 2008).

Sturtevant et al. (2006) stated that it is a common public impression that all reading and writing instruction should be completed by grade 3 or 4 causing literacy for adolescents to be ignored. However, many middle and high school teachers have reported feeling unprepared to help students with literacy and did not think that teaching reading skills in content-area classrooms was their responsibility (Cantrell & Hughes, 2008; Kamil et al., 2008). Bintz (1997) also found that teachers felt betrayed, frustrated, and overwhelmed because they did not have the formal training needed to teach both content and reading.

Instruction not only affects adolescent literacy, but students' personal motivation and engagement also plays a role. Biancarosa and Snow (2006) stated that middle and high school

students do not progress in reading and academic achievement because they lack both incentive and engagement. Guthrie and Wigfield (2000) stated, "Motivation is crucial to engagement because motivation is what activates behavior. A less motivated reader spends less time reading, exerts lower cognitive effort, and is less dedicated to full comprehension" (p. 406).

Cambourne (1995) defined engagement in literacy as a merger of multiple qualities: holding a purpose, seeking to understand, believing in one's own capability, and taking a responsibility for learning. Guthrie, McGough, Bennet, and Rice (1996) stated that engaged reading is both strategic and conceptual as well as motivated and intentional. Today's students cannot learn the advanced literacy skills necessary to be successful by passively sitting and listening as a teacher delivers instruction, but students must be engaged in reading, writing, discussion, and problem solving in all their classes (Sturtevant, 2004). Duke and Pearson (2002) stated that good readers are active readers. Guthrie and Wigfield (2000) proposed that engaged readers coordinate their strategies within a community of literacy to fulfill personal goals, desires, and intentions. They stated that engagement could only occur by including three dimensions: cognitive, social, and motivational.

There are also structural barriers that educators must overcome at the middle and high school levels to improve adolescent literacy skills (Kamil et al., 20008). Schoenbach et al. (1999) found that some teachers frontload content or summarize texts rather than help students to learn the discipline specific strategies needed to understand content-area work. Darwin (2003) found that content-area teachers were resistant to receive help from reading specialists, and covering content rather than reading to obtain understanding was the primary focus of the class. Lastly, Barry (1997) found that when schools had adolescent literacy programs in place to help

struggling readers, these programs were limited to special education students and only benefited a small portion of the population.

Another concern surrounding adolescent literacy is a resistance by educators to new literacies concerning the Internet and technology, and teachers' collective failure to teach the new literacies have caused many students to go unsupported in school. The Internet is now the central source of information in the world, and students should be learning how to identify important questions and locate, analyze, synthesize, and communicate information from online reading (Leu et al., 2007).

History of Content-Area Reading

As early as the 1920s educators recognized that students had difficulty transitioning from children's stories to content area textbooks and advocated that content area teachers help students to read and comprehend their content texts (Sturtevant, 2004). William S. Gray is often credited for starting the content-area reading movement. Gray stated that every teacher is a teacher of reading (Vacca, 2002).

In 1925 Gray conducted a study to identify common reading and study skills in content areas. He found that the reading and study skills used in English and language arts classrooms to read literature differed from those skills used in content areas. Often schools placed the sole responsibility for teaching literacy on English and language arts teachers, but these teachers could not and cannot teach all aspects of literacy alone. The responsibility for teaching reading and literacy skills was a shared responsibility belonging to all teachers in all subjects (Vacca, 2002). This content-area reading movement was built on the premise that all students can be taught to read better (Ulusoy & Dedeoglu, 2011).

By the mid-1980s states began requiring middle and high school teachers to take a course in content-area reading for certification, and through federal projects, reading specialists were placed in some junior high and high schools to assist teachers with literacy, but by the late 1980s to 1990s, scarcity of funding eliminated many of those positions. Vacca (2002) stated that teachers need more than one course in content-area reading to make a difference in literacy instruction. He stated that teachers needed support from reading specialists, access to current research on reading and learning, ongoing staff development in literacy through self-study, teacher inquiry projects, and action research in various content areas at the middle and high school levels.

Paradigms Shifts in Reading Research

Reading research has gone through three major paradigm shifts: Reading and Study Skills, Cognition and Learning, and Social Constructivist. The first paradigm, from the 1900s to the 1960s, focused on skills-based reading instruction in the content areas. Researchers (Gates, 1921; Gray 1925, 1933, 1938; Herber, 1964, 1970; Herber & Sanders, 1969; Huey, 1908/1968; Leggit, 1934; Thorndike, 1917) recognized a relationship between reading and learning and began two lines of further research: (1) identification of study skills and reading in the content areas and (2) effects of instructional variables on reading acquisition, study skills, and learning in the content areas.

Leggit (1934) found that when students practiced literacy skills in conjunction to their subject matter, students experienced an increase in their working literacy skills. Thorndike (1917) concluded that reading was an active process that used the same analytical actions as higher order thinking and was more than just using basic skills. Herber (1964) discovered that

skills taught in reading classes were applicable to content courses if students adapted the skills. Herber and Sanders (1969) called this process transformation, which is adapting skills to meet demands either across content areas or in higher grades in the same content area. They stated that students were often able to transfer skills by taking previous learning and applying it to current problems; however, students had difficulty transforming skills to meet current problems in a different content area or higher grade. Herber (1970) later wrote the first book exclusively devoted to content-area reading, *Teaching Reading in Content Areas* based on this study.

In the 1970s and the 1980s reading research then shifted to a study of cognition and learning. Herber and Sanders (1969) stated that reading was more than using decoding skills, but required generation, synthesis, and application of ideas. They agreed with Gray's (1925) finding that all teachers were teachers of reading but argued that reading teachers and content area teachers were not the same. Reading teachers' curricula focused on teaching the reading skills necessary to understand a text. Content area teachers did not select content to reinforce and practice reading skills but chose content based on concepts essential to their discipline. Content area teachers taught students how to read material in their designated disciplines to learn the content, not learn basic reading skills (Herber & Sanders, 1969).

Pichert and Anderson (1977) later found that schema played a role in memory, comprehension, and learning. Cognitive psychologist Rumelhart (1980) stated that prior knowledge facilitated learning from a text by filling the empty slots of a reader's schema. Bartlett (1932), the first psychologist to use the term *schema* as it is used today, defined schema as "an active organization of past reactions, or past experience" (p. 201). Alvermann (1987) stated that encouraging students to use prior knowledge or schema when reading improves comprehension, and teachers who included time to assess students' prior knowledge before,

during, and after reading helped students in developing the necessary concepts for comprehension.

Anderson and Pearson (1984) stated that data supported the ideas that a reader's schema helped text retrieval and constructing new knowledge. Riggs, Garcia, and Arlington (2001) stated that activating prior knowledge helps students to make "the learning leap from the abstract to the concrete by providing a connector between 'what I already know,' and 'what I need or want to learn'" (p. 34). Riggs et al. stated that the learning leap is essential for understanding because it builds knowledge on a student's familiarity with the topic and enables students to make connections to their own experience and culture.

Not only is prior knowledge important for readers to learn from text, but text structure also plays a role. Alvermann (1984) identified that knowledge about text structure was crucial to learning and memory. Meyer and Rice (1984) defined text structure as how the ideas in a text are interrelated to convey information to the reader. Meyer, Brandt, and Bluth (1980) found that skilled readers were able to identify hierarchically arranged relationships in informational text and differentiate important ideas from less important ideas. These strategic readers were aware of their reading processes and in control of the reading strategies. They possessed self-knowledge, task-knowledge, and self-monitoring and regulation. Alvermann (1984) concluded that being able to recognize a text structure was not enough to assist students in comprehension of the text. She stated that students must learn how identifying a text structure will help them to see the relationships of ideas in the text.

Research during the cognitive and learning paradigm also identified comprehension strategies for reading such as prior-knowledge activation, generation, graphic organizers, cognitive mapping, guided imagery, and text patterns that could help students become better

readers. Alverman and Moore (1991) tabulated and calculated the effectiveness of various learning strategies and concluded that many of the strategies were effective. Vacca (2002) stated that cognitive researchers recognized instructional frameworks for comprehension such as reciprocal teaching, graphic organizers, and guided reading.

Reading research later shifted from a cognitive and learning paradigm to a social constructivist paradigm. This paradigm is founded in constructivist theory, which states that knowledge is always being formed and is influenced by outside influences (Vacca, 2002). Au (1998) stated that the social context of the classroom affects the way students interact with the teacher, the text, and other students. Reading is more than just a transmission of content from the text to the reader, but there is a transaction between the reader and the text. The reader's interpretation of the text is based on what the reader brings to the text from his or her personal experiences and knowledge (Vacca, 2002).

Alvermann (2001) discovered that adolescents' perceptions of how competent they are as readers and writers affect their motivation in subject area classes. She stated that adolescents need to have appropriate background information and various strategies for reading content area texts, instruction that is embedded in the curriculum and responsive to their individual needs, and assignments that prompt adolescents to read with a critical eye.

Content Area Reading and Literacy

Vacca and Vacca (1996) define content literacy as "reading and writing to learn in a particular discipline" (p. 8). This is not an innate skill. Teachers must explicitly teach content-area literacy to develop learning from expository text (Neufeld, 2005; Spor & Schneider, 1999). Wilson (2004) stated that strategic readers monitor their comprehension as they read by mentally

paraphrasing the material, asking themselves questions, recognizing obstacles to their comprehension such as unusual writing style or lack of background information, and rereading to remedy any problems with comprehension. Poor readers do not monitor their comprehension and oftentimes stop reading when they do not understand. Poor readers can become stronger readers by learning the comprehension strategies that strategic readers use.

For students to develop content literacy, teachers must develop, model, and use a plethora of strategies with students to meet situational demands so that students can learn to use comprehension strategies independently (Neufeld, 2005; Spor & Schneider, 1999; Vacca, 2002). Some of the basic skills that underlie these comprehension strategies include predicting, self-questioning, paraphrasing, visual representation, and changing reading speed (Wilson 2004). Content-area reading instruction integrates reading, writing, talking, listening, and viewing strategies to help students better understand what they read in content area courses and develop content literacy (Ulusoy & Dedeoglu, 2011; Vacca 2002).

Content Area Reading Strategies

Vacca (2002) stated that there are visible and invisible aspects of content-area reading. Visible aspects occur when teachers deliver explicit strategy instruction to students. Vacca stated that explicit instruction in the development and use of reading strategies requires explanation of the strategy, modeling of the strategy, practice of the strategy, and application of the strategy.

Rafoth, Leal, and Defabo (1993) developed the MIRRORS mnemonic to help teachers remember the crucial components of effective strategy instruction. Teachers should model the strategy, inform students about when and how to use it, remind them to use the strategy, repeat the strategy through practice, outline the strategy's usefulness via constant feedback, reassess the

students' performance as a result of using the strategy, and stress strategy generalization.

The Report of the National Reading Panel (2000) supported explicit strategy instruction for content literacy in its findings. The report stated that low achieving students were more successful in their reading and learning when teachers explicitly taught the strategy. The report also stated that effective reading instruction provided students with a repertoire of strategies for comprehension, and by exposing students to various texts, students would understand that not all reading tasks can be approached in the same way using the same set of strategies. Content-area reading divides reading strategies into three stages: prereading, guided reading, and postreading (Jacobs, 2002; Riggs et al., 2001). Students are required to complete different strategies during each stage to aid in their comprehension of the text.

Prereading Stage and Strategies

In the prereading stage students build background knowledge of the topic, examine the text's structure, and look for familiar vocabulary words to help give students a purpose for reading. Vacca and Vacca (1996) stated that students want to read to learn when they have developed a sense of confidence with the text. In order to develop this sense of confidence students need to kindle interest in the text assignments and think positively about what they will read. Prereading will pique interest and raise expectation about the meaning of the text so that students read with purpose and anticipation.

Wilson (2004) stated that there are three important objectives to prereading activities: get students to think about the topic, direct their attention to a purpose for reading, and raise questions about the topic. Students need to understand why they are reading the content and for what purpose in order to make connections and predictions about the meaning of the unified whole of the text.

Langer (1993) concluded that because poorer readers could not identify a purpose for reading, they were unable to make those connections and predictions while reading and did not understand the meaning of the text. Fuentes (1998) discovered that poor readers often start reading without any preparation, read without knowing why, and read without considering how to approach the text, whereas good readers activate prior knowledge, understand task and purpose, and choose appropriate strategies before reading.

Suggested prereading activities to set a purpose for reading include brainstorming, questioning, anticipation guides, graphic organizers, journaling, free writing, morphemic analysis, word maps, or cloze activities (Allen & Miller, 2000; Jacobs 2002; Riggs et al., 2001). Wilson (2004) suggested seven strategies that teachers could implement to help students meet prereading objectives: oral previews, introducing core vocabulary, autobiographical writing before reading, writing down predictions, anticipation guides, drawing analogies, and brainstorming about initial associations with key concepts.

Oral previews. This strategy contains several components. Students should formulate short questions and statements designed to generate interest and provide a link between a familiar topic and the new topic (Vacca &Vacca, 1996; Wilson, 2004). Previews can contain a short text synopsis, key characters, and definitions of unfamiliar words (Wison, 2004). Vacca and Vacca (1996) stated that previewing gets students involved in a search for answers and helps them to actively participate during reading. Wilson (2004) stated that research has shown that oral previewing improves both comprehension and recall.

Introducing core vocabulary. In this strategy the teacher introduces important vocabulary that the student will encounter in the content-area reading. This makes the reading more approachable and gives students an idea of the text topic (Wilson, 2004).

Autobiographical writing before reading. White (1992) introduced this strategy where students write what they know in relation to the text topic. White stated that this allows them to make personal connections to what they will be reading, and by making connections students are more likely to be interested in the topic and recall what they have read.

Writing down predictions. Vacca and Vacca (1996) stated that making predictions about the text activates thought prior to reading and allows students to make meaning of the text because they brought expectations about the meaning to the text. By writing down the predictions, students can return to the predictions after they have read and reflect on what they learned from the reading (Wilson, 2004).

Anticipation guides. An anticipation guide is a series of statements about a text that require students to respond before reading the text (Vacca &Vacca, 1996). These statements can be controversial statements or statements that challenge students' beliefs and motivate them to read to make connections between the statements and the text. Anticipation guides will also reveal any misconceptions that students may have about the topic so that the teacher can guide students to understand why that statement is a misconception (Wilson, 2004). Vacca (2002) stated that the value of the anticipation guide does not lie in responding to the guide, but it is the discussion that occurs after responding that activates and agitates thought.

Drawing analogies. An analogy provides a comparison-contrast relationship between something that the reader understands and the unfamiliar concept in the text (Vacca &Vacca, 1996). Wilson (2004) compared the analogy to an interpretive bridge between unfamiliar material and what students already understand. Vacca and Vacca (1996) gave an example of a teacher who compared baseball to the game of cricket. Students wrote down what they understood about baseball before reading a text about cricket. This allowed students to make a

connection to a game that they already understood while reading.

Brainstorming about initial associations with key concepts. Vacca (2002) stated that brainstorming is a key feature of prereading. This strategy generates interest in content-area reading and allows the teacher to see the various levels of background knowledge students have before reading a new text. The teacher asks students to tell anything that comes to mind when they hear a certain word, and the students call out their responses. The teacher writes the responses on the board and then asks the students to make connections between their responses. This strategy gives students their first opportunity to make associations between the key concepts introduced in the text and their prior knowledge.

Guided Reading Stage and Strategies

In the guided reading stage students monitor their comprehension to develop a deeper understanding of the text. Vacca and Vacca (1996) compared guided reading to a dialogue between the text and the reader. They stated that asking questions while reading requires students to actively read rather than passively read. They also stated that it is the content-area teacher's job to scaffold the learning conversations that students have with the text through instructional frameworks or strategies that help readers to comprehend and recall what they have read.

All of the guided reading strategies in content-area reading include the basic skills of predicting, questioning, and summarizing. One strategy is using a K-W-L chart where students write down what they know, what they want to know, and what they learn from the reading (Vacca &Vacca, 1996; Wilson, 2004). Other useful strategies include "Click or Clunk" (Wilson, 2004), Reciprocal Teaching, SQ3R, Scan and Run, Directed Reading-Thinking Strategy, IEPC Strategy, Visual Representation, Embedded Questions, INSERT, Teacher Think Alouds, and Three-Level Reading Guides (Vacca & Vacca, 1996; Wilson, 2004).

Click or Clunk. Click or Clunk works best with nonfiction text. At the end of each reading section, students ask themselves if the meaning clicks or clunks. If it clicks, they can continue reading, but if it clunks, students ask themselves why did it clunk? What about the text does not make sense? The purpose of this strategy is to get students to stop while they are reading and think about what they have just read rather than continue reading without comprehension (Wilson, 2004).

Reciprocal Teaching. Reciprocal Teaching has two main phases and promotes self-directed, content area learning (Lapp, Flood, & Farnan, 1989; Palincsar & Brown, 1985). In the first phase, the teacher models the use of four comprehension-monitoring strategies: summarization, question generation, clarification, and prediction while conducting a read aloud. In the second phase, students begin to take more responsibility for using the four comprehension monitoring strategies in small groups by taking the role of the teacher. Because students witness how the teacher reads a text, this gives them a model of the types of questions they should be asking when reading a text. It allows them to become more confident when reading independently (Wilson, 2004).

Wilson (2004) cautioned that students may ask only literal questions when they first use the strategy, and teachers will need to monitor student progress and redirect them in order to generate a deeper understanding of the text. Wilson also stated that paragraph patterns might also be used in phase 2 of reciprocal teaching to hold students more accountable for what they have read. Paragraph patterns is a strategy that has students read a paragraph with a partner and write down the main idea of the paragraph after reading and discussion.

SQ3R. SQ3R is the survey, question, read, recite, and review method developed by Raphael and Pearson (1982). The purpose of this strategy is to lead students through a reading

assignment by using reading techniques that will help them comprehend the text (Vacca & Vacca, 1996).

The first step of SQ3R is to survey the material to develop an outline of the text's organization as well as a general understanding before reading. The second step has the reader raise questions from the text organization and headings with the expectation of finding answers from the reading. The third step has the reader read to answer the questions that he or she raised in the second step. The fourth step has the reader paraphrase the main ideas and supporting details and then check them against the passage. The last step is to review the material by rereading portions of the text to verify the answers from the previous steps and recall the main points and supporting details (Vacca &Vacca, 1996; Wilson, 2004).

Scan and Run. Scan and Run asks students to use four SCAN cues while previewing a chapter or text: survey headings and turn them into questions, capture the captions and visuals, attack boldface words thinking about meaning, and note the chapter questions to give a purpose for reading prior to reading.

While reading, students use three RUN cues: read and adjust speed, use word identification skills, and notice and check parts that are difficult to understand rereading when necessary. Teachers introduce the strategy by first modeling how the strategy is used and explaining the purpose of the strategy. Students then use the strategy on their own memorizing the mnemonic (Wilson, 2004).

Directed Reading-Thinking Activity (DT-RA). DT-RA encourages students to use their reasoning abilities and knowledge. Vacca and Vacca (1996) stated that this strategy "fosters critical awareness by moving students through a process that involves prediction, verification, judgment, and ultimately extension of thought" (p. 218).

There are four steps to this strategy: predict, read, confirm, and resolution. The first step *predict* has students reflect on what topic they will be reading and write it down using a chart (Wilson 2004). Vacca and Vacca (1996) stated that students should look at the titles, headings, and subheadings and ask and answer questions about the text.

The second step *read* has students read a few paragraphs of the text or chapter silently without reading ahead (Vacca &Vacca, 1996; Wilson, 2004). Vacca and Vacca (1996) suggested placing an index card or blank sheet of paper over the remaining material to stop students from reading ahead and force them to slow down and answer their own questions.

The third step *confirm* has students compare their original predictions to what was presented in the text (Wilson, 2004) and revise any of their original hypotheses (Vacca & Vacca, 1996), and the last step *resolution* has students summarize and evaluate the text either in writing or through discussion providing evidence to support their hypotheses (Vacca & Vacca, 1996; Wilson, 2004).

IEPC Strategy. IEPC stands for Imagine, Elaborate, Predict, and Confirm. The teacher begins by modeling and explaining the strategy to the students and how IEPC is useful to their learning. Students prior to reading explore their mental images about a topic. Everyone including the teacher closes his or her eyes and imagines all that they can about the topic including any sensory associations that he or she may have. The teacher asks guiding questions as needed during this stage.

After imagining, the students share the images that they had by elaborating on the topic in a think aloud. Based on the information gathered in the elaborate stage, students then predict what will occur in the text. Lastly, students will read the text to confirm their predictions. While students are going through the four stages, the teacher is keeping track of student responses in a

four item chart visually displayed in the classroom (Wilson, 2004).

Visual Representations. Visual representations include any visual representation of a reader's thoughts while reading. These representations could be thought chains, webs, flow charts, story maps, or graphic organizers. The purpose of the representation is to keep readers focused while reading (Wilson, 2004).

Embedded Questions. Embedded Questions are questions that are in embedded in the text with blank lines for a student response. These questions force students to stop reading and reflect on what they have just read. This strategy helps to interrupt ineffective reading processes and prompt students to actively engage in the reading passage. The question could also ask students to annotate specific sections of the text by circling vocabulary words, highlighting evidence to support inferences, or marking words that help to establish a specific mood or tone (Wilson, 2004).

Embedded Questions helps students to learn the benefits of annotating a text. It promotes independent work with the text and lays the foundation for comprehension. Through this process, students will also become more aware of the metacognitive processes while reading (Wilson, 2004).

INSERT. INSERT is a strategy developed by Vaughn and Estes (1986). It is a simple annotation method for readers to identify when comprehension begins to break down while reading. It encourages students to focus on new and important information in a text. INSERT uses symbols such as an X, +, !, ??, and * to annotate various sections of the text when readers make connections such as I thought differently, or this is new information (Wilson, 2004).

Teacher Think Alouds. Teacher Think Alouds show students how the teacher thinks when reading a text. The teacher verbalizes how he or she makes sense of the text for the

students. This strategy has the teacher model how he or she comprehends; therefore, giving students a model of how to monitor their own comprehension or metacognitive processes while reading (Wilson, 2004).

Three-Level Reading Guides. Reading guides simplify difficult texts for readers by offering the support they need to learn from the text until they reach the point where they can be weaned from this type of scaffolding (Vacca &Vacca, 1996). Three-level guides connect and integrate the three levels of comprehension with a series of statements to which students react (Richardson & Morgan, 1994). Herber (1978) first introduced the three level guides to provide a comprehension activity for assisting comprehension. These guides are teacher created and should be introduced as a whole class activity before students work on the guides individually (Richardson & Morgan, 1994).

Three-level reading guides make students aware of various levels of comprehension such as the literal level, interpretive level, and applied level. Literal comprehension means that the students are able to read the lines on the page and construct the author's literal meaning from those lines. The interpretive level requires students to read between the lines by putting together information, perceiving relationships, and making inferences. At this level, students reflect on the author's intended meaning and determine significance and relevance to their own lives. At the applied comprehension level, students read beyond the lines using information to express their own opinions about the text and form new ideas from the text. This level requires a synthesis of information from the text (Vacca & Vacca, 1996).

Vacca and Vacca (1996) cautioned, however, that teachers should not be misled by the discreteness of the guide. Most readers do not read for literal then interpretive, and then applied meanings. The levels are interactive and somewhat inseparable. The three-leveled reading guide

should serve as an aid to comprehension rather than a hardening of categories for readers.

Vocabulary Strategies While Reading

Wilson (2004) stated that vocabulary knowledge correlates strongly with reader comprehension, and research has shown that the best way for students to learn vocabulary is through an immersion in reading where the reader learns new vocabulary in context; however, Wilson did suggest four vocabulary strategies to build a student's vocabulary: the Vocabulary Self-Collection Strategy, Facilitated Peer-Dialogues, Semantic Feature Analysis, and IT FITS.

Vocabulary Self-Collection Strategy (VSS). Haggard (1986) first created VSS to promote the long-term acquisition of language in an academic discipline. Wilson (2004) stated that VSS has two varieties: general vocabulary and content-area specific vocabulary.

For general vocabulary development, each student brings a word to class that he or she believes the entire class should learn. Students present the word to the class, and the class creates a whole class definition of the word. At the end of the week, students take a test on their custom word lists (Wilson, 2004).

For content-area vocabulary, students read the assigned content and then work with a partner to identify words that are important to learning the content. The teacher then creates a list of the words, and students create whole class definitions for the terms. Throughout the course, students compile student-generated word lists for the content (Vacca &Vacca, 1996; Wilson, 2004).

Facilitated Peer Dialogues (FPD). FPD has students work with a partner when reading any new text. When one of the students encounters an unfamiliar word, the student stops the reading and begins a discussion with his or her partner on the meaning of the word. FPD not only has students discussing and problem solving, but it gives the teacher assessment information on

vocabulary acquisition (Wilson, 2004).

Semantic Feature Analysis (SFA). SFA is a technique that shows students how words are related. To use this strategy the teacher presents the students with a list of words that share a common feature. The students list a characteristic, quality, or feature for one of the words. The teacher then creates a matrix on the board that shows all of the words. The students discuss if the words on the list share the same features, and during this discussion, the teacher marks either a plus or a minus next to each of the words based on the student discussions. When the matrix has been filled, students then add their own words to the list (Wilson, 2004).

IT FITS. IT FITS provides support in vocabulary development to struggling readers. The student identifies the term and tells the definition by writing it on the top of an index card. Next, the student finds a keyword that will help remember the definition and writes it on the card. The student then imagines and thinks about a connection between the term and the keyword and draws a picture on the card to help remember the connection. Lastly the student studies the card until he or she has memorized the definition (Wilson, 2004).

Postreading Stage and Strategies.

In the postreading stage the reader reflects on the reading and pulls it all together (Richardson & Morgan, 1994). Richardson and Morgan stated that full understanding does not occur until the reader reflects on the text. Reflection involves three processes: critical thinking, enrichment, and demonstration of learning.

Teachers can assist students with critical thinking by giving study guides after students have read that have students evaluate the writing for bias or specific techniques, distinguish fact from opinion, and detect propaganda techniques used in the writing. Teachers can also give graphic organizers to help students make connections between texts or within a text after reading

(Richardson & Morgan, 1994).

Enrichment activities for reflection can take many forms: further reading about the topic, additional activities from the teachers' manuals, oral presentations, guest speakers, class reports, or group debates. Enrichment is designed to give students a better understanding of the content they learned from the reading. Multitext activities can also be used to provide reflection and enrichment. Students read other texts related to the topic and then do extended writing related to their learning (Richardson & Morgan, 1994).

The last piece of reflection is a demonstration of learning. Oftentimes, tests are used as a way to demonstrate comprehension, but this part of the reflection does not require a test. Other products can be used to demonstrate understanding such as graphic organizers, presentations, factstorming, discussion, essays, and one-minute summaries (Richardson & Morgan, 1994).

Disciplinary Literacy

In the past educators have believed that providing students with basic literacy skills would later lead to more advanced literacy skills (Shanahan & Shanahan, 2008). Perle and Moran (2005) found that strong early reading skills do not develop into more complex reading skills that prepare students to comprehend the specialized and sophisticated texts used in science, history, and mathematics. Shanahan and Shanahan (2008) stated that students require explicit instruction of sophisticated genres, specialized language conventions, disciplinary norms of precision and accuracy, and higher-level interpretive processes built on a solid foundation of sound early-reading instruction if students are going to reach literacy levels required for the most well-paid jobs in the U. S. economy.

Unfortunately, Bereiter and Bird (1985) found that when students encounter disciplinary texts, literacy instruction is no longer being taught or only general reading strategies are being used. Bain (2012) stated that by the time students reach high school or college, most content area teachers expect them to be able to learn from the assigned texts without additional instruction on how to read or write for that discipline. Shanahan and Shanahan (2008) stated that students need a literacy curriculum that directly guides them to meet the reading and writing demands in the disciplines, and the traditional conceptions of content-area reading do not meet those demands.

Content area literacy focuses on study skills that help students learn from the discipline specific texts, but disciplinary literacy emphasizes "the knowledge and abilities possessed by those who create, communicate, and use knowledge within the disciplines" (Shanahan & Shanahan, 2012, p. 7). Moje (2007) defined this concept of disciplinary literacy as learning disciplinary concepts through how disciplinary knowledge is produced and consumed within the discipline. Shanahan and Shanahan (2012) stated that the difference between content area reading and disciplinary reading is the difference between a novice and an expert. Content area reading teaches novice reading skills to understand content whereas disciplinary literacy teaches students how to read primary documents as an expert.

Wineburg's (1991) study illustrated the difference in content area reading and disciplinary literacy. Wineburg found a gap in knowledge between practicing historians and high school history students. Both groups participated in a think aloud while reading historical documents. During the think aloud the historians and history students approached the text in different ways. While the history students used general comprehension strategies or content area reading strategies, the historians used advanced sourcing methods that the history students lacked.

Wineburg (1991) also found that the historians and history students read history textbooks differently. The history students accepted the information in the text without question while the historians critically analyzed and rated the text as less trustworthy. They also questioned the text's content and accuracy. Wineburg's study led literacy scholars (e.g. Leinhardt, Stainton, & Virji, 1994, e.g., Wineburg, 1998; Yore, Bisanz, & Hand, 2003) to question literacy instruction at the secondary school level.

Shanahan and Shanahan (2012) contrasted the difference in vocabulary learning between content area reading approaches and disciplinary literacy approaches. They stated that content area reading, although providing useful study skills, did not help students learn how to examine vocabulary terms in science. Content area reading strategies helped students make connections by developing graphic organizers and synonym webs but emphasized memorization rather than causing analytical thought. Disciplinary literacy emphasized learning how and why the words were created. In science students would learn Greek and Latin roots to be able to unpack dense but precise meanings as well as make connections to classifications such as botany and biology. Students would learn the how and why rather than just memorizing a definition.

Shanahan and Shanahan (2012) stated, "Basically, disciplinary differences in literacy exist because of the differences in the disciplines themselves" (p. 12). Because the study of disciplinary literacy effectiveness is new in comparison to content area reading, scientific research is not yet sufficient to evaluate the effectiveness of disciplinary literacy instruction. Some studies (De La Paz & Felton, 2010; Hynd-Shanahan et al., 2004; Nokes, Dole, & Hacker, 2007) have been completed to test the efficacy of disciplinary literacy methods, but findings showed mixed results. However, Shanahan and Shanahan (2012) stated that the approach is

promising, and there needs to be a greater focus on disciplinary literacy in secondary schools to help students meet the required literacy needs for the future.

Professional Development

Mizell (2010) stated that research has shown that teaching quality is the most important factor in increasing student achievement; therefore, a teacher's content knowledge and pedagogy training are important to student success. Professional development is "the strategy schools and school districts use to ensure that educators continue to strengthen their practice throughout their career" (p. 1) so that educators can help students learn at the highest levels.

College and university programs cannot possibly provide all of the learning experiences necessary for teachers to be effective throughout their entire teaching career without additional instruction. There are always changes in content, new instructional methods, advances in technology, changed laws, and student learning needs that require additional learning for teachers (Mizell 2010). Professional development refers to this ongoing education related to one's work.

Mizell (2010) stated that doctors, lawyers, educators, accountants, engineers, and various professionals participate in professional development trainings in order to learn new skills related to their specific fields so that they can continue to improve their job performance. Shaha and Ellsworth (2013) stated that educators want and need help keeping their skills practiced and maintaining their personal teaching efficacy.

Professional development, also known as staff development, inservice, training, professional learning, and continuing education, is more than a teacher sitting in a class learning content. Mizell (2010) stated that there are many misconceptions surrounding professional

development. Professional development can be a conference, seminar, workshop, collaborative discussion within a work team, a college course, informal discussions with colleagues, independent reading and research, observations of other colleagues, or other learning from peers. He stated that the most effective professional development, however, engages teams of teachers during the school day to focus on their students' needs where teachers learn to problem solve and learn together in order to ensure all students are successful. Mizell also stated that this type of professional development helps educators analyze student achievement data to identify learning problems and quickly apply solutions to meet student needs.

In other fields professional development is designed to improve job performance, but in education the focus should be on improving student achievement. Teachers have to think about how to best engage students and improve learning in their classrooms. Professional development should help teachers address the major learning challenges they are facing, and teachers who do not experience effective professional development do not improve and their students' learning suffers (Mizell, 2010).

Effective professional development differs from professional development training. Professional development can be defined as any learning experience a teacher has to help improve student achievement in the classroom; however, a teacher can go to professional development training and not use the content from the training or from discussion.

Tschannen-Moran and McMaster (2009) found through a study on teacher self-efficacy and professional development that the most powerful development training included an authentic mastery experience fixed in the teacher's regular teaching environment where the teacher is using the new strategy or skill with his or her students under the guidance and support of a coach providing persuasion and feedback. Shaha and Ellsworth (2013) found that the more actively

engaged the participant is in the professional development training beyond passively watching a video, the greater the impact the professional development had on student achievement. Shaha and Ellsworth also found that higher engagement schools where the majority of teachers were actively engaged in professional development had greater gains in student achievement. These schools outperformed their lower engagement counterparts as well as reported lower teacher retention, student discipline, and student drop-outs.

Mizell (2010) defined effective professional development as regular training where educators put their new skills and knowledge to work. He stated that the effectiveness depends on how carefully educators conceive, plan, and implement it. The content must be related to a current learning problem common to students in a particular grade or class. Educators are divided into learning teams where they meet weekly during the workday to establish and pursue learning goals. In this setting, also known as team learning, less experienced teachers work with experienced teachers where they both become more skillful, reducing and eliminating variations in performance and take a collective responsibility for the success of all students.

Learning Forward, in collaboration with 40 professional educators, developed standards for professional learning for the Proposed Amendments to Section 9101 (34) of the Elementary and Secondary Education Act as reauthorized by the No Child Left Behind Act of 2001. Learning Forward (2015) defined professional development as "a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement."

Learning Forward (2015) stated that professional development should have a collective responsibility for student performance, should be comprised of professional learning aligned to standards and school improvement goals, and should be conducted by principals, lead or mentor

teachers, or academic coaches. Professional learning teams should meet several times a week to evaluate data to establish student and teacher learning needs, define a clear set of goals based on the data, establish how to determine if the goals have been met, and provide coaching to support the transfer of new skills.

CHAPTER 3

RESEARCH METHODOLOGY

This quantitative study was designed to provide a picture of high school teachers' perceptions of personal teaching efficacy and confidence to teach literacy instruction in three East Tennessee counties after the implementation of new literacy standards across the curriculum. The quantitative section of this study was designed to analyze two variables between ELA and nonELA high school teachers as well as apprentice and professional high school teachers. The variables included perceived self-efficacy and perceived ability to implement literacy instruction in the high school classroom.

The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction. Data were collected through online, voluntary surveys using Likert scaling and one open-ended response question. The sample included Tennessee high school teachers from three counties in Tennessee First Core Region 1 high schools who had taught math, science, social studies, career and technical education, or ELA. This chapter describes the research questions and null hypotheses, research design, sample, instrumentation, data collection, and analysis of the data.

Research Questions and Null Hypotheses

The following research questions were designed to examine high school teachers' perceptions with regard to self-efficacy and literacy instruction for apprentice and professional ELA and nonELA high school teachers.

1. Is there a significant difference in teachers' perceptions of self-efficacy between ELA and nonELA high school teachers?

   H_o1. There is no significant difference in teachers' perceptions of self-efficacy between ELA and nonELA high school teachers.

2. Is there a significant difference in teachers' perceptions of literacy instruction between ELA and nonELA high school teachers?

   H_o2. There is no significant difference in teachers' perceptions of literacy instruction between ELA and nonELA high school teachers.

3. Is there a significant difference in teachers' perceptions of self-efficacy between apprentice and professional high school teachers?

   H_o3. There is no significant difference in teachers' perceptions of self-efficacy between apprentice and professional high school teachers.

4. Is there a significant difference in teachers' perceptions of literacy instruction between apprentice and professional high school teachers?

   H_o4. There is no significant difference between teachers' perceptions of literacy instruction between apprentice and professional high school teachers.

5. Is there a significant difference in teachers' perceptions of self-efficacy between male and female high school teachers?

   H_o5. There is no significant difference in teachers' perceptions of self-efficacy between male and female high school teachers.

6. Is there a significant difference in teachers' perceptions of literacy instruction between male and female high school teachers?

H_o6. There is no significant difference in teachers' perceptions of literacy instruction between male and female high school teachers.

7. What literacy strategies do ELA and nonELA teachers use to teach literacy to adolescents in their classrooms?
8. What challenges do ELA and nonELA teachers feel they are facing with the new focus on literacy?

Instrumentation

A survey was designed with 54 items regarding demographics, self-efficacy, and literacy instruction. Five demographic items were created to collect data on teacher content area, level of teaching experience, education level, gender, and time spent in professional development for literacy. Two existing instruments were used with permission, the Teachers' Sense of Efficacy Scale (TSES) and the Teachers' Sense of Efficacy for Literacy Instruction (TSELI), and incorporated into this survey to collect data on self-efficacy and literacy efficacy.

From the TSES, all 24 items regarding self-efficacy were used to determine a teacher's sense of self-efficacy score. The 24 items were based on a nine-point Likert-type scale and created by Tschannen-Moran and Hoy (2001). Permission to use the TSES developed by Tschannen-Moran and Hoy is available for free from Tschannen-Moran's website (http://wmpeople.wm.edu/site/page/mxtsch/researchtools), but written permission was also obtained (Appendix D).

From the TSELI, all 22 items regarding literacy were used to determine a teacher's sense of efficacy score in literacy instruction. The 22 items were also based on a nine-point Likert-type scale and created by Tschannen-Moran and Johnson (2011). Permission to use the Teachers' Sense of Efficacy for Literacy Instruction (TSELI) developed by Tschannen-Moran and Johnson

is available for free from Tschannen-Moran's website (http://wmpeople.wm.edu/site/page/mxtsch/researchtools), but written permission was also obtained (Appendix E).

One item was designed to determine the impact of professional learning on literacy instruction. This item was based on a nine-point Likert-type scale. One item was designed to collect data on the literacy strategies teachers use in their classroom. This item gave a list of literacy strategies, and teachers selected all that applied to their instruction. The last item was open response. Teachers were asked to list any challenges they have experienced in teaching literacy.

Sample

The sample involved in this study consisted of English, math, science, social studies, and career and technical education teachers at 10 different high schools across three districts in East Tennessee. These districts were selected because of their rural location and similar funding. Five districts were originally proposed for this study; however, permission was granted to conduct the survey in only three of the five districts.

Seventy-seven teachers (20 English, 13 math, 10 science, 16 social studies, and 18 career and technical education teachers) voluntarily responded to the survey. Of the 77, 69 were professional teachers, and eight were apprentice teachers. When asking for the highest degree earned, forty-eight had earned a master's degree or higher, 27 had earned a bachelor's degree, one had earned an associate's degree, and one had earned trade or vocational training. The sample was equally divided between genders.

Data Collection

Before the beginning of this research project, permission to conduct research was obtained the Institutional Review Board (IRB) of East Tennessee State University and from the three Directors of Schools. Upon receiving IRB approval, the survey was then distributed to each participant through email. Participants received a link to Survey Monkey with instructions, informed consent, and information about the survey. The Director of Schools in one county provided a list of email addresses for teachers. The Director of Schools in the other two counties forwarded the email link to principals who then forwarded the link to teachers. Participants were asked to complete the survey in a 2-week window. Reminders were sent to complete the survey at the end of week 1 and on the last day of the window. The survey window was then extended 1 week, and one final reminder including the link was emailed to teachers either by the researcher or through the high school principals to increase the number of respondents to the survey.

Data Analysis

Statistics for the Social Sciences (SPSS) software was used for all data analysis procedures in this study. Research Questions 1 through 6 had corresponding null hypotheses. These research questions were addressed using a series of independent *t*-tests. These data were analyzed at the .05 level of significance.

Research Question 7 was designed to identify literacy strategies used by English, math, social studies, science, and career and technical education teachers. This research question was addressed by rank ordering the most and least frequently noted strategies.

Research Question 8 was designed to identify various challenges teachers feel they are facing. This research was addressed by compiling and summarizing the most and least frequently

noted challenges, and I created a descriptive narrative to transfer the knowledge communicated in the open-response items. Findings of the data analyses are represented in Chapter 4. A summary of findings, conclusions, and recommendations for future research are presented in Chapter 5.

Chapter Summary

This study examined the factors that pertain to the implementation of new literacy standards across the curriculum and examined perceived teacher self-efficacy and literacy instruction. Teachers from 10 schools within three districts in East Tennessee were used as the sample for this study. A survey was used to collect data regarding the two variables: perceived self-efficacy and literacy instruction. Independent *t*-tests were conducted to analyze Research Questions 1 through 6. Descriptive statistics were used to analyze Research Questions 7 and 8. The results of these data are revealed in Chapter 4.

CHAPTER 4

FINDINGS

The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction across the curriculum. Specifically the study analyzed teachers' content areas, level of teaching experience, gender, perceived personal self-efficacy, and perceived efficacy of literacy instruction to examine the manner in which these factors relate after the implementation of new literacy standards across the curriculum in Tennessee schools. The survey was distributed to approximately 150 high school teachers, and the self-selected sample included 77 high school teachers in three different districts in Tennessee First Core Region 1 High Schools in East Tennessee. Table 1 shows the number of participants from each content area.

Table 2

Number of Participants in Each Content Area

Content Area	Total Participants
English	20
Math	13
Science	10
Social Studies	16
Career and Technical Education	18

In this chapter, data are presented and analyzed to answer eight research questions and six null hypotheses. Data were analyzed from 47 statements regarding self-efficacy, efficacy for literacy instruction, and impact of professional learning using a nine-point Likert scale. Data on literacy strategies were analyzed using a multiple-response format. Data on challenges

implementing literacy across the curriculum in the high school classroom were analyzed using an open response format. The remaining questions containing demographic content were analyzed using a multiple-choice format. The survey was distributed four times. Approximately 150 teachers were invited to participate, and 77 teachers responded. Participants were advised that all responses were confidential, and demographic information collected did not identify any participants in the study.

Participants had 2 weeks to complete the survey, and three reminders were sent. The survey window was then extended an additional week and one final reminder was sent to complete the survey. Due to the small number of responses, data were not analyzed through a one-way ANOVA to analyze differences between individual content areas. Content areas were grouped by ELA and nonELA, and nonELA subgroups (math, science, social studies, and career and technical education) were not individually analyzed for significant differences between subgroups. Also, two survey items related to professional learning were not used in the analysis because two items were inadequate to formulate any findings on professional learning.

Research Question 1

Is there a significant difference in teachers' perceptions of self-efficacy between ELA and nonELA high school teachers?

H_o1. There are no significant differences in teachers' perceptions of self-efficacy between ELA and nonELA high school teachers.

An independent-samples *t*-test was conducted to evaluate whether self-efficacy scores differ based on a teacher's content area of instruction (ELA and nonELA). The mean score on the self-efficacy test was the test variable and teacher content area was the grouping variable.

The test was not significant, $t(75) = .416$, $p = .679$. Therefore, the null hypothesis was retained. There was no significant difference in the self-efficacy scores of ELA teachers (M=7.04, SD = .221) and nonELA teachers (M=7.14, SD = .895). The 95% confidence interval for the difference in means was -.37 to .58. The η^2 index was .002, which indicated a small effect size. Therefore, there was no significant difference in perceptions of self-efficacy between ELA and nonELA high school teachers. Figure 1 shows the distributions of the two groups.

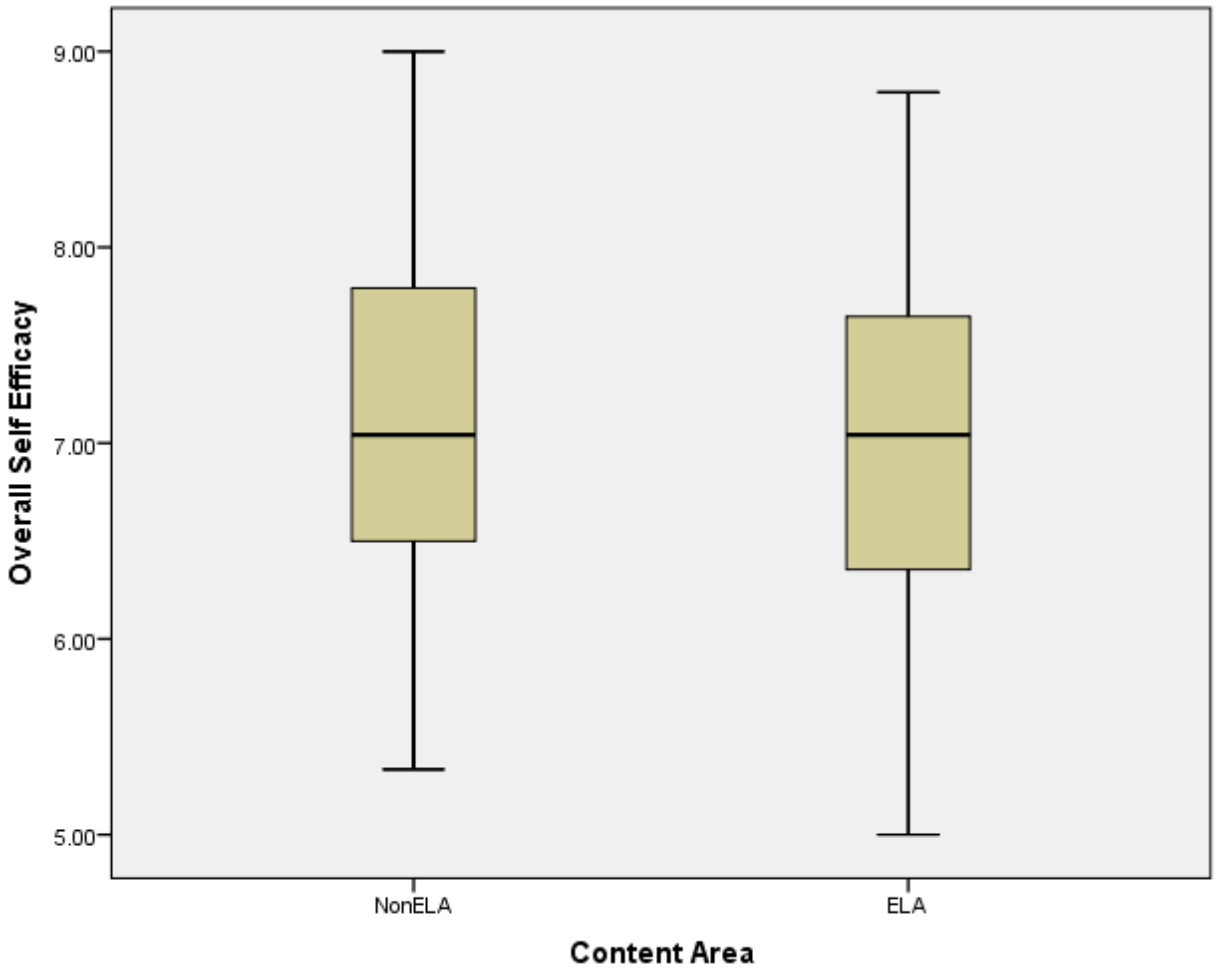

Figure 1. Self-Efficacy Scores of ELA and NonELA Teachers

Research Question 2

Is there a significant difference in teachers' perceptions of literacy instruction between ELA and nonELA high school teachers?

H_o2. There is no significant difference in teachers' perceptions of literacy instruction between ELA and nonELA high school teachers.

An independent-samples *t*-test was conducted to evaluate whether perceived literacy scores differ based on a teacher's content area of instruction (ELA and nonELA). The mean score on the perceived literacy test was the test variable and teacher content area was the grouping variable. The test was significant, $t(71) = 3.08$, $p = .003$. Therefore, the null hypothesis was rejected. ELA teachers (M=6.94, SD = 1.16) tended to be significantly more confident in teaching literacy to high school students than nonELA teachers (M=5.58, SD = 1.75). The 95% confidence interval for the difference in means was -.2.25 to -.48. The η^2 index was .12, which indicated a medium to large effect size. Therefore, ELA teachers were more significantly confident in teaching literacy than nonELA teachers. Figure 2 shows the distributions of the two groups.

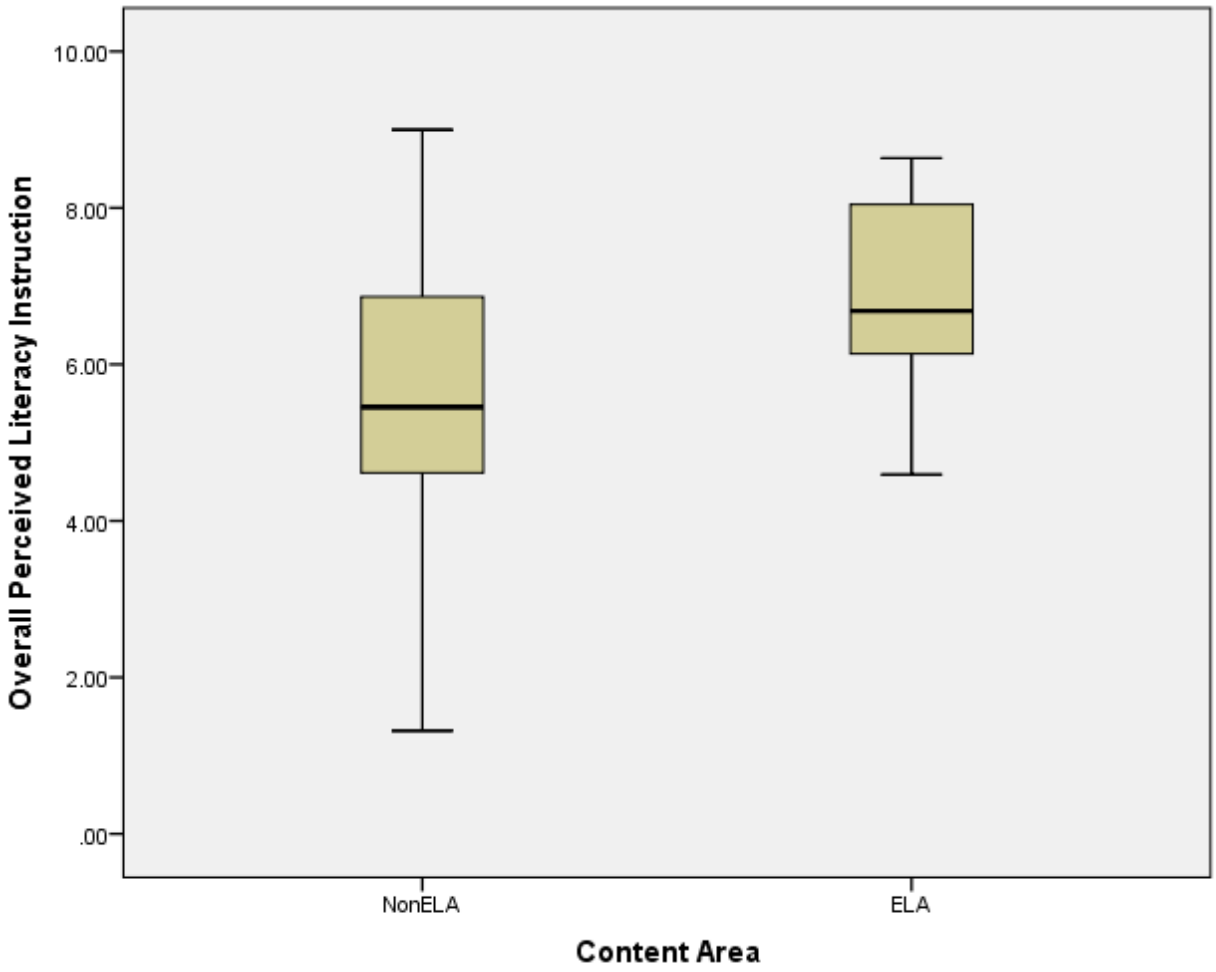

Figure 2. Perceived Literacy Instruction Scores of ELA and NonELA Teachers

Research Question 3

Is there a significant difference in teachers' perceptions of self-efficacy between apprentice and professional high school teachers?

H_o3. There is no significant difference in teachers' perceptions of self-efficacy between apprentice and professional high school teachers.

An independent-samples *t*-test was conducted to evaluate whether self-efficacy scores differ based on a teacher's level of experience (apprentice or professional license). The mean score on the self-efficacy test was the test variable and teacher level of experience was the grouping variable. The test was not significant, $t(75) = .290$, $p = .773$. Therefore, the null hypothesis was retained. There was no significant difference in the self-efficacy scores of apprentice (M=7.03, SD = .848) and professional teachers (M=7.13, SD = .928). The 95% confidence interval for the difference in means was -.78 to .59. The η^2 index was .001, which indicated a small effect size. Therefore, there was no significant difference in perceptions of self-efficacy between apprentice and professional high school teachers. Figure 3 shows the distributions of the two groups.

Figure 3. Self-Efficacy Scores of Apprentice and Professional Teachers

Research Question 4

Is there a significant difference in teachers' perceptions of literacy instruction between apprentice and professional high school teachers?

H_o4. There is no significant difference between teachers' perceptions of literacy instruction between apprentice and professional high school teachers.

An independent-samples *t*-test was conducted to evaluate whether perceived literacy instruction scores differ based on a teacher's level of experience (apprentice and professional). The mean score on the perceived literacy instruction test was the test variable and level of teaching experience was the grouping variable. The test was not significant, $t(71) = .236$, $p = .814$. Therefore, the null hypothesis was retained. There was no significant difference in the perceived literacy instruction scores of apprentice teachers (M=6.05, SD =1.49) and professional teachers (M=5.90, SD = 1.76). The 95% confidence interval for the difference in means was -1.14 to 1.45. The η^2 index was .0008, which indicated a small effect size. Therefore, there was no significant difference in perceptions of literacy instruction between apprentice and professional teachers. Figure 4 shows the distributions of the two groups.

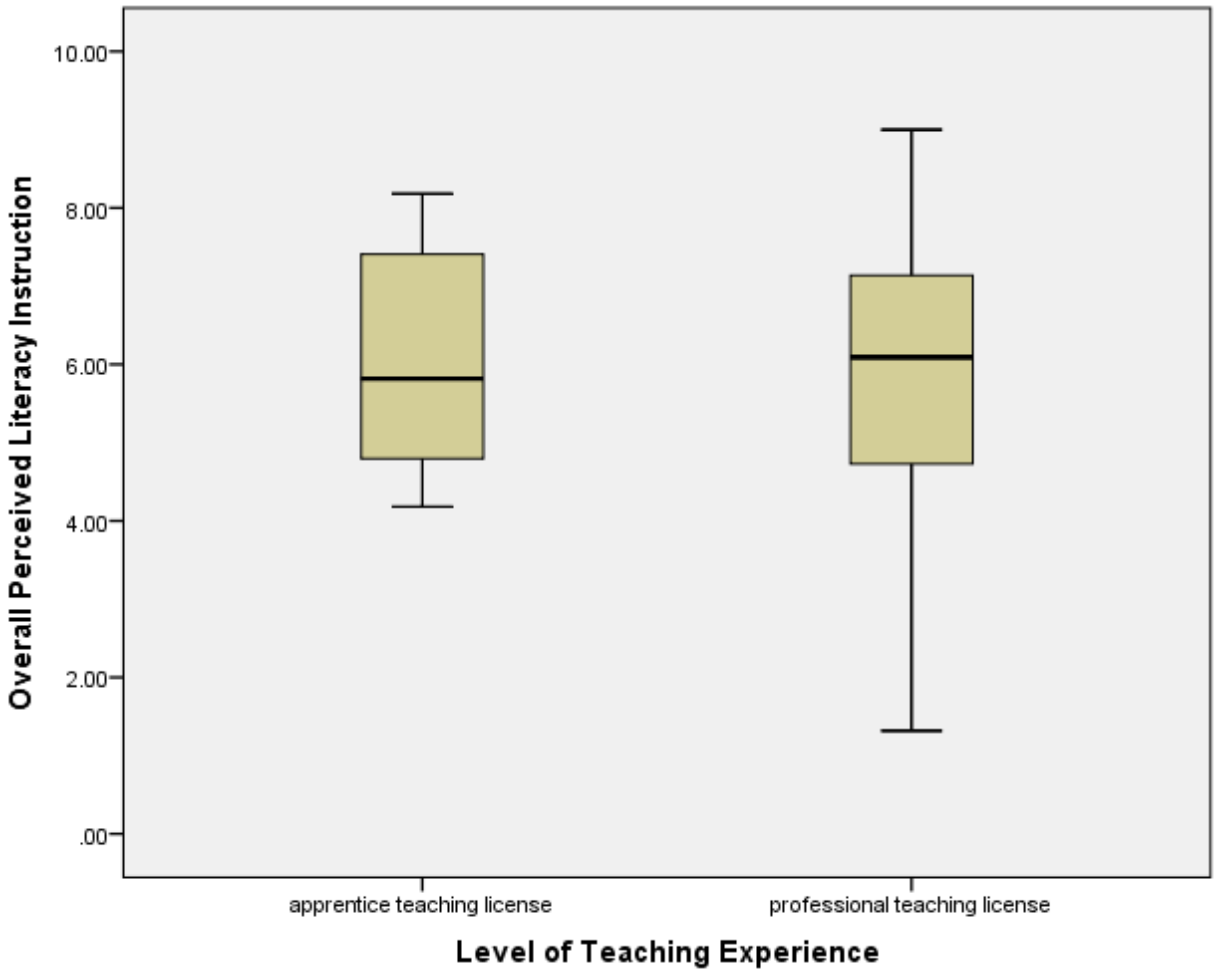

Figure 4. Perceived Literacy Instruction Scores of Apprentice and Professional Teachers

Research Question 5

Is there a significant difference in teachers' perceptions of self-efficacy between male and female high school teachers?

H_o5. There is no significant difference in teachers' perceptions of self-efficacy between male and female high school teachers.

An independent-samples *t*-test was conducted to evaluate whether self-efficacy scores differ based on a teacher's gender. The mean score on the self-efficacy test was the test variable and gender was the grouping variable. The test was not significant, $t(74) = .150$, $p = .881$. Therefore, the null hypothesis was retained. There was no significant difference in the self-efficacy scores of male teachers (M=7.14, SD = .923) and female teachers (M=7.11, SD = .928). The 95% confidence interval for the difference in means was -.39 to .46. The η^2 index was .0003, which indicated a small effect size. Therefore, there was no significant difference in perceptions of self-efficacy between male and female high school teachers. Figure 5 shows the distributions of the two groups.

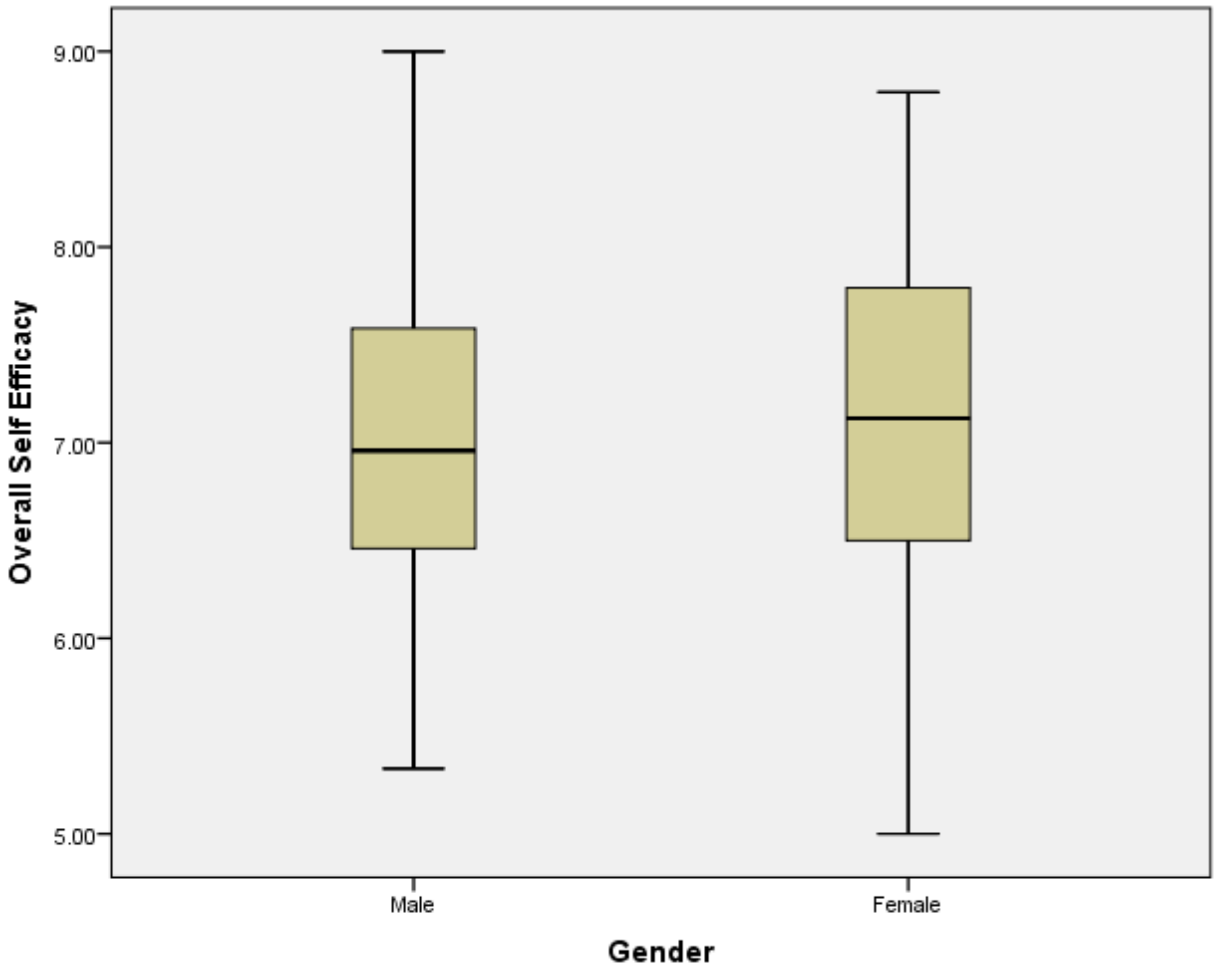

Figure 5. Self-Efficacy Scores of Male and Female Teachers

Research Question 6

Is there significant difference in teachers' perceptions of literacy instruction between male and female high school teachers?

H_o6. There is no significant difference in teachers' perceptions of literacy instruction between male and female high school teachers.

An independent-samples *t*-test was conducted to evaluate whether perceived literacy instruction scores differ based on a teacher's gender. The mean score on the perceived literacy instruction test was the test variable and gender was the grouping variable. The test was not significant, $t(70) = .846$, $p = .400$. Therefore, the null hypothesis was retained. There was no significant difference in the perceived literacy instruction scores of male teachers (M=5.78, SD = 1.97) and female teachers (M=6.12, SD = 1.40). The 95% confidence interval for the difference in means was -1.14 to .46. The η^2 index was .01, which indicated a small effect size. Therefore, there was no significant difference in perceptions of literacy instruction between male and female high school teachers. Figure 6 shows the distributions of the two groups.

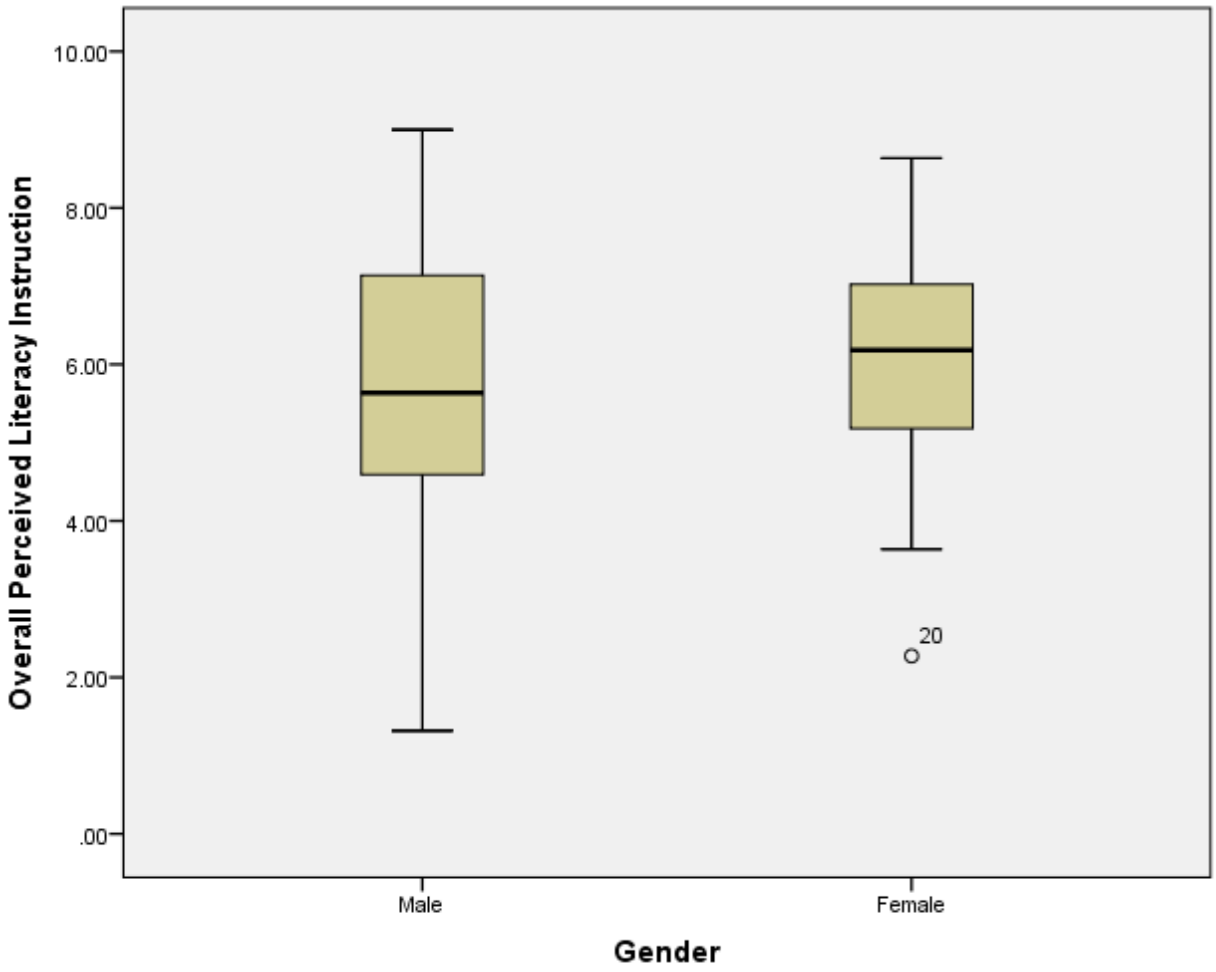

Figure 6. Perceived Literacy Instruction Scores of Male and Female Teachers

Research Question 7

What literacy strategies do ELA and nonELA teachers use to teach literacy to adolescents in their classrooms?

The two most frequently used strategies were visual representations and guided reading. The least two frequently used strategies were reciprocal teaching and anticipation guides. Five teachers did not identify any particular literacy strategy they used. Table 2 shows the frequencies of the strategies used.

Table 2

Literacy Strategies Used by High School Teachers across the Curriculum

Literacy Strategy	Total Teachers Using Strategy
Guided Reading	56
Visual Representations	55
Embedded Questions	39
Oral Previews	30
Reciprocal Teaching	24
Anticipation Guides	20
None of the above	5

Research Question 8

What challenges do ELA and nonELA teachers feel they are facing with the new focus on literacy?

Participants were asked the following open-ended response question at the end of the survey instrument: What challenges have you experienced in teaching literacy? Of the 77 participants who completed the survey, 47 completed the open-ended response question, and 30 did not.

Several challenges were identified in the open response. A few participants stated that class size and inadequate resources were challenges to teaching literacy in the high school classroom; however, lack of student motivation, student grade-level deficiencies, and time management were the three common themes.

Lack of student motivation was cited as the most frequent challenge. One participant wrote, "By the time they get to high school, 'hating reading' is second nature." Several stated that students see the length or difficulty of a passage and give up. One participant reported, "Lack of interest is the hardest thing to overcome." Many participants expressed that they cannot make their students read.

The next most common challenge was overcoming student grade-level deficiencies. Participants stated that students are required to read on grade level to meet standards, but they cannot comprehend the text. They expressed difficulty in differentiating to meet individual student needs since there are so many different reading levels in one class. Several expressed that students should have learned literacy skills before high school. One participant identified, "the wide gap between reading levels of students in my classes," and another stated, "Students do not have the fundamentals they should have been taught in this area before reaching my classroom."

Time management was the third challenge most identified by participants. Many participants stated that they did not have time to teach their standards as well as to teach students to read. One participant responded, "cramming too much material into too little time." Another stated, "We struggle to get through the math curriculum."

In addition to the challenges identified, several participants also expressed that they did not feel that it was their job to teach literacy in the high school setting. The following responses indicated four participants' perceptions about the challenges of teaching literacy:

"I'm NOT a certified English teacher."

"Some of these questions don't really pertain to the high school classroom. I have particular standards to address and I'm not really sure what literacy means in this context. Reading is a major component, but unless we are talking about RTI, I really don't have an opportunity to teach decoding and that kind of thing. Our standards assume students are reading on grade level."

"This should have already been taught to students way before high school."

"In a secondary setting, literacy cannot be taught in a regular education classroom."

Chapter Summary

Data from teachers were presented and analyzed in this chapter. There were eight research questions and six null hypotheses. All data were collected and analyzed through an online survey. The survey was distributed to approximately 150 teachers with 77 teachers responding from three separate counties in East Tennessee.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction. Specifically the study analyzed teachers' content areas, level of teaching experience, gender, perceived personal self-efficacy, and perceived efficacy of literacy instruction to examine the manner in which these factors relate after the implementation of new literacy standards in Tennessee schools. This chapter contains a summary of the findings, conclusions, implications for practice, and recommendations for future research.

Summary

The analysis presented in this study was based upon eight research questions reported in Chapters 1 and 3. Each research question had one null hypothesis with the exception of questions 7 and 8, which were open-ended and explored literacy strategies and challenges rather than collecting quantifiable data. The first six research questions were analyzed using a series of independent *t*-tests. The last two research questions were analyzed using descriptive statistics, and descriptions of the findings were recorded. The total number of participants in the study from three East Tennessee counties was 77. Findings indicated that there were no significant differences between self-efficacy and a teacher's content area, level of teaching experience, or gender. Findings also indicated that there were no significant differences between perceived literacy efficacy and a teacher's level of teaching experience or gender. Finally, the findings did indicate a significant difference in teachers' perceived literacy efficacy between ELA and

nonELA teachers. ELA teachers were more significantly confident in teaching literacy than nonELA teachers.

Conclusions

The purpose of this study was to evaluate high school teachers' perceptions with regard to self-efficacy and literacy instruction. Specifically, the study analyzed teachers' content areas, level of teaching experience, gender, perceived personal self-efficacy, and perceived efficacy of literacy instruction to examine the manner in which these factors relate after the implementation of new literacy standards in Tennessee schools. The following conclusions were made based on the findings from the data in this study.

1. There was no significant difference in teachers' perceptions of self-efficacy between ELA and nonELA teachers. Both groups reported a high sense of general teaching efficacy. These results corroborated Woolfolk et al. (1990) who stated that teacher efficacy is two-dimensional. They stated that teachers possess a general efficacy (all students can learn) and a personal sense of efficacy (teacher's belief in his or her instructional influence).
2. There was a significant difference in teachers' perceptions of literacy instruction between ELA and nonELA teachers. ELA teachers reported a significantly higher literacy score than nonELA teachers. Cantrell and Hughes (2008) mirrored these findings. They stated that teachers' sense of efficacy is reduced when they do not have the knowledge or skills to deal with specific situations they face, and efficacy often dips as teachers struggle with implementation. When content literacy is introduced, there are conflicting pedagogical techniques asking teachers to move from a teacher-centered classroom to a student-centered classroom. This discomfort

results in a lower sense of efficacy, which was reflected in the perceptions of literacy instruction score in this study between ELA and nonELA teachers. These findings also corroborate Woolfolk et al. (1990) who stated that teacher efficacy could be divided into two categories. The literacy part of the survey reflected a teacher's personal sense of teaching efficacy, and findings showed that there was a significant difference in personal teaching efficacy for literacy between disciplines.

3. There was no significant difference in teachers' perceptions of self-efficacy between apprentice and professional teachers. These results mirror Hoy and Spero (2005), Bandura (1997), and Klassen and Chui (2010). Hoy and Spero (2005) stated that a teacher's efficacy is not static. They noted that a teacher's efficacy rose over the first year of teaching and then fell at the end of the first year. This aligns with Bandura's (1997) theory on the sources of efficacy. Mastery experience is the most powerful source of efficacy (Bandura, 1997; Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2007). Hoy and Spero (2005) stated that the perception that teaching has been successful often leads to a high personal sense of teaching efficacy while perceptions of failure often lead to a low personal sense of teaching efficacy. Klassen and Chui (2010) corroborated these results in their study where they found that a teacher's efficacy changed over the lifetime of his or her career. This finding could also be the result of a small apprentice sample. Only eight apprentice teachers responded to the survey.
4. There was no significant difference in teachers' perceptions of literacy instruction between apprentice and professional teachers. Although apprentice teachers reported higher overall mean literacy scores, the difference was not statistically significant.

These findings mirror Bandura (1995, 1997) who stated that efficacy is situation specific and may not be uniform throughout one's life. Cantrell and Hughes (2008) stated that efficacy tends to dip with any new implementation, which could contribute to the lower overall literacy score from professional teachers who are used to teaching under a different set of standards. Apprentice teachers could also be getting new content area literacy training in teacher preparation programs; however, this finding could be the result of a small apprentice sample. Only eight apprentice teachers responded to the survey (1 career and technical education teacher, 2 English teachers, 2 math teachers, 1 science teacher, and 1 social studies teacher).

5. There was no significant difference in teachers' perceptions of self-efficacy between male and female teachers. These findings mirror Lee et al. (1991) who stated that there was not a difference in self-efficacy between genders. The findings also corroborate Wolters and Daughtery (2007) who used the same TSES self-efficacy survey on a sample of 1,024 teachers and found no significant difference between self-efficacy and gender.
6. There was no significant difference in teachers' perceptions of literacy instruction between male and female teachers. These results corroborated Bitner and Pajares (2006) who stated that there were no gender differences in the sources of self-efficacy. Lee et al. (1991) also stated that there were no differences in efficacy beliefs in gender.
7. The two most frequently used literacy strategies were visual representations and guided reading. The two least frequently used strategies were reciprocal teaching and anticipation guides. Five participants selected using no literacy strategies in the

classroom. For students to develop content literacy, teachers must develop, model, and use a plethora of strategies with students to meet situational demands so that students can learn to use comprehension strategies independently (Neufeld, 2005; Spor & Schneider, 1999; Vacca, 2002).

8. The three most identified challenges to teaching literacy were lack of student motivation, student deficiencies, and time management. Participants expressed concerns that they were unable to meet student literacy needs. Participants failed to connect literacy to their curriculum and focused on the student's deficiencies rather than how to close deficiency gaps. These results mirrored Cantrell and Hughes (2008) that stated content literacy approaches often challenge the compartmentalization that exists in the high school culture causing competing content and pedagogy. As a result, content teachers have conflicting beliefs about responsibility for teaching literacy. Cantrell and Hughes noted that teachers who primarily focus on their subject area content rather than literacy infusion are often disappointed with students' seeming lack of preparation from previous grades and became frustrated with the extreme difficulties that many adolescents have with learning new content. Bintz (1997) corroborated these findings when he recognized that content area teachers were concerned about their students' literacy difficulties, but they felt that they should not have to change their practice due to student deficiencies. Alger (2007) echoed these findings by stating that teachers were often strong readers as students and were unable to understand the importance of integrating literacy into content area courses.

Recommendations for Practice

The findings and conclusions of this research have enabled me to make the following recommendations for practice regarding the implementation of literacy across the curriculum:

1. Administrators should consider differentiated, teacher-led, literacy professional development to help content area teachers with the implementation of literacy strategies across the curriculum. Differentiated instruction would help to meet each teacher's individual needs through the implementation process, and teacher-led professional development would cut down on the cost of providing professional development. Cantrell and Hughes (2008) stated that efficacy tends to dip with any new implementation, and with support, efficacy could rise through mastery experience (Bandura 1997).
2. Administrators should also consider using a systematic and explicit approach to show the need for disciplinary literacy instruction in nonELA courses. Based on the open-ended responses, many participants did not see the need for literacy instruction across the curriculum or stated that they did not have time to include literacy in their curriculum. Fang and Coatoam (2013) stated that literacy skills and content are inextricably intertwined, and without literate practices, students will not be able to succeed in the social and cognitive practices of each discipline. Jacobs (2002) cited that secondary school teachers are more willing to integrate literacy in their curriculum when they see how it supports their overall learning goals for students.
3. Administrators should consider building cross-curricular professional learning communities using ELA teacher leaders to help nonELA teachers with literacy challenges. These professional learning teams could work collaboratively to analyze

data, reflect on previous instruction, and discuss best practices for student growth and achievement. Cantrell and Hughes (2008) recommended engaging teachers in critical construction of knowledge that would enable them to think analytically about the curriculum, pedagogy, and culture. They stated that teachers should reflect on and plan for how literacy could enhance student learning.

4. All teachers should conduct ongoing common formative assessments throughout the semester to monitor student growth and achievement in literacy. Bandura (1997) stated that mastery experience was the main source of self-efficacy, and if teachers see their students progressing toward their literacy goals, efficacy will rise.
5. Common academic vocabulary (Tier 2 words) should be used and taught throughout the school. Marzano and Pickering (2005) stated that all teachers in a school should focus on the same academic vocabulary and teach it in the same way for a powerful, comprehensive approach.

Recommendations for Future Research

This study was conducted 3 years after new literacy standards were integrated across the curriculum in high schools in Tennessee. Teachers continue to learn effective practices to teach literacy in content area classrooms, and as a result perceived literacy efficacy may continue to rise as teachers experience more success in their classrooms. Additional research should be conducted to compare efficacy scores after the implementation dip to see if teacher efficacy scores do rise after teaching literacy for a longer period of time. This study could also be expanded to include ELA and nonELA middle school teachers' perceptions of self-efficacy and literacy to see how they compare to ELA and nonELA high school teachers' perceptions.

Additional research should also be conducted on a larger scale to look for relationships and trends between nonELA teachers. To get a more accurate picture of self-efficacy and literacy efficacy in East Tennessee all First Core Region 1 high schools should be included in the study.

Many of the teachers in this study had spent 20 or more hours in professional learning for literacy. An additional study could be conducted to see if there is any relationship between a teacher's literacy efficacy score and time spent in professional development. Professional development is often used to help teachers with the implementation of new strategies and curriculum. Additional research is needed to investigate the impact professional learning has on teacher efficacy.

Finally, additional research is needed to investigate technology and any impact on student persistence in reading. Participants expressed that students were not engaged in reading and would not read lengthy passages. Additional research is needed to investigate any possible relationship between students' use of technology and impact on attention span.

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APPENDICES

Appendix A: Teacher Efficacy in Literacy Survey

High School Teachers' Perceived Self-Efficacy in Teaching Literacy across the Curriculum in Tennessee First Core Region 1 High Schools

Research Survey

Dear Participant:

My name is Ashley Keys, and I am a doctoral candidate at East Tennessee State University. I am working on my Ed. D. in Educational Leadership and Policy Analysis. In order to complete my studies, I need to complete a research study. The name of my research study is High School Teachers' Perceived Self-Efficacy in Teaching Literacy across the Curriculum in Tennessee First Core Region 1 High Schools.

The purpose of this study is to evaluate high school teachers' perceptions with regard to self-efficacy, literacy instruction, and perceived impact of professional learning across the curriculum. I would like to give a brief survey to high school teachers who teach English, math, science, social studies, and career and technical education courses using Survey Monkey. It should only take about 10 minutes to complete. You will be asked questions about how you teach literacy in your classroom. Since this project deals with how you teach literacy and challenges you may face as a teacher, it might cause some minor stress. However, you may also feel better after you have had the opportunity to express yourselves about the challenges you face teaching high school literacy. This study may provide benefit by providing more information about how teachers feel about teaching literacy in their classroom after the implementation of literacy standards in Tennessee.

Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties, as is the case with emails. In other words, we will make every effort to ensure that your name is not connected with your responses. Specifically, Survey Monkey has security features that will be enabled: SSL/TLS encryption software will be utilized. Although your rights and privacy will be maintained, the ETSU IRB (for non-medical research) and my dissertation committee in the ETSU Educational Leadership and Policy Analysis Department have access to the study records. I will be the only one with direct access to the study data; however, no identifiable data will be used in this survey.

If you do not want to fill out the survey, it will not affect you in any way. You may skip any questions you do not wish to answer or simply exit the online survey form if you wish to remove yourself entirely.

Participation in this study is voluntary. You may refuse to participate. You can quit at any time. If you quit or refuse to participate, the benefits or treatment to which you are otherwise entitled will not be affected.

If you have any research-related questions or problems, you may contact me, Ashley Keys at (423-773-1323). I am working on this project under the supervision of Dr. Virginia Foley. You may reach her at (423-439-7615). Also, the chairperson of the Institutional Review Board at East Tennessee State University is available at (423) 439-6054 if you have questions about your rights as a research subject. If you have any questions or concerns about the research and want to talk to someone independent of the research team or you can't reach the study staff, you may call an IRB Coordinator at 423/439-6055 or 423/439/6002.

Sincerely,

Ashley Keys

1. What is your content area?

- ◯ English
- ◯ Mathematics
- ◯ Science
- ◯ Social Studies
- ◯ Career and Technical Education

2. What is your level of teaching experience?

- ◯ apprentice teacher
- ◯ professional teacher

3. What is your education level?

- ◯ Trade/Technical/Vocational Training
- ◯ Associate Degree
- ◯ Bachelor's Degree
- ◯ Master's Degree
- ◯ Educational Specialist
- ◯ Doctorate

4. What is your gender?

- ◯ Male
- ◯ Female

5. How many hours did you spend during the last three years in professional development related to literacy?

- ◯ 0-4 hours
- ◯ 5-10 hours
- ◯ 11-15 hours
- ◯ 16-20 hours
- ◯ 21-25 hours
- ◯ more than 25 hours

6. Self-Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
How much can you do to get through to the most difficult students?	○	○	○	○	○	○	○	○	○
How much can you do to help your students think critically?	○	○	○	○	○	○	○	○	○
How much can you do to control disruptive behavior in the classroom?	○	○	○	○	○	○	○	○	○
How much can you do to motivate students who show low interest in school work?	○	○	○	○	○	○	○	○	○
To what extent can you make your expectations clear about student behavior?	○	○	○	○	○	○	○	○	○

7. Self-Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
How much can you do to get students to believe they can do well in school work?	○	○	○	○	○	○	○	○	○
How well can you respond to difficult questions from your students?	○	○	○	○	○	○	○	○	○
How well can you establish routines to keep activities running smoothly?	○	○	○	○	○	○	○	○	○
How much can you do to help your students value learning?	○	○	○	○	○	○	○	○	○
How much can you gauge student comprehension of what you have taught?	○	○	○	○	○	○	○	○	○

8. Self-Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
To what extent can you craft good questions for your students?	○	○	○	○	○	○	○	○	○
How much can you do to foster student creativity?	○	○	○	○	○	○	○	○	○
How much can you do to get children to follow classroom rules?	○	○	○	○	○	○	○	○	○
How much can you do to improve the understanding of a student who is failing?	○	○	○	○	○	○	○	○	○
How much can you do to calm a student who is disruptive or noisy?	○	○	○	○	○	○	○	○	○

9. Self-Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
How well can you establish a classroom management system with each group of students?	○	○	○	○	○	○	○	○	○
How much can you do to adjust your lessons to the proper level for individual students?	○	○	○	○	○	○	○	○	○
How much can you use a variety of assessment strategies?	○	○	○	○	○	○	○	○	○
How well can you keep a few problem students from ruining an entire lesson?	○	○	○	○	○	○	○	○	○
To what extent can you provide an alternative explanation or example when students are confused?	○	○	○	○	○	○	○	○	○

10. Self-Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
How well can you respond to defiant students?	○	○	○	○	○	○	○	○	○
How much can you assist families in helping their children do well in school?	○	○	○	○	○	○	○	○	○
How well can you implement alternative strategies in your classroom?	○	○	○	○	○	○	○	○	○
How well can you provide appropriate challenges for very capable students?	○	○	○	○	○	○	○	○	○

11. Literacy Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
To what extent can you use a student's oral reading mistakes as an opportunity to teach effective reading strategies?	○	○	○	○	○	○	○	○	○
To what extent can you use a variety of informal and formal reading assessment strategies?	○	○	○	○	○	○	○	○	○
To what extent can you adjust reading strategies based on ongoing informal assessments of your students?	○	○	○	○	○	○	○	○	○
To what extent can you provide specific, targeted feedback to students' during oral reading?	○	○	○	○	○	○	○	○	○
How much can you do to meet the needs of struggling readers?	○	○	○	○	○	○	○	○	○

12. Literacy Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
To what extent can you adjust writing strategies based on ongoing informal assessments of your students?	○	○	○	○	○	○	○	○	○
To what extent can you help your students with opportunities to apply their prior knowledge to reading tasks?	○	○	○	○	○	○	○	○	○
To what extent can you help your students monitor their own use of reading strategies?	○	○	○	○	○	○	○	○	○
To what extent can you get students to read fluently during oral reading?	○	○	○	○	○	○	○	○	○
To what extent can you model effective reading strategies?	○	○	○	○	○	○	○	○	○

13. Literacy Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
To what extent can you implement effective reading strategies in your classroom?	○	○	○	○	○	○	○	○	○
To what extent can you help your students figure out unknown words when they are reading?	○	○	○	○	○	○	○	○	○
To what extent can you get children to talk with each other in class about books they are reading?	○	○	○	○	○	○	○	○	○
To what extent can you recommend a variety of quality children's literature to your students?	○	○	○	○	○	○	○	○	○
To what extent can you model effective writing strategies?	○	○	○	○	○	○	○	○	○
To what extent can you integrate the components of language arts?	○	○	○	○	○	○	○	○	○

14. Literacy Efficacy Questions

	None at all		Very Little		Some Degree		Quite A Bit		A Great Deal
To what extent can you use flexible grouping to meet individual students needs for reading instruction?	○	○	○	○	○	○	○	○	○
To what extent can you implement word study strategies to teach spelling?	○	○	○	○	○	○	○	○	○
To what extent can you provide children with writing opportunities in response to reading?	○	○	○	○	○	○	○	○	○
To what extent can you use students' writing to teach grammar and spelling strategies?	○	○	○	○	○	○	○	○	○
How much can you motivate students who show low interest in reading?	○	○	○	○	○	○	○	○	○
How much can you do to adjust your reading materials to the proper level for individual students?	○	○	○	○	○	○	○	○	○

15. Professional Learning

	None at all	Very Little	Some Degree	Quite A Bit	A Great Deal
To what extent has professional learning impacted how you teach literacy in your classroom?	○	○	○	○	○

16. What literacy strategies do you use to teach literacy in your classroom?

- ☐ oral previews
- ☐ anticipation guides
- ☐ reciprocal teaching
- ☐ embedded questions
- ☐ guided reading
- ☐ visual representations
- ☐ none of these strategies

17. What challenges have you experienced in teaching literacy?

Next

Appendix B: IRB Approval Letter

EAST TENNESSEE STATE UNIVERSITY
Office for the Protection of Human Research Subjects • Box 70565 • Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053 Fax: (423) 439-6060

IRB APPROVAL – Initial Exempt

April 22, 2016

Ashley Keys

RE: High School Teachers' Perceived Self-Efficacy in Teaching Literacy across the Curriculum in Tennessee First Core Region 1 High Schools
IRB#: c0416.16e
ORSPA#: ,

On **April 22, 2016**, an exempt approval was granted in accordance with 45 CFR 46. 101(b)(2). It is understood this project will be conducted in full accordance with all applicable sections of the IRB Policies. No continuing review is required. The exempt approval will be reported to the convened board on the next agenda.

- New protocol submission xForm, Carter County Schools permission letter, Washington County Schools permission letter, Greene County Schools permission letter, Pertinent literature, PI CV, Informed consent, Initial email, 1 week reminder email, Final reminder email, Survey questions

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely,
Stacey Williams, Chair
ETSU Campus IRB

Cc: Virginia Foley, Ph.D.

Full AAHRPP Accreditation
Accredited since December 2005

Appendix C: Email Verification from School Superintendents

RE: Request to Conduct a Research Survey for Dissertation Research Inbox x

[redacted] Mar 9

to Ashley, [redacted]

Ashley,
You have my permission to conduct this voluntary survey.

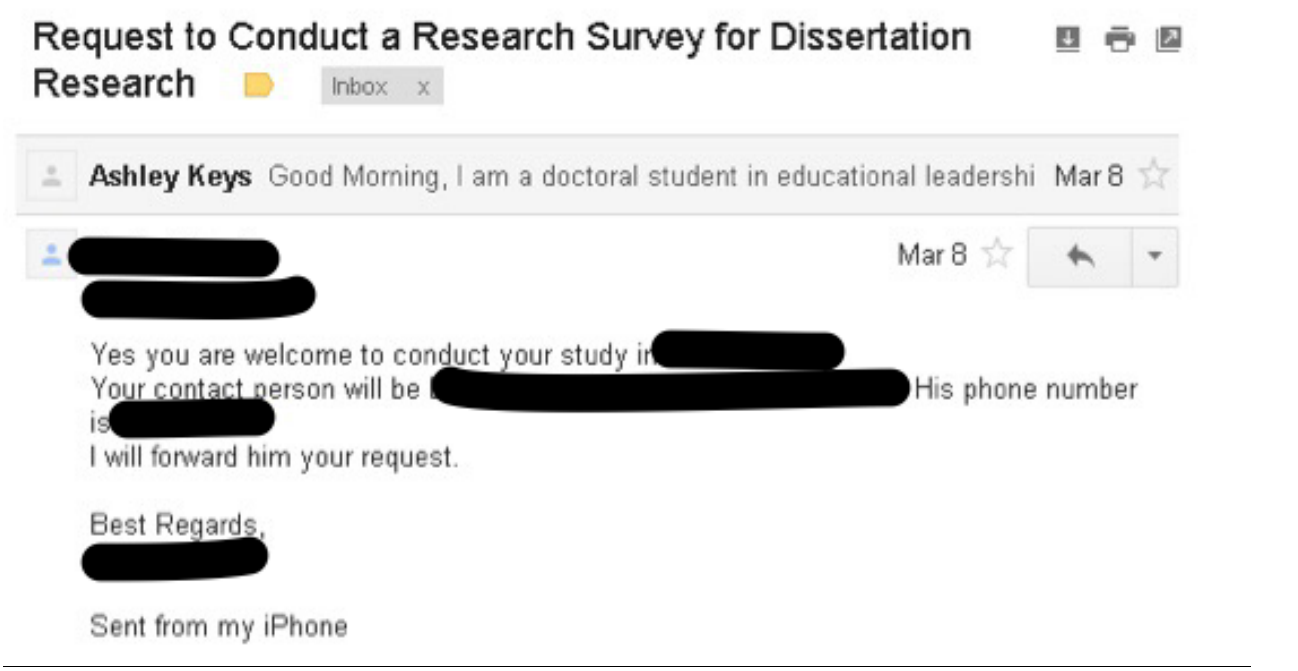
[redacted]

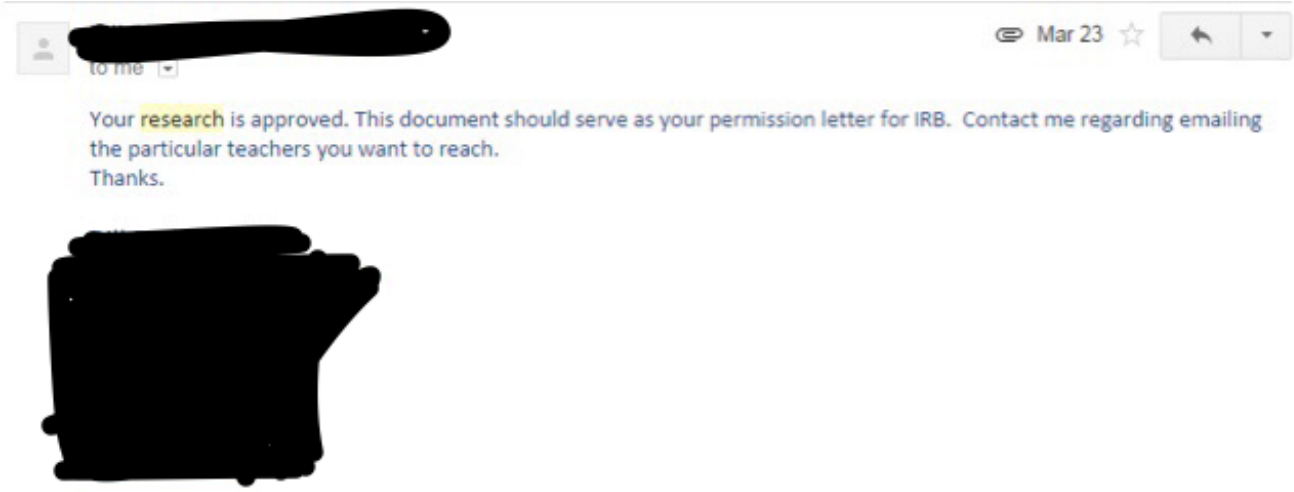
From: Ashley Keys
Sent: Tuesday, March 08, 2016 9:10 PM
[redacted]
Subject: Request to Conduct a Research Survey for Dissertation Research

Good Morning [redacted]

I am a doctoral student in educational leadership and policy analysis at East Tennessee State University. I am in the dissertation phase, and I would like to conduct an online, voluntary survey in Washington County on high school teachers' perceived self-efficacy in teaching literary across the curriculum. My sample includes career and technical education teachers, math teachers, and English teachers. I have included the exact questions for my research below. The TSES and TSELI questions have been used in previous research and were designed by Megan Tschannen-Moran. The information I gather will not be used to identify your county or specific schools within your county. The survey information will be combined with other first core region 1 high schools. Please let me know if you have further questions about the survey or research, and I look forward to hearing from you in the future.

Ashley Keys


Request to Conduct a Research Survey for Dissertation Research
Inbox x
Ashley Keys Good Morning, I am a doctoral student in educational leadershi Mar 8
Mar 8
Yes you are welcome to conduct your study in
Your contact person will be
His phone number is
I will forward him your request.
Best Regards,
Sent from my iPhone


Mar 23
to me
Your research is approved. This document should serve as your permission letter for IRB. Contact me regarding emailing the particular teachers you want to reach.
Thanks.

Appendix D: Permission to Use the Teacher Sense of Self-Efficacy Scale

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

July 9, 2015

Ashley,

You have my permission to use the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in your research. You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch . Please use the following as the proper citation:

> Tschannen-Moran, M & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*, 783-805.

I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education

P.O. Box 8795 • Williamsburg, VA 23187-8795 • (757) 221-2187 • mxtsch@wm.edu

Appendix E: Permission to Use the Teacher Sense of Efficacy for Literacy Instruction Scale

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

February 26, 2016

Ashley,

You have my permission to use the Teacher Sense of Efficacy for Literacy Instruction Scale that I developed with Denise Johnson for your study. You'll find a copy of my website at http://wmpeople.wm.edu/site/page/mxtsch. The proper citation for this measure is:

> Tschannen-Moran, M. & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education, 27*, 751-761. doi:10.1016/j.tate.2010.12.005

I've also attached the directions to access my password-protected website where you can access the Teaching and Teacher Education article where the measure was introduced.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education

P.O. Box 8795 • Williamsburg, VA 23187-8795 • (757) 221-2187 • mxtsch@wm.edu

VITA

ASHLEY N. KEYS

Education:	Public Schools, Bristol, Tennessee
	B.A. English, East Tennessee State University, Johnson City, Tennessee, 2005
	M.A.T. Secondary Education, East Tennessee State University, Johnson City, Tennessee, 2008
	Ed.D. Educational Leadership, East Tennessee State University, Johnson City, Tennessee, 2016
Professional Experience:	Teacher, David Crockett High School: Jonesborough, Tennessee, 2008-2016