EFFECT OF PROFESSIONAL DEVELOPMENT AND FOLLOW-UP SUPPORT THROUGH COACHING EMAILS ON SECONDARY ENGLISH TEACHERS’ SENSE OF EFFICACY IN IMPLEMENTING MENTOR TEXT INSTRUCTION

by

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ABSTRACT

Beyond rigorous reading instruction in America’s high schools, writing instruction in the 21st century must be addressed if students will be equipped with the critical thinking skills they need to be successful. Teachers, however, need training in implementing innovative methods in writing instruction to effect change in student achievement. This quantitative, quasi-experimental study attempted to determine what effect professional development through in-person training and follow-up support through coaching emails have on teachers’ perceived self-efficacy in implementing mentor text instruction for writing. Data were collected from 9 teachers who attended a 2-hour professional development session on strategies for using mentor texts. Before and after the training, teachers responded to the Teacher Self-Efficacy Scale (TSES). Participants received 5 weeks of follow-up support through coaching emails, which included classroom exemplar videos, articles on mentor text instruction, and lesson plans for using mentor texts. A 1-sample Wilcoxon Signed Rank Test was used to compare participants’ median scores on the TSES before and after the in-person training and then to compare the participants’ median scores on the TSES before and after receiving follow-up support through coaching emails.

Further research may demonstrate more variations of professional development and follow-up support as well as the specific uses and benefits of mentor texts in writing instruction for various grade levels and for various writing tasks as well as how it affects students’ reading ability.

Keywords: Sociocultural theory, zone of proximal development, self-efficacy, professional development, instructional coaching, professional learning community, mentor text
Dedication

This dissertation is dedicated to my husband Dr. Peter Morgan and my children Abigail, Samantha, and William, who patiently supported me through the years of doctoral work. It is also dedicated to my parents, Daniel and Robin Centeno, who always encouraged me to strive for excellence and never doubted my ability to pursue this degree.
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List of Abbreviations

Council of Chief State School Officers (CCSSO)

Common Core State Standards Initiative (CCSSI)

National Governors Association Center for Best Practices (NGACBP)

Professional Learning Community (PLC)

State of Texas Assessment of Academic Readiness (STAAR)

Texas Education Agency (TEA)

Texas Essential Knowledge and Skills (TEKS)

Teacher Sense of Efficacy Scale (TSES)
CHAPTER ONE: INTRODUCTION

Overview

Writing instruction has traditionally received less attention than reading; however, as teachers of writing and English Language Arts embrace rigorous state standards and higher expectations for instruction, writing has come under new scrutiny (Troia & Olinghouse, 2013). A popular instructional method embraced by current educators is the mentor text, but many teachers struggle with how to implement instruction using mentor texts for writing and how to truly integrate writing instruction with that of reading (Clark, Jones, & Reutzel, 2013; Graham & Perin, 2007; Santangelo & Olinghouse, 2009). While mentor texts appear throughout the literature, yet to be studied is the effect of professional development on teachers’ perceived self-efficacy in implementing mentor text instruction. This chapter introduces the need for teacher training on implementing rigorous writing instruction, specifically mentor text instruction.

Background

The 21st century has brought much innovation, but in education it has also brought a renewed push for standards-based learning and standardized curriculum. The No Child Left Behind Act (NCLB) of 2002 called attention to the need to hold schools accountable for the learning of all students, but it also introduced a new age of standardized testing by requiring schools to demonstrate student proficiency through annual testing (New America Foundation, 2014). In response to the inability of many schools to meet the requirements of NCLB, a call arose for new standards—the idea being that if standards were more rigorous, then students would be more prepared for college and future careers. The Common Core State Standards Initiative (National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010) is the most widely known response to the cry for more rigorous
standards; however, several states have revised standards for English Language Arts (ELA) since 2000, and at least 14 states have comparably rigorous standards (Carmichael, Wilson, Porter-McGee, & Martino, 2010). As a result, many school districts have been revising or writing entirely new curriculum to align with the new standards in order to prepare students for the state exams that have accompanied those new standards. Such is the case in Texas, where students take the State of Texas Assessment of Academic Readiness (STAAR) in grades 3 through 10.

Rigorous state standards call for an increase in a variety of writing tasks and sophisticated methods of constructing written responses that include appropriate features of the specific genre (Carmichael et al., 2010). A key component of these written responses is the expectation that students will engage in analytical and higher order thinking throughout their written compositions. Coker and Lewis (2008) pointed out that “the most problematic result of instituting writing assessments that ignore key features of writing, such as the content, is its impact on instruction as teachers align their writing expectations to the state tests” (p. 247). For example, on STAAR, students in the ninth grade must respond to an expository writing prompt in 45 minutes, and the response is limited to 26 lines. The Expository Writing Rubric, however, states that responses are to be “thoughtful and engaging. The writer may choose to use his/her unique experiences or view of the world as a basis for writing or to connect ideas in interesting ways. The writer develops the essay in a manner that demonstrates a thorough understanding of the expository writing task” (TEA, 2016, p. 18). The expectation implied in the rubric is that students will write creatively, analytically, and sophisticatedly. However, in classroom after classroom, students can be found writing 26-line compositions that superficially address the given prompt as teachers focus instruction on organization rather than on thoughtful development of ideas. In contrast, students should be exploring ways to write creatively,
analytically, and sophisticatedly; however, they must first develop these thinking skills, which comes through analysis of text.

Reading and discussion allow students to develop the thinking skills critical for success; however, writing allows students to apply these thinking skills in individual ways. For instance, Tierney, Soter, O’Flahavan, and McGinley (1989) found enough evidence to support the assertion that “reading and writing in combination have the potential to contribute in powerful ways to thinking” (p. 166). In other words, learning to read and write by reading and writing together leads to higher levels of thinking than reading or writing in isolation. Teachers must, therefore, recognize the importance of teaching reading and writing as a relationship. However, even teachers who grasp the importance of the reading and writing relationship may still struggle with how to approach such instruction. Teachers who have little confidence in their ability to guide students to effective, independent writing will struggle with implementing instruction demanded by rigorous state standards. Bandura (1994) suggested that a teacher’s sense of efficacy affects that teacher’s performance. This study aims to explore the question of how to build teachers’ sense of efficacy in implementing rigorous writing instruction.

Rigorous writing instruction emerging from the new standards leads to teaching students to analyze text for writing and language conventions. However, a potential pitfall may arise if teachers continue to teach reading and writing as separate entities. Therefore, integrating reading and writing instruction is essential for student success, but teachers will need support to implement such instruction effectively. According to Kane, Owens, Marinell, Thal, and Staiger (2016), “Many schools have had to overhaul their curricula, strengthen teachers’ content knowledge, and rethink the focus of professional development” (p. 6). A study conducted by the Council of Chief State School Officers (Blank, de las Alas, & Smith, 2008) found that
professional development that focuses on content and allows teachers time to practice implementation leads to significant effects. It follows, then, that teachers need more than just information about innovative writing instruction; they need professional development opportunities for practice, reflection, and feedback to implement effective, innovative instruction.

For students to learn how to incorporate analytical thinking in expository writing, they need to interact with such thinking. According to Vygotsky’s sociocultural theory, children learn more advanced concepts by interacting with those who understand those concepts (Miller, 2011). When it comes to writing instruction, Vygotsky’s theories posit that students need to interact with those more advanced in order to develop their inner speech (Vanderburg, 2006). A current strategy frequently used in English classrooms is providing a model of a written work for students to study (Graham & Perin, 2007). When selecting an instructional tool for teaching writing, many teachers use the term mentor text when utilizing the practice of providing a model. Proper use of a mentor text requires students to engage in text analysis, which demands comprehension and critical thinking about the text, and then written response. By utilizing authentic texts, teachers are able to pull elements of culture and society into the classroom and provide students the opportunity to interact with a more advanced writer. According to Vygotsky’s sociocultural theory, “people learn by making things that they find useful and important—that is, meaningful to them—particularly as the forms that these things take bear signs of broader cultural meaning” (Smagorinsky, 2013, p. 198). When asking students to write, teachers should allow students to write texts that the students will find useful and important. If students do not recognize the kinds of text that are useful and important in society, then it is
incumbent upon the teacher to introduce the students to those texts. The instructional practice of mentor texts allows for this introduction to occur.

Teaching students to write from the vantage point of a mentor text allows students to learn the nuances of analytical thinking and how an author constructs as opposed to focusing on the production of a composition. According to Gallagher (2011), providing students with mentor texts allows them to see how the writing piece is produced. Through the deconstruction of the mentor text, students are able to see how the text was constructed and analyze the thought processes that contributed to its construction. This differs from assigning students a writing task and offering minimal instruction on how to complete the task. According to Vygotsky’s theories, a student cannot grasp the final written composition the teacher envisions without intentional guidance (Gredler, 2012). However, for sake of time or, perhaps, lack of understanding, many teachers rely on formulas such as the five-paragraph essay as the expected structure for any writing assignment, but this method does not help students recognize the relationship between an author’s construction of text and their own. Moreover, the teacher’s expectation that the formulaic response incorporate evidence of analytical thinking without explicit guidance will result in ineffective compositions. If teaching formulaic writing constitutes a writing teacher’s repertoire, then the students may suffer. It behooves instructional leaders, then, to acquire or develop training for teachers on how to implement writing instruction that teaches students to analyze text and transfer their analysis to their own writing. Since teachers must draw upon their sense of efficacy to approach new instructional methods, professional development must specifically target teachers’ perceived self-efficacy so that they will endeavor to put their learning into practice.
**Problem Statement**

High school students need more complex instruction in writing in order to meet the demands of more rigorous standards and curriculum, and teachers need more research-based practices that lead to the integration of reading and writing as well as training on implementing those practices. Will (2016) cited a study by the Center for Education Policy Research at Harvard University: “There needs to be more research done to identify effective interventions to help teachers with writing instruction” (p. 2). A mentor text may serve as a scaffold for students learning to use the analytical thinking skills necessary to produce sophisticated writing by helping them deconstruct and analyze text prior to writing; Gallagher (2014) states that “Before our students can write well in a given discourse, they need to see good writing in that discourse” (p. 29). Teachers need continued support, however, as they explore new ways of implementing instruction involving mentor texts and writing. The problem of this study is how effective professional development with follow-up support through coaching emails is on teachers’ perceived self-efficacy in implementing mentor text instruction.

**Purpose Statement**

The purpose of this study is to determine if a single in-person professional development session or follow-up support through coaching emails after the session has an effect on teachers’ sense of efficacy in order to provide educators, curriculum developers, and instructional leaders with research-based practices to support teachers in the implementation of an instructional method that integrates rigorous text analysis and writing. Students must learn to analyze text in order to truly comprehend it; therefore, rigorous writing instruction must include not only the form of expository writing, but also an analytical way of thinking about text, which can be accomplished through mentor text instruction. Before effective instruction can take place—and
to ensure they are engaging students in best practices—teachers need training and support through professional development. This study examined two independent variables: the in-person professional development and the follow-up support through coaching emails. The teachers’ scores on the Teacher Sense of Efficacy Scale served as the dependent variable.

**Significance of the Study**

This study adds to the literature on instructional practices for writing, the reading and writing connection, and teacher professional development. With educators working to meet the demands of new, rigorous standards, they need more items in their proverbial tool belt. Smith, Wilhelm, and Fredricksen (2013) asserted that current practices in writing will not be enough to meet the new standards set by Common Core. Educators must change their instructional practices, especially in the area of writing, if they are to help students be more successful (Kane, Owens, Marinell, Thal, & Staiger, 2016; Troia & Olinghouse, 2013); and they need guidance and training on the most effective instructional methods (Darling-Hammond, Hyler, and Gardner, 2017; Desimone, 2011). For the implementation of new methods to be successful in affecting student learning, teachers need to develop a greater sense of efficacy about implementing them (Bandura, 1994; Tschannen-Moran & Hoy, 2001; Tschannen-Moran & McMaster, 2009; Yoo, 2016). This study will explore how professional development affects teachers’ beliefs about their ability to implement new writing instruction.

**Research Questions**

This study considers the following research questions:

**RQ1**: What effect does a single professional development session, which is designed to incorporate four measures of efficacy, have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?
RQ2: What effect does receiving follow-up support through coaching emails after in-person professional development have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?

Null Hypotheses

The following are the null hypotheses for this study:

$H_01$: There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after teachers participate in a single professional development session, which is designed to incorporate four measures of efficacy.

$H_02$: There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after receiving follow-up support through coaching emails following a single professional development session.

Definitions

The following terms will be used throughout the study as defined here:

1. Exemplar — An example of a specific type of text according to a specific description or set of criteria is an exemplar (Sadler, 1987). For example, if students are learning to write argument essays, they will study argument essays that resemble what the teacher expects. The exemplars may be produced by the teacher or may be student work.

2. Instructional Coaching — Desimone and Pak (2017) described instructional coaching as “a multifaceted endeavor that has taken hold in schools across the country as a mechanism for new teacher induction, ongoing teacher learning, assisting in implementation of new initiatives, and, most recently, in helping
teachers understand and adapt their instruction to new state content standards” (p. 4).

3. **Mentor Text** — A professional text in a specified writing style or writing genre is a mentor text (Gallagher, 2014). For example, if students are learning to write an editorial about politics, they will study an editorial about politics published in a newspaper.

4. **Professional Learning Community** — A group of educators focused on achieving similar objectives through collaboration can be called a professional learning community (DuFour, 2004).

5. **Self-Efficacy** — Bandura (1991) defined self-efficacy as the belief a person has about his or her own ability, or capability, to produce the desired effects.

6. **Sociocultural Theory** — A theory of learning and development originated by Lev Vygotsky that suggests children learn through interactions with more advanced members of their culture (Miller, 2011).

7. **Zone of Proximal Development** — The area between “what students are capable of achieving on their own” and “what a child or student can accomplish with the assistance of another’s expertise” (Mahn, 1999).
CHAPTER TWO: LITERATURE REVIEW

Overview

Effective writing instruction must be equated with a mentoring process because the mentoring of young writers is necessary for them to develop writing skills (Vygostky, 1962). Vygotsky’s sociocultural theory supports the idea that developing writers need an experienced writer to come alongside them as they apply new knowledge and skills, and the mentor text instructional strategy for writing encourages the mentoring relationship and supports the critical thinking skills required to produce effective compositions (Smagorinsky, 2013). However, teachers of writing must first understand the process of using mentor texts and how to develop instruction that gradually releases students to become independent writers (Gallagher, 2014). Thus, professional development and opportunities for teachers to practice and receive feedback are crucial pieces. This chapter contextualizes the relationship between Vygotsky’s theories of writing instruction and Bandura’s theory of self-efficacy, proposing that teacher perceived self-efficacy for implementing writing instruction through the use of mentor texts is the foundation to successful student writing.

Theoretical Framework

Bandura’s Social Cognitive Theory

A common quip among educators, especially when addressing concerns of those new to the teaching profession, is to “fake it until you make it.” Thus, many teachers unwittingly convey to their fledgling colleagues this admonition supported by Bandura’s theories of self-efficacy, which in summation is that confidence in one’s ability to complete a task is of utmost importance to its success. Bandura (1991) defined self-efficacy as “people’s beliefs about their capabilities to exercise control over their own level of functioning and over events that affect
their lives” (p. 257). In other words, those new teachers need to act like they believe they know
what they are doing until they, in fact, do. Bandura’s overarching theory is that people who have
high levels of self-efficacy are more confident in their ability to perform a function or guarantee
a certain outcome, but those who have low levels of self-efficacy have little confidence in their
ability to do either (Bandura, 1994). Thus, self-efficacy directly affects how people behave and
the choices they make, including in academic environments.

Bandura’s (1994) theory leads to the conclusion that self-efficacy in educators is
important because it is a driving factor in an educator’s willingness to attempt challenging
instructional practices: “People with high assurance in their capabilities approach difficult tasks
as challenges to be mastered rather than as threats to be avoided. Such an efficacious outlook
fosters intrinsic interest and deep engrossment in activities” (p. 2). Therefore, teachers with high
levels of perceived self-efficacy may be willing to experiment with an instructional practice like
a mentor text or try out various ways to use mentor texts, until they do so successfully.

Bandura (1994) described four sources of self-efficacy, and each of those sources can be
applied to the specific behavior of using mentor texts for writing instruction. Mastery
experiences, according to Bandura, are the most effective at building a sense of self-efficacy. As
teachers implement successful mentor text instruction, their belief in their ability to continue
doing so strengthens. Tschannen-Moran and McMaster (2009) associated professional
development with opportunity to begin building teachers’ sense of efficacy and cited Ross’s
study (1994) that stated, “The actual use of the new knowledge presented in a workshop has been
shown to contribute to changes in teacher self-efficacy, whereas simple exposure to the material
did not” (p. 230). Tschannen-Moran and McMaster (2009) sought to determine how various
professional development formats affected teachers’ sense of efficacy in relation to three of
Bandura’s four sources, and they found that the format offering teachers an authentic mastery experience in their own classrooms led to the highest increase in teachers’ beliefs about their self-efficacy. Important to note, however, is that the mastery experiences provided also involved coaching sessions for the teachers.

While integrating mastery experiences into professional development may be difficult, offering teachers vicarious experiences is less problematic. Bandura (1994) described vicarious experiences as opportunities to observe someone in a similar position or scenario successfully complete the task in question. For instance, teachers who view a video of mentor text instruction can envision themselves in a similar situation and recognize the skills and actions necessary to accomplish the task. Tschannen-Moran and McMaster (2009) suggested that observing a live demonstration of the task may be more effective than only viewing a video; however, discussion of the video demonstration may also be a factor in the level of influence the vicarious experience has on teachers’ perceived self-efficacy. The researchers did find that professional development that included vicarious experiences resulted in modest gains in teacher sense of self-efficacy but were not related to the frequency of teachers’ implementing the instruction. Still, vicarious experiences are an important component of professional development because they provide teachers with a model with which they can compare themselves and may provide ideas and strategies for accomplishing a similar task (Bandura, 1994).

Encouraging someone to take on a difficult task by offering that person words of affirmation may occur somewhat naturally; however, Bandura (1994) suggested that doing so actually promotes a boost in that person’s self-efficacy and refers to this as verbal persuasion; people are more likely to put forth effort when relying on verbal persuasion that they have the necessary skills or aptitude to complete the task. The opposite is also true: verbally persuading
someone that he or she cannot complete the task causes that person to doubt and may bring about failure. Tschannen-Moran and McMaster’s (2009) results support the notion that providing verbal persuasion through professional development relates to increases in teacher perceived self-efficacy; however, they did not find that it increased the frequency with which the teacher participants implemented the targeted strategy. Providing professional development that offers teachers new instructional strategies should also be connected to opportunities for teachers to practice and receive coaching so that they will attempt the strategies learned through training.

A fourth source of self-efficacy described by Bandura relates to combatting people’s existing negative beliefs, or emotional state, about a given topic, which can also be accomplished through professional development (Tschannen-Moran & McMaster, 2009). However, professional development providers must be vigilant not to cause trainees to become uncertain about their ability to implement the content learned through the training. Yoo (2016) found that ongoing professional development affected teachers’ sense self-efficacy, but some teachers realized that they entered the training with overconfidence. In this type of situation, the professional development provider must observe the concern in the attendees and work to counteract it if he or she wishes to nurture the participants’ sense of efficacy during the training. Such a situation suggests that follow-up coaching may be necessary in order to monitor the teacher’s use of the target strategy and continue the verbal persuasion that may have an effect on that teacher’s confidence.

Instruction that utilizes mentor texts to teach writing demands strong teacher knowledge and skill (Wette, 2014), so it follows that teachers with stronger perceptions of self-efficacy will be more likely to attempt such instruction and do so successfully. Successful endeavors will lead to more attempts and, hopefully, more success. However, some teachers hesitate to use mentor
texts to teach writing or use them ineffectively because they do not understand how to use mentor texts to integrate reading and writing skills for their students. The integration of reading and writing has long been shown in literature to have a greater effect on student learning than on teaching either in isolation (Fitzgerald & Shanahan, 2000; Graham & Hebert, 2011; Sinatra, 2000; Tierney, Soter, O’Flahavan, & McGinley, 1998), but teachers must understand the connection between the two skills before they can maximize the use of mentor texts for writing instruction. When it comes to writing instruction, Vygotsky’s sociocultural theory best informs educators on the nature of writing and learning to write.

**Vygotsky’s Sociocultural Theory**

Sociocultural theory stems from the work of Vygotsky, a Russian theorist who posited that language and thought develop simultaneously, a relationship that influences a child's educational growth. Vygotsky (1962) stated, “Thought is not merely expressed in words; it comes into existence through them. Every thought tends to connect something with something else, to establish a relationship between things” (p. 125). The relationships that form within the child’s mind stem directly from the language, or words, the child has developed. Teachers can observe this in action as children attempt to form responses to prompts, whether through discussion or writing, and struggle for the words to convey their thoughts. They may appear to be reaching for a connection that is just beyond their grasp for lack of the vocabulary to truly comprehend the answer. Thus, Vygotsky’s theory warrants study by teachers of writing. In fact, Smagorinsky (2013) identified several of Vygotsky's main ideas as having significance for modern teachers of English Language Arts, including how speech can be used as a tool for thinking. Indeed, Vygotsky's theory regarding the role of speech as a tool for thinking warrants exploration in relation to writing instruction.
Vygotsky demonstrated that students’ thinking skills develop as they acquire language; in other words, as a child learns more verbal language, his or her ability to utilize that language mentally increases. Vygotsky (1962) asserted that a student’s ability to use language to communicate is directly related to his or her ability to use words and their various meanings correctly. Only when this internalization of language occurs can the child then transfer that language into written speech since students need more words to communicate in writing than they do to communicate the same idea through speech (Vygotsky, 1962). Vanderburg (2006) summarized this Vygotskian theory by stating, “Children use verbal interactions to develop an inner voice that monitors the learning of new tasks and concepts” (p. 378). Smagorinsky (2013) extended Vygotsky’s idea about the importance of speech and asserted that students need to engage in speech activities in order to develop their thoughts for writing:

This potential of speech represents the tool function. Speech thus can both represent an idea and contribute to the formation of an idea, and when speech is coordinated and orchestrated to produce a text, the sign function of its form may then serve as a tool for yet new thinking by either the speaker or others. (p. 194)

According to this theory, if students are to develop the writing skills necessary to compose effective responses to expository writing prompts, they must first develop the language necessary to mentally process both the prompt and their response before they can begin constructing such responses.

According to Vygotsky (1962), one of the most important sources for students to acquire new concepts is instruction, which directs the growth of the students or lack thereof. When it comes to writing, teachers may consider instruction in formulaic writing to be sufficient in helping students understand the nuances of sophisticated expository writing. However,
Vygotsky (1962) asserted that “direct teaching of concepts is impossible and fruitless” (p. 83). A concept, according to Vygotskian theory, is the word’s meaning, and he described two types of concepts: spontaneous and scientific. Spontaneous concepts refer to those words that children come to learn through everyday experiences, and scientific concepts are those that children come to learn through instruction (Vygotsky, 1962). Mahn (1999) pointed out the importance of the interaction of the two relationships for true learning and indicated that the cultural and contextual surroundings influence how the two types of concepts develop. In the case of expository writing, the concept with which students struggle is conveying their ideas in a thoughtful and analytical way.

Teachers impart the meaning of analysis with the expectation that students will absorb the meaning and immediately begin applying the word when writing. However, it is the very skills embedded in the meaning of the word *analysis* that are necessary for students to complete the analysis task. Gredler (2012), in describing scientific concepts as subject matter concepts, stated that “the mental processes involved in developing complete concepts (i.e., conceptual thinking) are abstracting, synthesizing, comparing, and differentiating,” (p. 122). The analysis that teachers should incorporate into writing instruction is actually a way of thinking, which students must develop. Gredler (2012) interpreted Vygotsky’s idea of dialectical thinking as the development of form and content together. Indeed, such an approach aligns with Vygotsky’s description of scientific and spontaneous concepts. Vygotsky (1962) declared that offering students new and structured knowledge teaches them ideas they would not normally acquire on their own, and the students’ understanding of this knowledge follows different paths since each child’s experiences are unique. In other words, the students must experience analysis if they are
to develop an understanding of it, and each child will develop that understanding at a different pace.

Some might argue, then, that perhaps analysis cannot be taught through instruction; however, as Vygotsky (1962) concluded, “Even though these concepts are not absorbed ready-made, instruction and learning play a leading role in their acquisition” (p. 86). Therefore, the instruction must include that which will offer the students experience in analytical and higher order thinking. Students will not develop the ability to convey analytical thinking through writing as a result of instruction in formulaic writing; rather, they must experience analytical writing for initial understanding of the concept and continue to experience various forms of analyses if they are to develop the ability to construct such writing on their own. When it comes to expository writing, the mentor text must serve as the experience to which students are exposed. Educators must also consider that each student will develop this ability at a different pace. While one student may achieve understanding after a single experience, other students may continue to struggle until they experience analysis in a way that makes sense to them. As a result, teachers may need to be armed with several mentor texts on the same topic written at various reading levels and displaying various levels of analytical thought in order to meet the students at their level. Additionally, teachers must prepare to guide students in the analysis of the mentor text since not all students will immediately recognize what elements of the text they are to mimic in their own writing. Gredler (2012) posited that encouraging student cognitive growth demands interaction between teacher and students. These teacher-student interactions must occur within the student’s zone of proximal development in order to maximize instruction.

Vygotsky (2011) defined zone of proximal development (ZPD) as the gap between what students can do independently and that for which they need assistance: “ZPD defines those
functions that are not mature yet, but are currently in the process of maturation, the functions that will mature tomorrow” (p. 204). For many high school students, the ability to construct expository writing is a developing skill. According to Young (2014), a major stumbling block for students when constructing expository responses involves “a lack of thoughtfulness, individuality, and depth” (slide 24). Some teachers may incorrectly diagnose a student’s struggle with expository writing as an intelligence issue; however, Vygotsky (2011) pointed out that the conditions of a child’s situation have more influence on his or her ability to perform a task than does his or her IQ. According to Vygotsky (2011), the most important factor in determining instruction is not the intelligence of the students but “the relationship between the level of development and preparation of the child for school requirements” (p. 207). It is incumbent upon teachers to ascertain that relationship for their students. While teachers cannot control the conditions upon which a student enters their classroom, the teachers can and should carefully control the conditions under which they instruct the students, while taking into consideration the students’ past experiences. Smagorinsky (2013) described a variety of factors that influence a student’s ZPD, including past experiences, worldview, and the teacher’s actions. Furthermore, Smagorinsky emphasized the importance of the cultural nuances that may influence the ZPD of students; for instance, how closely the teacher and students understand the cultural aspects of how to complete the task influences how the students will respond to the task and learn the intended concept. One service a mentor text may provide is to build student understanding of the concept, in this case, the analytical thinking required in a way that students perceive as relevant to their lives. According to Smagorinsky (2013), the cultural and social context of the students must be considered, so teachers may wish to select a text that relates to students in order to avoid
or minimize the “mismatch of expectations” (p. 200) that may occur when teacher and students have different backgrounds.

Connecting the learning to students’ cultures or backgrounds also helps the students connect to what they have previously learned (Smagorinsky, 2013). Mahn (1999) pointed out that one of Vygotsky’s important claims supporting the zone of proximal development is that the learning children achieve in school occurs as part of a trajectory that begins outside of school, so “Understanding these aspects of learning and development and the concept of the zone of proximal development is an important prerequisite for successful work with children who create unique paths of development based on their exceptionalities and who will have qualitatively distinct zone of proximal development” (p. 347). Instructors of writing must determine the social or cultural factors that might influence student motivation and seek out mentor texts that have potential to engage the students in the learning. Vanderburg (2006) concluded that students need to interact with people who have already developed the skill in question, in order to develop their inner voice. Writing instructors have a unique opportunity via mentor texts to scaffold the learning for their students by bringing in advanced individuals other than themselves who can speak to the students in meaningful, relevant ways so that the students can learn to respond in like manner.

**Sociocultural Theory and Writing Instruction**

Vygotsky’s theories have been used in conjunction with research writing and writing instruction in various ways. Vanderburg (2006) reviewed studies that considered how Vygotsky’s ideas have been used to support students in the learning process. For instance, Sperling’s (1990) study on teacher-student writing conferences incorporated Vygotsky’s ideas about the zone of proximal development and demonstrated that students can develop writing
skills when the more skilled instructor, or teacher, provides scaffolding; his study focused specifically on the zone of proximal development and excluded Vygotsky’s theories of inner speech (Vanderburg, 2006). One of the goals of Vygotsky’s zone of proximal development is to develop independence in students, or, in other words, to provide the guidance and scaffolds that students need until they are able to perform without those supports. Vanderburg’s review includes several studies that indicate that students can provide those supports to each other through peer collaboration, peer editing, and discussion. For example, Walvrood and McCarthy (1990) showed that when high school students assumed the role of “professional-in-training” (p. 382), the students were able to help each other through collaboration. Preus (1999) concluded that students were able to support each other when they pursued help from their groups. Dyson (1990) demonstrated that even very young students can provide scaffolds for each other through discussion, which became a tool to help them analyze their writing concerns. Finally, Karegianes (1980) found that peer editing groups can help students of various learning levels, including special education students, improve their writing (Vanderburg, 2006). In all of these studies, Vanderburg also pointed out the lack of integration of Vygotsky’s theories on inner speech. Nevertheless, he summarized further studies that incorporate the zone of proximal development and the effect of writing instruction on students’ inner voice.

Influencing the inner voice involves changing the way students think about a concept. For example, when students initially learn to analyze, they may struggle with the functions of analysis. Teachers who instruct their students to include analytical thinking in their expository writing must provide them with examples of what this type of writing looks like so that students can imitate. Once students begin to internalize the concept of analysis, they will be better able to construct expository responses that evidence analytical thought. Vanderburg (2006) included a
study by Sommers (1980) in which new writers developed a new understanding of revision by listening to more experienced writers discuss the elements of revision they used to compose writing pieces. The explanations of the more experienced writers helped the less experienced writers incorporate the concept of revision into their inner speech. Vanderburg (2006) noted that Heath and Branscombe (1983) reported similar results when they studied high school students’ ability to produce academic writing. Once again, a community of writers who shared ideas and gave advice helped less experienced writers develop their inner speech as they internalized writing concepts.

A final study reported by Vanderburg (2006) also supports the idea that helping students improve their ability to write directly aligns to the students’ ability to read and think about text. According to Vanderburg’s (2006) summary of a study by Marshall (1987), “the students’ use of personal and formal analytic writing improved the processes they utilized to handle reading assignments” (p. 387). Furthermore, Vanderburg (2006) pointed out a crucial component that, as of the review, had not been studied, which is the dearth of studies on how Vygotsky’s theories apply to other elements of the writing process and, specifically, a scarcity of models teachers can use to help students develop their inner voice in the planning and drafting stages of the writing process. Mentor texts may help students develop their inner voice as they develop language (Owles & Herman, 2014).

More recently, Lan and Liu (2010) reported that identifying EFL students’ ZPD and scaffolding instruction by utilizing a model composition can improve the students’ writing ability as well as increase their motivation for learning. The teacher played a crucial role in improving the students’ writing and motivation because it is through the teacher that the students recognize the criteria of effective writing as well as learn to “combine what they have experienced in
sample reading and what has been extracted by the mutual negotiation into their own writing” (Lan & Liu, 2010, p. 35). In other words, the teacher guides the students to understand what they see in the model text and how it relates to their own compositions.

Assaf (2014) called upon the third space theory of McCarthey and Moje (2002), which purports that students engage their ZPD most effectively in a third space created at school by the conjoining of the students’ personal experiences with that of their academic, or school, experiences. Assaf’s study reports that teachers of middle school students created a third space for their students in which they were allowed and even expected to write about their personal experiences. One method used by the cooperating classroom teacher was the mentor text to help teach students the craft of writing. Overall, the students were able to read and analyze texts through various modes of instruction, and by making connections to their personal experiences, they came to a deeper understanding. Through small group discussion and writing activities, the students were able to sharpen their skills of using academic language and changing their thinking. The creation of the third space resulted in a safe environment for students to discuss the texts and improve their writing, which then “created a different kind of writing instruction for the middle grades, one that values students’ local knowledge while learning about, incorporating, and changing institutional knowledge” (Assaf, 2014, p. 15). This integration of the students’ prior knowledge with the academic knowledge presented by the teacher is essential for student growth. Miller (2011) asserted that one of the main tenets of Vygotsky’s sociocultural theory is the necessity of culture for development: “Culture organizes children’s everyday experiences and nurtures development” (p. 174). As a result, learning within the ZPD is a result of the relationship between the shared understanding of the teacher and the students (Miller, 2011).
Beck and Stevenson (2015) demonstrated the importance of the shared understanding in a study on migrant students and their ability to develop personal narratives after reading mentor texts of similar experiences. Though the teacher may not have shared experiences or a shared understanding, the teacher can provide mentor texts that do share the experience. Beck and Stevenson (2015) found that students who studied mentor texts that they found relevant and modeled their writing after those mentor texts increased their writing scores by 35%. The powerful piece in their study involved “bringing students together to read, critique, reflect upon, and create stories that depict lives like their own” (Beck & Stevenson, 2015, p. 66) because such stories challenged the students to hear and understand the voices of the authors who have published those experiences. The voices students heard and modeled through the mentor texts might have been perpetually excluded from their awareness if not for the use of the mentor text to bridge the gap between students and teacher. Indeed, Smagorinsky (2013) stated that “Culturally learned ways of knowing—those that people learn through their interactions with those who surround them—provide a major source of difference in how people learn how to think” (p. 197). Therefore, teachers who feel they do not possess a shared understanding of a topic should consider the use of mentor texts to help mitigate the lack of experience in order to scaffold instruction for their students.

Related Literature

The Reading and Writing Connection

Vygotsky’s theories clearly indicate the connection between language acquisition and writing, and there remains no greater way to help students acquire language than reading. However, teachers must be adept at helping students comprehend, make sense of, and analyze text if the teachers are to use those texts to teach students to write. Multiplying the use of a text
through its study in both reading and writing instruction is indicative of the rigorous instruction required for many of the current state standards. In fact, Carmichael et al. (2010) evaluated the standards of all 50 states, and one of the criteria they used was “Content and Rigor.” Included in the broad category of “Content and Rigor” are such items as the type of text, complex texts, critical content knowledge, and the scaffold introduction of various writing genres (Carmichael et al., 2010). Teachers of writing may wish to use mentor texts for writing instruction without considering how intertwined the reading instruction should be. However, if writing teachers wish to elevate the language used by students, then the teachers must present students with increasingly complex texts to analyze for the sake of both reading and writing instruction. The use of mentor texts, then, promotes rigorous instruction that serves dual purposes.

Educators have equated rigor to complex texts, in part, as a result of the CCSSI’s (NGACBP & CCSSO, 2010) references to complex texts. However, a closer reading of the language of CCSSI (NGACBP & CCSSO, 2010) leads to the understanding that it is not the complex text that makes instruction rigorous but the fact that “Students will be challenged and asked questions that push them to refer back to what they’ve read. This stresses critical-thinking, problem-solving, and analytical skills that are required for success in college, career, and life” (para. 2). Researchers and educators have agreed. For instance, Blackburn (2014) defined rigor as holding students to high expectations while providing support for students to meet those expectations throughout the learning process. Likewise, Sztabnik (2015), a teacher of literature, explained rigor as “not defined by the text — it comes from what students do…it is measured in depth of understanding” (para. 9). Johnston (2013) found this to be true in a qualitative study of inner-city students. When the complexity of the text was increased and the expectation for the students was raised, students responded and succeeded: “With clear objectives that scaffold
towards the use of higher order thinking skills, self-efficacy, and extended writing assignments, these students can be empowered to perform” (Johnston, 2013, p. 41). Rigorous instruction, therefore, necessitates appropriately complex instructional practices, so the complexity of text matters because it provides the fodder for the high expectations and critical thinking. Nonetheless, the instructional task is equally important, especially when the instruction centers on writing.

Understanding text is an important first step in learning to construct written responses. According to Fisher and Frey (2014), “Understanding the purpose of and how others use evidence, reading closely looking for evidence, and annotating and sourcing texts are important aspects students must learn if they are going to be proficient composers who integrate evidence and respond to complex tasks” (p. 5). Indeed, Guan Eng Ho (2009) found that a systemic approach of using text analysis to teach writing structure resulted in the improved performance of the student in her case study. One of the goals of the Texas state standards is that students are able to write analytically using relevant evidence (TEA, 2010). The intent of the standard is for students to write expository essays that offer an analytical response to the prompt or topic. Proper instruction toward this standard should include the students analyzing a topic through informal writing and discussion as well as using evidence from sources outside their own experiences. For instance, Pisano (1980) found that a teacher who integrates tasks that demand critical thinking prior to students’ writing expository essays may be rewarded with student writing of higher quality. However, when it comes to writing standards, teachers do not always incorporate the emphasis on analytical thinking necessary for students to demonstrate mastery of the standard as a whole.
One way for students to begin learning to think analytically about text is for teachers to insist that students “read both as readers and as writers” (Fisher & Frey, 2014, p. 116). Kane et al. (2016) found that assessments of rigorous standards in English Language Arts place more emphasis on student writing than prior assessments have. The difference between students who do well on these assessments and those who do not may come down to how their teachers offered instruction on writing. Teachers are changing their instructional practices to help students meet state standards such as the CCSSI (NGACBP & CCSSO, 2010), and a majority of those teachers have increased the amount of writing they assign to their students (Kane et al., 2016). Simply increasing the amount of writing students do, however, will not suffice if educators are to prepare them for the analytical writing that stands between the students and graduation. Students not only need to read and write, they also need to think critically about a topic that they will analyze in their writing. According to Fitzgerald and Shanahan’s assertion (2000), one of the best methods for learning to think critically may be through text analysis prior to writing because reading and writing in conjunction affect student thinking since the two activities lead students to increase their knowledge through two avenues, and students need to learn to develop their knowledge through both reading and writing.

According to a meta-analysis of research studies that considered the connection between reading and writing, Graham and Hebert (2011) found that writing about a text increases reading comprehension of that text. In a follow-up study, Hebert, Gillespie, and Graham (2013) analyzed the types of writing tasks involved in studies that examined the relationship between writing and reading, and they found that there was not one writing task that stood out from the others as being more effective in increasing students’ reading comprehension; they did, however, note the scarcity of studies that considered how effective extended writing is compared to writing
tasks that involve minimal response such as summarizing or note taking. An extended writing task that many high school students will face before exiting high school is an expository essay that demands analysis of a topic to convey ideas. In order to execute such a task successfully, students must first learn to think and analyze through analysis of text via means of writing and discussion. Teachers must, therefore, modify their instructional practices regarding writing. According to Kane et al. (2016), teachers are changing their instructional practices to accommodate the challenges of new state standards, but one area that is often neglected is instruction of writing.

**Writing Instruction**

Writing in the high school English classroom may carry with it a certain amount of dread for some members of the class. The teacher may dread the stacks of papers to sift through, meticulously evaluating for clarity, cohesion, and content. Some students may dread the task itself, but the cause for each student’s dread may differ. For a few, it is simply an aversion to writing; other students may find little interest in the assigned topic. When faced with such obstacles from their students, teachers may prefer to avoid the subject altogether. However, with the nation’s attention focused on higher expectations in all content areas, teachers of writing must also step up to the task. Many, though, are ill-equipped to do so. According to Will (2016), current assessments place a greater emphasis on writing, but teachers do not receive guidance in how to instruct students according to the new expectations. Indeed, “…several recent surveys have found nearly all language arts teachers are at least somewhat reliant on material they’ve developed or selected themselves” (Will, 2016, p. 4). The dearth of available resources may leave teachers feeling frustrated, and if they do not see student progress, discouraged.
Students may or may not be able to explain their struggle with constructing written responses, so it falls to the teacher to consider how the instructional methods used will support student learning. For example, when students experience writing instruction, they may not stop to consider whether the instruction is beneficial because it is helping them improve their thinking skills and providing them with varied language structures or if the instruction is simply guiding them to a correct answer. Perceiving writing instruction and its final product in terms of Vygotsky’s dialectical thinking would be appropriate. Vygotsky considered the content and form “indivisible” (Gredler, 2012, p. 123); in this case, the concepts would be the elements of expository writing, but the form would be the “new ways of thinking” (p. 123), or the critical thinking necessary to convey logical responses about given topics. The teacher must, therefore, consider how the instruction impacts students’ ability to intertwine the new concepts and the new form.

It is clear that teachers must consider how the instructional methods used to teach writing influence students’ ability to complete a writing task. Consideration must also be made as to how the writing instruction will lead to independent writers. Teachers who provide detailed outlines designed to inform the structure of writing prior to a writing task may inadvertently create a crutch upon which their students will continually desire to lean; instead, teachers must be careful to offer students scaffolds that will support them throughout the writing process, which can be removed as they become unnecessary. Vanderburg (2006) suggested that teachers who plan for these scaffolds and guide their students to independence are operating under the theory of Vygotsky’s zone of proximal development (ZPD). In order to produce independent writers, teachers of writing, specifically at the secondary level, need instructional methods that positively influence students’ ability to analyze a topic or prompt and respond through writing.
However, those teachers also need guidance as they learn to design and implement instruction that utilizes these methods.

**The Need for Improved Writing Instruction**

Traditionally, the instruction of writing has received less attention than that of reading and mathematics, both in research and in practice. According to Troia and Olinghouse (2013), several studies show that secondary teachers do not devote proportional amounts of instructional time to writing and do not give assignments that demand higher order thinking. In addition, the National Commission on Writing’s (2003) conclusion that writing is the most neglected among the three staples of education—reading, writing, and arithmetic—has been oft cited in the literature on writing (Graham & Perin, 2007; Harris, Graham, Friedlander, Laud, & Dougherty, 2013). The neglect of writing has continued in recent years. A flood of reports and editorials on changes in reading instruction inundated the literature since the advent of CCSSI (NGACBP & CCSSO, 2010); however, in comparison, few scholars have addressed the need for changes in writing instruction, and far fewer studies have been completed on how teachers can or should implement instructional strategies for writing or how writing can help students meet more rigorous reading standards.

**Writing on State Assessments**

Current standards in education, including the CCSSI (NGACBP & CCSSO, 2010), do not neglect writing; writing is inextricably intertwined with reading standards and, naturally, standards for language conventions. Indeed, the CCSSI (NGACBP & CCSSO, 2010) reading standards mandate critical thinking and analysis, and many teachers will naturally require students to write in order to demonstrate competency in the standards. The problem with instruction is that the reading standards are emphasized and the writing standards are not,
perhaps because educators do not see beyond the genres of writing assessed, or perhaps they do not fully grasp the relationship of the reading standards to the writing standards. A third possibility is that educators have not carefully studied the assessments that will be used across the nation to determine students’ competency with state standards and so have missed the greater complexity of the writing tasks. Stahl and Schweid (2013) pointed out that to successfully complete the PARCC or Smarter Balance assessments, “students will need to generate inferences, monitor their own comprehension, and then adjust accordingly to produce high-level responses” (p. 124). Another possibility for the lack of emphasis on writing is the tendency to ignore evidence-based practices in writing instruction, combined with the lack of indicators in the standards themselves for instructors to use evidence-based practices (Troia & Olinghouse, 2013). Yet the onus for such ignorance may not solely be on classroom practitioners. Although the literature on evidence-based strategies for writing exists, it is insufficient to give educators an adequate picture of what best practices are for writing instruction. One such strategy that could potentially benefit students as they learn to write in a way that meets the level of analysis and critical thinking demanded by current state reading standards such as the CCSSI (NGACBP & CCSSO, 2010) or the Texas Essential Knowledge and Skills, commonly referred to as the TEKS (TEA, 2010), is the use of mentor texts, which provide students an opportunity to analyze text while gaining an understanding of the structures that writers use in their craft.

**Writing and State Standards**

The demand of CCSSI (NGACBP & CCSSO, 2010) writing stems not from the writing standards, but from the use of writing to meet the reading standards. The anchor standards for writing pose traditional writing tasks. For example, according to the CCSSI (NGACBP & CCSSO, 2010), the first three anchor standards for writing dictate that students should write
argumentative, expository, and narrative pieces. Following the three traditional types of writing is the demand for editing and revision, research, and continuous practice. Harris, Graham, Friedlander, Laud, and Dougherty (2013) concluded that the writing standards focus on four basic applications: write for many purposes, write well, write to obtain and build knowledge, and use writing to learn in many areas. A similar theme exists in the TEKS. The TEKS address all genres of writing, and each writing standard can be paired with a reading standard. It is the integration of the reading and writing standards that makes the TEKS effective for English Language Arts. For example, to meet the standards for writing, students in the ninth grade are required to “write an analytical essay of sufficient length” that is organized, developed, relevant, and purposeful; and for reading, they must “make subtle inferences and draw complex conclusions about the ideas in text and their organizational patterns” for informational/expository texts (TEA, 2008). It follows that students should learn how to construct text as they learn to analyze it. However, instruction must be addressed if teachers will be able to guide their students to success. Kane et al. (2016) noted that many schools have needed to completely revise curriculum as well as increase teachers’ knowledge about content. For example, LaRusso et al. (2016) found that complex reasoning is related to deep comprehension of text. Tierney et al. (1989) demonstrated that a strong correlation exists between students’ writing and their higher order thinking ability. Therefore, it stands to reason that teachers should offer instruction that encourages students to write as a means of exercising their reasoning skills, which should, in turn, improve reading comprehension.

Harris et al. (2013) defined skilled writing as “complex, requiring extensive self-regulation of a flexible, goal-directed, problem-solving activity” (p. 539). Smith et al. (2013) asserted that current practices in writing will not be enough to meet the new standards set by
Common Core. The Common Core anchor standards for reading include verbs such as “interpret,” “integrate and evaluate,” “analyze,” and “assess” (NGACBP & CCSSO, 2010), all of which fall high on Bloom’s Taxonomy of thinking skills. The need for better instruction in writing can be seen by studying the sample writing prompts published by PARCC: “Use what you have learned from reading ‘Daedalus and Icarus’ by Ovid and ‘To a Friend Whose Work Has Come to Triumph’ by Anne Sexton to write an essay that provides an analysis of how Sexton transforms ‘Daedalus and Icarus’” (Riley, 2014, p. 26). Students must not only sufficiently read and comprehend the two texts, they must then write a sophisticated analysis of the two texts. As Smith et al. (2013) pointed out, “If students are to meet or even exceed the CCSSI (2016), they need far more than the knowledge of formulas” (p. 45). Students who have learned the formula of the five-paragraph essay may have a structure, but that does not guarantee the content of their structure conveys understanding of the text. Students who do understand the text and have a grasp of the analysis may still struggle with constructing language that demonstrates that understanding. The foundation for the analytical writing demanded by some standardized assessments is the expository essay, with which many students today still struggle (Nunes, 2013).

Educators in Texas may argue that the writing assessments found on STAAR do not warrant study of textual analysis because the prompts are expository or persuasive in nature. However, the standard for writing in the ninth grade clearly indicates analysis: “write an analytical essay of sufficient length” (TEA, 2008, E1.14A). The prompts given on the STAAR End of Course exam for English I imply analysis, but many teachers do not understand the subtlety and limit their instruction to formulaic responses. For instance, the 2016 STAAR English I Scoring Guide indicates that students will need to “write an essay explaining your
definition of a true friendship” (TEA, 2016, p.2). While this prompt may appear to ask students to write about the topic by summarizing what they believe about friendship, the instructions state: “explaining your definition.” The prompt requires students first to analyze true friendship and then explain their definition. Included in the response should be examples of true friendship that students must be able to explain and connect to their definitions. Truly, critical thinking skills must be applied. Nonetheless, teachers restrict writing instruction to practice prompts and five paragraph essays without addressing the need for analytical thought.

Consequently, teachers must consider implementing scaffolding tools like mentor texts when they teach writing, to help students recognize structures and forms of writing while allowing them practice in deeply analyzing text. Students who understand what they are writing about are more likely to feel confident in their ability to write (Hawkins, 2006). Students need instruction and practice in both text analysis and written response to successfully complete the analytical writing mandated by current state standards (Peery, 2013), and through their study of complex texts should come to recognize the features and conventions of multiple genres used by effective writers (Fisher, Frey, & Lapp, 2012). However, such rigorous instruction may not come naturally or easily to a great number of teachers. Teachers, themselves, need instruction on how to implement effective and rigorous instruction that integrates the analysis of text with the development of writing.

**Writing Instruction With Models**

Graham and Perin (2007) conducted a meta-analysis of writing instruction in which they looked for instructional treatments that produced results, and one of those scaffolding tools was models. Modeling involves “students examining examples of one or more specific types of text and attempting to emulate the patterns or forms in these examples in their own writing” (Graham
& Perin, 2007, p. 449). The purpose of modeling, according to Graham and Perin, is not only to help students recognize what their end product should resemble, but also to help them recognize elements of good writing so that they can eventually produce competent writing without the aid of the model. In the meta-analysis, however, Graham and Perin only found six studies of models that reported a significant effect size, but the overall conclusion of these studies shows that studying models does result in “small improvements in writing quality” (p. 464). Similarly, Santangelo and Olinghouse (2009) endeavored to identify practices of highly effective teachers of writing and also found that models can be used “to teach a number of writing skills” (p. 9). According to Santangelo and Olinghouse (2009), models can be authentic texts, samples of student work, or passages written by teachers; models of writing also help students improve their reading comprehension by helping them identify text structures. However, Graham and Perin’s meta-analysis is a stronger study of writing practices; Santangelo and Olinghouse did not clarify the type of studies they analyzed to determine what makes a highly effective writing teacher nor what studies showed success. It must be noted, though, that Santangelo and Olinghouse intended their paper to show the usefulness of a strategy known as Self-Regulated Strategy Development or SRSD, and Stage 3 is modeling. Harris et al. (2013) also delineated the stages of SRSD and claimed that over “80 studies of SRSD have been conducted across grades 1-12” (p. 540).

Nevertheless, few studies that specifically consider using models as an instructional tool have emerged since the report by Graham and Perin (2007). One study, Wette (2014), considered the use of modeling as an instructional practice for second language (L2) writing. Wette asserted that modeling “encompasses presentation of cognitive processes by the teacher, analysis of completed text products or performances, and cooperative modeling by the teacher with the whole class or by students in groups” (p. 62) and can be used to teach writing to second
language learners. The study was “interpretive and qualitative” and meant to “gain a holistic, in-depth understanding of the practices of a relatively small sample of participants” (Wette, 2014, p. 63). Wette reported that modeling occurred frequently and served to benefit the students as well as the teachers, but one specific drawback identified was utilizing a model that was too far removed from the students’ skill level. While Wette’s qualitative study provided valuable insight into how teachers use modeling, more quantitative evidence is needed to determine how effective modeling may be for helping students meet CCSSI.

A possible reason for the dearth of studies in using models as an instructional strategy for writing may be the fact that modeling does not always mean providing an example text. For example, Regan and Berkeley (2012) identified modeling as an essential part of reading and writing instruction and posed three guiding questions for teachers who wish to utilize modeling in their writing instruction; however, the examples used show a teacher using verbal modeling of thought processes throughout the writing process rather than providing a model of a final product. Indeed, Wette (2014) also referred to other ways to model during instruction, specifically the cognitive processes a writer uses, as did Harris et al. (2013) in their description of SRSD’s third stage of modeling. Another possibility for the lack of studies specifically referring to models is the parallel between providing models and using mentor texts.

**Writing Instruction With Mentor Texts**

Gallagher (2014) gave the definition of a mentor text as a published or authentic text of the same style or genre as the text students need to write. If students need to write expository pieces that convey logic and thoughtfulness, then the teacher should provide a text that does so for students to study. Pytash, Edmonson, and Tait (2014) found mentor texts to be useful in helping students navigate social studies essays, and Owles and Herman (2014) found that mentor
texts were very helpful in teaching elementary students to write certain types of texts. Begg (1987) used the concept of modeling to teach students to write a critical analysis of a horror film; the model Begg used was Stephen King’s *Danse Macabre*. Begg posited that the model “became the primary source of the critical analysis paper assignment—a culmination of all the techniques and strategies that the composition students have learned” (p. 73). Although Begg called the text he had his students mimic a model, Gallagher (2014) would probably define King’s *Danse Macabre* as a mentor text. Gallagher (2014) described a mentor text as a piece a teacher would have the students emulate:

> If we want our students to write persuasive arguments, interesting explanatory pieces, or captivating narratives, we need to have them read, analyze, and emulate persuasive arguments, interesting explanatory pieces, and captivating narratives…. Before our students can write well in a given discourse, they need to see good writing in that discourse. (p. 29)

Furthermore, Gallagher pointed out the correlation between using mentor texts and meeting several of the CCSSI reading standards. Some of the confusion differentiating the terms *model, mentor text, and exemplar* stems from statements such as students benefit from “having exemplary models to analyze and imitate” (Gallagher, 2014, p. 21) when describing the use of a mentor text.

Owles and Herman (2014) provided clarification of the difference between a mentor text and a model by emphasizing the relationship between reading and writing when using a mentor text: “We can use mentor texts to show the characteristics of good writing and reading” (p. 51). In other words, if students are to recognize these characteristics, they must first engage in textual analysis. In addition, Owles and Herman described ways teachers at various levels can use
appropriate mentor texts for their particular level of students. Mentor texts can serve as a scaffolding tool because they help secondary students move “from structured guidance to independence” (Owles & Herman, 2014, p. 56). Mentor text seems to be the new label for models since the appearance of the Common Core standards, due to the emphasis on texts in the standards. The problem with the literature, however, is the lack of empirical studies on mentor texts and their effect.

Pytash et al. (2014) utilized a qualitative study to explore how using a mentor text in an economics class affected high school students. While the study does not provide quantitative data showing significant effects of the mentor texts, it does provide highly beneficial information about using mentor texts to help students write to meet the CCSSI (NGACBP & CCSSO, 2010). First, the type of writing the students in the study had to do was unfamiliar to them. Many students, especially in the first few years following the implementation of the CCSSI, might be unfamiliar with the type of writing required to show competency. In the study by Pytash et al., the students had little familiarity with the “white papers of policy critiques or policy statements” (p. 99) they needed to write. Second, the study provided feedback from students who were given a mentor text. Indeed, the students who participated in the study conveyed satisfaction with the mentor text, not only as a tool to help them write, but also, since they had to understand the structure and purposes of the mentor text in order to use it as a model, as information in its own right on the subject (Pytash et al., 2014). The study also suggested the importance of incorporating writing into all disciplines. Often, English teachers emphasize writing more than other content area teachers do, but the Common Core standards demand that writing occur in all contents.
Pytash et al. (2014) concluded that “Studying authentic texts…is one way for students to grow as readers, writers, and learners in the discipline” (p. 104). The word authentic is an important component of the difference between models and mentor texts. Owles and Herman (2014) concurred and referred to published texts by “the beloved authors we and they read and admire” (p. 51) as mentor texts. However, the occlusion of texts other than authentic texts as mentor texts contradicts Gallagher (2014), who claimed that mentor texts “shouldn’t come solely from professional writers” (p. 21). Gallagher suggested teachers can also create mentor texts and should do so in front of the students, thus modeling the writing process while creating a mentor text. Yet it is the meaning of model that creates ambiguity between the terms model text and mentor text. Gallagher also referred to “comparing model texts with examples of lower-quality writing” (p. 32), thus insinuating that the model text is the best example of a certain type of writing, and, of course, a model example can also be referred to as an exemplar.

Sanders and Moudy (2008) qualitatively studied the role of mentor texts in the development of teachers. Education students were tasked with increasing their content knowledge through the study of mentor texts. As they analyzed various texts for specific organizational patterns, they became more knowledgeable of those patterns and were able to write more effectively in each given organizational pattern (Sanders & Moudy, 2008).

Muhammad (2015) qualitatively studied the role of mentor texts to support the writing development of adolescent girls. Muhammad found that the mentor texts allowed the girls to develop more ideas and understand the style and structure of the genre of the mentor text each studied. The success of the mentor text strategy in this study partially stemmed from the girls’ analysis of the mentor texts. The students learned to read the text as a writer; in other words, the
students read the mentor text critically, analyzing it for its structure and development, which, in turn, allowed them to mimic what they analyzed in their writing (Muhammad, 2015).

**Writing Instruction With Exemplars**

According to several studies, exemplar texts are useful in helping students understand the expectations of an assignment (Handley & Williams, 2011; Hendry, Bromberger, & Armstrong, 2011; Hendry, Armstrong, & Bromberger, 2012). The term *exemplar* mostly occurs in studies that explore the use of an example text to inform students of how that text compares to the standard, and arises from Sadler’s (1987) definition of the term as “key examples chosen so as to be typical of designated levels of quality or competence” (p. 200). Sadler’s intent for an exemplar was as an instructional tool for educators to help their students understand and meet standards. Although Sadler is vague on the production or selection of exemplars, most of the research employing the term exemplar identifies the exemplar as either a student sample or a product of the educator. Newlyn (2013) attempted to differentiate between exemplars and models by stating that exemplars more accurately fit student work whereas a model is the ideal produced by the teacher (p. 26). However, Newlyn went on to state that “exemplars should be thought of in the broadest possible context and are representative of examples of indicative standards of work as previously completed by students or produced by educators” (p. 27). In the years between Sadler (1987) and Newlyn (2013), studies emerged on the use of exemplars, but the definition of an exemplar seems to depend on the type of tool the exemplar is meant to be.

Orsmond, Merry, and Reiling (2002) studied the role of exemplars to help students understand the assessment of their learning; therefore, they utilized Sadler’s (1987) definition of an exemplar. In this study, the exemplars used were previous student samples; however, the students were not told the grades the exemplars received. The purpose was to determine if
students understood the criteria of the assignment. Orsmond et al. (2002) concluded that exemplars do help students understand assessment criteria but may not help students in the process of producing the final product. Although this study did not intend to explore how exemplars can be used as a scaffolding tool, it does indicate a problem with using exemplars to scaffold instruction. If students do not understand the process of producing the final product, then when the tool is removed, the students might not be able to produce an effective text.

Handley and Williams (2011) offered an interpretation of exemplars that addresses the potential of exemplars to focus on the end product rather than the process. Handley and Williams asserted that “exemplars are not models” and should not be given to students to study and mimic; rather, exemplars should be used to help students “refine their understanding of their discipline and how to communicate within it” (p. 98). According to this interpretation, exemplars function more like mentor texts than models. Handley and William’s study, though, was similar to that of Orsmond et al. (2002) in that they looked at how students used exemplars to understand the assessment criteria. In contrast, Handley and Williams used a quasi-experimental study to find significant differences between students’ grades and their perception of the usefulness of the exemplars. The researchers found that students valued the exemplars but did not understand the processes to get to a final product, so “what was needed was a dialogic process by which tutors could share their tacit ways of interpreting explicitly written criteria, so that students could begin to see those criteria embedded in the exemplars” (Handley & Williams, 2011, p. 104). Also, Handley and Williams concluded that exemplars must be carefully selected according to length and level so that they are not confusing or misleading to students, and they suggested using exemplars created by the instructor as opposed to student samples and mentioned the need for future study in this area.
Still in the spirit of using exemplars to clarify assessment criteria, Hendry et al. (2011) asserted that exemplars can also be used as a method of feedback as students work toward a final assessment. Hendry et al. (2011) used Sadler’s (1987) definition of exemplars and did not attempt to refine it; they used student samples from previous classes and offered exemplars of three different grades. The results of this study revealed that students found the exemplars very useful, and the “qualitative and quantitative results show clearly that exemplars marked and discussed in class provide the most useful guidance to students for completing their assignment” (Hendry et al., 2011, p. 8). Hendry et al. confirmed the usefulness of exemplars and clarified the need for instructors to discuss the exemplars with students to ensure students understand why the exemplar is a good or poor example of an assessment product. Hendry et al. suggested more studies, specifically “for guiding students in completing longer, more conventional assessment tasks, such as essays” (p. 9). High school educators may find that providing students with an exemplar textual analysis may be effective in helping students understand the criteria and construction of the final product. If the exemplar text is utilized as a mentor text, then deconstruction of the text should occur, and, therefore, the teacher will guide the students through an analysis of the process used to construct the exemplar analysis.

In a follow-up study, Hendry et al. (2012) considered the effect of exemplars when used with a rubric, as opposed to rubrics without an exemplar, and the effect of the teachers’ input in the discussion about the exemplar and rubric. The mixed-method approach utilized in this study allowed the researchers to obtain quantifiable data showing the significant relationship between students’ perceptions of the usefulness of the exemplar and the students’ grades on the final assessment (Hendry et al., 2012). The study clearly showed that students value the exemplars, but without teacher discussion of how the exemplars meet the criteria of the rubric, they are not
as effective. The qualitative results from the student surveys addressed another concern about using exemplars, which is that students will plagiarize. According to the results of Hendry et al. (2012), students were aware of the potential for plagiarism; however, the participating students considered plagiarizing highly inappropriate since the exemplar task was not the same as their own. As a result, instructors who use exemplars should be careful to use selections that may resemble the assessment task for which they are preparing students but not specific examples of that task.

In contrast, Chandler-Olcott and Zeleznik (2013) used the term exemplar to describe example essays constructed by the researchers in order to provide their students with “an exemplar text that met the assignment criteria” (p. 93). In this case, the exemplars used were answers to the stated prompt the students would eventually answer; however, the authors voiced no concern that students would plagiarize portions of the exemplars. This may be due to the process by which the researchers used the exemplars. Chandler-Olcott and Zeleznik modeled various steps of the entire writing process and showed how those steps contributed to the final product. The students had support throughout the process as they constructed their original responses and had little need to resort to plagiarism. Furthermore, the prompt presented to the students warranted a personal response. In Chandler-Olcott and Zeleznik, the exemplars were an effective means of helping students create written texts that were largely unfamiliar to the students.

Thus far, exemplars and mentor texts are fairly distinguished from one another in the literature. Exemplars are either student samples or instructor-constructed samples that show students what assessments look like at various levels of competency (Hendry et al., 2011; Hendry et al., 2012; Orsmond et al., 2002; Sadler, 1987); mentor texts are authentic texts that
instructors use to teach students the structure of a specific type of text (Gallagher, 2014; Owles & Herman, 2014; Pytash et al., 2014). However, for practice in reading comprehension and analysis of a complex text, mentor texts are more applicable since they allow teachers to use the rich literature or complex text desired for instruction but with the purposeful use for writing instruction (Owles & Herman, 2014). Such is the case in Clark et al. (2013), which used “children’s information books as exemplars of well-structured text models to teach young students how to write selected discourse patterns required of teacher and young students in the CCSS” (p. 267). Clark et al. referred to the mentor text as an exemplar, which indicates the lack of clear differentiation between the two types of model texts.

**Clarifying Terminology**

Teachers of writing will benefit from using model texts, but the most effective use will result from using the appropriate model for a given purpose. Teachers may find obtaining information on the appropriate model text difficult as long as the terminology remains muddled. Assigning the correct term to the function of the tool will be highly beneficial to the body of literature on the topic of example texts, and educators will need to carefully consider what it is they want to do with the tool. An exemplar, then, is an example of a product that meets certain criteria of a given standard or standards to warrant a specified score (Sadler, 1987). An exemplar is useful when teaching students to complete specific tasks to show competency in meeting a specific standard (Hendry et al., 2011; Hendry et al., 2012). Teachers who need to prepare students to write essays in response to standardized test prompts should use exemplars, especially when the type of essay is unfamiliar to students.

Mentor texts, on the other hand, are authentic texts in a specific type of writing (Gallagher, 2014). Mentor texts should be used to teach students elements such as style,
structure, tone, diction, etc., and unlike exemplars, mentor texts may not be appropriate for exemplifying criteria for standards (Owles & Herman, 2014). Teachers who wish to help students understand how a text is structured in order to increase comprehension and improve students’ ability to analyze the text should use mentor texts since students who need to write an analysis of texts must be able to comprehend the texts but also analyze them. Mentor texts in this case should be examples of textual analysis or literary analysis, such as Begg (1987) did by using King’s *Danse Macabre*.

The term *model*, however, obscures the distinction between mentor texts and exemplars. Newlyn (2013) defined models as “specific examples of a ‘perfect’ answer” (p. 26), but Wette (2014) stated three definitions of modeling that include a completed text. The ambiguity in the literature perhaps stems from the use of *model* as both a noun and a verb. A model, as a noun, is an example of a product. Model, as a verb, is an action carried out by the instructor. Regan and Berkeley (2012) emphasized the verb model, but Graham and Perin (2007) listed the “study of models” (p. 449) as an effective instructional tool for writing, which demands the model be a noun. Therefore, instructors can model how to read a mentor text, or, as Chandler-Olcott and Zeleznik (2013) did, can model how to write portions of an essay. Furthermore, a concern exists that students will interpret an exemplar as a model to imitate (Handley & Williams, 2011) when, in fact, an exemplar is meant only to be an example of products that meets certain criteria (Sadler, 1987). Exemplars are meant to give students an idea of what their final product should look like as opposed to giving them something to imitate. However, when it comes to introducing students to a new way of writing, they may need a model in order to have a starting point, which is what Graham and Perin (2007) described when they used the term model:
For example, providing students with models of good essays provides immediate help, as it illustrates in a concrete fashion what they should try to achieve in their own writing. It is further assumed that as students repeatedly analyze these models and attempt to emulate them over time, they develop a better understanding of the criteria underlying good writing and that they increasingly apply this newly acquired knowledge without having to rely on the models for assistance. (p. 451)

Either a mentor text or an exemplar can be used in this fashion and for this purpose; therefore, a mentor text is a model, and so is an exemplar. Instructors can model reading or writing skills with a mentor text or an exemplar. Gallagher (2014) suggested using a mentor text to teach the structure of a particular style of writing but also to use exemplar responses to help students recognize effective and ineffective ways to respond to certain types of prompts. Further studies need to be conducted on the effectiveness of mentor texts to help students analyze texts and incorporate elements of the writer’s craft they find in the mentor text into their own writing as well as on the effectiveness of exemplars in helping students write expository essays that demonstrate sophistication in thinking.

This study has emphasized the use of a mentor text, whether it is a model found in published literature or an exemplar essay written by a student or constructed by the teacher. Just as the students in Chandler-Olcott and Zeleznik (2013) were “generally inexperienced with this sort of literary analysis” (p. 95), it is likely that many high school students have not yet been challenged to incorporate critical thinking into their writing nor to analyze text for how its features apply to their own writing. It is also likely that teachers may be inexperienced with developing and implementing instruction that guides students through this rigorous process.
More often than not, this guidance will come to teachers through professional development and instructional coaching.

**Professional Development of Teachers**

Professional development often evokes an array of emotional reactions; however, researchers agree that it is imperative for teacher and student growth. Learning Forward (2011) builds a foundation of standards for professional learning upon the assumption that improvement in education is dependent upon professional learning: “Professional learning is the primary vehicle available to schools and school systems to strengthen the performance of the education workforce, and the success of educators’ daily work depends on it” (p. 6). One of the challenges developers of professional development must overcome is the teacher attitude toward professional development, that it does not meet their needs. According to Birman, Desimone, Porter, and Garet (2000), “the degree to which professional development focuses on content knowledge is directly related to teachers’ reported increases in knowledge and skills;” (p. 30) however, an effective professional development session must focus on a specific instructional strategy for a particular content and not general instructional strategies loosely related to the content. For example, training teachers to use mentor texts for writing instruction must include specific instructional methods and not just an overview of what mentor text instruction is.

Teachers, like students, need to practice the concepts they learn during professional development and not just hear them, but Birman et al. (2000) stated that teachers then need opportunities to “observe and be observed teaching; to plan classroom implementation…to review student work; and to present, lead, and write…” and they referred to this as active learning (p. 31). In a follow-up study to Birman et al. (2000), the researchers (Desimone, Porter, Garet, Yoon, & Birman, 2002) studied the effect of professional development on teacher practice.
and again found that “teacher participation in professional development that focuses on a particular teaching practice predicts increased teachers’ use of that practice in their classrooms” (p. 98). In a review of the literature on professional development from the research of Birman et al. (2000) through their own research study, Penuel, Fishman, Yamaguchi, and Gallagher (2007) agreed that effective professional development must integrate active learning, and the study by Blank, de las Alas, and Smith (2008) found that professional development programs were effective for math and science teachers when they included content instruction and then continued training and support. One-time professional developments have their place, but what happens in the teachers’ classrooms beyond the training matters.

**Professional Learning Communities**

Professional learning communities (PLCs) have grown in number across the nation in recent years, so much so that DuFour (2004) cautioned that “the term [PLC] has been used so ubiquitously that it is in danger of losing all meaning” (para. 1). Stoll and Louis (2007) recognized that a common definition of PLC does not exist but pointed to a variety of research that agrees that a PLC focuses on professionals working together to grow in some capacity related to their work, and they concluded that PLCs can be effective when the community prioritizes learning and networks with others to increase learning. Thessin (2015) recommended using PLCs as a cost-effective means of providing ongoing professional development to teachers but cautioned that collaboration and leadership are essential to their success. In a follow-up study, Jones and Thessin (2017) explored a school’s use of PLCs throughout one school year and focused on the principal’s role in monitoring PLCs that were developing, implementing, and sustaining their work. Similarly, Peppers (2015) found through qualitative analysis of high school teachers that PLCs may be an effective means of professional development when they are
formed around those with common interests and supported by school leadership. Research has suggested that principals should provide PLC members with ongoing support, professional development, and resources for the PLC to effectively sustain the learning that occurs (Blank et al., 2008). It is not enough for teachers to engage in professional development, nor is it sufficient to enroll them solely in a PLC. The two go hand-in-hand.

The term *community of practice* has also been applied to PLCs: Wenger-Trayner (2015) defined communities of practice as “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (p. 1). As in the case of Jones and Thessin (2017), Dobbs, Ippolito, and Charner-Laird (2016) found that professional learning communities are more effective when supported by school leadership and focused on a particular objective. In addition, Dobbs et al. found that communities of practice are “powerful tools for improving disciplinary literacy instruction and disrupting the traditionally isolating cultures of secondary schools” (p. 31). Professional development followed by, or integrating, opportunities for teachers to practice and discuss with each other their ideas about implementation of the concepts or skills they learned during that professional development is included in several descriptions of effective professional development (Darling-Hammond et al., 2017; Desimone, 2011). Communities of practice allow for that to happen. However, in larger districts or when campuses do not provide effective PLCs, it may be necessary for teachers to look outside their home campus to find a community of learning that will support and enrich the goals they have for their students.

**Online Professional Learning Communities**

Lock (2006) suggested a new paradigm in professional learning by calling for the implementation of online learning communities and argued that it is not the location of the
community that defines it as such, but rather their shared objectives. In the case of teacher professional development, it is a group of learners “who engage in the learning process for themselves, are willing to refine their thinking and practice, to listen to each other as they formulate ideas and understandings, and are open to learn from errors” (Lock, 2006, p. 669).

However, PLCs must be more than a collection of individuals interested in similar topics, who periodically participate in online discussion; otherwise, the online PLC becomes nothing more than another social media network. DuFour (2004) reminded educators that PLCs should have as their ultimate objective student learning, and their hallmark must be collaboration: “The powerful collaboration that characterizes professional learning communities is a systematic process in which teachers work together to analyze and improve their classroom practice” (para. 17). For example, Riverin and Stacey (2008) studied two groups of participants who joined the Education Network of Ontario over a decade and found that when the network lost its collaborative nature, participation waned. Interestingly, the group of participants who joined the network after participating in face-to-face professional development found a greater sense of community, and the researchers pointed out a suggestion that “online communities should be exploring the use of discussion forums linked to structured professional development opportunities” (Riverin & Stacey, 2008, p. 54).

In a survey of members of three different online PLCs, Duncan-Howell (2010) concluded that teachers desire professional development that meets their needs and interests and consider online communities that fulfill their idea of effective professional development. However, 22% of the participants ranked single sessions as effective in influencing teaching practices, and Duncan-Howell surmised that “perhaps, the respondents perceive this type of session effective for a particular role such as acquiring a new skill or information about a new policy” (p. 332).
She did not, however, explore the connection between the single session professional development and the online communities. Liu, Carr, and Strobel (2009) published initial evidence that participating in an online learning community following a professional development workshop positively affects teachers’ confidence, and teachers believe the process contributed to their professional growth. Like Yoo (2016), the analysis focused only on one group of participants. Whereas Yoo (2016) reported on participation in an online PLC and Liu et al. (2009) on a group that participated in a face-to-face workshop and then an online PLC, neither compared the effects of participating in one versus the other.

In a similar vein, Liu and Kleinsasser (2014) studied the effects of an online PLC on preservice and inservice English-as-a-Foreign-Language (EFL) teachers and how it could be used as professional development. The inservice teachers were asked to serve as advisors to the preservice teachers, and all participants engaged in the online community through discussion board posts and reporting on specific tasks. Through qualitative and quantitative methods, Liu and Kleinsasser found that both groups of teachers reported increased knowledge; however, a limitation on the study revealed the ambiguity in the cause of any increased knowledge. It may have been the actual experiences of the teachers or their professional backgrounds. Confusion about their roles in the online community also existed for the inservice teachers, who desired to engage as learners but were expected to act as advisors. Liu and Kleinsasser concluded that online PLCs must have a trusted leader at the helm and perhaps a virtual component that allows members to interact face-to-face.

The literature on online PLCs is growing, but more work remains. A plethora of questions remain regarding the effectiveness of online PLCs, especially in comparison to and in conjunction with in-person professional development. Thus far the research has shown that
online PLCs must integrate the same key components as professional development. Desimone (2011) recommends that professional development be focused on content, involve active learning, maintain coherence, extend for at least a semester for at least 20 hours of contact time, and include groups of professionals who learn and work together in a community. This model begins with a knowledge-building professional development experience and then continues as teachers practice implementing what they have learned. The literature shows that PLCs can be a useful means of teacher learning (Duncan-Howell, 2010; Liu & Kleinsasser, 2014; Pepper, 2015; Riverin & Stacey, 2008); however, the literature does not yet reveal how effective online PLCs are in supporting teacher growth following the initial professional development. Campus-based PLCs meant to provide teachers with continuing professional development often have at their helm an instructional coach. However, when teachers receive professional development from a source outside of their campus-based personnel, it may not be feasible for an instructional coach to provide ongoing, in-person follow-up, which leads to the question informing the present study of how effective online coaching may be following a professional development session.

**Instructional Coaching**

Instructional coaching has appeared in the literature for several decades, but educational researchers continue to search for common definitions and applications. Denton and Hasbrouk (2009) provided a summary of the history of instructional coaches since the 1970s and concluded that “there appears to be a consensus that coaching is a form of sustained, job-embedded professional development and that it includes some form of teacher observation” (p. 155). They described several types of instructional coaching, including technical, problem-solving, reflective practice, and team-building coaching. Indeed, instructional coaching can take many forms but can be an influential factor in building capacity in teachers to carry out various aspects of
instruction (Neuman & Cunningham, 2009). Kurz, Reddy, and Glover (2017) offered a multidisciplinary framework for instructional coaching that provides for several actions associated with various types of coaches: questioning, assessing, goal-setting, planning, demonstrating, critiquing, evaluating, and adjusting. The framework encompasses three focal points for instructional coaches—skills, process, and development—and leads to specific outcomes: performance enhancement, environmental improvements, promotion of autonomy, enhancement of cognition, and community development. The framework developed by Kurz et al. (2017) provides for various types of instructional coaches but specifically supports the work done by campus-based coaches whose role is to support teacher development through observation and feedback. Observation of teachers and feedback are common to all descriptions of instructional coaching reviewed by Connor (2017) throughout nine separate articles on instructional coaching. Teachers likely perceive an instructional coach to be a specific person whose role is to work one-on-one with teachers and coach them to improve their performance as instructors, which aligns to Kowal and Steiner’s (2007) definition: “an instructional coach is defined as someone whose primary responsibility is to bring practices that have been studied using a variety of research methods into classrooms by working with adults rather than students” (para. 7). While many types of coaching exist, many educators will agree that instructional coaching should aim to improve teacher practice and effectiveness. Therefore, it follows that instructional coaching is a form of professional development and can potentially influence teachers’ sense of efficacy in implementing new instructional strategies.

Desimone and Pak (2017) asserted that instructional coaching serves as professional development because it often reflects the five elements of effective professional development; instructional coaches that serve to promote the development of teachers should maintain a
content focus, provide opportunities for active learning, ensure that learning is coherent and aligned to the goals and values of the school, sustain the duration of the professional development, and provide for collective participation. One challenge site-based instructional coaches may face is lack of content knowledge to support all the teachers within their charge. Denton and Hasbrouck (2009) agreed that “professionals need to be equipped with content-specific knowledge, as well as skills related to establishing, maintaining, and working within professional relationships with teachers and other school personnel” (p. 169). Teachers seeking to improve their practice by learning about new instructional strategies for their content, such as mentor texts, may place greater confidence in a coach who demonstrates equal or greater knowledge of that content. Kowal and Steiner (2007) asserted that coaches need coaching, too, specifically in the area of content. Although some may argue that an instructional coach may be effective even if content knowledge is lacking, Howley, Dudek, Rittenberg, and Larson (2014) included in their instrument for measuring coaching skills the item, “I feel comfortable helping colleagues identify gaps in their knowledge, and develop plans for addressing gaps in knowledge or practice” (p. 794). A conceivable conclusion is that someone lacking content knowledge may feel less comfortable in assisting colleagues in that specific area.

In order to contribute to the development of teachers, instructional coaches must also provide teachers with opportunities to engage in active learning (Desimone & Pak, 2017). Active learning integrates the sources of self-efficacy and thus promotes increased teacher confidence as it sharpens teachers’ skills and craft. As teachers learn new information or skills, they need opportunities to apply and practice their learning. The support of the instructional coach provides teachers with feedback, usually through observation and conferences. Neuman and Cunningham (2009) and Spelman and Bell (2011) both found that professional development
combined with coaching had positive effects on teacher knowledge and practice. Neuman and Cunningham found that professional development alone did not have the same effect as pairing the learning with follow-up coaching. Both studies utilized a coaching model that involved observation, feedback, and problem solving; and both studies invested several months in the exploration of the effect follow-up coaching had on teachers. The duration of the coaching is likely a contributing factor to its effectiveness.

Desimone and Pak (2017) included duration as an important element of instructional coaching meant to serve as a form of professional development. Desimone (2011) concluded that over 20 hours of professional development are needed for the training to be effective, so it follows that site-based instructional coaches may be more effective than off-site coaches as they can continually work with teachers through PLCs and one-on-one conferences. Indeed, the fourth element of effective professional development involves the collective participation of teachers, and coaches facilitate collective learning when they lead PLCs and allow teachers to work together to problem solve and discuss aspects of planning and implementation. It is worth studying, however, if short-term professional development through instructional coaching can be effective. For instance, Knight (2012) found that instructional coaching can be more than six times more expensive than other traditional means of professional development. Hiring short-term instructional coaches to provide follow-up to teachers who attended or received professional development may not be practical; neither is it reasonable that professional development providers be expected to act as instructional coaches through established, on-site methods.

Online coaching may present a problem for the fifth ingredient in successful professional development, which is coherence, or alignment to the existing goals and values of a school or
classroom. Desimone and Pak (2017) described the importance of the coach’s role in providing that coherence; however, they also allowed for the possibility “for coaching to occur in isolation from other school, district, or state initiatives or to focus on a particular strategy without considering unique classroom contexts” (p. 8). If professional development providers can serve as instructional coaches through online follow-up with their participants, then it may be possible for them to help teachers understand how the new strategy or knowledge relates to their unique learning environments. Crawford, Zucker, Van Horne, and Landry (2017) acknowledged the lack of a research-based coaching model for educational institutions, noting the multiple responsibilities assigned to site-based coaches, and have begun exploring the effects of remote coaching on teacher practice. This remote coaching involves video footage of teachers in action and the coach’s response. However, only preliminary findings have been included, and the subject warrants continued study. For teachers already feeling overtasked, they may find the exchange with remote coaches frustrating. However, as technology becomes more and more user friendly, teachers may find online coaching serves their needs quite well.

Online follow-up coaching may be a solution to the needs of educators who engage in professional development and either do not have an instructional coach or whose coach is not able to provide the necessary follow-up. Online coaching may incorporate each of Bandura’s (1994) sources of self-efficacy. For example, online coaches can provide teachers with vicarious experiences through video or anecdotal records, and teachers can record their own experiences and reflect on them as mastery experiences. Through written communication or online chat forums, online coaches can provide feedback and verbal persuasion or counteract negative perceptions teachers may have of their ability to implement effective instruction.
Summary

Research shows that professional development followed by support, whether through coaching or PLCs, is more effective than isolated professional development sessions (Blank et al., 2008; Spelman, Bell, Thomas, & Briody, 2016; Yoo, 2016). Yet to be seen is how effective online coaching can be as a method of follow-up to in-person professional development.

Teachers in the age of standards-based learning, held accountable by reading and writing assessments, need more training on innovative instructional strategies to help them effectively prepare students to meet those standards (Peery, 2013; Smith et al., 2013; Troia & Olinghouse, 2013). For teachers of writing, the connection between reading, writing, and thinking is clear, but teachers need support in utilizing effective strategies for incorporating these essential actions (Graham & Perin, 2007; Hebert et al., 2013; Tierney et al., 1989).

One method currently being used and recommended as a best practice, which warrants more intensive research and for which teachers need more training, is the mentor text. Mentor texts can be interpreted as models when they provide an example of a product (Graham & Perin, 2007); as authentic texts that give students an idea of how a certain type of text should be structured (Gallagher, 2014); and, occasionally, as exemplars, though exemplars most frequently appear in the literature as examples of texts that meet certain criteria of a given standard (Sadler, 1987). The use of these types of texts to scaffold student learning during writing instruction aligns to Vygotsky’s theories of the zone of proximal development, inner speech, and concept development; however, the use of the mentor text for writing instruction demands that teachers understand the dynamics of how text analysis and writing work together.

Before they will attempt such instruction, teachers must possess a sense of efficacy that motivates them to undertake such a venture. According to Bandura (1994), self-efficacy stems
from four sources, and each of these sources can be developed through professional development and online follow-up coaching (Tschannen-Moran & McMaster, 2009). This study aims to determine how effective follow-up support through coaching emails is in raising teachers’ sense of efficacy in implementing mentor text instruction following an in-person professional development session.
CHAPTER THREE: METHODOLOGY

Overview

The purpose of this study is to provide educators and professional development providers with a research-based professional development model for training teachers to use mentor texts in writing instruction, which includes providing follow-up support through coaching emails. A one sample Wilcoxon Signed Rank Test was used to compare the participants’ median scores on the pretest and the posttest 1, and on the posttest 1 and posttest 2. Chapter 3 describes the research design; summarizes the research questions and hypotheses; describes the participants, setting, and instrumentation; outlines the procedures used; and provides an overview of the data analysis.

Design

This study is a quasi-experimental, one-group pretest-posttest design to determine if there is a statistically significant difference in secondary English teachers’ scores on the Teacher Sense of Efficacy Scale (TSES) for implementing mentor text instruction for writing after receiving in-person professional development and after receiving follow-up support through coaching emails for 5 weeks after the in-person professional development. Gall, Gall, and Borg (2007) stated,

The one-group pretest-posttest design involves three steps: (1) administration of a pretest measuring the dependent variable; (2) implementation of the experimental treatment (independent variable) for participants; and (3) administration of a posttest that measures the dependent variable again. The effects of the experimental treatment are determined by comparing the pretest and posttest score. (p. 416-17)
The primary purpose of the study was to determine if the in-person professional development or the combination of professional development and follow-up support through coaching emails affected secondary English teachers’ perceived self-efficacy. The independent variables were the in-person professional development and the follow-up support through coaching emails treatment. The dependent variable was the score on the TSES measured at three times: prior to the in-person professional development (pretest), following the in-person professional development (posttest 1), and following the 5 weeks of follow-up support through coaching emails (posttest 2). Participants selected for this study were middle school and high school English teachers in a large, urban public school district.

Gall et al. (2007) indicated several potential threats to the validity of a one-group pretest-posttest design. The internal factors include history, maturation, pretesting, and instrumentation. The history of the teachers and the work environments that each operates within on a daily basis may affect their beliefs about implementing mentor text instruction. To reduce the possibility of these factors affecting the outcome of the study, the participants were given detailed examples of how to use mentor texts for various reasons, and ample opportunities to ask questions about possible challenges since it is impossible to control for extenuating factors at each participant’s campus. Maturation of the participants may also affect the results of a one-group pretest-posttest design; however, in this case, maturation of the participants’ sense of efficacy contributes to the desired effect. In other words, as participants use mentor text instruction and learn what strategies are effective for their students, their confidence in using them should increase. It is the intent of this study that such should happen. The potential threat, therefore, is whether teachers would have implemented these strategies without the impetus of the professional development or would have continued practicing without the guidance of the online coaching. Unfortunately, a large enough
sample could not be found to create comparison groups that did not receive either treatment. The participants, instead, self-reported if their use of mentor texts increased after the professional development session.

Pretesting may also be considered a threat to the internal validity of a one-group pretest-posttest design wherein the participants anticipate the desired responses on the posttest because of familiarity with it after having taken the pretest. However, the Teacher Sense of Efficacy Scale (Tschannen-Moran & Hoy, 2001) is designed to “assess a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects” (pp. 801-02). It is unlikely, then, that participants will seek to improve upon their original scores but will, instead, attempt to respond in a way that reflects their honest perception of the item at the moment. This, also, then mitigates the potential threat of the instrument used since what has not changed is the “nature of the measuring instrument” (Gall et al., 2001, p. 385).

External factors that may threaten the validity largely involve the sample population. Participants only came from the accessible population on a volunteer basis. Thus, while the researcher was able to limit participation to teachers in grades 6 through 12, the researcher could not control for multiple factors that may affect the outcome of the study, such as years of experience or existing familiarity with mentor texts. To reduce the possibility of external factors affecting the outcome, participants were asked to complete the TSES three times. The initial pretest provided baseline data, and participants took the TSES as two separate posttests: once after the initial professional development and again after 5 weeks of online coaching.

**Research Questions**

This study considered the following research questions:
RQ1: What effect does a single professional development session, which is designed to incorporate four measures of efficacy, have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?

RQ2: What effect does receiving follow-up support through coaching emails after in-person professional development have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?

Null Hypotheses

The following are the null hypotheses for this study:

H₀₁: There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after teachers participate in a single professional development session, which is designed to incorporate four measures of efficacy.

H₀₂: There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after receiving follow-up support through coaching emails following a single professional development session.

Participants and Setting

Participants for this study were selected based upon a convenience sample of the accessible population, who volunteered to participate in each aspect of the study. A power analysis done using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) required a sample size of 20 for a one sample Wilcoxon Signed Rank Test if power is set at .8 with alpha at .1 and a medium effect size (.5). However, only nine teachers gave consent and participated throughout this study. According to Gall et al. (2007), the minimum number of participants for a related samples t-test is eight when the matching variable is set at .7, alpha at .10, and power at .5 for a large effect size; and the Wilcoxon
Signed Rank Test is a nonparametric alternative to the paired samples \( t \)-test (Rockinson-Szapkiw, 2013).

The participants were nine English teachers in grades 6-12 in a large urban school district in Texas. According to the 2016-2017 Texas Academic Performance Report, the school district served approximately 157,000 students in grades kindergarten through 12 and employed over 10,000 teachers (TEA, 2017). Of these teachers, 34.6% were African American, 29% were Hispanic, and 30.6% were white. Only 29.6% of the teachers were male, with 70.4% being female. In addition, many of the teachers in this district are new teachers, with 11.2% having 0 years’ experience and 34.5% having 1-5 years’ experience. Teachers with 6-10 years of experience make up 17.2% of the teaching staff; while 37.1% of the teachers have more than 10 years of experience.

The current sample consists of nine teachers currently employed as English teachers in the district. All nine teachers were female, with four being African American and five Caucasian. Since there is a much larger percentage of female teachers than male in the district, it is not unrealistic that only female teachers chose to participate in this study. Of the nine teachers, 0% report being a brand new teacher, 22.2% having 1-5 years’ experience, 22.2% having between 6 and 10 years of experience, and 55.6% having more than 10 years’ experience. However, because the sample population differs somewhat from the district teacher population as a whole, the results of this study cannot be generalized to the target population. Two of the participants had a prior relationship with the researcher, and two were acquainted; all of the participants, however, participated out of a desire to improve professionally and learn more about an instructional strategy they deemed to have potential to benefit their students.

The study consisted of one group, the nine participants who attended the professional development and also received the follow-up support through coaching emails. All participants
attended a 2-hour, in-person professional development session focusing on strategies for using mentor text instruction to teach writing; and then received and responded to coaching emails for 5 weeks. The coaching emails consisted of tips for using mentor texts, suggestions from journal articles on mentor text instruction, video exemplars of mentor text instruction, ideas from the participants, and the researcher’s responses to participants’ questions.

**Instrumentation**

The Teacher Sense of Efficacy Scale (TSES) was used to measure teachers’ beliefs about their ability to implement mentor text instruction (see Appendix A). Tschannen-Moran and Hoy (2001) developed the TSES to provide a valid and reliable measure to determine teachers’ efficacy beliefs in specific situations and across contexts. Their model “suggests that a valid measure of teacher efficacy must assess both personal competence and an analysis of the task in terms of the resources and constraints in particular teaching contexts” (p. 795). The TSES examines how teachers feel about their ability to perform in given situations and so is an ideal instrument for studying how teachers feel about their ability to implement mentor text instruction. When developing this instrument, Tschannen-Moran and Hoy asked a group of graduate students in a seminar on teaching at Ohio State University to develop items for a new scale to measure teachers’ sense of efficacy. Of the 100-plus items the group generated, 52 were identified as assessing the concepts envisioned by the researchers. These 52 items were then studied in three separate situations, leaving a final 24 items on the scale and also providing for a 12-item short form. The final TSES was then evaluated for reliability, achieving a score of .94 on Cronbach’s alpha for the 24-item scale and .90 on the short form. Tschannen-Moran and Hoy’s factor analysis resulted in three consistent factors: Efficacy in Student Engagement (.87 alpha), Efficacy in Instructional Practices (.91 alpha), and Efficacy in Classroom Management (.90 alpha).
Tschannen-Moran and Hoy (2001) developed the Teacher Sense of Efficacy Scale (TSES) to support researchers in studying effective methods of increasing teacher efficacy. Yoo (2016) used the TSES in a study exploring the effect of online professional development on teachers’ perceived self-efficacy. In Yoo’s study, nearly 150 teachers experienced 5 weeks of online professional development that included feedback from professional learning coaches. The results of the paired-samples t-test revealed a significant difference between pretest and posttest scores on the TSES in all three of the factors the TSES measures (Yoo, 2016). However, Yoo’s post ad hoc analysis using a one-way ANOVA did not indicate a significant difference when controlled for teacher gender or grade level taught. The current study also considers the effect professional development and online learning have on teacher perceived self-efficacy; however, this study compares the teachers’ scores on the TSES to their own scores at three different points in time.

**Procedures**

Nine teachers attended a 2-hour professional development session (N=9) and agreed to receive follow-up coaching emails. All participants responded to the TSES prior to the in-person session (pretest) and within 5 days after the in-person training (posttest 1); participants completed the survey a third time following 5 weeks of receiving the follow-up coaching emails (posttest 2).

Prior to the study, the researcher secured permission from the Institutional Review Board (IRB) of Liberty University (see Appendix B) and from the school district’s Research Review Board (RRB) through the district’s application process. Over 800 teachers contacted via email were invited to attend a 2-hour professional development session on strategies for using mentor texts provided by the researcher through the district’s professional development program. Of 20 teachers who registered, only 14 teachers attended the training. All attendees signed a consent form at the
beginning of the session (see Appendix C). During the session, the researcher integrated four sources of self-efficacy into the training on using various strategies for using mentor texts during writing instruction.

At the end of the session, all attendees were asked to complete a feedback survey required by the district before participants can receive continuing education credit for professional development. The researcher asked participants’ permission to use their responses qualitatively but anonymously in the final dissertation, which was granted through the consent form. The day after the session, all attendees were invited to complete the TSES again as the initial posttest.

Those interested in receiving the follow-up coaching emails were asked to sign-up at the end of the training, and nine teachers agreed. The follow-up coaching emails were sent each week for 5 weeks following the professional development training. Teachers were asked to submit questions and ideas about using mentor texts. The researcher provided tips based on current research and authors considered to be experts on writing instruction (i.e., Gallagher, 2014) and included exemplar videos of mentor text instruction occurring in secondary classrooms. The researcher gave suggestions based on participants’ questions and also provided examples of lesson plans that utilize mentor texts for writing. At the end of the 5 weeks of follow-up coaching emails, the researcher asked the nine teachers to complete the TSES a final time.

**Data Analysis**

Teachers responded to 24 items on the TSES. Tschannen-Moran and Hoy (n.d.) suggested computing the unweighted means of the items. Descriptive statistics were produced for each set of scores: the pretest, posttest 1, and posttest 2. Difference scores were determined used SPSS, and assumption testing was completed based upon the difference scores. According to Gall et al. (2007), the Wilcoxon Signed Rank Test is a nonparametric test similar to the \( t \)-test for correlated
means, or paired samples. Due to the small sample size, the one sample Wilcoxon Signed Rank Test was used to determine if there was a difference in the participants’ median scores from the pretest to the posttest 1, and a second one sample Wilcoxon Signed Rank Test was used to determine if there was a difference in participants’ median scores from the posttest 1 to the posttest 2.
CHAPTER FOUR: FINDINGS

Overview

Chapter 4 provides a detailed description of the hypothesis testing that was performed for this study. Descriptive statistics are provided, followed by a summary of the assumption testing that was used. Finally, each null hypothesis is presented, with the statistical analysis performed to determine if it could be rejected.

Research Questions

This study considered the following research questions:

**RQ1:** What effect does a single professional development session, which is designed to incorporate four measures of efficacy, have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?

**RQ2:** What effect does receiving follow-up support through coaching emails after in-person professional development have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction?

Null Hypotheses

The following are the null hypotheses for this study:

**H₀1:** There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after teachers participate in a single professional development session, which is designed to incorporate four measures of efficacy.

**H₀2:** There is no difference in secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction after receiving follow-up support through coaching emails following a single professional development session.
Descriptive Statistics

A descriptive analysis was conducted to measure the difference in mean scores of teachers’ responses to the Teacher Sense of Efficacy Scale (TSES) at three points in time. Nine female teachers of grades 6 through 12 English classes participated in professional development through an in-person training and 5 weeks of receiving follow-up coaching emails; they completed the TSES before the in-person training (pretest), after the in-person training (posttest 1), and again after the follow-up coaching emails (posttest 2). Table 1 presents the means and standard deviations of scores for each of the participants.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
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<tbody>
<tr>
<td>Pretest</td>
<td>9</td>
<td>7.45</td>
<td>.298</td>
<td>6.46</td>
<td>8.83</td>
</tr>
<tr>
<td>Posttest 1</td>
<td>9</td>
<td>7.67</td>
<td>.332</td>
<td>5.71</td>
<td>8.92</td>
</tr>
<tr>
<td>Posttest 2</td>
<td>9</td>
<td>7.96</td>
<td>.260</td>
<td>6.92</td>
<td>8.92</td>
</tr>
</tbody>
</table>

Results

Assumption Tests

Prior to conducting the one sample Wilcoxon Signed Rank Test, assumption testing was performed. Three assumptions must be met before the Wilcoxon Signed Rank Test can be used. According to Lund and Lund (2013), the first assumption is that the dependent variable is measured on a continuous level, and when a Likert scale contains more than seven values, it may be treated as continuous; Tschannen-Moran and Hoy (n.d.) indicate that the TSES items should be treated as continuous. The second assumption is that the independent variables are matched pairs and
independent of the other pairs in the sample (Green & Salkind, 2014; Lund & Lund, 2013). Each participant completed the TSES three times, and the researcher matched the pretest, posttest 1, and posttest 2 scores of each participant. The third assumption is that “the distribution of the difference scores is continuous and symmetrical in the population” and “This assumption pertains to the difference scores” (Green & Salkind, 2014, p. 359). Figures 2 and 3 show the histograms for the difference scores of each of the tests.

Figure 1. Histogram of the difference scores from pretest to posttest 1.

Figure 2. Histogram of the difference scores from posttest 1 to posttest 2.
Additionally, Rockinson-Szapkiw (2013) stated that the Shapiro-Wilk normality test may be used for sample sizes smaller than 50, and “non-significant results (a significance level more than .05) indicate tenability of the assumption” (p. 18). Table 2 below shows the significance levels found for both sets of difference scores, \( p > .05 \).

Table 2

Tests of Normality

<table>
<thead>
<tr>
<th></th>
<th>Kolmogorov-Smirnov*</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>Difference 1</td>
<td>.152</td>
<td>9</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Null Hypothesis One

Nine secondary English teachers participated in a 2-hour in-person professional development to determine if it would have any effect on their perceived self-efficacy as they considered implementing mentor text instruction as measured by their scores on the TSES before and after the session. Of the nine participants, the posttest 1 elicited an increase in six of the participants’ scores, whereas three participants saw a decrease in scores. A one sample Wilcoxon Signed Rank Test determined that there was not a statistically significant difference in participants’ scores on the TSES (\( Mdn = .50 \)) from before participating in professional development (\( Mdn = 7.08 \)) to afterwards (\( Mdn = 7.96 \)), \( z = -.534, p = .594 \). The effect size was computed by dividing the \( z \) score by the square root of the observations, \( r = -.126 \). Therefore, the
null hypothesis cannot be rejected. A G*Power power analysis revealed a power of .178 (Faul et al., 2007), indicating the likelihood of a Type II error.

**Null Hypothesis Two**

Nine secondary English teachers received follow-up support through coaching emails for 5 weeks after participating in a 2-hour in-person professional development to determine if the follow-up support would have any effect on their perceived self-efficacy as they considered implementing mentor text instruction, as measured by their scores on the TSES. Of the nine participants, the posttest 2 elicited an increase in six of the participants’ scores, whereas three participants saw a decrease in scores. A one sample Wilcoxon Signed Rank Test determined that there was not a statistically significant difference between participants’ scores on the TSES ($Mdn = .25$) after receiving follow-up through coaching emails ($Mdn = 8.21$) and those before ($Mdn = 7.96$), $z = -1.068, p = .285$. The effect size was computed by dividing the $z$ score by the square root of the observations, $r = -.252$. Therefore, the null hypothesis cannot be rejected. A G*Power power analysis revealed a power of .280 (Faul et al., 2007), indicating the likelihood of a Type II error.
CHAPTER FIVE: CONCLUSIONS

Overview

Chapter 5 provides a detailed discussion of the results of the study by considering each research question in turn. Implications and limitations of the results are discussed, with recommendations for future research provided. According to a study done by the Center for Education Policy Research (Will, 2016), more research on helping teachers with writing instruction is necessary. Professional development that provides teachers with opportunities to practice and receive ongoing feedback may have potential for increasing the capacity of teachers to implement effective writing instruction. The goal of this study was to determine if follow-up to professional development in the form of coaching emails after a traditional professional development session was effective in increasing teachers’ sense of efficacy in their ability to use mentor texts as a strategy for writing instruction.

Discussion

The purpose of this study was to determine if a single in-person professional development session affected teachers’ sense of efficacy, or if follow-up support through coaching emails after the in-person session had an effect. Data were collected from nine teachers using the Teacher Sense of Efficacy Scale (TSES) before teachers participated in a 2-hour, in-person professional development training on strategies for using mentor texts for writing instruction, again after teachers participated in the training, and then again following 5 weeks of follow-up emails in order to address two research questions.

Research Question One

The first research question was, What effect does a single professional development session, which is designed to incorporate four measures of efficacy, have on secondary English
teachers’ scores on the TSES as they consider implementing mentor text instruction for writing? According to Darling-Hammond et al. (2017), research has shown that professional development initiatives often appear ineffective in changing teachers’ practices. As a result, Darling-Hammond et al. (2017) reviewed 35 studies from the past 30 years and found seven common attributes of effective professional development: content-focused, active learning, collaboration, models/modeling, coaching support, feedback and reflection, and sustained duration. These seven attributes align to the five core features identified by Desimone (2011): content focus, active learning, coherence, duration, and collective participation. The overlap of these elements strongly suggests that effective professional development must integrate each piece. Challenges with one-time, teacher-based professional development sessions include the lack of opportunity for teachers to practice and receive feedback identified by Darling-Hammond et al. (2017) and duration identified by Darling-Hammond et al. (2017) and Desimone (2011).

The current study investigated the possibility that a single professional development session that purposefully targeted the four factors of self-efficacy may be effective in increasing teachers’ perceived self-efficacy, despite brief duration and lack of coaching. The results of a one-sample Wilcoxon Signed Rank Test ($z = -.534, p = .594, r = -.126$, power of .178) were inconclusive. Lack of a statistically significant effect suggests that the in-person professional development did not have an effect on teachers’ sense of self-efficacy; however, the low statistical power of the test indicates the likelihood of a Type II error. Rockinson-Szapkiw (2013) pointed out that low power can lead to a Type II error, thus making it difficult to say with certainty that the null hypothesis cannot be rejected. However, studies on the effects of professional development on teachers indicate that traditional sessions do not lead to teacher growth (Birman et al., 2000). On the other hand, Tschannen-Moran and McMaster (2009) tested
the effects of four variations of a 3-hour in-person professional development workshop on teachers’ perceived self-efficacy. The first two treatments involved 3-hour workshops, the first of which targeted one source of self-efficacy and the second of which targeted two sources of self-efficacy. With the third and fourth variation, extended time was given to allow for the third and fourth additional sources of self-efficacy. Tschannen-Moran and McMaster (2009) found that each 3-hour workshop was “related to modest gains in teacher self-efficacy” (p. 240). In the district where the current study took place, professional development workshops are often limited to 2 hours. Therefore, the researcher wanted to determine if those 2 hours could be used to affect teachers’ perceived self-efficacy if the workshop targeted the sources of self-efficacy, as in the case of Tschannen-Moran and McMaster (2009). An important difference between the current study and that of Tschannen-Moran and McMaster involved the inclusion of the sources of self-efficacy. Whereas Tschannen-Moran and McMaster developed an additive program model, beginning with a workshop that only included the one source of self-efficacy and the fourth targeting all four, the current study attempted to embed all four sources in one training. Nevertheless, the results of the current study indicate that the incorporation of all four sources may have been ineffective.

Indeed, teachers need time to process new information and practice new strategies, which was the case in Powell-Moman and Brown-Schild’s (2011) study, which found an increase in teacher self-efficacy after a 2-year professional development program. Powell-Moman and Brown-Schild’s (2011) results align to assertions that effective professional development must be of a sustained duration. Desimone (2011), Birman et al. (2000), and Darling-Hammond et al. (2017) all agreed that duration of professional development is essential to its effectiveness. In
the current study, the 2-hour workshop may not have allowed enough time for teachers to process the information and examples provided.

Furthermore, Birman et al. (2000) indicated that professional development activities were more likely to be effective if they were a part of a “wider set of opportunities for teacher learning and development” (p. 29). While the in-person professional development of the current study allowed teachers to experience the strategies for using mentor text instruction, they did not provide room for teachers to practice with students and then discuss that implementation with colleagues. Tschannen-Moran and McMaster (2009) found the “most powerful professional development format included an authentic mastery experience embedded in the teacher’s regular teaching context” (p. 240); however, they did not determine how important the workshop was to that mastery experience but compared the differences in participants’ scores on the pretest and posttest in treatment four to those of the other treatments.

Therefore, it is possible that professional development prior to any ongoing opportunities for practice and feedback creates an anchor for the continuing work and will keep participants focused on their common objectives. Desimone et al. (2002) found results that were “consistent with research and reformers that suggest that teachers must engage in active learning such as interacting with their colleagues on a regular basis to discuss their work and their students’ learning, in order to develop a deeper understanding of how children think and learn” (p. 101). The current study supports the idea that teachers need ongoing practice and support following professional development training in order to practice the skills they have acquired because the professional development session itself was insufficient, though because of the low power of the statistical analysis, the results cannot be used conclusively to make that assertion.
Research Question Two

The second research question of the current study was, What effect does receiving follow-up support through emails after in-person professional development have on secondary English teachers’ scores on the TSES as they consider implementing mentor text instruction for writing? The results of the one-sample Wilcoxon Signed Rank Test ($z = -1.068, p = .285, r = -.252, \text{power of .280}$) indicated there was not a statistically significant difference in participants’ median scores from the posttest 1 to the posttest 2, but the results were inconclusive. The low power of this analysis, however, indicates the likelihood of a Type II error.

Findings from other studies suggested that effective professional development must include opportunities for practice and feedback (Birman et al., 2000; Blank et al., 2008; Darling-Hammond et al., 2017; Desimone, 2011). Teachers must be allowed opportunities to practice the strategies learned during professional development and then have opportunities to reflect on and discuss their attempts and receive feedback, which Darling-Hammond et al. (2017) described as an essential element of “high-quality professional learning” (p. 4). Desimone (2011) included “Collective Participation: Groups of teachers from the same grade, subject, or school should participate in professional development activities together to build an interactive learning community” (p. 69) as an essential component of effective professional development. Indeed, the interactive learning community will not thrive without opportunities to discuss their attempts at implementing a new strategy learned during professional development and receive feedback from peers or instructional coaches. The follow-up support through emails may not have been conducive for the interactive learning environments or collective participation other studies have shown to be effective.
Desimone and Pak (2017) maintained that instructional coaching serves as a form of professional development when it integrates the features of effective professional development identified by Desimone (2011). Connor (2017) included observation and feedback as an “active ingredient of effective coaching” (p. 80). Indeed, studies have shown that professional development followed by coaching can have a positive effect on teacher knowledge and practice (Neuman & Cunningham, 2009; Spelman & Bell, 2011). However, most of the literature on instructional coaching has emphasized the active role of the coach in observing the instruction and providing feedback through conferences with teachers. For example, Crawford et al. (2017) described a model of instructional coaching in which coaches facilitate the introduction of teachers to the content and continued training as well as follow-up discussions and support with implementation.

What has not been addressed in the literature is the role of the instructional coach in the practice and feedback component of professional development teachers receive from external sources. Denton and Hasbrouck (2009) raised a concern that “When coaching is implemented within the context of a defined schoolwide initiative, training may be provided to coaches as part of the program’s implementation, but the effectiveness of this training may vary” (p. 170). In other words, even when coaches are trained with or before teachers, it may not be effective in helping the coaches meet teacher needs. Additionally, site-based instructional coaching may be an obstacle for schools since it can be too expensive (Knight, 2012), so alternatives need to be explored. For example, in the current study, the online follow-up coaching was implemented by the provider of the professional development and did not depend upon a site-based instructional coach.
Denton and Hasbrouck (2009) encouraged researchers to explore a variety of instructional coaching models. The present study was developed from the perspective that the professional development provider could serve as the instructional coach for the participants by providing coaching through tips, resources, responses to questions, and facilitation of teacher interaction, which was all done through the follow-up emails. Increasing teachers’ sense of efficacy is an important first step to increasing their capacity to implement rigorous writing instruction because they will be more willing to experiment with challenging tasks (Bandura, 1994). However, the inconclusive results of this study raise more questions than solutions. Do opportunities to practice and discuss their experiences affect teachers’ sense of self-efficacy as they implement a new instructional strategy learned in a professional development session? Can follow-up received through emails be effective in helping teachers feel more confident in trying new methods of instruction? Can the professional development provider act as the coach, or do teachers need an on-site person to observe and provide feedback? Research has suggested that opportunities for practice and reflection, observation and feedback, and follow-up to professional development are essential elements of an effective professional development model (Birman et al., 2000; Blank et al., 2008; Darling-Hammond et al., 2017; Desimone, 2011; Neuman & Cunningham, 2009; Spelman & Bell, 2011). The inconclusive results of the current study, however, do not allow an assertion to be made of the effect that follow-up support through coaching emails may have on teachers’ perceived self-efficacy.

**Implications**

Teachers who desire to build upon their skills and continue to refine their practice will continue to seek out professional development, so the training they receive must be effective in helping them improve or change their practices in order to affect student learning. This study
has followed a growing body of research that suggests that effective professional development must include follow-up activities that allow teachers to practice and to reflect on and discuss their instruction. As researchers have found, effective professional development results from active learning, collaboration, and opportunities for coaching and feedback throughout a sustained duration (Birman et al., 2000; Darling-Hammond et al., 2017; Desimone, 2011; Powell-Moman, & Brown-Schild, 2011; Tschannen-Moran & McMaster, 2009; Yoo, 2016). What cannot be achieved in one-time training may be achieved by follow-up coaching.

The current study emphasized follow-up support from the professional development provider through a series of coaching emails following a one-time, in-person professional development training; however, the results are inconclusive. It cannot be determined that the addition of follow-up support through coaching emails to the in-person professional development session did or did not have an effect on teachers’ sense of efficacy in implementing mentor text instruction. The results of the statistical analysis indicate that neither had an effect on teachers’ perceived self-efficacy; however, in addition to the quantitative results, participants provided qualitative feedback on the final survey. The follow-up emails provided teachers with more examples of how to implement the strategies learned during the professional development session and tips on how to make them more effective. It also allowed teachers to respond to the ideas based on what they were doing in their classrooms, ask questions, and learn from each other. For example, one participant wrote, “I found reading about how the other teachers utilized mentor texts in their room valuable to my own teaching.” Six of the nine teachers who responded to the final survey indicated that they found the online follow-up coaching helpful. Comments such as “I was able to engage more and ask questions about the information I was receiving. The participants shared ideas. This was helpful in thinking through modifying
strategies for our unique campuses and situations” and “I found the online coaching very helpful! The open sharing forum allowed me to see how to successfully use a mentor text to anchor my instruction, specifically, my writing instruction” provide evidence that the follow-up emails served their purpose in providing teachers with ongoing support as they practiced utilizing mentor texts for writing instruction, but they do not provide statistical evidence that it had an effect on teachers’ perceived self-efficacy.

**Limitations**

Several limitations raise caution on interpreting the results of this study. Both internal and external threats existed and may diminish the validity of the results. In addition, weaknesses in the treatment conditions lead to limitations on the validity of the results.

**External Threats to Validity**

**Sample Size.** The participant sample leads to several limitations on the validity of this study. To begin with, the sample size was extremely small. Although over 800 teachers were contacted about participating, only 14 teachers attended the professional development session. Of those 14, only nine teachers completed each part of the study. The small sample size led to a low power for the statistical analysis, so it cannot be said with any degree of certainty that the treatment did or did not have an effect. In addition, the sample size also influenced the research design. More participants would have allowed the creation of a comparison group, but this study was limited to a one-group design.

**Sample Selection.** Another limitation with the current sample is the lack of random selection. All nine teachers who participated in the study volunteered to do so. However, two volunteered because of their relationship to the researcher, though the teachers all submitted responses to the TSES based on self-reflection. The sample was also not as diverse as the target population, which
includes more than a 50/50 representation of race and a wider array of teaching experience than the sample. Moreover, the sample was limited to one school district, which while large, does not represent other districts throughout the state or region.

**Internal Threats to Validity**

**History.** Related to the participant sample limitation is the history of the teachers and their work environments. Because the researcher was unable to randomly select participants from the entire population, historical factors for each participant could not be controlled. For example, seven of the nine teachers in the sample had at least 6 years of teaching experience, so each of them had had many opportunities to implement writing instruction using different strategies. In the present study, it was not possible to eliminate teachers from the study who already had experience using mentor texts. The pretest was given to determine where each participant’s perceived sense of efficacy was before the professional development session.

In addition to various histories, each teacher had a unique work environment. Some teachers may have had a supportive administrator or campus instructional coach whom they could seek out when struggling with a new instructional strategy; while others may have felt they are isolated. Those who may have had additional support beyond the online follow-up coaching may have felt an increased sense of self-efficacy without the provided treatment. While the online follow-up coaching targeted the strategy that participants learned during the professional development session, participants may also have had other sources of support affecting their perceived self-efficacy.

**Maturation of Participants.** Gall et al. (2007) warned that as participants mature in their roles following a treatment method, they may have achieved the intended results of the study without receiving the treatment provided by the study. Once again, the small sample size calls into question
the validity of the results. Without a comparison group who did not receive the treatment, it is impossible to completely control for factors outside of the treatment that may have influenced participants’ maturation.

**Pretesting.** Whenever a posttest is used that participants have already seen as the pretest, the possibility exists that they will respond differently in an attempt to increase their scores (Gall et al., 2007). In this study, however, participants took the posttest 1 and posttest 2, 5 weeks apart, so it is unlikely that they remembered their responses from a previous attempt. The survey used to measure participants’ perceived self-efficacy was not designed to collect a certain number of correct answers but, rather, relied on participants’ self-reflection. Therefore, participants had no incentive to try to improve their scores.

**Treatment Conditions**

Beyond limitations often associated with one-group pretest-posttest designs, elements of the treatment conditions also limited the validity of the results. To begin with, the in-person professional development session lasted only 2 hours. While 2 hours is a typical length of a one-time training, scant literature exists to support the effectiveness of this abbreviated amount of time. Indeed, the factors of effective professional development suggest at least 20 hours of contact time (Desimone, 2011). However, professional development sessions in the district where the study took place are limited by teacher work hours and usually take place on weekdays after teacher contractual hours end, and so are usually about two hours in duration. Furthermore, the follow-up support was limited to 5 weeks and excluded the use of video chat and observation of teacher practice. Rather, the follow-up support utilized email communication and video exemplars that provided the vicarious experiences for teachers. While this allowed for the participants to respond to one another, their interaction did not occur in real time.
Recommendations for Future Research

Research on professional development elements and methods must continue as more stringent expectations are placed on teachers to bring their students to mastery of rigorous learning standards. Additionally, research on effective instructional practices must continue to help teachers select those practices that will result in the greatest return on student achievement. The current study focused on professional development of a specific strategy for writing instruction; however, more research is needed on the effects of professional development, as well as the instructional strategy of using mentor texts for writing instruction. Mentor text instruction is not limited to secondary students, so future studies on mentor text instruction should include not only secondary teachers and students, but also elementary teachers and students, as well as those in higher education. This study focused solely on secondary English teachers’ sense of efficacy in implementing instruction; however, further research should be conducted on the effect of online coaching on fidelity of teacher implementation of instructional practices and student achievement.

While this study only considered nine teachers who received training, future studies should target greater numbers of teachers. It is also worth studying the effect of professional development and methods of follow-up support on teachers from a particular institution, as well as a sample of teachers from several institutions. The sample size of the current population was limited to female teachers with several years of experience, so it behooves future researchers to consider the effect of professional development on new teachers, preservice teachers, and a wider range of experienced teachers. It will also be interesting to investigate if teacher gender plays any role in the effectiveness of follow-up support, specifically the use of email. Studies that integrate the effect on student achievement will also be necessary and should consider students of individual grade levels and a variety of demographics and socioeconomic backgrounds. Specific studies on English
Learners or students with special needs will also provide insights into the effectiveness of mentor text instruction on various student populations.

Professional development of teachers of writing will continue to provide a wide range of topics for study, and a plethora of opportunities for studying the effects of mentor text instruction exist. Writing instruction will continue to be scrutinized as the nation becomes more and more aware of learning standards, and teachers deserve every opportunity to receive effective professional development and coaching support as they endeavor to implement rigorous strategies, such as mentor texts, into daily instruction.
REFERENCES


National Writing Project. Retrieved from


Appendix A: Instrument

To view the Teacher Sense of Efficacy Scale, go to

http://wmpeople.wm.edu/site/page/mxtsch/researchtools
Appendix B: IRB Approval

October 19, 2017

Ann-Marie Morgan
IRB Approval 3002.101917: Effect of an Online Professional Learning Community on Secondary English Teachers’ Sense of Efficacy in Implementing Mentor Text Instruction

Dear Ann-Marie Morgan,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

The Graduate School
Appendix C: Participant Consent Form

PARTICIPANT CONSENT FORM

Effect of an Online Professional Learning Community on Secondary English Teachers’ Sense of Efficacy in Implementing Mentor Text Instruction

Ann-Marie Morgan
Liberty University
School of Education

You are invited to participate in a research study about an instructional practice used in writing called mentor texts and the effect professional development has on teachers’ beliefs about their ability to implement that instruction. You were selected as a possible participant because you are a secondary English teacher. I ask that you read this form and ask any questions you may have before agreeing to be in the study.

Ann-Marie Morgan, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to determine if professional development has an effect on teachers’ beliefs about their ability to implement mentor text instruction for expository writing. Professional development is often provided in one-time, in-person workshops. However, with the increased use of online learning, teachers can work together across schools and districts to grow professionally through online learning communities. This study will explore if the online PLC has a greater effect on teachers’ self-efficacy than the in-person training.

Procedures: There will be two groups involved in this study. The experimental group will consist of those teachers who elect to participate in online coaching after the two-hour workshop. The control group will be those teachers who attend the two-hour workshop but do not wish to join the online PLC. If you agree to be in this study, you may join either group. Both groups will likely consist of 15 participants. I will ask all participants to do the following things:
1.) Attend a two-hour training on mentor text instruction one time and then try implementing the instructional strategies you will learn in your classrooms for five weeks.
2.) Complete an online Google Form to report your sense of efficacy before the in-person training, one day after the training, and then again after five weeks. Participants will be asked to record voluntary demographic information when completing the pre-training survey. Your email address will be collected to ensure matching of pre- and post-training surveys; however, no personal information will be shared. Each survey will take approximately 20-25 minutes to complete.
3.) Consider participating in online coaching for five weeks. If you decide to participate in the online coaching, you will be asked to submit a summary of your lesson plans and anonymous student writing samples that use the mentor text strategies and respond to emails sent by the researcher providing instructional tips, exemplar videos, and feedback. The total time each week for online PLC participation is 25 minutes.
4.) All participants will be asked to complete a feedback survey after the in-person workshop, and online PLC members will be asked to complete the same survey at the conclusion of the online PLC. Comments made on this survey may be used, anonymously, in the written dissertation as qualitative evidence of the professional development. These surveys will take about 10 minutes to complete.

Risks and Benefits of being in the Study: The risks involved in this study are minimal. There is little to no risk of injury—physical, mental, or emotional. Any risks associated with the study are no more than a participant would encounter in everyday life.

The benefits to participation include gaining professional development in mentor text instruction. Participating in the online PLC may further benefit teachers by providing ongoing support and feedback.

Compensation: You will not receive monetary compensation for taking part in this study, but you will receive two hours of continuing education credit for participating in the professional development workshop. Participants who join the online PLC will earn an additional two hours of continuing education credit for a total of four hours of continuing education credit. Participants who wish to withdraw from the study will receive PD credit for the hours they have earned at the time of their withdrawal. Credit cannot be withheld solely on the basis of a participant withdrawing from the study.
Confidentiality: The records of this study will be kept private. In any type of report that I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

The only records used by the researcher will be the responses on the Teacher Sense of Efficacy Scale, voluntary demographic information, and responses provided in the professional development feedback surveys. No names will be used in the final paper, and no names will be released to the public or Liberty University. Teacher attendance in the professional development session will be recorded so that participants may receive continuing education credit. The online PLC will utilize Google Hangouts as a forum for virtual interaction and may be recorded. However, these recordings will only be used by the researcher for review of the training and to inform future similar activities. Discussion recorded will not be used in the dissertation. Only comments made on the feedback surveys will be used, anonymously, in the dissertation.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision to participate or not will not affect your current or future relations with Liberty University or Dallas Independent School District. If you decide to participate, you are free not to answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will not be used in this study.

Contacts and Questions: The researcher conducting this study is Ann-Marie Morgan. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at amorgan72@liberty.edu. You may also contact the research’s faculty advisor, Dr. Gary Kimball at gkimball@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd, Green Hall Suite 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study. I understand that, while this project has been reviewed by Dallas Independent School District, Dallas ISD is not conducting the project activities.

(Note: Do not agree to participate unless IRB approval information with current dates has been added to this document.)

☐ The researcher has my permission to audio/video record me during the online PLC activities as part of my participation in this study.

Signature: ___________________________ Date: ___________________________

Signature of Investigator: ___________________________ Date: ___________________________