THE IMPACT OF TEACHER EDUCATION WRITING-INTENSIVE COURSES

ON PRESERVICE TEACHERS' SELF-EFFICACY FOR WRITING AND

WRITING INSTRUCTION

A Dissertation

by

TRACEY SAMANTHA HODGES

Submitted to the Office of Graduate and Professional Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Chair of Committee,   Erin McTigue
Committee Members,   Patricia Goodson
                     Li-Jen Kuo
                     Hersh C. Waxman
Head of Department,   Yeping Li

August 2015

Major Subject: Curriculum and Instruction

ABSTRACT

In the United States, changes to policy as well as practice are negatively affecting writing instruction for K-12 students. While workforce demands continue to require more writing competence, public schools are shying away from including more writing instruction as they struggle to meet increasing testing demands. Additionally, teachers consistently report that they feel inadequately prepared to teach writing and feel low self-efficacy for their own writing abilities. In this multiple-article dissertation, a mixed methods quasi-experimental research design was used to compare the self-efficacy of preservice teachers taking writing-intensive education courses to those in non-writing-intensive courses. Systematic classroom observations, instructor interviews, and preservice teacher surveys were utilized to collect data.

Results of the first study show that the *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI)* provides reliable and valid scores for measuring preservice teacher self-efficacy for writing, preservice teacher self-efficacy for writing instruction, and the effectiveness of the teacher preparation program for teaching writing. The second study shows that preservice teachers enrolled in writing-intensive courses do not differ from preservice teachers enrolled in non-writing-intensive courses in their self-efficacy toward writing and writing instruction. However, preservice teachers who write more often do show higher levels of self-efficacy for writing instruction than preservice teachers who write less than three times per week. Finally, study three shows that the beliefs of the instructor have a direct impact on the preservice teachers. Instructors who

feel they are themselves writers and can teach writing, generally have preservice

teachers with more positive views of writing. Combined, the results of these three

studies show that writing beliefs influence how confident preservice teachers feel about

teaching writing.

DEDICATION

To my dissertation chair, Dr. Erin McTigue, for being the mentor I aspire to be; words will never capture the gratitude, respect, and honor I have in calling you my teacher and friend.

To my father, Tommy Hodges, for instilling in me the inquiry and work ethic that has been the driving force behind my ambition and success.

To my mother, Carla Hodges, for modeling generosity, kindness, and service to others, inspiring my daily mission to "do good" in the world and live my passion.

To my sister, Melody Hodges, for showing me that obstacles and challenges, while part of life, do not define a person's aptitude, attitude, or achievement.

ACKNOWLEDGMENTS

Completing a doctoral degree is a feat of determination, resistance, and strength. That said, it is far from a solitary attempt and requires the dedication, support, guidance, and perseverance of many. It is my great honor to pay respects to the people who have, both knowingly and unconsciously, had a hand in my successful fulfillment of this goal.

First and foremost, I thank my family who are the pillars upon which I stand and who share in this dissertation's dedication. Thank you to my parents, sister, grandmother, and extended family who walked every step of this adventure with me, hand-in-hand. When I embarked on this pursuit, you reminded me to always enjoy what I was doing, learn from the people I encounter, and make certain that serving others was at the heart of my achievements. I am happy to report that these three truths are the reason I was successful. You have shared in every tear, every triumph, and every test of my determination. Without you, finishing would be insignificant.

I thank my dissertation committee who made this journey a prosperous endeavor for me. Dr. McTigue, thank you for the unyielding support over the past six years and keeping me on this path. Despite my constant demands and requests, you have never faltered in being my greatest cheerleader, most meticulous critic, and kindest advocate. You have been the strength, compassion, and guiding post in my journey. Dr. Waxman, thank you for instilling in me an appreciation for statistics and research design and providing me with more opportunities than I can list. Your mentorship has prepared

me for the demands of academia that cannot be taught within a classroom wall: the skills of networking, the importance of peer review, and the constant effort to be current in education policy. Dr. Kuo, thank you for pushing my ideas to the next level and challenging me to see beyond the easy answers. Your courage and moral character are models for how I hope to conduct myself as an academic. Dr. Goodson, thank you for being a shining star in the sometimes darkened sky of the blank page. You are my writing coach and a pure beacon of wisdom.

I thank my research team who made the data collection process efficient and effective. April Douglass, thank you for broadening my definition of quality writing and modeling how to inspire creativity in my students. Nancy Weber, thank you for sharing your knowledge of classroom observations and helping me adapt this knowledge to capture writing instruction. Katherine Wright, thank you for selflessly joining this project and keeping me sane during the busiest times of data collection. Anna De la Garza, thank you for being one of the most responsible, attentive, and enthusiastic undergraduates I have had the pleasure of knowing and for bringing so much energy to this project. Each of you became more than my experts, inter-raters, and observers, you kept me going even when things did not go as I planned. Thank you for all of your feedback, criticism, and time spent making this project a reality. Your friendship made the past two years of this work a pure joy.

I thank the instructors and preservice teachers who sacrificed precious minutes of their class sessions for questionnaires, surveys, and observations so that this dissertation could be realized. Your patience, commitment, and understanding were

invaluable to making the data collection process stress-free and rewarding. I learned from each of you and became a more skillful teacher as a result of your effective modeling of diverse practices. The teacher in me is forever grateful for the opportunity to learn from you.

I thank my friends who have been constant sources of support. Thank you for handing me tissues when I cried, hugging me when I needed reassurance, and constantly telling me that I was capable. You reminded me to enjoy the process as much as possible and savor every new opportunity for growth. The countless hours of text messages, phone calls, and cross-state travels invigorated me to continue the doctoral pursuit.

I thank my graduate school friends and colleagues who truly understand the often-painstaking demands of doctoral studies. From being collaborators in research to offering feedback on manuscripts to traveling to conferences together, you have influenced me to continually work harder. The friendly competition and humble pride we each shared led me to never give up. The open doors I often walked through for answers to questions, advice about school, work, or life, and recommendations for books were always met with smiles and sincerity. This community helped me stay afloat at all times.

Finally, I would like to thank the teachers who inspire me daily. Each teacher I have encountered in my life, either as a student or colleague, is my constant inspiration to continue this work. Beginning in kindergarten, first, and second grades, I was prepped for success. My progression through middle school, high school, and college presented me with teachers who went above and beyond to ensure that I was prepared for the next

step, whatever that may be. As a practicing teacher, I worked alongside the most passionate and warm-hearted teachers in schools today. These teachers exemplified the ideal that education is more than knowledge and that every student matters. I am blessed to know so many teachers who give their all simply because it is best for their students. My research and contribution to education are for you.

To everyone mentioned here and those I undoubtedly forgot, know that the honor, respect, and privilege of knowing you are mine. Thank you!

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

CHAPTER I

INTRODUCTION, DEFINITION OF KEY TERMS, & THEORETICAL

PERSPECTIVES

Nationally, the conversation about writing has increased (National Center for Education Statistics, 2012; Whitney & Friedrich, 2013). The Common Core State Standards, new testing requirements for K-12 students, and increased integration of technology into our daily lives have challenged our writing abilities (Daddona, 2013). However, a persistent problem is evident. As a whole, writing has been overlooked in American schools and does not receive the time and attention it deserves and needs (Mackenzie & Hemmings, 2014). One clear example of the unequal time writing receives relates to recent news reports from the College Board about the 2016 edition of the SAT (Scholastic Aptitude Test). According to a recent news report, the new SAT will include a 50-minute essay, instead of the traditional 25-minute essay; however, this essay is optional, depending on the university a student wishes to attend. Moreover, the writing section will no longer receive its own score, but the score will be added to the reading portion to make up only half of a student's overall score (O'Shaugnessy, 2014). While more time for writing the essay is a step in the right direction, the other two changes reflect steps backwards for writing education and cultural value.

The National Assessment of Educational Progress (NAEP) reports that nearly two-thirds of 4th, 8th, and 12th graders score below the proficient level in writing (Graham & Perin, 2007; National Center for Education Statistics, 2012). Accordingly,

American businesses spend $3.1 billion annually on writing remediation for employees (National Commission on Writing, 2004). As literacy demands of the work force increase, the field of education must prepare more highly qualified writing teachers to support this growth (Martin & Dismuke, 2015; Wang, Hall, & Rahimi, 2015; Zimmerman, Morgan, & Kidder-Brown, 2014). In short, writing instruction currently does not parallel the writing demands of the 21st-century workforce.

While the problem is well defined, the question of *why* this neglect persists remains unanswered. Research focusing on inservice teachers suggests that teachers do not feel adequately prepared to teach writing (Cutler & Graham, 2008). Looking at the connection between teacher self-efficacy for writing and student achievement in writing, we see that students of high-efficacy writing teachers spend more time writing each week than students of low-efficacy teachers, and high-efficacy teachers teach writing processes, grammar, and usage skills more often (Graham, Harris, Fink, & MacArthur, 2001; Zimmerman, Morgan, & Kidder-Brown, 2014). Research suggests that preservice teacher preparation programs and former teachers are the leading sources of preservice teachers' beliefs about writing (Graham, Harris, MacArther & Fink, 2002; Colby & Stapleton, 2006; Daisey, 2010; Dempsey, PytlikZillig & Bruning 2009). These arguments focus research back to the teacher education programs that are tasked with preparing preservice teachers to become effective writing teachers.

Writing has become more important for communication with the increased influence of technology (Coskie & Hornof, 2013; Yancey, 2004); therefore, a stronger emphasis should be placed in schools on writing *instruction* (McCarthey, Woodard, &

Kang, 2014). Writing instruction is often overlooked in schools, and one likely factor is that writing instruction is overlooked in teacher education programs. When a specific skill does not receive ample attention, the perpetuated idea is that the skill is not important. Most recent research in this area considers beliefs about writing and self-efficacy for writing relate for *inservice* teachers only. However, the beliefs about writing and self-efficacy for writing of *preservice* teachers cannot be ignored. The quality of writing instruction at the preservice level can have profound and lasting effects on teachers' attitudes (Bifue-Ambe, 2013; Yildirim & Ates, 2012) and performance.

The present dissertation, a compendium of three unique studies, seeks to determine the effectiveness of teacher modeling of writing practices on preservice teachers' self-efficacy for writing and writing instruction. Table 1 provides an outline of the research questions answered by Study One and a brief explanation of the methodology and statistical analyses. Study One, *Developing the Preservice Teacher Self-Efficacy for Writing Inventory,* informs the field by creating a survey instrument to measure preservice teachers' self-efficacy for writing and writing instruction. This instrument is tested for reliability and validity of scores with multiple samples of preservice teachers.

Table 1. Study One Research Questions and Statistical Analyses

Research Question	Statistical Analyses
1. Based on theory and research, how can preservice teachers' self-efficacy for writing and writing instruction be measured?	Survey Development and Prior Research
2. How reliable are scores on two newly created instruments to measure preservice teachers' self-efficacy for writing and writing instruction?	Reliability Coefficients (Cronbach's Alpha)
3. How valid are scores on two newly created instruments to measure preservice teachers' self-efficacy for writing and writing instruction?	Validity Testing (Principal Components Analysis and Confirmatory Factor Analysis)

Table 2 provides an outline of the research questions answered by Study Two and a brief explanation of the methodology and statistical analyses. Study Two, *The Impact of Writing-Intensive and General Education Courses on Preservice Teachers' Self-Efficacy for Writing and Writing Instruction,* uses the instrument created in Study One to compare outcomes of preservice teachers in writing-intensive education courses to those in general education pedagogy courses. The goal is to measure the effectiveness of the writing-intensive education courses as well as reveal an underlying latent construct from the survey factors.

Table 2. Study Two Research Questions and Statistical Analyses

Research Question	Statistical Analyses
1. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *perception of the effectiveness of their teacher education program* in equipping them to teach writing?	Propensity Score Matching and Analysis of Variance
2. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *self-efficacy for writing instruction*?	Propensity Score Matching and Analysis of Variance
3. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *self-efficacy for writing*?	Propensity Score Matching and Analysis of Variance
4. How frequently are preservice teachers writing during an average week and what types of writing are the engaging in most frequently?	Frequencies
5. What are the *effects of frequency of writing* on preservice teachers' *perception of the effectiveness of their teacher education program* in equipping them to teach writing, *self-efficacy for writing instruction*, and *self-efficacy for writing*?	Multivariate Analysis of Variance and Constant Comparative Analysis
6. What relationship exists between *self-efficacy for writing*, *self-efficacy for writing instruction*, and *effectiveness of the teacher preparation program*?	Higher-Order Factor Analysis

Finally, Table 3 provides an outline of the research questions answered by Study

Three and a brief explanation of the methodology and statistical analyses. Study Three,

The Impact of Instructors on Preservice Teachers' Beliefs about Writing, uses

quantitative data informed by qualitative data to measure and evaluate classroom

practices related to writing. The impact of these instructional practices on preservice

teachers' self-efficacy for writing and writing instruction is also analyzed.

Table 3. Study Three Research Questions and Statistical Analyses

Research Question	Statistical Analyses
1. To what extent do writing-intensive and general education courses affect preservice teachers' perceptions of the effectiveness of their teacher education program, self-efficacy for writing instruction, and self-efficacy for writing?	Effect Sizes (Cohen's *d*)
2. How do instructors in writing-intensive courses differ from instructors in general education courses?	Descriptive Statistics
3. To what extent do instructors vary in preservice teachers' self-efficacy for writing instruction by course type?	Hierarchical Linear Modeling
4. To what extent do instructors vary in preservice teachers' self-efficacy for writing by course type?	Hierarchical Linear Modeling
5. What are the writing beliefs of instructors of writing-intensive and general education courses?	Constant comparative Analysis

Combining the three studies, the research is translated into practical strategies for

teacher preparation programs. My goal is that other teacher preparation programs will

utilize the surveys to better understand the reliability and validity of scores obtained from the surveys in order to focus on highly effective practices. Current researchers in the field can also utilize the survey instruments to test more diverse samples of preservice teachers. Analyzing whether the instruments continue to show high reliability and validity scores is critical to understanding their trustworthiness. Ultimately, the goal of teacher education programs is to produce more highly qualified, competent, and effective teachers to enter the profession. Therefore, understanding the classroom interactions between university instructors and preservice teachers is essential.

In the following section, I will operationally define the important variables for this dissertation. After defining the constructs, I provide an overview of the theoretical perspectives relating to writing. This will establish a common understanding of how writing has developed over the past 30 years and will provide the framework for the three studies in this dissertation. Finally, I present a review of the literature on self-efficacy and beliefs about writing and writing instruction. Understanding the prior and current literature offers justification and support for how this dissertation seeks to fill gaps within the research field.

Definitions of Key Terms

Before synthesizing the theoretical perspectives and literature review, several key terms, which are used throughout the introduction and three studies, are defined to maintain consistency and clarity of the topic.

Writing

Writing is a complex, multi-faceted cognitive function that incorporates aspects of social and cultural perspectives (Faulkner, 2013; Prior, 2006). Writing is defined as the cognitive, emotional, collaborative, and physical task of written communication. Writing involves artistic, political, spiritual, and self-expressive purposes. Writing is also an "indispensible" tool for learning (Graham, 2006). Within the present study, writing is used to learn content within courses in teacher preparation programs, but also is the basic methodt of processing ideas and translating them into written text (Bruning et al., 2013).

Writing Instruction

Writing instruction includes the pedagogical techniques used to efficiently and effectively teach students of any age the task of writing. In this study, writing instruction not only pertains to the task of writing but also includes assessment of writing and using writing as a tool for learning. For example, while teaching students about content, writing can be used in the form of freewriting or low-stakes writing, such as quick writes, online discussion postings, or minimal/ungraded writing to explore students' thinking (Elbow, 2004). Using low-stakes writing assignments, teachers can evaluate the students' thinking about a topic and students can engage in metacognition, reflection, and writing practice. Additionally, writing instruction includes teaching of writing strategies, skills, and knowledge (Graham, 2006).

Teacher Preparation Programs

Teacher preparation programs, for the purposes of this study, relate to those programs at universities that prepare undergraduate preservice teachers for a career as a

teacher. Teacher preparation programs include specific coursework, field experiences, and tests that students must complete to obtain certification as a practicing teacher (Kennedy & Archambault, 2012).

Preservice Teachers

Preservice teachers are defined as undergraduate students seeking teacher certification upon graduation. These students may be majoring in interdisciplinary studies, educational psychology, or a specific content area (such as English or Biology). Preservice teachers take specific education-based courses to fulfill the state requirements for teacher certification and most engage in clinical field experiences related to teaching (Kennedy & Archambault, 2012).

Effective Teacher Modeling

In my own research, *effective teacher modeling* is operationally defined as the demonstration of best, evidence-based practices related to writing instruction in authentic classroom settings (Rinke, Mawhinney, & Park, 2014). This suggests that teacher educators are staying up-to-date on best practices that research shows improve student outcomes and achievement in writing and are demonstrating these practices, including strategies and instructional approaches, to preservice teachers. Moreover, these demonstrations are occurring in authentic classroom settings, meaning that preservice teachers can visualize how these practices would translate into their own classrooms while testing and using the strategies and instructional approaches themselves. Effective teacher modeling focuses on using research-based practices to model strategies preservice teachers can implement in their future classrooms. An instructor who engages

preservice teachers in low-stakes writing activities to deepen their understanding of vocabulary practices for English Language Learners is modeling activities that can be used with K-12 students. In contrast, instructors who lecture and do not implement writing activities or engage students in the content are not effectively modeling how to teach.

General Education Pedagogy Courses

General education courses are defined as the courses preservice teachers take in teacher preparation programs over content related to specific disciplines (such as mathematics or social studies) or related to pedagogy and instruction. These courses in the current study cover general teaching content, not specifically focused on one subject. For example, one course focuses on developmental reading aspects such as morphology and phonology, which all teachers need to know and emphasizes diagnostic tests for measuring reading abilities.

Writing-Intensive Education Courses

Writing-intensive courses allow preservice teachers opportunities to engage in writing, examine their own thinking (metacognition) about writing, and practice giving feedback on others' writing while helping preservice teachers to develop positive beliefs about writing. To improve the writing skills of undergraduates, many universities, including the one in this study, have opted to restructure content area courses and incorporate regular writing tasks in ways that allow students to learn both the subject matter and ways of thinking and writing specific to their discipline (Farris & Smith, 1992; Grauerholz, 1999).

Although the basic requirements for writing-intensive courses can vary by university, the conditions for a writing-intensive course in the university studied here are as follows: (1) writing must be related the students' major; (2) explicit instruction in writing must be provided by the instructors; (3) feedback for improvement of writing must be provided on major writing assignments; (4) a large portion of the course grade must be based on writing quality (approximately one course hour, which would be 33% for a three-credit course); and (5) a major writing assignment of at least 2000 words must be produced by the students. Additionally, the writing-intensive education courses at the participating university have two sources of feedback and assistance in the form of the Calibrated Peer Review (CPR) system and Undergraduate Peer Mentors (UPM).

Calibrated Peer Review (CPR) System

CPR is an online system that allows students to anonymously enter a writing assignment, provide feedback to peers, and self-evaluate their own writing. All writing-intensive courses are required to use this system for peer- and self-evaluation.

University Peer Mentors (UPMs)

UPMs are preservice teachers assigned as writing consultants to each writing-intensive course. Each of these preservice teachers must have received an "A" in the course during a previous semester and shown skill in writing and providing feedback on writing. During the semester, UPMs provide conferences, presentations over specific aspects of writing, and feedback to students currently enrolled in writing-intensive courses.

Self-Efficacy

Self-efficacy is a person's belief that s/he can accomplish a task successfully and persevere even if faced with a challenge (Bandura, 1986). Self-efficacy relates to the level of confidence a person has to complete a specific task. In this study, self-efficacy is related to writing and writing instruction. Therefore, self-efficacy is defined as a preservice teachers' belief that s/he can successfully complete a task, like writing or writing instruction, successfully. This belief will be sustained in the face of difficulty or challenges.

Preservice Teachers' Self-Efficacy for Writing

Based on social cognitive theory and self-efficacy for writing (Bandura, 1977, 1986), *preservice teachers' self-efficacy for writing* is defined as the preservice teachers' belief that they can effectively write for multiple purposes (e.g., communication, persuasion, lesson planning, note-taking) and multiple audiences (e.g., parents, teachers, self, students) with confidence.

Preservice Teachers' Self-Efficacy for Writing Instruction

For the purposes of the present study, *preservice teachers self-efficacy for writing instruction* is defined as preservice teachers' belief in their abilities to effectively instruct future students on writing tasks and on writing strategies to improve writing achievement. It is the teacher's belief in his or her abilities to engage students in the process of writing to produce high-quality writing samples.

This construct differs from self-efficacy for writing in two ways. First, self-efficacy for writing focuses on the present writer, while self-efficacy for writing

instruction focuses on the future teacher of writing. Second, self-efficacy for writing focuses on the preservice teacher as a writer, while self-efficacy for writing instruction focuses on the preservice teacher as an instructor of others. Both constructs are needed to effectively teach writing to K-12 students.

Theoretical Perspectives

Writing is a complex and multi-dimensional cognitive and social process, and the more researchers understand about the underlying processes, the more complex writing appears to become. To that effect, the constructs supporting effective writing instruction are also multi-dimensional and complex. No single model of writing instruction fully captures these complexities (Graham, Berninger, & Abbott, 2012). While writing is being neglected in schools, it continues to gain attention as an important component of literacy education. In fact, the Common Core State Standards emphasize both learning to write and writing to learn as important constructs in literacy development (CCSS, 2010; Graham et. al, 2012) while No Child Left Behind, which supported the Reading First Initiative, completely ignored writing as one of the five main components of literacy education.

Writing instruction is foundational to students' success in the classroom and beyond (Graham & Perin, 2007), but little research focuses on teacher education programs as vehicles for improving the self-efficacy beliefs of preservice teachers. Current research on self-efficacy shows that teachers who demonstrate a high sense of efficacy are more likely to diversify their instructional strategies, utilize multiple genres of text, and engage students in various grouping methods to improve student

13

achievement (Tschannen-Moran & Johnson, 2011). However, research is needed to more clearly connect teacher self-efficacy with writing instruction.

Writing research has consistently fallen behind both reading and communication research. Writing often is referred to as the "neglected R" in education (see, National Commission on Writing, 2003). In fact, a search of the Social Sciences Citation Index reveals that for the past ten years (2003-2013), 12,994 articles were published in the area of reading while only 5,963 articles were published in the field of writing. Due to this dearth of research, it is not surprising that specific theories relating to writing are also limited. Because writing has been overlooked in schools, writing application throughout the 20th century has been mostly atheoretical.

Writing theory has undergone many changes since the early 1900s, constantly shifting from a focus on mechanics and form to a focus on creativity and sociability. The 1930s saw the first major shift in writing theory, calling for more attention to creativity and seeing writing as a social process (Behizadeh & Engelhard, 2011). This shift was greatly influenced by the work of Dewey (1938) who believed that children learn by experience in social environments. However, this shift was not to last, and writing theory through the 1950s and 1960s refocused on mechanics and form due to the work of Chomsky (1957) and Bruner (1960). The 1970s brought the largest shift and most influential changes to writing theory by considering the cognitive aspect of writing.

In the following sections, I describe four theories related to writing: ecological theory (Bronfenbrenner, 2000), the cognitive processes theory of writing (Flower & Hayes, 1981; Hayes, 1996), the sociocultural theory of writing (Prior, 2006), and social-

cognitive theory (Bandura, 2001; Pajares & Valiante, 2006). Ecological theory and socio-cognitive theory stem from sociology and psychology, while the cognitive processes theory and sociocultural theory directly relate to writing.

Ecological Theory

While theories related to writing are scarce, theories from sociology, psychology, and human development can be applied to the complex processes required to write. Writing encompasses cognitive as well as social interactions. According to Bronfenbrenner and Morris (1998), "human development takes place through processes of progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects, and symbols in its immediate external environment" (p. 996). Applying this idea to writing shows that writing, as a component of development, is reliant upon interactions with others.

Two primary schools of thought on writing development exist: a cognitive perspective and a sociocultural perspective. The sociocultural perspective is supported by applying Bronfenbrenner's Ecological Theory specifically to writing. According to this theory, the individual is influenced by continually growing and expanding elements of the world around him/her. These elements include social life, school, government, work, home life, and basic ideologies (Garbarino & Abramowitz, 1992).

Overview of Ecological Theory

The Ecological Theory rests on the premise that people are influenced by proximal processes (Bronfenbrenner & Evans, 2000; Bronfenbrenner & Morris, 1998), which describes the interactions people undertake with those social elements which are

15

closest to them. Bronfenbrenner describes four categories of proximal processes that influence people, each growing in magnitude as the degree of difference from the individual increases. More commonly, this process is also the nurture versus nature phenomenon (Bronfenbrenner & Ceci, 1994). Individuals are born with genetic material that influence their biological processes and interactions with the environment, but as they transact with the environment, they are also influenced (Garbarino & Abramowitz, 1992).

When focusing on writing, people develop writing skills and behaviors by interacting with those around them. A student can view models of good writing to develop more advanced syntactical and semantic strategies. Additionally, as schools progress toward collaborative education, students are encouraged to both share and critique their own work and those of peers. Finally, within the global structure of the World Wide Web and social media, students are able to share their writing with people from different countries, of different languages, and with different perspectives. Each of these transactions helps promote the writing development of a student.

The four sub-systems that form the ecological system are the microsystems, mesosystems, exosytems, and macrosystems. The microsystem is the level closest to the individual. This includes the psychological aspects that influence choice, behavior, and motivation. The microsystem begins small, including a person's family, friends, and home, but as the person ages, this system becomes more complex. Bronfenbrenner describes this "increasing capacity to do more [as] the very essence of development" (Garbarino & Abramowitz, 1992, p. 25). Additionally, within the microsystem, people

16

influence each other. For example, in relation to writing, students will observe how their teacher, family members, and peers write, and learn from those observations. By sharing their own writing, students gain peer- and self-evaluations which improve the quality of their work.

The second system in the ecological framework is the mesosystem, which represents the connections between a student's microsystems. Mesosystems are links between the elements of students' lives which are closest to them. One common mesosystem is the connection between school and home life. A student with a supportive family who assists with homework or attends school functions has a healthier mesosystem and is more likely to develop than a same-aged peer whose family is not involved with school life (Garbarino & Abramowitz, 1992). For writing, the connections come when students see writing as a valuable tool for expression, communication, and learning in both school and home. Students who share their writing with family members or write to family members who might live far away are seeing this connection. Moreover, students who see their parents or family members writing for enjoyment or to complete tasks also are more likely to note the importance of writing in every day life.

The third component of the theory is the exosystem, which represents situations that influence students indirectly. These often include the workplace of the parents, and governing bodies that make decisions that affect the student's life. In relation to writing, these most commonly represent the policies directing writing instruction. Currently, writing does not gain much attention within policy initiatives and is therefore left out of

some school curriculum or only focused on minimally. If students attend school and writing is not stressed, the belief is that writing is unimportant.

Finally, the fourth component of the ecological theory is the macrosystem. The macrosystem represents the broader organization of the world, including historical change over time. This system represents how the world should be, based on our current ideologies. While this component of the system relates to writing more loosely, a connection is still present. The pervasive beliefs about writing that are shared among cultures and societies influence how individuals perceive the skill.

Cognitive Processes Theory of Writing

Writing research has mostly been conducted without attention to theory. One of the first theories solely used to understand writing emphasizes the importance of the cognitive processes. The cognitive processes theory was widely accepted due to the lack of previous theories. This new focus of writing as a cognitive process led to a seminal theoretical paper (Flower & Hayes, 1981) that is still used as a theoretical framework for many contemporary researchers.

Overview of Cognitive Process Theory of Writing

According to Flower and Hayes (1981), their cognitive process theory of writing evolved through observations of students' writing to "introduce a theory of cognitive processes involved in composing in an effort to lay groundwork for more detailed study of thinking processes in writing" (p. 366). The theory is based on four key points: (1) while composing written work, authors proceed through a set of distinctive thinking processes; (2) a higher-order system of organization exists among these processes; (3)

composing requires goal-setting; and (4) writers create macro and micro goals to complete the writing task (Flower & Hayes, 1981, p. 366).

Flower and Hayes (1981) were the first to develop a model of writing that showed the circular nature of the writing process. They emphasize the idea that authors cycle through the major steps of the writing process (brainstorming, prewriting, drafting, revising, and editing) multiple times during the larger process. Prior to this seminal work, researchers and practitioners operated under the assumption that writing was a linear process in which writers progressed without reverting back. For example, according to older models, a writer would prewrite then draft then edit and revise. In contrast, under the cognitive process model, a writer initially may prewrite then draft then revert back to prewriting as a new idea hits. This method is more realistic and true to the actual act of writing and composing. Additionally, this model supports the idea that good writers understand audience, purpose, and their own goals for writing. These three factors indicate a level of understanding about genre, purpose, and motivation that exists in contemporary education research.

From the Flower and Hayes (1981) model, information flows from one box, or process, to another. This process is iterative, and at any moment, the writer can move back to a previous box and begin the process again. In 1996, Hayes updated this model to better represent the new trends in writing research. After more than 15 years as the one of the leading models, Hayes (1996) recognized that the initial model was missing several key features (e.g., motivation and affect). The updated model focuses on four major iterations to the originally proposed theory. First, the central role of working

memory is acknowledged and included in the new model but was absent from the original model. Through research, Hayes and other researchers realized that they could not ignore the functioning of working memory in students' abilities to write. Working memory is what allows students to remember their ideas long enough to translate them into written text. Second, the visual-spatial variable is included in the updated model. Again, researchers realized that students used visual-spatial reasoning to translate speech and ideas into written text. The variable also focuses on the use of graphics, images, and other visual representations of ideas. Third, motivation and affect are included as separate constructs that influence writers. The original model did not account for motivation about a topic or the affective benefits of writing. Finally, the cognitive process is more structured than the new model in that it reflects the three major steps writers go through to produce text (i.e., text interpretation, reflection, and text production) (Hayes, 1996). Additionally, the cognitive process model of writing is cyclical and allows writers to revert to any previous step of the writing process as needed. For example, a writer can generate text and edit the text, then cycle back to generating more text.

While these models are dated, they both still serve as a major foundational theory for writing research. Leading researchers in the field (e.g., Cutler & Graham, 2008; Dempsey, PytlikZillig, & Bruning, 2009; Graham, Berninger, & Abbott, 2012; Graham, Gillespie, & McKeown; Graham & Perin, 2007; Nystrand, 2006) have cited these works as part of the theoretical framework for their research. One limitation to these models is that they have predominantly been used in research for K-12 students. Applying this

model to postsecondary students will potentially offer new insights into the viability and external validity of the model.

Sociocultural Theory of Writing

Cognitive processing theory (Flower & Hayes, 1981; Hayes, 1996) was critiqued soon after publication for being too narrowly focused, and as a result, researchers began considering social, historical, and political contexts of writing, which were missing from this model. Out of these merging of other factors affecting writing came sociocultural theory. Sociocultural theory also emerged from research in psychology, anthropology, sociology, linguistics, and semiotics, the study of signs and symbols (Prior, 2006). Currently, sociocultural theory is the dominant framework for writing research.

The present studies are heavily influenced by social factors of writing as well as motivation and affect variables. Motivation, affect, and social influences are components of sociocultural theory. Moreover, while writing can occur in isolation, I believe writing (particularly in the age of electronic texts) is an inherently collaborative activity, which is one of the basic tenets of sociocultural theory. Moreover, sociocultural theory emerged as writing became increasingly seen as a form of activity, or a tool for learning (Prior, 2006).

Overview of Social Cognitive Theory

An activity such as writing happens in specific situations and is governed by the rules of a culture or society but can be individualized to the specific individual. Writing is a social construct that is culturally-based and individualized. The sociocultural theory of writing has been influenced by Vygotsky's (1978) social constructivist approaches as

21

well as Leont'ev's (1981) activity theory. Sociocultural theory is a union of these two theories, focusing on the social and concrete aspects of learning that Vygostky championed while incorporating the basic premises that collaboration is part of any activity. Therefore, sociocultural theory views writing as a mode of social action and not simply a means of communication (Prior, 2006).

The basic idea of the sociocultural theory of writing is that writing extends beyond the present moment and context to include prior knowledge, understanding of language, multiple genres, motivation, and influences of technology. Writing is viewed as a series of short- and long-term production, representation, reception, and distribution. The same core beliefs were present in the cognitive process theory of writing, but in sociocultural theory they originate from an individual's unique experiences within society and civilization. Writing occurs when an individual creates a long-term goal then uses short-term goals to engage with, understand, and produce text.

The sociocultural theory of writing has a unique place in schools because it purports a collaborative view of writing, including division of labor and coauthorship. By this standard, teachers in classrooms are always coauthors on students' writing. Rather than being a bystander, teachers play an active role in instructing students, offering support, providing feedback, and modeling writing practices. Additionally, writing research that originates with a sociocultural lens focuses on specific classroom practices, actions that make up literate practices, and the specific kinds of collaboration schools support (Prior, 2006). Any research conducted on writing within school contexts under this theory provides a close analysis of the speech, reading, writing

production, and behaviors that students and teachers engage in during writing activities. In other words, the sociocultural lens prioritizes the *interaction* between participants (teachers, peers), rather than the products.

While the sociocultural theory of writing is more abstract than the cognitive processes theory of writing, it offers more insights into the social and collaborative aspects of writing situated within the complexities of schools. The current research studies focus heavily on teacher educator's modeling of best practices in writing instruction, which are supported by this theory. Additionally, the focus on motivation, affect, social variables, and influences of culture and society that are not as central to the cognitive process theory are the focus of sociocultural theory. The theory also supports the idea of collaboration, in which teachers work with students to create final writing pieces, which is part of the present research.

Social Cognitive Theory and Self-Efficacy in Writing

Writing is complex, and in fact, the more researchers understand the cognitive processes and engagement for writing tasks of students, the more complex the relationships between cognition and producing writing become. Social cognitive theory (Bandura, 1977, 1986) began focusing on writing as researchers increasingly sought to capture the thought processes underlying the composition writing of students. As social cognitive theory and self-efficacy for writing have developed, researchers have realized that students' beliefs about their own writing processes and competence for writing are instrumental to their ultimate success as writers (Pajares, 2003; Pajares & Valiante, 2006).

The present research focuses on writing self-efficacy as a central construct to the writing development of preservice teachers. When preservice teachers have effective models of writing and writing instruction, provided by their teacher educators, they become more competence and efficacious teachers themselves. This idea is supported by the work of Bandura, but was stated by Pajares and Valiant (2006) as "if there is one finding that is incontrovertible in education…it is that children learn from the actions of models" (p. 167). Social cognitive theory is foundational for understanding the linkages between preservice teachers self-efficacy for writing, teacher educators' modeling of effective writing instruction, and the success of K-12 students in writing.

Overview of Social Cognitive Theory and Self-Efficacy in Writing

Writing is an activity that requires meaning making as well as self-understanding. When people engage with a writing task they value, they can better understand their own thinking, beliefs, and attitudes toward a topic. This idea is based on the assumption that students are motivated to write. Self-efficacy beliefs, which are a core part of social cognitive theory, provide the foundation for academic motivation. As defined earlier, self-efficacy is a person's belief that s/he can accomplish a task successfully and persevere even if faced with a challenge (Bandura, 1986). At its core, this is motivation. Moreover, Bandura (1997) argued that students' accomplishments could be better predicted by self-efficacy than previous attainment. As teachers, this idea is fundamental because it supports teacher influence in altering student perceptions.

According to Bandura (2001) and Pajares (2003), self-efficacy originates from four sources: (1) interpreting the results of previous performance, (2) models/observing

others, (3) social persuasions, and (4) emotional states. In other words, students develop perceptions about their competency for a certain tasks by considering how they have performed in the past, what they see others do, how supportive the people around them are, and what they emotional state is. Therefore, students are more likely to select tasks in which they have high self-efficacy and avoid tasks in which they have low self-efficacy (Bandura, 2001; Pajares, 2003; Pajares & Valiante, 2006). However, these beliefs can be altered through support and practice, and with time, the new beliefs can become habit and subsume the previously held beliefs. This is the idea in social cognitive theory that people are agents (Bandura, 2001) or proactive and self-regulating to the circumstances they are in.

For educators, self-efficacy is critical to the success of students as well as the influential in the effectiveness of instruction the teacher provides. Teachers can foster self-efficacy in their students by giving students choice in writing assignments, providing opportunities for collaborative writing and discussion, and instructing on self-regulated learning strategies (Pajares & Valiante, 2006). For increasing self-efficacy in the teachers, measures of writing skills as well as writing tasks are critical. Additionally, overall academic self-concept is an influential predictor of self-efficacy for specific academic tasks, like writing. Teachers who feel confident in their abilities to teach, in general, and feel competent in their academic abilities, will express higher levels of self-efficacy for both writing and writing instruction.

Connections Among Theories to Explain Writing

In the previous sections, I outlined a major problem facing practitioners and researchers today – writing is overlooked. Much of the research appears to be atheoretical, which could point researchers in the direction of a solution. The field needs concrete, established, and tested theories to explain the complex cognitive and social processes involved in the task of writing. Additionally, four theories were presented which can help explain writing. While these theories still need to undergo testing and validation, they are a starting point. No one theory currently encompasses all that is writing. For example, the cognitive processes theory explains what occurs in students' brains as they write, but neglects outside forces, such as motivation, engagement, and social influence. On the other side of the problem, sociocultural theory explains how students are influenced by their culture and social relationships to engage in writing, but it does not address what is occurring in a student's brain during the writing process. Therefore, researchers today can either combine theories to explain this process or focus on one element of writing, which does not get a clear picture of the entire writing activity.

For the current research, sociocultural and social cognitive theories are both used to support the intersection and influence of teacher preparation courses and instructors on preservice teachers' beliefs about writing. Much research posits that teacher must be writers themselves to be effective writing teachers, as well as have sound knowledge of writing pedagogy (Grossman, Hammerness, & McDonald, 2009; Morgan, 2010). Sociocultural theory suggests that educators and students, in this case instructors and

preservice teachers, are co-authors on writing and through modeling, instructors can influence the beliefs of preservice teachers. Social cognitive theory states that through mastery and interacting with peers, students become more confident about their abilities. The present research specifically examines the behaviors of instructors which contribute to shifts in self-efficacy for writing and writing instruction among preservice teachers.

Writing Instruction

In the previous sections, I outlined theories relating to writing and how merging these theories support the present research. In the following sections, I outline research conducted on beliefs about writing.

Writing is a complex and multi-dimensional cognitive and social process, and the more researchers understand about the underlying processes, the more complex writing appears to become. To that effect, the constructs supporting effective writing instruction are also multi-dimensional and complex. No single model of writing instruction, that currently exists, fully captures these complexities (Graham, Berninger, & Abbott, 2012). While writing is being neglected in schools, it continues to gain attention as an important component of literacy education. In fact, the Common Core State Standards emphasize both learning to write and writing to learn as important constructs in literacy development (CCSS, 2010; Graham et. al, 2012) while No Child Left Behind, which supported the Reading First Initiative, completely ignored writing as one of the five main components of literacy education.

Writing instruction is foundational to students' success in the classroom and beyond (Graham & Perin, 2007), but little research focuses on teacher education

programs as vehicles for improving the self-efficacy beliefs of preservice teachers. Current research on self-efficacy shows that teachers who demonstrate a high sense of efficacy are more likely to diversify their instructional strategies, utilize multiple genres of text, and engage students in various grouping methods to improve student achievement (Tschannen-Moran & Johnson, 2011). However, research is needed to more clearly connect teacher self-efficacy with writing instruction.

Adding to the dilemma of addressing teacher efficacy for writing, few tools exist that specifically measure self-efficacy for writing (Bruning, Dempsey, Kauffman, McKim, & Zumbrunn, 2013; Graham et al., 2001) or writing instruction (Graham, Harris, MacArthur, & Fink, 2002). Instead, much of the writing research focuses on writing apprehension (Daly & Miller, 1975), self-regulation efficacy (Zimmerman & Badura, 1994) or strategies (Harris, Graham, & Mason, 2006). Moreover, research focusing specifically on preservice teachers (Zimmerman, Morgan, & Kidder-Brown, 2014) is largely qualitative. Table 4 summarizes the purpose, instruments and results from studies conducted on writing beliefs and self-efficacy, which informed the present study.

Table 4. Purpose, Instrument, and Results of Studies

Study	Purpose	Instrument	Results
Bruning et al., 2013	To determine a three-factor model, consisting of ideation, self-regulation, and conventions, for measuring writing self-efficacy with middle and high school students	*Self-Efficacy for Writing Scale (SEWS)*	1. The two studies presented establish a foundation for multifactorial models of writing self-efficacy. 2. Middle and high school students responded similarly to items on the survey, indicating that self-efficacy beliefs are relatively stable over time.
Daly & Miller, 1975	To determine factors influencing college students' writing apprehension using an empirically-based, standardized instrument	Unnamed, writing apprehension	1. Scores for the instrument were valid and reliable. 2. Writing apprehension was measured by focusing on different types of writing and interactions with peers and teachers.

Table 4. Continued

Study	Purpose	Instrument	Results
Gibson & Dembo, 1984	To determine how dimensions of self-efficacy relate to Bandura's theory and analyze patterns in teaching behaviors of high and low efficacy teachers	*Teacher Efficacy Scale*	1. A two-factor model of general teaching and personal teaching self-efficacy emerged. 2. Differences in academic focus, grouping methods, and feedback patterns exist between high and low efficacy teachers.

Table 4. Continued

Study	Purpose	Instrument	Results
Graham et al., 2002	To develop and validate an instrument measuring teachers' orientations for writing and beliefs about writing	*Writing Orientations Scale*	1. Scores for the *Writing Orientations Scale* were valid and reliable. 2. 99% of participants valued explicit writing instruction and 73% valued natural learning, showing that most teachers see writing as an integrative approach. 3. Only 39% of primary-grade teachers emphasized correctness in teaching writing to students.
Harris et al., 2006	To examine the effectiveness of Self-Regulated Strategy Development for young, struggling, urban students	*Self-Regulated Strategy Development (SRSD)* – instructional practice, not instrument	1. Using SRSD, students developed more positive beliefs about writing and implementing writing. 2. SRSD increased students' knowledge of writing.

Table 4. Continued

Study	Purpose	Instrument	Results
Zimmerman & Bandura, 1994	To determine how self-regulation skills in writing influence course grades and self-efficacy	1. *Writing Self-Regulatory Efficacy Scale* 2. *Self-Efficacy for Academic Achievement*	1. The extent to which students perceived they could self-regulate during the writing process influenced their self-efficacy for writing and overall course grade.

Table 4. Continued

Study	Purpose	Instrument	Results
Zimmerman, Morgan, & Kidder-Brown, 2014	To determine the beliefs of preservice teachers in a writing methods course for teaching writing	Qualitative reflections about writing and teaching writing	1. Both conceptual and pedagogical knowledge for writing should be developed through writing methods courses. 2. Increased exposure to writing results in more positive beliefs about writing and a greater sense of self as a writing teacher. 3. Collaborations among preservice teachers helped scaffold their understanding of writing instruction.

This literature review focuses on the importance of preservice teacher self-efficacy for writing and writing instruction as well as the influence of effective teacher educators as writing models. The findings from this review can be used to inform teacher education programs about the necessities for specific courses about writing instruction, while demonstrating the connection between self-efficacy beliefs and practice. Future research will seek to focus on longitudinal studies of long-term beliefs toward writing and student achievement.

Purpose

Students in K-12 schools are falling behind international peers in writing achievement and writing achievement is not a primary focus of many individual classrooms (National Commission on Writing, 2003). Writing does not have a set, specific unified curriculum, and writing is unequally emphasized in schools, typically gaining focus when a standardized test corresponds with the grade level and being thrown to the way-side when a standardized test is not looming. Billions of dollars are spent annually by businesses for training employees on foundational writing skills. Moreover, little research is being conducted on writing practices of K-12 students, as compared to the reading practices of K-12 students. Conducted research is often atheoretical due to limited theories specific writing instruction. Even less research is conducted on the beliefs and attitudes of preservice teachers, who will be training K-12 students and therefore are in a unique position to change the state of K-12 writing instruction.

Many universities recognize that writing is not a focus of their education and have developed writing-intensive courses for each major, which focus on discipline-specific content and instruction in writing for that discipline. In colleges of education, the role of these courses increases to include modeling of best practices for writing instruction, while providing instruction on how to teach writing to future students. However, no system for evaluating the effectiveness of these courses and their influence on preservice teachers has been established or researched. The present studies seeks to fill this gap in the literature by accomplishing three goals:

1. Create instruments that reliably and validly measure preservice teacher self-efficacy for writing and writing instruction

2. Explain to what extent writing-intensive education courses improve preservice teachers' self-efficacy for writing and writing instruction

3. Synthesize best practices for teaching writing and writing instruction to preservice teachers, based on observations of effective teacher models

CHAPTER II

DEVELOPING THE PRESERVICE TEACHER SELF-EFFICACY FOR WRITING INVENTORY (PT-SWI)

Writing. Seven letters that equal a complex, abstract concept. When asked "what's writing?" likely responses include: (1) writing is a form of communication; (2) writing is a tool for learning; or (3) writing is a form of self-expression (Graham & Perin, 2007). From this simple example, it is clear that writing is a complex and multi-dimensional cognitive and social process. The more researchers understand about the underlying processes, the more complex writing appears to become. To that effect, the constructs supporting effective writing instruction are also multi-dimensional and complex. No single model of writing instruction currently exists that fully captures these complexities (Graham, Berninger, & Abbott, 2012). As a result, studying writing instruction requires a range of instruments and tools.

Unfortunately, the current approaches to writing instruction may not be fully capturing the complexities of the process. For example, the National Assessment of Educational Progress (NAEP) reports that only 24% of 8th- and 12th-graders scored at the proficient level in writing (National Center for Educational Statistics, 2012). Accordingly, American businesses spend $3.1 billion annually on writing remediation for employees (National Commission on Writing, 2004). The gap between employers' expectations for writing and employees' proficiency only threatens to expand. As literacy demands of the work force increase and as writing has become more important

for communication with the increased influence of technology (Yancey, 2004), the field of education must prepare more highly qualified writing teachers to support this growth. In short, writing instruction currently does not parallel the writing demands of the 21st-century workforce.

While the problem is well defined: writing instruction is lacking in American schools (e.g., Applebee & Langer, 2009; National Commission on Writing, 2004), the question of *why* this neglect persists and how to remediate this neglect remains unanswered. Research focusing on in-service teachers (i.e., teachers currently practicing in the field) provides some insight and suggests that teachers do not feel adequately prepared to teach writing (Cutler & Graham, 2008). This finding is particularly problematic taken in conjunction with the established connection between teacher self-efficacy for writing and student achievement in writing: Students of teachers with high-efficacy in writing spend more time writing each week than students of teachers with low-efficacy for writing. Additionally, high-efficacy teachers teach writing processes, grammar, and usage skills more often (Graham, Harris, Fink, & MacArthur, 2001). These arguments focus research back to the teacher education programs that are tasked with preparing preservice teachers to become effective writing teachers.

Informed by social cognitive theory (Bandura, 1986) and current research (Pajares, 2003; Pajares & Valiante, 2006), *preservice self-efficacy for writing* is the preservice teachers' belief that they can effectively accomplish writing tasks even if the tasks are difficult or challenging. Extrapolating from the previous definition, I defined *preservice teachers self-efficacy for writing instruction* as preservice teachers' belief in

their abilities to effectively instruct students on writing tasks and writing strategies to improve students' writing achievement. These constructs are distinct from each other because a teacher may feel confident in her own writing but be unsure how to translate that skill to a young, potentially unmotivated, audience.

Adding to the dilemma of addressing teacher efficacy for writing, few tools exist that specifically measure self-efficacy for writing (Bruning, Dempsey, Kauffman, McKim, & Zumbrunn, 2013; Graham et al., 2001) or writing instruction (Graham, Harris, MacArthur, & Fink, 2002). Instead, much of the writing research focuses on writing apprehension (Daly & Miller, 1975), self-regulation efficacy (Zimmerman & Badura, 1994) or strategies (Harris, Graham, & Mason, 2006). Additionally, the majority of research on this topic is being conducted with in-service teachers (Cutler & Graham, 2008), not preservice teachers. I argue that change must occur at the teacher preparation stage. By the time teachers reach the classroom, they are inundated with tasks and gain limited professional development for teaching writing. Reaching teachers who are still developing their beliefs about writing and writing instruction has the potential to proactively prepare teachers for more success in integrating writing into their future classrooms, rather than reactively try to change entrenched behaviors. The present study seeks to fill these gaps in two ways: (1) by developing an instrument, called the *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI)*, that focuses on both self-efficacy for writing and self-efficacy for writing instruction, and (2) by developing the instrument specifically for preservice teachers.

Current State of Writing Instruction

In the U.S., Common Core State Standards, new testing requirements for K-12 students, and increased integration of technology into our daily lives have challenged our writing abilities. Emerging policies should change the perspective of writing instruction in schools. The Common Core State Standards emphasize both learning to write and writing-to-learn as important constructs in literacy development (National Governors Association, 2010a; Graham et. al, 2012) while No Child Left Behind, which supported the Reading First Initiative, did not even include writing as one of the five main components of literacy education. One clear example of the unequal time and ambivalent status that writing receives relates to recent news reports from the College Board about the 2016 edition of the SAT (Scholastic Aptitude Test). According to a recent news report, the new SAT will include a 50-minute essay, instead of the traditional 25-minute essay; however, this essay is optional. Depending on the university a student wishes to attend, individuals may choose to skip this portion of the exam. Moreover, the writing section will no longer receive its own score, but the score will be added to the reading portion to comprise only half of a student's overall score (O'Shaugnessy, 2014). While increasing time for writing the high-stakes essay is movement in a positive direction, the other changes reflect backward steps for writing education and cultural values for writing.

Most recent research on preparing teachers to instruct writing considers beliefs and self-efficacy related to *in-service* teachers only (e.g., Cutler & Graham, 2008). However, the beliefs about writing and self-efficacy for writing of *preservice* teachers

should not be ignored as the two constructs are strongly and logically connected. Many teachers feeling unprepared to teach writing (Cutler & Graham, 2008), blame their educational experiences for their low self-efficacy and avoidance of writing (Dempsey, PytlikZillig & Bruning 2009; Morgan, 2010). Research suggests that teacher preparation programs and former K-12 teachers are the leading sources of preservice teachers' beliefs about writing (Graham et al., 2002; Colby & Stapleton, 2006; Dempsey et al., 2009). This finding suggests the quality of writing instruction at the preservice level can have profound and lasting effects on teachers' attitudes.

Survey Development

Using previously published research as a starting point (Cutler & Graham, 2008; Daly & Miller, 1975; Graham et al., 2001; Graham et al., 2002; Zimmerman & Bandura, 1994), I created and tested the *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI* in Spring 2014. Four sub-sections comprise a pre-version and post-version to measure *preservice teachers' self-efficacy for writing* and *preservice teachers' self-efficacy for writing instruction.* This allows faculty in teacher preparation to measure change by employing the measure before and after a targeted intervention. For this study, the inclusion requirement was enrollment in a writing-intensive education course, which is defined as a three-credit course with one course credit hour for writing instruction and two course credit hours for education content instruction. Students in these courses are expected to master content for specific education standards such as knowledge of teaching English language learners (ELLs) and choosing high quality

children's literature alongside increased writing skills. The following sections detail the creation of the surveys.

Demographic Information

The *PT-SWI* included basic demographic information (e.g., university identification number, gender, ethnicity, classification, certification area), which will served for matching protocols for the pre- and post-versions of the survey. Additionally, one qualitative question asked about the types of writing activities students engaged with each week. This question provided information about how preservice teachers conceptualize writing, which focuses on the multidimensionality of the writing construct.

Self-Efficacy for Writing

The first section of the *PT-SWI* focused on the preservice teachers' self-efficacy for writing. Table 5 suggests the origin of each item and any modifications from a previously published measure. Researcher-created items and relevant studies supporting the item's development were also documented.

Table 5. Self-Efficacy For Writing - Item Development

Item	Source
1. I can self-monitor during the writing process to improve the quality of my writing.	Researcher-created, from Bruning et al., 2013
2. The majority of time I spend writing is for enjoyment.	Adapted from Daly and Miller, 1975
3. I am confident in writing for a variety of audiences.	Adapted from Zimmerman and Bandura, 1994
4. I feel confident sharing my writing with peers.	Adapted from Zimmerman and Bandura, 1994
5. Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking).	Researcher-created, from Bruning et al., 2013
6. Overall, I have positive feelings toward writing.	Adapted from Daly and Miller, 1975
7. I feel confident in my overall writing abilities.	Adapted from Daly and Miller, 1975
8. Writing is a challenging task for me.	Adapted from Daly and Miller, 1975
9. I am confident in writing for multiple genres (i.e., persuasion, nonfiction, narration).	Adapted from Zimmerman and Bandura, 1994
10. In my preservice teacher preparation coursework, I saw effective modeling of writing assessment.	Adapted from Graham et al., 2001

In the second section, the *PT-SWI* focused on how well the students felt their teacher preparation program equipped them to instruct certain writing components. The Writing Assessment Protocol (WAP, from participating university) and 6+1 Traits rubrics (nationally recognized) contain elements of writing, which are the focus of

instructional approaches assessed by current research (Cutler & Graham, 2008; Graham

et al., 2002). Additionally, Bruning and associates (2013) describe three constructs that

compose writing self-efficacy: ideation, conventions, and self-regulation. Ideation is the

creation of ideas, arguments, and content for writing. Conventions include the

grammatical rules and stylistic features of writing. Self-regulation is the ability to

monitor generation and editing of writing (Bruning et al., 2013). Table 6 shows the

research support for each item as well as which dimension of writing self-efficacy is

measured.

Table 6. Self-Efficacy For Writing Skills – Item Development

Item	Current research support for researcher-created item	Dimension of Writing Self-Efficacy from Bruning et al., 2013
11. Voice (i.e., presence of the author in the text, tone)	6+1 Rubric; Graham et al., 2002; WAP Rubric	Ideation
12. Organization of Ideas	6+1 Rubric; Cutler & Graham, 2008; Graham et al., 2002; WAP Rubric	Ideation
13. Clarity of Thought	Graham et al., 2002; WAP Rubric	Ideation
14. Cohesiveness	6+1 Rubric; Graham et al., 2002; WAP Rubric	Ideation
15. Grammatical Conventions (i.e., passive voice, punctuation, capitalization)	6+1 Rubric; Cutler & Graham, 2008; Graham et al., 2002; WAP Rubric	Conventions

Table 6. Continued

Item	Current research support for researcher-created item	Dimension of Writing Self-Efficacy from Bruning et al., 2013
16. Spelling	Cutler & Graham, 2008; Graham et al., 2002; WAP Rubric	Conventions
17. Word Choice	6+1 Rubric; Graham et al., 2002; WAP Rubric	Ideation
18. Syntax (i.e., sentence structures)	6+1 Rubric; Graham et al., 2002; WAP Rubric	Conventions
19. Editing and Revising	Cutler & Graham, 2008; Graham et al., 2002	Conventions
20. Paragraph Structure (i.e., organization of key ideas, inclusion of transitions)	Cutler & Graham, 2008; Graham et al., 2002; WAP Rubric	Ideation
21. Overall Quality	Cutler & Graham, 2008; Graham et al., 2002; 6+1 Rubric	Self-Regulation

The final section of the *PT-SWI* measured preservice teachers' self-efficacy for writing instruction. This section asked students to adopt the perspective of a future in-service teacher to indicate the importance of writing instruction to students' achievement in class as well as what components of writing instruction should be emphasized. All items were researcher-created; however, the majority (see Table 7) were informed by work on in-service teachers focusing on the types of instructional practices those teachers employ (Cutler & Graham, 2008) and their underlying beliefs, or orientations, about writing (Graham et al., 2002).

Table 7. Self-Efficacy For Writing Instruction - Item Development

Item	Current research support for researcher-created item
22. Writing is an important skill to teach to students.	Graham et al., 2002
23. Writing instruction should be integrated into daily classroom instruction.	Graham et al., 2002
24. Writing is an important skill for teaching my certification area.	Graham et al., 2002
25. When teaching writing, I feel comfortable implementing state standards focused on writing.	Bruning et al., 2013 (self-regulation)
26. Effective teachers must be proficient at writing.	Graham et al., 2002
27. I feel adequately prepared to teach writing.	Cutler & Graham, 2008
28. Teachers who enjoy writing can more effectively teach writing.	Cutler & Graham, 2008
29. The writing process is challenging to teach.	Cutler & Graham, 2008
30. Providing consistent assessment of writing is important to developing writing confidence in students.	Graham et al., 2002
31. Writing is an effective way to engage students.	Cutler & Graham, 2008; Graham et al., 2002
32. When assigning writing activities, I feel it is important to provide students with a specific topic on which to write.	Cutler & Graham, 2008; Graham et al., 2002

One difference between the pre- and post-versions exists, which is an additional section to the post-version that asked preservice teachers to rate the effectiveness of their writing-intensive education course and assess their perceived growth in self-efficacy (see Table 8). The items were researcher-created. Additionally, three university-specific questions focused on writing services provided to the preservice teachers: the Undergraduate Peer Mentors, Calibrated Peer Review, and the University Writing Center. All services provided writing consultations, systematic peer review, and editing services, which could benefit and improve the students' writing. Therefore, items 5-8 (see Table 8) should be adapted for available programs emphasizing writing at the target institution.

Initial Pilot Testing

During October 2013, I pilot tested the instrument with a sample of 26 participants to measure reliability coefficients and validity scores. I also received feedback from the participants about wording and any questions, which caused them confusion. I compared Cronbach's alpha scores for the entire survey ($\alpha = .815$), self-efficacy for writing ($\alpha = .689$), effectiveness of the teacher education program ($\alpha = .854$), and self-efficacy for writing instruction ($\alpha = .658$). The three-factor model showed consistency, but several items did not factor as expected. For example, *Item 5 Writing helps me accomplish daily tasks* received a low factor score and was cited by participants as confusing. I modified this item by adding the parenthetical reference *(i.e., completing to-do lists, journaling, note-taking)* for clarity. Participants also experienced difficulty answering an open-ended question, which asked participants to *List the types*

of writing you engaged in during the past week. Repeatedly, participants wanted clarity

on how writing is defined for this study. I added a parenthetical reference to this item

(include both academic and personal forms of writing) for additional clarity, but did not

provide a concrete definition.

Table 8. Evaluation of the Effectiveness of the Course For Which the Preservice
Teacher is Currently Enrolled – Item Development

1. My writing has improved this semester.

2. Writing is less intimidating because of what I learned in this course.

3. This course provided me with opportunities to write when learning new material.

4. During the semester, I saw modeling of effective writing strategies.

5. The Undergraduate Peer Mentors (UPMs) assisted me in improving my writing.

6. The Calibrated Peer Review (CPR) System improved the quality of feedback I give
to others about their writing.

7. The Calibrated Peer Review (CPR) System improved the quality of *my* writing.

8. The University Writing Center assisted me in improving the quality of my writing
this semester.

9. My instructor modeled writing for various **genres** (i.e., persuasion, nonfiction, or
informative).

10. My instructor modeled writing for various **audiences**.

11. After this course, I feel more confident in my writing abilities.

Methods

For this study, I administered the pre-version of the *PT-SWI* to preservice teachers during the first week of the semester-long writing-intensive courses to establish a baseline for their self-efficacy for writing and writing instruction. The post-version of the survey was administered during the last two weeks of class. Participants were given access to an online version of the surveys; however, they had the option to complete paper-and-pencil versions if they preferred to or did not have access to the Internet in class.

Participants

Participants were 233 preservice teachers at a large research university in the southwest part of the United States. At the post-survey administration, 209 preservice teachers were still participating in the study. The 10% attrition is due to students dropping courses, opting to not continue participating in the study, or being absent from class on the survey administration days.

All participants were enrolled in one of four writing-intensive education courses, which was required for their degree plans and state teacher certifications. Although the basic requirements for designated writing-intensive courses can vary by university, the conditions for a writing-intensive course in the university studied are as follows: (1) writing assignments must be related to the students' major; (2) explicit instruction in writing must be provided by the instructors; (3) feedback for improvement of writing must be provided on major writing assignments; (4) a large portion of the course grade must be based on writing quality (approximately one course hour, which would be 33%

for a three-credit course); and (5) a major writing assignment of at least 2000 words must be produced by the students. Additionally, the writing-intensive education courses at the participating university have two additional sources of feedback and assistance for students in the form of a computerized scoring system entitled the Calibrated Peer Review (CPR) system and a skilled and trained peer writing consultant, Undergraduate Peer Mentors (UPM). However, these two support systems are relatively minor as they are supplementary to the course instruction.

Demographic information for the participants is provided in Table 9. This sample is consistent with the state population of in-service teachers who are primarily Whit(85%) and female (85%) (Texas Education Agency, 2014).

Table 9. Demographic Information ($n = 233$)

	n	percentage
Classification		
Freshman	2	.9%
Sophomore	61	26.1%
Junior	140	59.8%
Senior	29	12.4%
Graduate	1	.4%
Ethnicity		
African American	2	.9%
Asian	2	.9%
Hispanic	26	11.1%
White	198	84.6%
Other	3	1.3%
Certification Area		
EC-6	113	48.3%
4-8	89	38%
8-12	16	6.8%

Table 9. Continued (*n* = 233)

	n	percentage
Frequency of Writing		
daily	70	29.9%
3-5 per week	86	36.8%
1-2 per week	64	27.4%
less than 1 per week	10	4.3%
Never	3	1.3%

Statistical Analyses

For the present study, I wanted to evaluate the effectiveness of the newly created *PT-SWI* by analyzing reliability coefficients and validity scores. I compared these scores to guidelines for educational research as well as prior literature to determine the trustworthiness of our scores. For reliability, I decided to use Cronbach's alpha due to its use in the recent literature. For validity, I first used principal components analysis to determine the number of factors naturally emerging from the survey. Next, I verified the factor-model with confirmatory factor analysis to determine the model goodness-of-fit.

Validity Measures

In addition to analyzing reliability coefficients for the *PT-SWI*, I dissected the validity of the scores. I established both content and construct validity for the *PT-SWI* to analyze the effectiveness of this instrument in measuring self-efficacy for writing and self-efficacy for writing instruction. I reviewed prior literature on these constructs with

in-service teachers, conducted principal components analysis, and confirmed our model through confirmatory factor analysis.

Content Validity. For content validity, I reviewed the prior literature and adapted questions from previous measures (e.g., Bruning et al., 2013; Cutler & Graham, 2008; Daly & Miller, 1975; Graham et al., 2001; Graham et al., 2002; Zimmerman & Bandura, 1994). This provided content validity for the *PT-SWI* as similar items tested favorably with in-service teachers. Two faculty members with extensive work in writing practice reviewed the items for clarity and writing content, which also added to our validity.

Construct Validity. First, I conducted a principal components analysis to determine the factor-model of the *PT-SWI*. Factor analysis can be used to determine the relationship among variables and builds a case for validity (Thompson, 2004). Our analysis was exploratory in that I did not specify the number of factors I expected. After I identified the factor-model from our sample, I conducted a confirmatory factor analysis to determine the goodness-of-fit of our model. Confirmatory factor analysis allowed us to better understand the trustworthiness of our data while verifying that the factor-model was the best representation of our data.

To further analyze the construct validity, I analyzed previously published literature on self-efficacy to assess fit statistics for the field. Unfortunately, I found that many recent articles did not include fit statistics for the model tested by the factor analysis. An exception was Bruning and colleagues (2013) who reported these measures and was therefore used as a comparison. In measuring writing self-efficacy of middle school students, Bruning and associates found acceptable scores for goodness of fit

(*RMSEA* = .069; *CFI* = .953*)*. The *root-mean-square error of approximation* score is approaching the acceptable range (below .05) (Meyers, Gamst, & Guarino, 2013). However, the *comparative fit index* score surpasses the field identification as a good fit (greater than .95) (Hu & Bentler, 1999). Our results are compared to these scores within the results section.

Reliability Measures

To evaluate the trustworthiness of the reliability scores (using Cronbach's alpha), I consulted prior literature. Several studies (Bruning et al., 2013; Graham et al., 2001; Graham & Perin, 2007; Tschannen-Moran, Hoy, & Hoy, 1998; Zimmerman & Bandura, 1994) have calculated reliability coefficients for scores from measures of self-efficacy, which allowed us to evaluate the consistency of these measures. Some of these measures are for self-efficacy for writing and some are for self-efficacy in general. By analyzing reliability coefficients from various sources, I identified item stems for questions that would yield more favorable reliability scores. This synthesis showed the appropriateness of our measures, despite the complexity of merging the two related yet distinct constructs of self-efficacy for writing and self-efficacy for writing instruction.

The highest comparison reliability coefficients for self-regulation of writing, which is a subcomponent of self-efficacy, came from Zimmerman and Bandura (1994). These researchers calculated a high reliability coefficient (α = .94). Moving to 2001, Graham and associates used a general measure of self-efficacy for teaching and had moderate to high reliability coefficients with their sample (α = .70 - .80). These scores were consistent with overall measures of personal teaching efficacy (α = .75 - .87) and

teaching efficacy (α = .64 - .77) (Tschannen-Moran et al., 1998). Finally, in a more recent evaluation of self-efficacy for writing, Bruning and associates (2013) measured three sub-constructs of self-efficacy for writing, ideation (α = .903), conventions (α = .847), and self-regulation (α = .884).

These reliability coefficients correspond to scores of general self-efficacy, teaching self-efficacy, and writing self-efficacy. Consistently, scores from writing self-efficacy measures should yield reliability coefficients ranging from .80 to .94, while scores for general teaching self-efficacy may be slightly lower, ranging from .64 to .87.

Procedures

To establish the reliability coefficients, I initially removed all incomplete surveys. For both the pre-survey and the post-survey, I removed 10% of the surveys for this purpose. Using only complete surveys, I calculated Cronbach's alpha for the entire survey and each factor scale independently. I compared the reliability coefficients with the target ranges described above. Because the scales were within our target ranges, I did not omit items with lower reliability scores.

<div align="center">

Results

</div>

To establish construct validity, principal components analysis confirms three components, one for each section of the survey. These three components correspond to the self-efficacy for writing, effectiveness of teacher preparation program, and self-efficacy for writing instruction. On Table 10, the bolded scores represent the component for which the item is best supported. Overall 52.261% of the total variance was accounted for by the three-components model. This score is slightly lower than other

<div align="center">

53

</div>

measures in the field; for example, Graham and associates' self-efficacy measure

accounted for 62% of the total variance (Graham et al., 2002). However, many previous

studies focus on in-service teachers while our results focus on preservice teachers. The

difference in total variance may be explained by the varying levels of self-efficacy

intrinsically associated with teachers in the field and teachers not yet in the field.

Table 10. Factor Scores For Three Components on Pre-Version PT-SWI

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
1. I can self-monitor during the writing process to improve the quality of my writing.	.017	**.562**	.013
2. The majority of time I spend writing is for enjoyment.	.124	**.528**	.017
3. I am confident in writing for a variety of audiences.	.065	**.830**	.050
4. I feel confident sharing my writing with peers.	.046	**.731**	.042
5. Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking).	.190	**.249**	.210
6. Overall, I have positive feelings toward writing.	.005	**.760**	.062
7. I feel confident in my overall writing abilities.	.064	**.900**	.106
8. Writing is a challenging task for me.	.151	**.866**	.108

Table 10. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
9. I am confident in writing for multiple genres (i.e., persuasion, nonfiction, narration).	.017	**.715**	.003
10. In my preservice teacher preparation coursework, I saw effective modeling of writing assessment.	**.477**	.057	.132
11. I feel prepared to teach - Voice (i.e., presence of the author in the text, tone)	**.738**	.057	.039
12. I feel prepared to teach - Organization of Ideas	**.816**	.039	.128
13. I feel prepared to teach - Clarity of Thought	**.835**	.008	.114
14. I feel prepared to teach - Cohesiveness	**.769**	.044	.021
15. I feel prepared to teach - Grammatical Conventions (i.e., passive voice, punctuation, capitalization)	**.721**	.090	.137
16. I feel prepared to teach - Spelling	**.710**	.019	.046
17. I feel prepared to teach - Word Choice	**.746**	.049	.020
18. I feel prepared to teach - Syntax (i.e., sentence structures)	**.799**	.000	.024
19. I feel prepared to teach - Editing and Revising	**.799**	.088	.075

Table 10. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
20. I feel prepared to teach - Paragraph Structure (i.e., organization of key ideas, inclusion of transitions)	**.816**	.003	.006
21. I feel prepared to teach - Overall Quality	**.852**	.044	.005
22. Writing is an important skill to teach to students.	.140	.041	**.844**
23. Writing instruction should be integrated into daily classroom instruction.	.050	.005	**.816**
24. Writing is an important skill for teaching my certification area.	.055	.030	**.718**
25. When teaching writing, I feel comfortable implementing state standards focused on writing.	.172	.202	**.433**
26. Effective teachers must be proficient at writing.	.110	.065	**.751**
27. I feel adequately prepared to teach writing.	.301	.170	**.483**
28. Teachers who enjoy writing can more effectively teach writing.	.016	.050	**.645**
29. The writing process is challenging to teach.	.124	.317	**.499**
30. Providing consistent assessment of writing is important to developing writing confidence in students.	.012	.142	**.707**

Table 10. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
31. Writing is an effective way to engage students.	.002	.017	**.706**
32. When assigning writing activities, I feel it is important to provide students with a specific topic on which to write.	.182	.033	**.339**
R^2 = 52.361%	29.960%	12.844%	9.557%

When scores on an item are not consistent, the item does not typically factor as expected. For example, item 5, *Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking)*, reveals very low scores for all three components, which is concerning. One justification could be that no set definition for writing is established, leaving the item open to interpretation and resulting in the low reliability. For example, when asked to provide evidence to support their response to Item 5, one student wrote *I am a waitress and take* orders while another stated *Writing research papers for two* courses as evidence of writing during the week. These vastly contrasting responses indicate two orientations about what qualifies as writing in this context. The item was revised between pilot testing and the present study by adding the parenthetical qualifier (e.g. taking notes for class, writing on a blog, journaling) to clarify what constitutes "writing"; however, further clarification is needed.

Item 10, *In my preservice teacher preparation coursework, I saw effective modeling of writing assessment* only had an acceptable score for Component 1.

However, after further evaluation, I consider this item to likely be interpreted as an evaluation of the effectiveness of the teacher preparation program. I expected the item instead to be a measure of personal writing self-efficacy. Considering the former interpretation, I would anticipate greater variation since the participants were recruited from three different programs (e.g., K-6 interdisciplinary studies, 4-8 English and social studies education, and 4-8 science and mathematics education) at the same school.

A principal components analysis confirms three components for the post-version of the *PT-SWI*. The first section, which suggests if and how students feel the writing-intensive courses improve their writing, scored with the same component as the third section of the survey, which measured the individual elements students feel their teacher preparation program prepares them to teach. According to Table 11, the validity scores from the post-version mostly mirrored those of the pre-version. This finding is a further indication that the survey has construct validity. Overall, the three components accounted for 43.775% of the total variance.

Table 11. Factor Scores For Three Components on Post-Course Survey

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
1. My writing has improved this semester.	**.365**	.275	.147
2. Writing is less intimidating because of what I learned in this course.	**.489**	.354	.065
3. This course provided me with opportunities to write when learning new material.	**.346**	.140	.299

Table 11. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
4. During the semester, I saw modeling of effective writing strategies.	**.650**	.059	.136
5. The Undergraduate Peer Mentors (UPMs) assisted me in improving my writing.	**.333**	.172	.023
6. The Calibrated Peer Review (CPR) System improved the quality of feedback I give to others about their writing.	.157	**.288**	.073
7. The Calibrated Peer Review (CPR) System improved the quality of my writing.	**.332**	.277	.052
8. The University Writing Center assisted me in improving the quality of my writing this semester.	**.268**	.202	.164
9. My instructor modeled writing for various genres (i.e., persuasion, nonfiction, or informative).	**.702**	.127	.082
10. My instructor modeled writing for various audiences.	**.746**	.039	.042
11. After this course, I feel more confident in my writing abilities.	**.500**	.378	.097
12. I can self-monitor during the writing process to improve the quality of my writing.	.058	**.637**	.136
13. The majority of time I spend writing is for enjoyment.	.077	**.521**	.130
14. I am confident in writing for a variety of audiences.	.012	**.843**	.133
15. I feel confident sharing my writing with peers.	.073	**.862**	.147

Table 11. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
16. Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking).	.060	**.378**	.333
17. Overall, I have positive feelings toward writing.	.057	**.768**	.169
18. I feel confident in my overall writing abilities.	.131	**.825**	.107
19. Writing is a challenging task for me.	.227	**.711**	.152
20. I am confident in writing for multiple genres (i.e., persuasion, nonfiction, narration).	.051	**.732**	.035
21. In my preservice teacher preparation coursework, I saw effective modeling of writing assessment.	**.706**	.018	.092
22. I feel prepared to teach - Voice (i.e., presence of the author in the text, tone)	**.589**	.134	.044
23. I feel prepared to teach - Organization of Ideas	**.644**	.001	.133
24. I feel prepared to teach - Clarity of Thought	**.734**	.001	.152
25. I feel prepared to teach - Cohesiveness	**.675**	.031	.091
26. I feel prepared to teach - Grammatical Conventions (i.e., passive voice, punctuation, capitalization)	**.537**	.225	.205
27. I feel prepared to teach - Spelling	**.659**	.156	.006
28. I feel prepared to teach - Word Choice	**.812**	.141	.148

60

Table 11. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
29. I feel prepared to teach - Syntax (i.e., sentence structures)	**.753**	.038	.122
30. I feel prepared to teach - Editing and Revising	**.575**	.085	.120
31. I feel prepared to teach - Paragraph Structure (i.e., organization of key ideas, inclusion of transitions)	**.695**	.055	.031
32. I feel prepared to teach - Overall Quality	**.724**	.073	.040
33. Writing is an important skill to teach to students.	.108	.199	**.931**
34. Writing instruction should be integrated into daily classroom instruction.	.081	.058	**.867**
35. Writing is an important skill for teaching my certification area.	.029	.018	**.779**
36. When teaching writing, I feel comfortable implementing state standards focused on writing.	.232	.030	**.516**
37. Effective teachers must be proficient at writing.	.244	.146	**.731**
38. I feel adequately prepared to teach writing.	.201	.252	**.358**
39. Teachers who enjoy writing can more effectively teach writing.	.007	.135	**.416**
40. The writing process is challenging to teach.	.015	.248	**.338**

Table 11. Continued

Item	Component 1 – Effectiveness of Teacher Preparation Program	Component 2 – Preservice Teachers' Self-efficacy for Writing	Component 3 – Preservice Teachers' Self-efficacy for Writing Instruction
41. Providing consistent assessment of writing is important to developing writing confidence in students.	.042	.025	**.646**
42. Writing is an effective way to engage students.	.053	.037	**.684**
43. When assigning writing activities, I feel it is important to provide students with a specific topic on which to write.	**.217**	.138	.126
$R^2 = 43.775\%$	25.884%	11.507%	6.384%

Two items did not factor as expected on the three components. Item 6, *The Calibrated Peer Review (CPR) System improved the quality of my writing,* did not factor highly for any of the three factors. One justification could be that students have vastly different perspectives on the CPR system, particularly as it is used in a different manner across classes (e.g., as a final assessment versus a feedback mechanism). Additionally, depending on the instructional context for incorporating the system, students often have different expectations of what they will gain from using it. This disparity in scores on the item could be affecting the factor scores as well.

Item 43, *When assigning writing activities, I feel it is important to provide students with a specific topic on which to write,* also resulted in low component scores. The low scores for this item could be explained by the limited opportunities for choice of writing topics presented to students in the writing-intensive courses. A second consideration is that preservice teachers might have varying perceptions of the impact of

choice on student writing. For example, one preservice teacher may view choice as a way to help students narrow down many options (i.e., giving few choices to get the students started writing), while another preservice teacher may view this as limiting and controlling (i.e., students must choose from a prescribed list of ideas). These differing viewpoints could result in dichotomous perceptions from the participants.

In addition to conducting the principal components analysis, I conducted a confirmatory factor analysis with the three-component model prescribed above to determine goodness of fit. I confirmed the model to be identified, and tested goodness of fit with the *comparative fit index* (*CFI*) and *root-mean-square error of approximation* (RMSEA). As only Bruning and associates (2013) conducted a similar analysis, I am utilizing these results along with guidelines outlined by several educational researchers (Hu & Bentler, 1999; Meyers et al., 2013). Results for our model compared with results from the field are synthesized in Table 12.

Table 12. Goodness of Fit Statistics From Confirmatory Factor Analysis

Goodness of Fit statistic	Results from the Present Study	Bruning et al., 2013 results	Guidelines from Educational Researchers (Meyers, Gamst, & Guarina, 2013)
CFI	.817	.953	Good fit = greater that .95 Adequate fit = between .80 and .89
RMSEA	.077	.069	Good fit = less than .05 Acceptable fit = less than .08

Examining Table 12 more closely illuminates both a strength and potential concern. First the analysis of the goodness of fit suggests that the three-factor model with 32 variables is an adequate model for the constructed survey. However, the present study fit statistics, while in the *adequate fit* range, are a less ideal fit than Bruning et al. (2013). One explanation may be due to the scope of the measure. Bruning et al. (2013) focuses on self-efficacy for writing only with 16 variables in a three-factor model. However, our results focus on self-efficacy for writing and self-efficacy for writing instruction in a 32 variable model.

Reliability estimates for scores from the *PT-SWI* are compared to the body of existing literature on writing self-efficacy and general teaching self-efficacy to determine the overall trustworthiness of the scores (Thompson, 2002). Table 13 shows the overall reliability score for the pre-version of the *PT-SWI* and by individual sub-section. The scores are consistent with previously published literature on self-efficacy for writing. As seen from Table 13, the reliability coefficients are approaching the higher range of scores from the previous literature based on the effectiveness of the teacher preparation program ($\alpha = .94$), especially in the areas of "overall reliability" and "self-efficacy for writing instruction". The score for "self-efficacy for writing instruction" is within the acceptable range ($\alpha = .80 - .94$). The score for "self-efficacy for writing" is relatively low, but is well within the range for teaching self-efficacy ($\alpha = .64 - .87$) and is slightly below the typical range for writing ($\alpha = .80 - .94$).

Table 13. Reliability Estimates For Pre-Version (*n* = 209)

	n = items	Cronbach's Alpha	Writing Self-Efficacy	General Teaching Self-Efficacy
			(α = .80 - .94)	(α = .64 - .87)
Overall reliability	32	.892	Within	Greater than
Self-efficacy for Writing	10	.707	Lower than	Within
Effectiveness of Teacher Education Program	11	.930	Within	Greater than
Self-efficacy for Writing Instruction	11	.832	Within	Within

Table 14 shows the overall reliability of scores for the post-version of the *PT-SWI* and by individual sub-section. The overall reliability coefficient (α = .915) is approaching the higher range of estimates from the previous literature (α = .94). The score for "self-efficacy for writing instruction" is within the field range (α = .80 - .94), "self-efficacy for writing" is relatively low, but may be due to the nature of the construct, in which I are asking students to speculate on their ability to complete a future task in a future unknown context. However, this score is within the range for teaching self-efficacy (α = .64 - .87) but is slightly below the parameters for writing (α = .80 - .94).

Table 14. Reliability Scores for Post-Version Survey (*n* = 209)

	n = items	Cronbach's Alpha	Writing Self-Efficacy	General Teaching Self-Efficacy
			(α = .80 - .94)	(α = .64 - .87)
Overall reliability	43	.915	Within	Greater than
Self-efficacy for Writing	10	.733	Lower than	Within
Effectiveness of Teacher Education Program	11	.902	Within	Greater than
Self-efficacy for Writing Instruction	11	.803	Within	Within

Discussion

The purpose of the present study was to evaluate the effectiveness of a new survey, the *PT-SWI*, for measuring preservice teacher self-efficacy for writing and writing instruction. This survey contributes to the field by merging contemporary research on self-efficacy for writing and self-efficacy for writing instruction into a single survey focusing on preservice teachers, who are currently overlooked in self-efficacy for writing research. Previously, these constructs have not been specifically examined for preservice teachers, but research shows that when self-efficacy for a task is low, in-service teachers often revert back to methods of teaching they saw from their own instructors (Morgan, 2010). Therefore, it is crucial to examine and dissect these

constructs to inform teacher preparation programs, which can adapt writing instruction based upon our findings.

Teacher Preparation Program Effectiveness

The results reveal that combining self-efficacy for writing and self-efficacy for writing instruction into one measure is complicated because our results show that preservice teachers do not have a set definition for what writing entails. Some preservice teachers view writing as a tool for completing tasks (i.e., writing to-do lists and writing orders at a job), while others view writing as a substantive task (i.e., writing a research paper or responding to a discussion post). It is important that future teachers have a working definition of writing, although I recognize that it is a complex construct to define. However, most participants had a rather narrow definition of writing which is concerning.

Moreover, based on this sample, even after completing a course designed to promote writing, preservice teachers are unsure of their preparation to teach writing and do not consider the many elements included in teaching writing. Preservice teachers do not often consider that writing requires mastery of conventions, such as formatting, spelling, and grammar, as well as organization of ideas, word choice, and voice. Reliability coefficients and validity scores were high for these components, but preservice teachers varied in their responses to these items. This revealed that preservice teachers might only be considering a small subset of the many components, which make up writing. For example, a preservice teacher who values content over conventions may only be viewing writing through the lens of ideation and organization (Bruning et al.,

2013; Graham et al., 2002). However, a student who views quality writing as correctly formatting with minimal errors, may view writing through conventions and grammar. These many components make writing multi-faceted and add to the complexity for teaching this skill. Additionally, much of the current research focuses on two distinct elements of writing: the writing process and writing-to-learn. For students to be successful, teachers must be able to effectively instruct both aspects of writing. Future research needs to break down writing more to address these differences.

Reliability Measures

The differences preservice teachers have in their definitions and opinions make the task of measuring self-efficacy for writing and writing instruction difficult. Despite these challenges, the reliability coefficients for the instrument show consistency with the current, yet limited, research on self-efficacy for writing. Future research is needed to determine if the consistency of these scores remain with more diverse and larger samples across different time intervals.

The results for the self-efficacy for writing instruction variable are especially noteworthy. This construct is even less researched than self-efficacy for writing and is more challenging to measure. Ultimately, this is a measure of perception as the preservice teachers have not yet had their own classroom. However, these scores were within the field range (α = .80 - .94) based on the self-efficacy for writing research. As this is mostly an unexplored construct, this study serves as a starting point for future researchers hoping to analyze this construct with diverse samples of preservice teachers. This construct may emerge to be highly predictive of how preservice teachers behave in

their classrooms in regards of writing instruction so more work is warranted in this area. I hypothesize that this construct would logically be more predictive of preservice teachers' approach to teaching writing than their personal self-efficacy for writing.

Validity Measures

Validity for scores on the *PT-SWI* indicate that the items are moderately effective for describing the self-efficacy for writing and self-efficacy for writing instruction, while the items are very effective for describing the preservice teachers' perceptions of how well their preparation program trained them to teach writing. One consideration worth acknowledging is that the demographics of the sample are mostly homogenous, over-representing students who are White and female. These numbers are representative of the current population of teachers in both Texas (Texas Education Agency, 2013) and the United States. The homogeneity of responses could affect the validity and reliability coefficients, which are largely dependent on participant responses.

Secondly, the fit statistics for the *PT-SWI* did not correspond to the usual scores for "good fit" as outlined by the field (Hu, & Bentler, 1999; Meyers et al., 2013) although they met the criteria considered as "adequate fit". Moreover, when I attempted to compare these scores with fit statistics from the field, I found that many researchers did not include fit statistics in their analyses. This reveals a limitation in the field in which researchers are including factor analyses, but not fitting their data to theorized models to ensure they match the constructs. While our fit statistics reveal "adequate" or "acceptable" fit of the model, these scores can only be compared with arbitrary benchmarks.

Finally, as with the reliability coefficients, I found that the validity scores from the factor analysis showed some fluctuations. Primarily, these fluctuations occurred with items that implicitly asked about students' orientation toward writing. I can explain some of these differences in responses by keeping in mind that students do not all define writing in the same way. For example, if students view writing as a tool for learning, they will probably indicate agreement with the item *Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking)*; however, if they view writing as a task involving the writing process, they might rate this item lower. Therefore, consideration should be taken to identify varying definitions of writing and how those definitions influence student responses.

Limitations

Several limitations are present in the current study. First, as mentioned previously, the data were collected from a homogenous sample at a single university, limiting generalizability. Second, I was able to analyze the construct validity for the items on the instrument but not concurrent or predictive validity. Having the same groups of students complete the *PT-SWI* and other similar measures will indicate how each instrument measures the self-efficacy for writing and self-efficacy for writing instruction constructs. Finally, the scores from this instrument are simply a snapshot of how students perceive writing and writing instruction. To fully understand how these views change over time and how they influence K-12 students, I would administer the survey multiple times over longer periods of time. Ideally, a longitudinal study would

follow preservice teachers into their careers to measure how their beliefs and practices are aligned with their beliefs as preservice teachers.

Future Directions

The present study provides insights into the complexity of merging two distinct constructs, self-efficacy for writing and self-efficacy for writing instruction. While reliability coefficients and validity scores show that the *PT-SWI* is effective in capturing these constructs, more research is needed to further validate these results. Researchers must be aware of the model fit of their results and include this information within their manuscripts. The inclusion of these analyses will further identify the strengths and limitations of studying writing outcomes for preservice teachers.

Teacher education programs can utilize the *PT-SWI* to identify weaknesses in their own preservice teacher writing preparation. The programs can see which variables preservice teachers feel are efficacious and which they feel they need further instruction. Teacher educators can design writing instruction, research, and practice around what their individual students identify as areas of weakness.

The greatest influence on the field of writing come from current and future policy changes. Currently, writing research is under-represented in No Child Left Behind (NCLB), the Race to the Top (RtT), and value-added legislations. However, our results show that preservice teachers have mixed views on writing. When studying in-service teachers, research has shown that these perspectives influence the amount of writing and types of writing instruction K-12 students receive. Policy makers need to readmit writing to the national conversation when considering education.

Conclusion

Recent policy changes depict a roller-coaster of conclusions about writing. The development of the Common Core State Standards focus on the importance of writing as a tool for learning, while the emphasis on value-added scores continues to ignore writing instruction. If writing instruction is not emphasized in teacher preparation programs, preservice teachers will not likely value writing and it will not be a focus of their pedagogy once they have their own classroom. Though most research conducted on beliefs about writing and self-efficacy for writing is related to in-service teachers, the beliefs about writing and self-efficacy for writing of preservice teachers cannot be ignored. The findings from this study can be used to inform teacher education programs about the necessity for writing instruction courses while demonstrating the connection between self-efficacy beliefs and practice. Future research will seek to validate the instrument and focus on longitudinal studies of long-term beliefs toward writing and student achievement.

CHAPTER III

THE IMPACT OF WRITING-INTENSIVE AND GENERAL EDUCATION COURSES ON PRESERVICE TEACHERS' SELF-EFFICACY FOR WRITING AND WRITING INSTRUCTION

The teaching profession continues to see a connection between self-efficacy beliefs and positive teacher attitudes about teaching (Wang, Hall, & Rahimi, 2015), particularly among teachers who remain in the profession longer than five years (Hargreaves & Fullan, 2012). As self-efficacy is a domain-specific construct (Bandura, 1977), it is critical that teacher education programs focus on developing self-efficacy beliefs in multiple areas. Writing instruction is facing a potential decline in importance in schools with the increasing policy demands focusing on mathematics and reading achievement (Chetty, 2012; Darling-Hammond, Amrein-Beardsley, Haertel, & Rothstein, 2012); however, studies continue to show that by improving writing achievement, students show improvement in other academic domains (National Commission on Writing, 2003). Consequently, teacher preparation programs need to focus on building the self-efficacy beliefs of preservice teachers specifically for writing and writing instruction.

Preservice teachers learn the skill of teaching writing from effective teacher models, practice with writing, and experience applying their writing knowledge. In fact, in their seminal work, Graham and Perin (2007) found that when teachers did not provide effective modeling of strategies in writing instruction, student achievement

73

profoundly decreased (d = -.61). The idea of effective modeling crosses into higher

education when teacher educators are instructing preservice teachers (Kaufman, 2009).

Preservice teachers often revert to teaching in the same ways they were taught in their K-

12 classrooms because they do not fully grasp the connections between theory, research

and practice from their teacher preparation courses (Ritter, 2012). The responsibility of

elucidating these connections is on teacher educators, who can enhance the effectiveness

of preservice teachers by modeling practices suggested by theory. In addition to

modeling, preservice teachers need exposure to writing and safe environments to explore

their own writing abilities. Courses that allow preservice teachers opportunities to

engage in writing, examine their own thinking (metacognition) about writing, and

practice giving feedback on others' writing, help develop positive beliefs about writing

(Morgan, 2010). However, even after certification, many teachers report that they are

inadequately prepared to teach writing (Kiuhara, Graham, & Hawken, 2009).

Current research on writing instruction is primarily focused on in-service

teachers (e.g., Cutler & Graham, 2008; Graham & Perin, 2007), and shows that teachers

who demonstrate a high sense of efficacy, the belief that they can persevere and

successfully complete a task even when faced with a challenge (Bandura, 1977, 2001),

are more likely to diversify their instructional strategies, utilize multiple genres of text,

and engage students in various grouping methods to improve student achievement

(Tschannen-Moran & Johnson, 2011). Concurrently, the newly developed Common

Core State Standards increasingly emphasize the writing process, the frequency with

which students are writing, and the quality of student writing for different genres and

audiences (National Governors Association, 2010a). Meeting these requirements demands teacher preparation programs to develop preservice teachers with strong self-efficacy related to writing.

Purpose

Before entering the classroom, preservice teachers receive training in pedagogy through teacher education programs or an alternative preparation program. However, as noted above, current research on self-efficacy for writing or writing instruction is limited to work with inservice teachers. Currently, there is a lack of research focusing specifically on the beliefs preservice teachers hold about writing and writing instruction, and the few extant studies are primarily qualitative in methodology (Zimmerman, Morgan, & Kidder-Brown, 2014). Quantitative research is also needed to connect self-efficacy beliefs of preservice teachers with variables which might be influencing those beliefs. The present study addresses this gap in the literature through the use of a mixed methods research design which focuses on writing-intensive preservice education courses at a large research university in the Southwest United States. Using multiple sources of data, I compared two groups of preservice teachers, those enrolled in a university-designated writing-intensive education course and those enrolled in general education methods courses, to determine how these courses impacted their self-efficacy for writing and writing instruction.

Considering that not all inservice teachers become teachers through traditional preparation programs, an added emphasis can be placed on the courses in teachers' undergraduate careers. Frequently, writing-intensive courses currently serve as one of

the types of instruction preservice teachers receive on improving their own writing and how to teach writing. As such, their effectiveness for molding the beliefs of preservice teachers should be analyzed. The current study focuses on the effectiveness of these writing-intensive courses in improving preservice teachers'' self-efficacy for writing and writing instruction. Several studies have focused on the quality of writing-intensive courses to improve the writing abilities of students and have found that scaffolding (Massengill, 2011) and strategies (Kolb, Longest, & Jensen, 2013) show the greatest gains in writing achievement. Yet, no studies have specifically considered the impact of writing-intensive courses to improve self-efficacy of preservice teachers. The results of this study will be beneficial to researchers focusing on writing instruction and teacher education programs who are facing increasing demands for accountability and teacher effectiveness (Kumashiro, 2015).

Preparing Preservice Teachers to Teach Writing

While universities take different approaches to instructing preservice teachers to teach writing, since the 1990s (occurring as part of the writing across the curriculum movement), teacher preparation programs began requiring students to take writing-intensive courses within their education major (Farris & Smith, 1992; Grauerholz, 1999). Most writing-intensive courses are used as a means for teaching writing basics along with content knowledge to help reduce the number of courses students must take to compete their undergraduate degrees (Grauerholz, 1999). Many states, to date, do not require writing methods courses for teacher certification, making the small doses of writing provided in writing-intensive courses paramount to helping preservice teachers

develop their skills for writing and teaching writing (Martin & Dismuke, 2015; Morgan, 2010; National Commission on Writing, 2003).

Writing-Intensive Education Courses

In general, courses that allow preservice teachers opportunities to engage in writing, examine their own thinking about writing, and practice giving feedback on others' writing, help develop positive beliefs about writing. *Writing-intensive* courses attempt to meet these goals while simultaneously learning content (Farris & Smith, 1992). These courses incorporate regular writing tasks in ways that allow students to learn both the subject matter and writing genres specific to that field. For example, in an undergraduate biology course, researchers found that integrating writing resulted in higher levels of efficacy for reading scientific texts and communicating science content (Brownell, Price, & Steinman, 2013).

Writing-intensive courses in education programs have the added layer of also preparing preservice teachers to teach writing. The specific learning objectives of these courses differ; however, they are intended to provide students with specific, authentic practice in writing that both inform their knowledge of the content and allow them to practice effective writing method. Writing should facilitate thinking (Bean, 1996; Flower, 1993), building on preservice teachers' knowledge of writing-to-learn.

General Education Courses

General education pedagogy courses are the courses preservice teachers take in teacher preparation programs over content related to specific disciplines (such as mathematics or social studies) or related to general pedagogy and instruction. In this

study these courses also focused on developmental aspects of reading and assessment practices. General education pedagogy courses differ from the writing-intensive courses only in that they are not required to explicitly address writing, provide direct instruction on writing practices or strategies, or have students write lengthy assignments. That does not mean that these elements could not be included as part of the course; however, the primary focus of these courses is on education theory and practice, rather than writing.

Forming Beliefs about Writing

Improving writing comes from practicing writing. The frequency with which students practice writing develops more positive beliefs about the process and act of writing (Elbow, 2004; Silvia, 2007). In fact, preservice teachers who were given opportunities to write throughout the day showed more positive attitudes toward writing (Hall & Grisham-Brown, 2011). Yet, research also shows that preservice teachers are often granted limited opportunities to see effective models of writing instruction (Grisham & Wolsey, 2011). These pedagogical models should emphasize what teachers do with students and how teachers improve the writing abilities of their students. These features of teaching writing should be explicitly communicated to preservice teachers, not just inferred (Grisham & Wolsey, 2011). In other words, preservice teachers need to simultaneously engage in activities from the perspective of a writer and from the perspective of a writing teacher (Martin & Dismuke, 2015).

Consistent with empirical findings, preservice teachers often self-report mentors, models, and support in their teacher education programs as contributing to their overall beliefs about teaching and sense of preparedness (Siwatu, 2011). In fact, Van Dinther,

Dochy, and Segers (2011) found that 80% of intervention programs influenced students' self-efficacy beliefs. Of the variables influencing self-efficacy, mastery-based activities show the largest increase in self-efficacy (Van Dinther et al., 2011). Mastery activities require participants to actively engage in an activity, see effective models of the activity, and challenge previously held beliefs about the activity (Bandura, 2001). A strong connection between instructional practices and self-efficacy also exists. From these research studies, preservice teachers' beliefs about writing are influenced by many factors, but primarily stem from specific interventions focused on improving their attitudes and views toward writing.

Theoretical Framework

The role of self-beliefs is central to the premise of this study. Students' beliefs about their own writing processes and competence for writing are instrumental in their ultimate success as writers (Pajares, 2003; Pajares & Valiante, 2006). Therefore, teachers need to be writers, and view themselves as writers, in order to effectively teach writing (Colby & Stapleton, 2006). It is significantly more difficult for a teacher to instruct on a skill with which he or she is not familiar or adept. According to Tschannen-Moran and Woolfolk Hoy (2001), "a teacher's efficacy belief is a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 783). Moreover, teachers who feel that they will improve student achievement are more likely to change their beliefs regarding self-efficacy (Skaalvik & Skaalvik, 2010).

The present study, informed by social cognitive theory (Bandura, 1986, 2001) and sociocultural theory (Prior, 2006), analyzes potential changes in the self-efficacy beliefs of preservice teachers for writing and writing instruction from course instruction in writing. Social cognitive theory (Bandura, 1977, 1986) was applied to writing as researchers increasingly sought to capture the thought processes underlying the composition writing of students. Additionally, social factors such as motivation and affect are increasingly important to how preservice teachers conceptualize writing, and sociocultural theory emerged as writing became increasingly seen as a form of activity, or a tool for learning (Prior, 2006). Rather than being a bystander, teachers play an active role in instructing students, offering support, providing feedback, and modeling writing practices. Additionally, writing research that originates with a sociocultural lens focuses on specific classroom practices, actions that make up literate practices, and the specific kinds of collaboration schools support (Prior, 2006). In other words, the sociocultural lens prioritizes the *interaction* between participants (teachers, peers), rather than the products.

Through social cognitive theory and self-efficacy for writing (Bandura, 1977, 1986), *preservice teachers' self-efficacy for writing* is the preservice teachers' belief that they can effectively write for multiple purposes (e.g., communication, persuasion, lesson planning, note-taking) and multiple audiences (e.g., parents, teachers, self, students) with confidence.

Writing instruction includes the pedagogical techniques used to efficiently and effectively teach students of any age the task of writing. Writing instruction does not

80

only pertain to the task of writing but includes assessing writing and using writing as a tool for learning. For example, while teaching students about content, writing can be used in the form of low-stakes writing, such as quick writes, online discussion postings, or minimal/ungraded writing to explore students' thinking (Elbow, 2004). Using low-stakes writing assignments, teachers can evaluate the students' thinking about a topic and students can engage in metacognition and reflection.

Methods

The purpose of the present study is to determine and compare how writing-intensive and general education pedagogy courses impact preservice teachers' self-efficacy for writing and self-efficacy for writing instruction. Additionally, I analyzed preservice teachers' perceptions of how effectively their education program prepared them to teach specific elements of writing (e.g., spelling, paragraph structure, organization). According to social cognitive theory, students are influenced by behavior (e.g., writing and writing instruction), personal factors (e.g., self-efficacy), and environment (e.g., the classroom). The present study compares behavior and personal factors by analyzing differences in the environment (writing-intensive course vs. general education course). I hypothesized that students in writing-intensive courses will show greater scores in self-efficacy for writing, self-efficacy for writing instruction, and effectiveness of their teacher preparation program; however, this does not imply that only writing-intensive courses provide opportunities for future teachers to practice writing. In fact, as defined previously, general education courses require students to complete writing activities, but unlike writing-intensive courses, the course descriptions

(see Table 14) do not specify a focus on writing instruction. In the following sections, I outline my data sources, research questions, and rationale for the statistical analyses utilized.

Prior literature posits that in-service teachers feel inadequately prepared to teach writing, yet preservice teachers have not been a focus of recent studies on self-efficacy for writing. Moreover, self-efficacy for writing instruction is a particularly unexplored construct in studies analyzing the beliefs of preservice teachers. The present study seeks to fill this gap by focusing specifically on preservice teachers and measuring their self-efficacy toward writing and writing instruction. I outline the specific research questions below. The first three questions focus specifically on the intervention of writing-intensive courses for the three scales identified from the *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI)*. Questions four and five emphasize how often preservice teachers are writing and what kinds of writing they are engaging in, connecting self-efficacy for writing and self-efficacy for writing instruction by linking these constructs through the frequency of writing. Question six shows the correlation between self-efficacy for writing and self-efficacy for writing instruction indicating that the variables positively impact each other.

1. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *perception of the effectiveness of their teacher education program* in equipping them to teach writing?

2. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *self-efficacy for writing instruction*?

3. What are the effects of two course types (writing-intensive vs. general education) on preservice teachers' *self-efficacy for writing*?

4. How frequently are preservice teachers writing during an average week and what types of writing are the engaging in most frequently?

5. What are the *effects of frequency of writing* on preservice teachers' *perception of the effectiveness of their teacher education program* in equipping them to teach writing, *self-efficacy for writing instruction*, and *self-efficacy for writing*?

6. What relationship exists between *self-efficacy for writing*, *self-efficacy for writing instruction*, and *effectiveness of the teacher preparation program*?

Intervention - Writing-Intensive vs. General Education Courses

The intervention in this study was defined as enrollment in a writing-intensive teacher education course. The design is quasi-experimental, comparing preservice teachers enrolled in writing-intensive courses to preservice teachers enrolled in general education courses. At this institution, course title and writing-intensive course designation are not separable. For that reason, I compared courses covering related yet different content. The writing-intensive courses, identified as A, B, C, and D, were compared to two similar courses, E and F, which are not writing-intensive (see Table 15 for a description of the courses observed in this study). The courses were similar because students in the general education courses, typically, had not been exposed to writing-intensive courses yet. Therefore, they were approaching the topic of writing without already being influenced by the extensive writing requirements and practice of these courses. Additionally, I chose all courses primarily enrolled by sophomore or junior

level students (87%). Much variability exists in the content of the courses, showing that writing could be integrated into various topics.

Table 15. Course Names, Titles, and Descriptions

Focus	Course ID	Course Title	Course Description
Writing-intensive	A	Language Acquisition and Development	Role of the child, the community and the school through stages of language development; relationship of linguistic, cultural and conceptual processes to second language learning.
Writing-intensive	B	Multicultural and Interdisciplinary Literature for Middle Grades	Focuses on multicultural and interdisciplinary literature appropriate for middle grades students; implements and evaluates effective multicultural, interdisciplinary instruction through selection, use and development of literature in middle grades classroom.
Writing-intensive	C	Reading and Writing across the Middle Grades Curriculum	Focuses on multicultural and interdisciplinary literature appropriate for middle grades students; implements and evaluates effective multicultural, interdisciplinary instruction through selection, use and development of literature in middle grades classroom.

Table 15. Continued

Focus	Course ID	Course Title	Course Description
Writing-intensive	D	Teaching Reading Through Children's Literature	Use of past and contemporary literature for the motivation of wide leisure reading in the elementary grades.
General Education	E	Reading in the Elementary School	Recent trends, issues, materials and procedures considered essential for effective teaching of reading, such as comprehension, word analysis, study skills, motivation, grouping, etc.
General Education	F	Assessment in Reading Instruction	Recent trends, issues, materials and procedures considered essential for effective teaching of reading, such as comprehension, word analysis, study skills, motivation, grouping, etc.

Although the basic requirements for writing-intensive courses vary by university, the conditions for a writing-intensive course in the university studied are as follows: (1) the course must require writing related to the students' major; (2) instructors must provide explicit instruction in writing; (3) instructors must provide feedback that allows for the improvement of writing on major assignments; (4) a large percentage of the final course grade must be based on writing quality (about 25% for a 4-credit course, 33% for

a 3-credit course, and 75% for a one-credit course); and (5) instructors must require a minimum of 2000 written words.

Instruments

The *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI)* (see Chapter II for a detailed description) is the focus of this study. I created the *PT-SWI* by modifying current surveys measuring in-service teacher self-efficacy for writing (Cutler & Graham, 2008; Graham et al., 2001; Graham et al., 2002), K-12 student self-efficacy for writing (Bruning et al., 2013), college student writing apprehension (Daly & Miller, 1975), and college student writing self-regulation skills (Zimmerman & Bandura, 1994). This survey is unique in that it focuses specifically on preservice teachers and includes scales for both self-efficacy for writing and self-efficacy for writing instruction. I included an additional scale evaluating the effectiveness of the teacher education program in preparing preservice teachers to instruct on specific writing elements. I administered both pre- and post-versions of the survey to determine changes in self-efficacy from beginning to end of the semester.

Participants

I administered the pre-version of the *PT-SWI* in early September and the post-version in late November (actual dates varied on course and instructor availability). Participants for the study were 451 preservice teachers enrolled in education courses (see Table 16) at a large research university in the southwestern part of the United States during the fall 2014 academic semester. Over 93% of the sample was female and the majority white. Additionally, most participants indicated they are pursuing an EC-6 certification and were in their junior-year of study.

Five hundred and fifty-five preservice teachers participated in the pre-survey and 488 participated in the post-survey. 94.6% of the pre-survey data and 92.4% of the post-survey data resulted in usable responses. After removing incomplete responses from the data, 525 preservice teachers comprised the pre-version data while 451 preservice teachers remained in the post-version data. This represents a 14% attrition rate due to students dropping out of course enrollment and opting not to participate in either the pre- or post-survey administrations. I obtained a list of absent students for each survey administration and emailed them to allow for participation; however, absenteeism also contributes to the attrition rate. Table 16 shows the demographic information for participants during both the pre- and post-survey administration.

Table 16. Demographic Information for Pre-Version ($n = 525$) and Post-Version ($n = 451$) of the *PT-SWI*

	Pre-Version *PT-SWI*		Post-Version *PT-SWI*	
	n	percentage of total sample	*n*	percentage of total sample
Gender				
Male	32	6.1	30	6.6
Female	493	93.9	421	93.1
Ethnicity				
African American	7	1.3	8	1.8
Asian	15	2.9	16	3.5
Hispanic	39	7.4	34	7.5
White	460	87.6	391	86.5
Other	4	.8	3	.7
Classification by course hours completed				
Freshman (0-30)	6	1.1	4	.9
Sophomore (30-59)	128	24.4	112	24.8
Junior (60-94)	328	62.5	280	61.9
Senior (95+)	63	12	55	12.2
Certification Area				
EC – 6	328	62.5	276	61.1
4-8	161	30.7	149	33.0
8-12	14	2.7	14	3.1
K-12	14	2.7	7	1.5
Other	6	1.1	5	1.1
Content Area Specialization				
English/Language Arts	208	39.6	211	46.7
Mathematics	136	25.9	98	21.7
Science	45	8.6	34	7.5
Social Studies	70	13.3	61	13.5
Special Education	15	2.9	10	2.2
Bilingual Education	14	2.7	9	2.0
Other	37	7.0	29	6.4

Statistical Analysis Overview

For this explanatory sequential mixed methods research design (Creswell, 2009; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009), I compared preservice teachers enrolled in writing-intensive education courses during the fall semester to those who were enrolled only in general education courses. In this section, I first present an overview of the methods indicating how they connect together, and then describe each analysis in more detail.

First, I conducted a principal components analysis of the survey data to determine the factor-model for the data. Second, due to the unbalanced size of each group (writing-intensive and general education), I used propensity score matching procedures to create two groups of participants based on stable factors such as classification, gender, and ethnicity. Third, I used the propensity score matches to conduct three analyses of variances on the scales from the principal components analysis. I compared the propensity score matches with the course type to show that the propensity score matches are a better representation of true differences among the participants. Fourth, I conducted multivariate analysis of variances (MANOVA) to determine the effects of gender, classification, certification area, frequency of writing, and ethnicity on preservice teachers' self-efficacy for writing, self-efficacy for writing instruction, and perception of the effectiveness of their teacher education program in equipping them to teach writing. To further demonstrate how and why the frequency of writing relates to students' self-efficacy, I conducted a constant-comparative qualitative analysis using non-hierarchical, axial coding to find themes among types of writing with

which students engaged. Finally, to show the relationship among the three scales, self-efficacy for writing, self-efficacy for writing instruction, and effectiveness of the teacher preparation program, I conducted a higher-order factor analysis. In the following sections, I outline the specific justifications and procedures for each analysis.

Principal Components Analysis. I analyzed the *PT-SWI* using principal components analysis to determine the factor-model of the survey. Principal components analysis using promax rotation reveals factor scores for the constructs, as well as allowed me to conduct the higher-order factor analysis (Thompson, 2004). Both the pre-version and post-version of the *PT-SWI* factored into three components. The factors of the pre-version of the *PT-SWI* accounted for 48.91% of the total variance and individual items' pattern coefficients ranged from .427 to .880. These components are effectiveness of the teacher preparation program ($R^2 = 24.89$), self-efficacy for writing ($R^2 = 24.89$), and self-efficacy for writing instruction ($R^2 = 8.51$). See Table 12 (in Chapter II) for the results of the pre-version of the *PT-SWI*.

Several items did not factor as anticipated. For example, *Item 5 Writing helps me accomplish daily tasks (i.e., completing to-do lists, journaling, note-taking)* showed low factor scores for each component. Additionally, *Item 10 In my preservice teacher preparation coursework, I saw effective modeling of writing assessment* revealed a low factor score. Finally, *Item 27 I feel adequately prepared to teach writing* and *Item 32 When assigning writing activities, I feel it is important to provide students with a specific topic on which to write* did not factor solidly into one component. The analysis of

variance and multivariate analysis of variance procedures might bring clarity to why these low scores persist.

Table 17 lists the reliability coefficients for the pre-version of the *PT-SWI*. The overall reliability of the survey (measured by inter-item correlation) is high ($\alpha = .86$). The self-efficacy for writing scale is high ($\alpha = .84$). The effectiveness of the teacher education program sub-scale shows high reliability ($\alpha = .93$). The self-efficacy for writing instruction scale's reliability score is considered acceptable and approaching good internal consistency ($\alpha = .76$).

Table 17. Reliability Scores For Pre-Version ($n = 525$)

	n = items	Cronbach's Alpha
Overall reliability	32	.86
Self-efficacy for Writing	10	.84
Effectiveness of Teacher Education Program	11	.93
Self-efficacy for Writing Instruction	11	.76

The factor scores for the post-version of the *PT*-SWI are comparable to the pre-version and are reported in detail in Table 12 (in Chapter II). Again, principal components analysis confirmed the three-factor model, which accounted for 48.85% of the total variance. Individual items' scores ranged from .425 to .895. Looking at Table 13 (see Chapter II), the results of the post-version of the *PT-SWI,* similar items have low

factor scores. This may reveal issues with the construct validity. One additional item shows a low factor score. *Item 5 The University Writing Center assisted me in improving the quality of my writing this semester* does not factor well into any of the components. This difference is also explored in later analyses.

Table 18 shows the reliability scores for the post-version of the *PT-SWI*. Overall reliability ($\alpha = .82$) is comparable to the pre-version of the survey. The self-efficacy for writing scale ($\alpha = .79$) and self-efficacy for writing instruction ($\alpha = .87$) are good, while the effectiveness of the teacher education program ($\alpha = .92$) is very high.

Table 18. Reliability Scores For Post-Version ($n = 451$)

	n = items	Cronbach's Alpha
Overall reliability	32	.82
Self-efficacy for Writing	10	.79
Effectiveness of Teacher Education Program	11	.92
Self-efficacy for Writing Instruction	11	.87

Propensity Score Matching. After administering the surveys, propensity score matching (Rosenbaum & Rubin, 1983; Rubin, 1977) compared preservice teachers in writing-intensive to preservice teachers in non-writing intensive courses. The design is quasi-experimental, but the two groups are uneven in sample sizes and therefore not comparable in their current state. To lessen bias and show true differences, which may

exist between the groups, I used propensity score matching to pair participants from the two samples. I grouped participants based on inclusion in a writing-intensive or general education course. Then, I matched participants based on classification (i.e., freshman, sophomore, junior, senior), gender (i.e., male, female), ethnicity (i.e., African American, Asian, Hispanic, White, Other), number of writing-intensive courses previously taken (i.e., 0, 1, 2, 3, 4 or more), and certification area (i.e., EC-6, 4-8, 8-12, K-12, Other) (Nagengast, Marsh, & Hau, 2013). I used nearest neighbor matching with a caliper of .01 to include as many matches as possible without including a control more than once, which resulted in 47 usable matches (Austin, 2011; Beal & Kupzyk, 2013). These 47 matches are used for the analysis of variance and multivariate analysis of variance procedures in the following sections.

Analysis of Variance. To indicate that propensity score matching reveals a better representation of the data, I conducted three analyses of variance. First, I used the course type variable, which indicated whether a course was writing-intensive or general education, and the propensity score matching scores to show differences among the three scales from the principal components analysis. These analyses show that the nearest neighbor matching reveals differences that are not indicated by analyzing the total data set.

Multivariate Analysis of Variance. To further analyze how gender, classification, certification area, frequency of writing, and ethnicity impact preservice teachers' self-efficacy for writing, self-efficacy for writing instruction, and effectiveness of the teacher preparation program, I conducted multivariate analysis of variances. I utilized the

93

propensity score matching data. Multivariate analysis of variance suggests the degree of

relationship among the three scales while showing interactions between the independent

variables (e.g., gender, classification, certification area, frequency of writing, and

ethnicity).

Constant Comparative Analysis. Using constant comparative analysis (Creswell,

2013)*,* I systematically examined students' responses to the open-ended question *List the*

types of writing (either academic or personal) you engaged in during the past week. I

used non-hierarchical coding procedures by not placing greater weight to any categories.

I began with open coding and assigned each response to the tentative categories of either

academic writing or *personal writing*. Then, I used axial coding to create sub-categories

under each major category. Ultimately, eight themes emerged representing *academic*

writing preservice teachers engaged in and nine themes representing *personal writing*.

Higher-Order Factor Analysis. Self-efficacy is content specific (Bandura, 2006).

Believing that both the self-efficacy for writing and self-efficacy for writing instruction

scales were highly correlated, I conducted a higher-order factor analysis (Gorsuch, 1983;

Thompson, 2004). Higher-order factor analysis allows highly correlated factors to be

aggregated based on their pattern coefficient scores. This analysis would further show

that the constructs are related and can be measured using one instrument. Additionally,

correlations between factors alone and between factors and individual variables can be

analyzed to determine how factors are related and which individual variables contribute

to certain factors. I hypothesize that the three scales (effectiveness of the teacher

preparation program, self-efficacy for writing, and self-efficacy for writing instruction) yield one over-arching factor in the *PT-SWI*.

Intervention Fidelity

To first ensure a minimum quality standard for the writing-intensive courses (i.e., classroom practices reflected in the syllabus descriptions of writing use) and to also show that the two course types are indeed different, I implemented several fidelity procedures (Gresham, MacMillan, Beebe-Frankenberger, & Bocian, 2000). My process is aligned with current practices as summarized by Fogarty's (2012) review of fidelity practices in literacy interventions. Fogarty both concluded that fidelity practices have increased in the past five years, and that researcher-created checklists are the most common practice for measuring fidelity. I integrated a checklist into a systematic classroom observation instrument which was complemented with personal field notes.

While I hypothesized that writing-intensive courses implemented more writing instruction and writing-oriented activities, I needed to verify. Particularly, to analyze how gains in self-efficacy can be related to amount of writing and writing instruction the preservice teachers were exposed to, I needed to document the writing practices. This specific concept relates closely to the aspect of fidelity research showing that the "intended model" is consistent with the "enacted program" (Century, Rudnick, & Freeman, 2010, p. 4). Alternatively using the five-dimensional framework outlined by Dane and Schneider (1998), focusing on adherence, quality, exposure, student responsiveness, and program differentiation, I ensured fidelity of the treatment, course type.

The primary method for determining the fidelity of the treatment, writing-intensive course, was in using systematic classroom observations. Over the semester, five trained researchers conducted 57 total observations, representing three for each course section. The observations were taken at three time points to sample from the beginning, middle and end of the semester. Inter-rater reliability among the five observers ranged from 83% to 91% agreement. The results of these observations are discussed in detail in Chapter IV; however, I do include how these observations contributed to each component of Dane and Schneider's (1998) framework here.

Adherence. Writing-intensive courses require that instructors provide direct writing instruction to their students and that at least one-third of the total course grade is dependent upon writing-based activities. Additionally, each student in the course is required to author one substantive piece of writing with at least 2,000 words. I first reviewed the course syllabi to show that the writing-intensive courses used at least one-third of the course time for writing activities. Following the writer's workshop framework (Atwell, 1998), all of the writing-intensive instructors provided in-class time to work on drafts of writing, provide peer- and self-reviews of their writing assignments, and conference one-on-one with the instructor or a trained writing consultant.

Moreover, I verified that each writing-intensive course required at minimum a 2,000 word written assignment. This assignment came in the multiple forms: research papers, literary analysis projects, or book essays. Finally, I used the observations to document the extent to which instructors focused on direct instruction of the writing process, writing strategies, or writing instruction. Writing-intensive instructors did

integrate direct instruction of writing, modeling of writing strategies, and practicing

writing more into their classrooms than general education instructors (see Chapter IV for

detailed results).

Quality. To ensure instructor quality, I used two measures. First, I documented

the procedures within the classroom with the observation instrument. I focused on types

of instruction, level of engagement, and writing skills practiced from the perspective of

the instructor and the perspective of the students. This allowed me to compare what the

instructor behaviors with student attitude and enthusiasm. Second, I asked the instructors

for feedback on their teaching practices through a questionnaire. This allowed me to

document how much time instructors put into preparation for their course and how they

structured the course to include writing elements.

Exposure. Students attended 15 weeks of classes, so they were receiving a large

amount of the intervention, approximately 180 minutes each week or a total of 2,700

minutes. While I only observed three of these class meetings, I distributed the

observations over the semester to monitor how the class evolved from beginning to end

of semester. Several courses included select online sessions, but all courses met face-to-

face at least 12 out of the 15 weeks.

Student Responsiveness. I measured student responsiveness in two ways. First, I

documented how many students completed both the pre-version and post-versions of the

survey: 86%. This shows that students were in class and generally willing to share their

perceptions of writing from the course. Second, using the observation instrument

designed for students, I monitored student engagement and whether or not the students

were on or off task. During each observation period, if a student showed behaviors of active engagement, such as responding to written and oral questions, taking notes, or watching the instructor, the student was marked on-task. If the student appeared to be lapse in attention, texting, emailing or checking social media, or talking about topics not related to class, the student was marked off-task. The majority of observations showed individual students to be on-task more than 80% of the time.

Program Differentiation. I documented differences between the writing-intensive and general education pedagogy courses to ensure that they were different based on writing. Using the observation instruments, I found that writing-intensive courses did focus on writing more than their general education counterparts. For example, writing-intensive course instructors provided direct instruction of the writing process more than 20% of the time, while general education course instructors only taught the writing process 5% of the time. Moreover, writing-intensive instructors provided direct instruction of writing strategies and modeling of writing strategies twice as often as general education course instructors. In writing-intensive courses, almost one-third of class time was spent practicing writing, while less than 2% of general education course time focused on practicing writing. Additionally, analyzing the course syllabi showed that writing-intensive courses required greater quantity of writing in terms of frequency and allotted more in-class time devoted to writing activities. General education courses required usually one long writing assignment, in the form of a student assessment report or lesson plan, while writing-intensive courses required multiple drafts of one long writing assignment or multiple long writing assignments.

Results

In the following sections, I outline the impact of using propensity score matches and the effects of the course type on preservice teachers, the frequency of writing in teacher education courses, and the relationship between self-efficacy for writing and writing instruction. To illustrate the impact of the propensity matching scores, I first provide results for the data without propensity score matching, and then show the results with propensity score matching. This illuminates the impact of unbalanced samples, such as those for writing-intensive and general education course participants, and suggests that the propensity score matching show a more realistic interpretation of the differences between course types. Next, I outline the specific results which answer each research question. I used the propensity score matching ($n = 94$) data when comparing writing-intensive to general education courses. When comparing students' changes from beginning of semester to end of semester, I use the full sample.

Impact of Using Propensity Score Matching and Effects of Course Type on Preservice Teachers

First, I used the entire post-version of the survey ($n = 451$) to compare the means for each of the scales, effectiveness of teacher preparation program, self-efficacy for writing, and self-efficacy for writing instruction. As Table 19 shows, no significant differences exist between writing-intensive and general education course participants for the three scales.

Table 19. Results of One-Way Analysis of Variance by Course Type (*n* = 451)

	Writing-Intensive Courses		General Education Courses			
	M	SD	M	SD	*F*	*p*
Effectiveness of Teacher Preparation Program	2.43	.24	2.47	.33	.77	.38
Self-Efficacy for Writing Instruction	4.08	.60	3.99	1.07	.62	.43
Self-Efficacy for Writing	3.50	.51	3.39	.81	1.69	.19

Note: *p* < .05; **p* < .01; ***p* < .001

Propensity Score Matching. Following the procedures described in the methods, I matched participants from the two groups (writing-intensive and general education) based on undergraduate classification, gender, ethnicity, number of writing-intensive courses previously taken, and certification area. Using nearest neighbor matching, which pairs participants to another participant that is their closest match (Cleophas & Zwinderman, 2012), I created 47 matched pairs. Using these 47 pairs, I compared the means for each of the scales, effectiveness of teacher preparation program, self-efficacy for writing, and self-efficacy for writing instruction. Table 20 shows the means.

Table 20. Results of One-Way Analysis of Variance Using Propensity Scores (*n* = 94)

	Writing-Intensive Courses		General Education Courses			
	M	SD	M	SD	*F*	*p*
Effectiveness of Teacher Preparation Program	2.42	.26	2.47	.33	.57	.45
Self-Efficacy for Writing Instruction	4.11	.77	3.99	1.07	.39	.54
Self-Efficacy for Writing	3.44	.58	3.39	.811	.14	.71

Note: *p* < .05; **p* < .01; ***p* < .001

Looking at Tables 19 and 20 in concert reveals a few findings. First, without using propensity score matching, the groups appear more different. For example, the self-efficacy for writing scale seem different; however, when matched more appropriately to a nearest neighbor, the two groups are much more similar. The means and standard deviations did not change, but the influence of the larger sample size affecting the *p-values* is noteworthy. The matched sample is only 27% of the original participant pool. While matching the participants did not reveal significant differences, it does provide a more valid representation of the impact of the writing-intensive course.

According to Table 20, no significant differences exist between the writing-intensive courses (M = 2.42, SD = .26) and general education courses (M = 2.47, SD = .33) based on the effectiveness of the teacher education program. Additionally, no significant differences exist between the writing intensive courses (M = 4.11, SD = .77)

and general education courses (M = 3.99, SD = 1.07) for preservice teachers' self-efficacy for writing instruction. No significant differences exist between the writing intensive courses (M = 3.44, SD = .58) and general education courses (M = 3.39, SD = .81) for preservice teachers' self-efficacy for writing.

Frequency of Writing in Teacher Education Courses

Table 21 shows the frequency of writing results from the pre-survey and post-survey administrations. Additionally, I qualitatively coded each open-ended response. I separated the specific writing tasks students listed and indicated whether they were personal or academic in nature. For example, if a student reported types of writing completed that week as *discussion posts for class, research paper outline, writing in my diary*, I coded both *discussion posts for class* and *research paper outline* as academic, while *writing in my diary* is an example of personal writing. The percentage of each type of writing are included at the bottom of Table 21.

Table 21. Frequency of Writing For Pre-Version (*n* = 525) and Post-Version (*n* = 451) of the *PT-SWI*

Frequency of Writing	Pre-Version *PT-SWI*		Post-Version *PT-SWI*	
	n	percentage of total sample	*n*	percentage of total sample
Daily	120	22.9	118	26.1
3-5 times per week	153	29.1	171	37.8
1-2 times per week	188	35.8	135	29.9
Less than once a week	58	11.0	25	5.5
Never	6	1.1	3	0.7
Academic Writing		85.15%		85.71%
Personal Writing		25.28%		18.47%

According to Table 21, 87.8% of preservice teachers wrote at least once per week at the time of the pre-version *PT-SWI* administration. By the post-survey administration, 93.8% of preservice teachers reported writing at least one time per week. More than 85% of their responses related to academic writing. By qualitatively coding the preservice teachers' responses, I discovered seven themes related to the types of writing they engaged in: (1) emails to professors (5.14%); (2) notes for class (32.10%); (3) reflections for class, in journal or discussion thread format (38.22%); (4) papers and essays for any undergraduate courses (10.39%); (5) presentations or Powerpoints (1.67%); (6) teacher-

related writing such as objectives or lesson plans (1.48%), and (7) other academic writing such as homework (10.73%).

Preservice teachers provided both writing process responses such as *I have created discussion posts, written a research paper, created a creative writing paper, and summarized multiple articles.* Several participants described writing-to-learn tasks such as *I also have a habit of writing quick little poems while I study if I have something on my mind that's distracting me.* Another student discusses how she uses writing to help her study, *I write then type my notes almost every day to ensure I understand the material, and fill in any gaps in my notes that I may have missed during lecture.* Many students also indicated using lists and planners to help them stay organized during the week.

Additionally, 25.28% of the participants indicated completing personal writing during the week. When analyzing their responses, I created eight categories: (1) texting (8.13%); (2) personal emails (5.63%); (3) social media including Facebook and Twitter (8.13%); (4) personal journaling or diary-keeping (41.25%); (5) creative writing such as poems and short stories (3.75%); (6) blogging (2.5%); (7) letters to friends and family (7.5%); and (8) other personal writing or non-specific personal writing (23.11%). Interestingly, 85.37% of participants who indicated that they kept a journal or diary specifically mentioned using it for religious purposes; this accounted for nearly 22% of the entire sample. Additionally, 23.11% of participants were non-specific about what kinds of writing they completed. Many preservice teachers simply wrote "personal writing" as a blanket term for the writing they engaged in during the week.

The open-ended response reveals that nearly a quarter (23.11%) of preservice

teachers are private about the personal writing they do. While most did not provide

specific examples of their personal writing, participants gave examples of writing as

organizational applications with essays, *being on Facebook or Twitter*, and *reflections*

often on different book I read. One participant even mentioned writing in multiple

languages for personal use *I write in both English and Spanish (almost daily) and I write*

a letter to my sister every day.

To observe differences between the effectiveness of the teacher preparation

program, self-efficacy for writing instruction, and self-efficacy for writing variables, I

conducted a multivariate analysis of variance. Based on the results of the factor analyses,

I focus on three dependent variables: (1) effectiveness of the teacher preparation

program, (2) self-efficacy for writing instruction, and (3) self-efficacy for writing. I

wanted to see if an interaction effect exists between the three constructs and frequency

of writing. Table 22 shows the results of the multivariate analysis of variance for

frequency of writing.

Table 22. Multivariate Analysis of Variance For Frequency of Writing

Dependent Variable	Sum of Squares (SS)	Mean Square (MS)	df	F	p	Partial Eta Squared
Effectiveness of Teacher Preparation Program	.115	.029	4	.434	.784	.005
Self-Efficacy for Writing Instruction	4.783	1.196	4	2.595	.036*	.028
Self-Efficacy for Writing	6.864	1.716	4	5.782	.000***	.060

Note: *$p < .05$; **$p < .01$; ***$p < .001$

A one-way MANOVA revealed a significant multivariate main effect for frequency of writing, Wilks $\Lambda = .932$, $F (12, 950.16) = 2.152$, $p < .05$, partial eta squared = .023. Given the significance of the overall test, the univariate main effects were examined for self-efficacy for writing instruction, $F (4, 361) = 2.595$, $p < .05$, partial eta squared = .028; and self-efficacy for writing, $F (4, 361) = 5.782$, $p < .001$, partial eta squared = .060 (see Table X).

Participants who reported writing daily showed higher levels of self-efficacy for writing instruction ($M = 4.301$, $SD = .637$) than participants who reported writing 3-5 times per week ($M = 4.0916$, $SD = .724$) or 1-2 times per week ($M = 3.953$, $SD = .655$). Additionally, participants who reported never writing ($M = 3.345$, $SD = .710$) reported statistically significantly lower levels of self-efficacy for writing instruction. Moreover, participants who reported writing daily ($M = 3.648$, $SD = .608$) or 3-5 times per week (M

= 3.519, *SD* = .514) showed higher self-efficacy for writing than participants who wrote

1-2 times per week (*M* = 3.351, *SD* = .541) or never (*M* = 3.000, *SD* = .608).

The Relationship Between Self-Efficacy for Writing and Writing Instruction

Using higher-order factor analysis (Thompson, 2004), two latent constructs

reveal the association between effectiveness of the teacher preparation program, self-

efficacy for writing instruction, and self-efficacy for writing. See Table 23 for these

results.

Table 23. Higher-Order Factor Pattern Coefficient Matrix

First-Order Factor	Pattern Coefficient (*A*)	h^2
Effectiveness of Teacher Preparation Program	.121	.015
Preservice Teachers' Self-efficacy for Writing	.870	.758
Preservice Teachers' Self-efficacy for Writing Instruction	.863	.744

According to Table 23, the three constructs in the survey further factor into two

latent variables. The effectiveness of the teacher preparation program remains as a

separate construct, but the two self-efficacy constructs form one additional latent

construct. Writing skill coupled with writing instruction skills create the construct

writing knowledge. Honoring the hierarchical structure of the analysis, and borrowing

from Bloom's Taxonomy (1956), this third construct represents the application of

107

writing knowledge. This latent construct, named *perceived application of writing knowledge* convergences the preservice teachers' knowledge about writing and how confident they feel in applying that knowledge in the future. This finding shows that the two self-efficacy variables are highly correlated. From this, I can conclude that on the whole, an increase in self-efficacy for writing will result in an increase in self-efficacy for writing instruction.

Discussion

From the results, three themes emerge: (1) the type of course preservice teachers are enrolled in has minimal influence on their perceptions and self-efficacy for writing and writing instruction; (2) the amount of writing students engage in during the week does influence their perceptions and self-efficacy for writing and writing instruction, and (3) a relationship does exist between preservice teacher self-efficacy for writing and self-efficacy for writing instruction. In the following sections, I will discuss each of these three themes, limitations, and directions for future research.

Type of Course has Minimal Influence on Perceptions and Self-Efficacy

Writing-intensive courses are designed to promote practices which harness preservice teachers' writing abilities while imparting knowledge of specific educational theories and practices. Therefore, I hypothesized that these courses would have a larger impact on preservice teachers' perceptions of the effectiveness of their teacher education program, self-efficacy for writing, and self-efficacy for writing instruction. However, I found no significant differences based on course type for each of these variables.

Three potential conclusions for this lack of difference exist. First, much of the research (Morgan, 2010; Hall & Grisham-Brown, 2011; Woolfolk Hoy, Davis, & Pape, 2006) suggests that preservice teachers often revert to practices they saw in their own education. This implies that preservice teachers, by the time they are sophomores or juniors in their undergraduate program, have been exposed to fourteen or more years of teaching practice (Zimmerman, Morgan, & Kidder-Brown, 2014). The result is beliefs that are ingrained so deeply, they are difficult to change. According to developmental psychology, preservice teachers, typically older than 19, have reached the final stage of development. Unless they accumulate significant evidence to the contrary, their beliefs will remain mostly consistent (Chinn, & Brewer, 1993). From a sociocultural perspective, this same idea applies to the instructors, who may be employing practices they observed in their own teacher education programs as well. Again, this perpetuates the same ideas for how writing should be taught and results in beliefs that are difficult to change.

A second conclusion is that a one-semester course, consisting of only fifteen weeks of class sessions, does not provide enough time to see a shift in perceptions or beliefs. Self-efficacy beliefs are formed over a long period of time and need a substantial amount of time to change (Bandura, 1997; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). Preservice teachers in writing-intensive courses did report slightly higher means for both self-efficacy for writing and self-efficacy for writing instruction, but the difference was not statistically significant. Given a longer intervention time, the difference in means may approach signficance.

Third, students may not develop a deep enough understanding of their own writing abilities and writing pedagogy to make a mental transfer between what they are observing in their classes and what they internalize for their own practices. For many preservice teachers, the education theory as well as methods for teaching content and writing are new ideas. As they are grappling with learning the new information (i.e., the primary course goals), they may not be fully cognizant of the secondary curricula of improving their writing and learning about writing pedagogy. Cognitive load theory (e.g., Sweller, 1988; Sweller, Ayres, & Kalyuga, 2011) explains that the human mind can store a limited about of information as working memory and long-term memory interact. If the content material preservice teachers are learning is in large quantity, they will not fully exploit their working memory while not being able to commit all of the information to long-term memory.

Furthering this discrepancy, writing-intensive instructors are expected to teach the education theory and content *plus* provide writing instruction. Based on the typical operational definitions of writing-intensive courses (e.g., two-thirds content learning, one-third writing instruction), instructors allot unequal time to each aspect of the course, which suggests to students that writing is not as important. Writing-intensive instructors who provide writing-based activities to supplement content learned in class are integrating content area literacy. Content area literacy primarily serves as a tool for enhancing knowledge (Moje et al., 2004). For example, an in-class metacognitive writing prompt would help preservice teachers think more critically about the content of that course. However, more recent critiques of content area literacy posits that through

these activities, learners deepen knowledge of only content, but do not develop the disciplinary knowledge of writing (Shanahan & Shanahan, 2008). According to Shanahan and Shanahan (2014), understanding the "discourse practices" of a specific discipline allow preservice teachers to develop the skills necessary to teach that discipline (p. 631). While instructors are successfully integrating writing and building content area literacy knowledge, they may not be developing the disciplinary knowledge preservice teachers need to improve their self-efficacy for writing instruction.

Effect of Writing-Intensive Courses on Preservice Teachers Perceptions of the Effectiveness of Their Teacher Education Program. Looking specifically at preservice teachers' perceptions of the effectiveness of their teacher education program, the results in this study show that students feel relatively confident about their preparation program. A score of two on the *PT-SWI* represents feeling *somewhat* prepared to teach writing elements while a score of three suggests feeling prepared *to a great extent*. Surprisingly, the mean for writing-intensive courses (M = 2.42) is slightly lower than the mean for general education courses (M = 2.47), although the difference is not statistically significant.

Overall, preservice teachers feel well-prepared to teach specific writing elements such as organization, word choice, and sentence structures, regardless of course type. Again, the concept of teaching apprenticeship (Zimmerman, Morgan, & Kidder-Brown, 2014) which suggests that preservice teachers have been exposed to writing instruction for many years throughout their own K-12 schooling, could be affecting the high means for writing elements. Preservice teachers felt most prepared to evaluate the overall

quality of student writing (M = 2.60) and organization of ideas (M = 2.69). Many rubrics, such as the 6+1 Traits Rubric, focus on the overall piece of writing, which preservice teachers were likely exposed to during schooling. Additionally, standardized tests focus on organization, giving preservice teachers preparation in this element of writing.

Preservice teachers feel least prepared to teach voice (i.e., presence of the author in the text, tone) (M = 2.21) or spelling (M = 2.25). Even though voice is a component on many rubrics, it is typically not focused on in direct instruction as other elements of writing such as grammar and clarity take precedence. Interestingly, preservice teachers rated their preparation to teach spelling low, though many early childhood and elementary classrooms still give routine spelling tests. Joshi, Treiman, Carreker, and Moats (2008) explain that spelling rules are often overlooked and rote memorization is emphasized with teaching spelling. This might explain why preservice teachers do not feel adequately prepared to teach spelling; they know many spellings by memorization but cannot explain the underlying rules and principles.

One explanation for the high means for both course types might be lack of practical experience preservice teachers have in teaching these writing elements. Following these preservice teachers as they begin field experiences and working in schools might show changes in their overall efficacy toward writing, or a more differential impact of the writing-intensive course experiences. Self-efficacy is domain and context specific, so in teacher education courses, preservice teachers may feel confident in their abilities to write and teach writing; however, as they embark on their

teaching careers, they may find that the context of the classroom, student skill levels, and teaching requirements, shift their self-efficacy beliefs. This suggests that both time and inexperience could be additional variables, which the present study could not completely control for.

Effect of Writing-Intensive Courses on Preservice Teachers Self-Efficacy for Writing Instruction. Surprisingly, writing-intensive (M = 4.11) and general education (M = 3.99) courses showed little differences, none significant, in preservice teachers' self-efficacy for writing instruction. As the writing-intensive courses specifically prescribe and allot time for teaching writing and modeling writing strategies, this finding is interesting. In general, all preservice teachers in this study feel confident in their self-efficacy for writing instruction.

Through my intervention fidelity, I found that writing-intensive courses did include more writing activities and writing instruction. However, since there are no significant differences between students' perceptions of their self-efficacy for writing or writing instruction, based on course type, students in general education courses are getting similar training in writing, despite not being enrolled in a writing-intensive course. Given that university instructors are expert teachers, instructors of both writing-intensive and general education courses may employ effective strategies that include writing (see Chapter IV for more information on this premise). Because the instructors are effective teachers, they unknowingly focus on writing through their course requirements and actions. This shows that while writing-intensive instructors focus on

writing because general education instructors do not *de-emphasize* writing, few differences are observed by the students.

Additionally, while the writing-intensive instructors are showing preservice teachers strategies for improving writing quality, they might not be explicitly tying these strategies to teaching K-12 students. Preservice teachers, then, cannot make connections between what they are learning in their program and what they will apply to their own teaching in the future. For example, while preservice teachers are learning writing techniques and strategies alongside teaching content and pedagogy, they are not integrating the two concepts. When asked what types of writing they engaged with, less than 2% of the preservice teachers indicated that they engaged in teacher-related writing such as writing objectives or lesson plans. This shows a discrepancy in *how* writing is being used in the teacher education courses.

Effect of Writing-Intensive Courses on Preservice Teachers Self-Efficacy for Writing. Overall, preservice teachers in writing-intensive (M = 3.44) and general education (M = 3.39) courses feel moderately confident in their own writing abilities. This scale revealed the largest area for growth as these were the lowest means preservice teachers reported. This finding suggests that preservice teachers, while feeling confident in their writing abilities, can still make improvements.

Even though preservice teachers enrolled in writing-intensive courses are exposed to direct writing instruction and are required to write a minimum of 2,000 words, these requirements may not differ from what preservice teachers enrolled in general education courses are expected to complete. The qualitative coding did not

reveal differences between the answers of writing-intensive and general education students. Preservice teachers write essays, papers, discussion postings, lesson plans, and reflections in many education courses. Much of the writing research (Elbow, 2004; Silvia, 2007) shows that practicing writing increases efficacy for writing. This could be the underlying factor resulting in similar means. In short, there was limited discrimination between preservice teachers' perceptions of differences in writing-intensive and general education courses. From the preservice teachers' perspective, all classes were engaging in frequent writing experiences.

A second conclusion for the lack of differentiation shown in preservice teachers' levels of self-efficacy for writing is described by Grauerholz (1999), who suggested that students in writing-intensive courses are focused on the writer, not on the audience. They do not take writing seriously as a sociocultural construct, but view it as a requirement to check off for their grade and course credit. The writing, therefore, needs to be carefully linked with course goals and outcomes so that preservice teachers understand the link between what they are learning in class and their future careers (Grauerholz, 1999).

Effects of the Frequency of Writing

One of the most striking differences supports the notion that practicing writing increases positive beliefs about writing. From pre-survey administration to post-survey administration, preservice teachers reported a slight increasing trend in the percentage of time spent writing in a week. Early in the semester, 87.8% of preservice teachers said they wrote at least one time per week. By the end of the semester, 93.8% wrote at least one time per week. At both administrations, approximately 85% of writing time was

spent writing for academic purposes. Preservice teachers indicated that they wrote for personal reasons approximately 25% of the time early in the semester and 18% of the time by the end of the semester. This shift in writing can also be attributed to the number of assignments students were likely to have during the first week of courses, when they may have been absent from writing during a break for school. In contrast, the preservice teachers may be writing more toward the end of the semester when final assignments are due in their courses.

The results also show an important link between self-efficacy for writing instruction and frequency of writing. Preservice teachers who wrote daily reported the highest levels of self-efficacy for writing instruction. Preservice teachers who wrote at least three times per week reported the highest means for self-efficacy for writing. Both of these results reveal a connection between how often preservice teachers practice writing and how favorably they feel about writing. As much research suggests that practicing writing improves attitude toward writing, these results are consistent with previous findings.

Relationship Between Self-Efficacy for Writing and Self-Efficacy for Writing Instruction

As teachers make gains in their self-efficacy for the task of writing and for teaching writing, they have a better perception of their ability to apply the knowledge of writing. This hierarchical relationship is supported by Bloom's Taxonomy which shows that as students (in this case, preservice teachers) acquire knowledge about writing and writing instruction, they will move to higher-order thinking skills like application

(Bloom, Engelhart, Furst, Hill, & Krathwohl, 1956). Furthermore, when preservice teachers feel competent in their own writing abilities and confident in their skills to teach a certain subject area, they are more influential for their students and have a greater impact on their students (Tschannen-Moran, 2011). The fourth latent variable, *perceived application of writing knowledge,* connects the self-efficacy research with instructional objective research that should be foundational to how teacher preparation programs prepare teachers.

Limitations

While I worked to consider confounding variables and issues in both data collection and analysis, several limitations are present. The data collected by the *PT-SWI* is self-report data, which inherently subjects itself to skepticism. Preservice teachers could be rating their efficacy more highly than they actually feel; this Hawthorne Effect could be the result of knowing they are part of a research study (Patton, 2009; Thompson, 2006). They may also be rating certain items highly simply because they suspect the items are related. For example, preservice teachers may rate the effectiveness of their program highly if they feel that writing is an important task to teach. In reality, the preservice teachers might feel that writing is important but not feel prepared to teach certain aspects of writing. I minimized such factors by having a third-party person administer the surveys who was neither associated with the preservice teachers' course or their grade.

Limitations to the testing and instrumentation are included in the questions asked on the survey, some critical information about their past experiences has not been

117

acquired. For example, preservice teachers' self-efficacy for writing might be the result of factors outside of the classroom such as writing courses in other college (e.g., composition, English, or even science-related writing courses). In an effort for the survey to be completed during a small portion of class time, I could not ask an exhaustive list of questions about the writing history of preservice teachers.

Self-efficacy beliefs take time to result in changes (Bandura, 1997), but the present study took place over fifteen weeks, or one semester. I was limited by the time-frame for measuring self-efficacy beliefs, which may explain the modest changes I found in preservice teachers. Ideally, the present study would continue longitudinally to follow preservice teachers into the field as they complete field experiences to determine whether they apply the knowledge learned in their writing-intensive courses and if their efficacy changes as they practice teaching writing and interacting with K-12 students.

An additional limitation is that the study is quasi-experimental and a true control group could not be formed. Statistically, I attempted to account for this selection and design bias through propensity score matching; however, this statistical analysis is not as effective as a control group would be in forming conclusions about the differences in course type. The means for the three scales (effectiveness of teacher education program, self-efficacy for writing, and self-efficacy for writing instruction) are highly similar using the entire sample and the propensity score matching sample, showing consistency in the samples. Moreover, differences between the quality of instruction and emphasis the instructor places on writing could be mitigating the results.

Finally, I had no control over the content of the courses or the amount of writing instructors engaged in during their class sessions. Through my fidelity procedures, I worked to capture the true nature of the courses. However, despite some minor differences in the writing foci of the two course types, these differences appear to have not been observed by the preservice teachers. Therefore, few differences emerged in the results.

Directions for Future Research

The results of the present study are important for educational theory. The higher-order factor analysis shows that preservice teacher self-efficacy for writing and preservice teacher self-efficacy for writing instruction form a higher construct. This higher-level skill is the application of writing knowledge that preservice teachers are capable of implementing when they have high self-efficacy for both the skill of writing and the practice of teaching writing. While the results of this study found this connection, further research is needed with larger and more diverse samples to verify these results.

The results of the present study are important for teacher education programs. While many teacher education programs offer support systems such as writing centers and writing-integrated courses, few include writing methods courses in their programs (Zimmerman, Morgan, & Kidder-Brown, 2014). The modest results of this study show that just integrating writing into education theory and methods courses might not be enough to change preservice teachers' beliefs about writing. Either additional courses or courses with a stronger focus on *just* writing pedagogy might show greater changes to

119

efficacy beliefs. Teacher education programs can use the results of this study in two ways.

First, teacher education programs can use the *PT-SWI* to measure the self-efficacy beliefs for writing and writing instruction as well as their preservice teachers' perceptions of how effective their teacher education program is. These results can inform the education program in making decisions about the quality of writing preparation for their teachers. Second, teacher education programs can use the results of this study and their own results to evaluate their need for including writing in the teacher education program.

Finally, the results of this study are important for policy makers. Currently, education policy is moving toward a focus on value-added scores, which to date only consider mathematics and reading achievement (Amrein-Beardsley, Collins, Polasky, & Sloat, 2013; Scherrer, 2012). However, reading and writing are two sides to literacy that are equally important to K-12 students' success. Studies have shown that increasing writing achievement shows subsequent increases in other subject area achievement such as mathematics (Kenney, Shofner, & Norris, 2014; National Commission on Writing, 2003). This study shows that writing is not being focused on in teacher education programs, which could result in increased gaps in K-12 students' writing achievement.

Conclusion

As literacy demands of the work force increase, the field of education must prepare more highly qualified writing teachers to support this growth. Results from the present study support an emphasis on effective modeling and the influence of education

courses on building self-efficacy and knowledge of writing. Teacher education programs

and leaders in the field will benefit from these results by: (1) using the instruments to

evaluate their own writing courses, and (2) using the findings to build support for

required writing courses for preservice teachers.

CHAPTER IV

THE IMPACT OF INSTRUCTORS ON PRESERVICE TEACHERS' BELIEFS ABOUT WRITING

The National Assessment of Educational Progress (NAEP) reports that nearly two-thirds of 4th, 8th, and 12th graders score below the proficient level in writing (Graham & Perin, 2007). Accordingly, American businesses spend $3.1 billion annually on writing remediation for employees. As literacy demands of the work force increase, the field of education must prepare more highly qualified writing teachers to support this growth. In short, writing instruction currently does not parallel the writing demands of the 21st-century workforce.

Writing instruction is often overlooked in schools, and one likely factor leading to this omission is that writing instruction is overlooked in teacher education programs. When a specific skill does not receive ample attention, the perpetuated idea is that the skill is not important. Most recent research in this area considers beliefs about writing and self-efficacy for writing relate for *inservice* teachers only. However, the beliefs about writing and self-efficacy for writing of *preservice* teachers cannot be ignored.

Current research of inservice teachers shows that writing is not emphasized in classroom instruction (Cutler & Graham, 2008). Instead, many teachers feel unprepared to teach writing (Cutler & Graham, 2008), blaming their educational experiences for their low self-efficacy and avoidance of writing (Dempsey, PytlikZillig & Bruning 2009; Morgan, 2010). Research suggests that preservice teacher preparation programs and

former teachers are the leading sources of preservice teachers' beliefs about writing (Graham, Harris, MacArther & Fink, 2002; Colby & Stapleton, 2006; Dempsey, PytlikZillig & Bruning 2009). Preservice teachers learn the skill of teaching from effective teacher models. Yet, many teachers report that they are inadequately prepared to teach writing (Kiuhara, Graham, & Hawken, 2009). This finding suggests the quality of writing instruction at the preservice level can have profound and lasting effects on teachers' attitudes.

Purpose

Students in K-12 schools are falling behind international peers in writing achievement and writing achievement is not a primary focus of many individual classrooms (National Commission on Writing, 2003). Writing does not have a set, specific unified curriculum, and writing is unequally emphasized in schools, typically gaining focus when a standardized test corresponds with the grade level and being thrown to the way-side when a standardized test is not looming. Billions of dollars are spent annually by businesses for training employees on foundational writing skills. Moreover, little research is being conducted on writing practices of K-12 students, as compared to the reading practices of K-12 students. Conducted research is often atheoretical due to limited theories specific writing instruction. Even less research is conducted on the beliefs and attitudes of preservice teachers, who will be training K-12 students and therefore are in a unique position to change the state of K-12 writing instruction.

123

The present study merges aspects of sociocultural theory (Prior, 2006) with social cognitive theory (Bandura 1977, 1986; Pajares, 2003; Pajares & Valiante, 2006). Bringing these two theories together, the focus of the present study is on how preservice teacher self-efficacy for writing and writing instruction are influenced by teacher educators. To meet the goal of graduating competent writers, many universities have developed writing-intensive courses for each major, which focus on discipline-specific content and instruction in writing for that discipline. In colleges of education, the role of these courses increases to include modeling of best practices for writing instruction, while providing instruction on how to teach writing to future students. However, no system for evaluating the effectiveness of these courses and their influence on preservice teachers has been established or researched. Specifically, the present study will focus on how instructor practices, student activities, overall classroom environment, and teacher educator beliefs about writing impact self-efficacy beliefs of preservice teachers over one semester.

Methods

The present study is an explanatory sequential mixed methods research design (Creswell, 2009; Creswell & Plano Clark, 2011; Teddlie & Tashakkori, 2009) using descriptive statistics, hierarchical linear modeling of observation and survey data, and constant comparative analysis of open-ended instructor questionnaire responses. This research design focuses on the quantitative analysis of data and supplements the numerical values with qualitative findings. Each set of data is analyzed independently but conclusions may be drawn from comparing the findings of each. Figure 1 shows how

I first collected the quantitative data, and based upon the results of the quantitative data, gathered qualitative data to better inform my overall conclusions.

Figure 1. Exploratory sequential mixed methods design data collection

Quantitative Data
- PT-SWI (pre and post)
- Systematic Classroom Observations

Qualitative Data
- Instructor Questionnaire

Influence of Instructors on Preservice Teachers' Beliefs about Writing
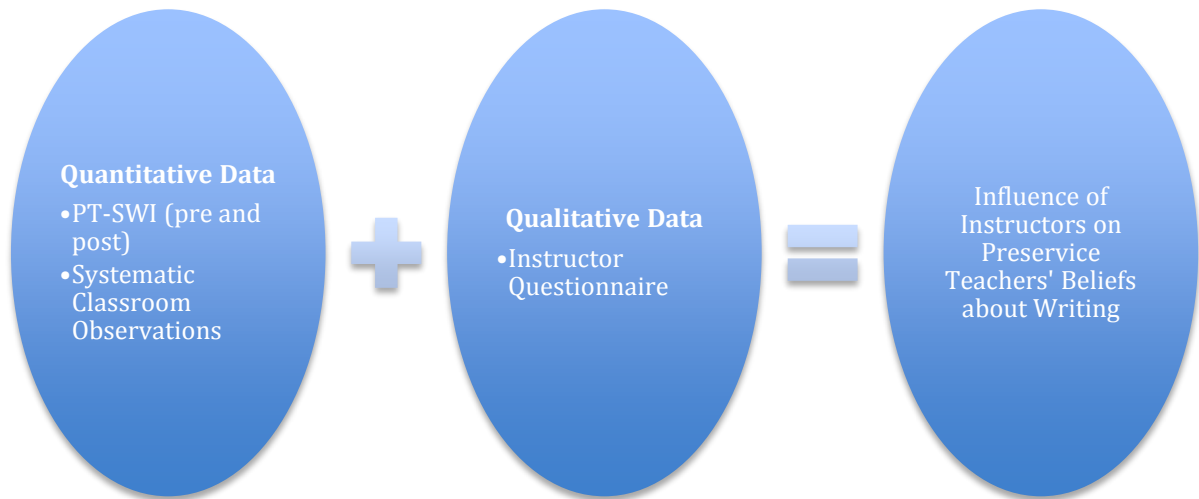
Research Questions

Because of the exploratory nature of this study and the diversity of quantitative and qualitative analyses, five research questions guide the results. I organized the results to show the analyses which answer each research question in turn. Within the discussion section, I draw conclusions based on the separate analyses for both the quantitative and qualitative data. The research answers the followings questions:

1. To what extent do writing-intensive and general education courses affect preservice teachers' perceptions of the effectiveness of their teacher education program, self-efficacy for writing instruction, and self-efficacy for writing?

2. How do instructors in writing-intensive courses differ from instructors in general education courses based on instructional practices and writing skills taught?

3. To what extent do instructors vary in preservice teachers' *self-efficacy for writing instruction* based on course type?

4. To what extent do instructors vary preservice teachers' *self-efficacy for writing* based on course type?

5. What are the writing beliefs of university instructors of writing-intensive and general education courses?

Participants

Two sets of participants are the focus of the present study. The focus of the study is on the course instructors – with the goal of identifying which classroom practices influence the beliefs of preservice teachers enrolled in their courses. The second set of participants is the preservice teachers enrolled in the instructors' courses.

Instructors. The primary set of participants includes the thirteen instructors of six different undergraduate education courses at a large research-based university in the southwestern part of the United States. Of the thirteen instructors, 84.62% are female and 15.38% are male. In this sample, 76.92% of the instructors are White and 15.38% are Hispanic. One instructor (7.69%) identified as other.

These instructors teach a variety of courses, four designated as writing-intensive, indicating that they focus on pedagogical areas, such as English as a Second Language or Content Area Literacy, as well as provide direct instruction on the writing process. The other two general education courses focus solely on education pedagogy such as assessment and reading trends in schools. While general education courses do not explicitly focus on teaching writing or writing instruction, they may also include writing activities and strategies inherent to effective teaching practices. For a more detailed description of the courses, see Chapter III (e.g., Table 12).

Preservice Teachers. The second set of participants included 364 preservice teachers enrolled in the courses taught by the thirteen instructors. Table 24 includes the demographic information for gender, ethnicity, classification, certification area, content area specialization, and number of writing-intensive courses previously taken. The preservice teacher sample consists of 92.9% female and 7.1% male students. The sample is primarily represented by White students, and preservice teachers in their third year (Junior) of study. The majority of students had not previously taken a writing-intensive course, although approximately one-quarter of the sample had taken one writing-intensive course prior to the fall 2014 semester.

Table 24. Demographic Information For Preservice Teachers ($n = 364$)

	n	percentage of total sample
Gender		
Male	26	7.1
Female	339	92.9
Ethnicity		
African American	8	2.2
Asian	10	2.7
Hispanic	30	8.2
White	315	86.3
Other	2	0.5
Classification by course hours completed		
Freshman (0-30)	4	1.1
Sophomore (30-59)	62	17.0
Junior (60-94)	249	68.2
Senior (95+)	49	13.4
Certification Area		
EC – 6	200	54.8
4-8	139	38.1
8-12	14	3.8
K-12	6	1.6
Other	5	1.4
Content Area Specialization		
English, Language	173	47.4
Mathematics	79	21.6
Science	27	7.4
Social Studies	45	12.3
Special Education	10	2.7
Bilingual Education	5	1.4
Other	26	7.1

Table 24. Continued

	n	percentage of total sample
Writing-Intensive Course Previously Taken		
0	187	51.2
1	91	24.9
2	51	14.0
3	25	6.8
4 or more	11	3.0

Instrumentation and Methods

Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI). The *Preservice Teacher Self-Efficacy for Writing Inventory (PT-SWI)* (see Chapter II for a detailed description) is the primary measurement tool. I created the *PT-SWI* by modifying current surveys measuring in-service teacher self-efficacy for writing (Cutler & Graham, 2008; Graham et al., 2001; Graham et al., 2002), K-12 student self-efficacy for writing (Bruning et al., 2013), college student writing apprehension (Daly & Miller, 1975), and college student writing self-regulation skills (Zimmerman & Bandura, 1994). This survey is unique in that it focuses specifically on preservice teachers and includes scales for both self-efficacy for writing and self-efficacy for writing instruction. I included an additional scale evaluating the effectiveness of the teacher education program in preparing preservice teachers to instruct on specific writing elements.

PT-SWI Administration Procedures. I administered the pre-version of the survey in September 2014 prior to completing any classroom observation and the post-version of the survey in late November after the final classroom observation was completed. The

surveys were administered during class and each took approximately 15 minutes for preservice teachers to complete. Using both the pre- and post-versions allowed me to determine changes in self-efficacy from beginning to end of the semester.

Instructor Observation Instrument Development. The instructor often sets the tone for what can be accomplished in the classroom environment. This person brings knowledge, organization, and value to each of the activities presented in class. To gain a more concrete interpretation of the courses, I conducted systematic classroom observations, using an adaption of the *Teacher Roles Observation Schedule (TROS)* (Waxman & Padrón, 2004) to document: (1) the settings in which preservice teachers engaged in writing (e.g., whole class, small group, dyad, or individual), (2) the interactions between the instructor and preservice teachers, the focus of the classroom instruction, (3) writing strategies incorporated, and (4) instructional practices used by the instructor. I narrowed my observations to those activities and tasks promoting writing or writing instruction. Using previous research and current writing rubrics, I developed a list of writing-related strategies and instructional practices to include in the observation protocol (Bruning et al., 2013; Cutler & Graham, 2008; Daly & Miller, 1975; Graham et al., 2001; Graham et al., 2002; 6+1 Traits Rubric, Zimmerman & Bandura, 1994).

TROS-adapted Observation Procedures. Unlike nonsystematic observations, which involve field notes and mostly unstructured interpretations of the classroom environment, systematic classroom observations establish a protocol for gathering information in a reliable, replicable way to reduce bias (Reiss, 1971). This method increases understanding of what is occurring in the classrooms in regards to writing, and

provides a synthesis of the teaching effectiveness of both writing-intensive and general

education instructors (Waxman, Padrón, Franco-Fuenmayor, & Huang, 2009).

Each classroom ($n = 19$) was observed three times during the semester ($n = 57$).

The observations were planned so that the first observation occurred in September, the

second in October, and the final one in November; however, due to scheduling

challenges and availability of the instructors, these dates fluctuated slightly. Following

the procedures of Waxman and Padrón (2004), during each observation I watched the

instructor in 30-second intervals. At the end of the 30-second observation, I recorded the

setting, interactions with students, purpose of the instruction, writing strategies used, and

instructional practices included. For 50-minute class sessions, I conducted five rounds of

observations, and for 75-minute or 180-minute class sessions, I conducted ten rounds of

observations.

Instructor Questionnaire Development. To qualitatively understand differences

in the instructors' philosophies for teaching writing as well as their perceptions of the

preservice teachers' self-efficacy for writing and writing instruction, I developed and

pilot-tested *The Instructor Questionnaire* with a team of researchers including two

faculty with extensive experience teaching writing-intensive courses, two graduate

students, and one undergraduate research assistant, who had previously been enrolled in

writing-intensive courses. Prior to testing, an associate professor, who has conducted

extensive research on writing at the graduate level, and is the director of the university's

writing program reviewed the questionnaire for content validity. The research team

revised the questionnaire based on the feedback provided. Appendix B includes the

protocol for the questionnaire. Most items are open-ended; however, several items

include a four-point Likert scale ranging from *not at all* to *highly*. Additionally, one

question asks instructors to rank the five most important elements of writing to teach,

and one question asks instructors to indicate the frequency (e.g., *0*, *1*, *2-3*, *4+*) with

which they incorporate certain instructional strategies.

Instructor Questionnaire Procedures. I administered the instructor questionnaire

online after completing the *PT-SWI* administrations and *TROS-adapted* classroom

observations. The questionnaire took approximately 30- to 45-minutes for university

instructors to complete.

Statistical Analysis

In this section, I initially present an overview of the analysis plan and then

present each step in greater detail. First, I analyzed the effect sizes for three scales

(effectiveness of the teacher preparation program, self-efficacy for writing instruction,

and self-efficacy for writing) from the *PT-SWI*. Second, I use descriptive statistics of the

TROS-adapted classroom observations to show where these differences specifically

occur; for example, differences may exist between instructional practices or writing

strategies used by the instructor. Third, I conducted a hierarchical linear model to show

how differences in preservice teachers' self-efficacy for writing and writing instruction

relate to the course type (writing-intensive or general education) and the instructors.

Finally, I compared the quantitative results to qualitative coding of the instructor

questionnaires to analyze how the instructors' philosophy of writing contributes to the

differences noted in the hierarchical linear models. Figure 2 shows my rationale for

including each analysis.

Figure 2. Flow chart indicating statistical progression
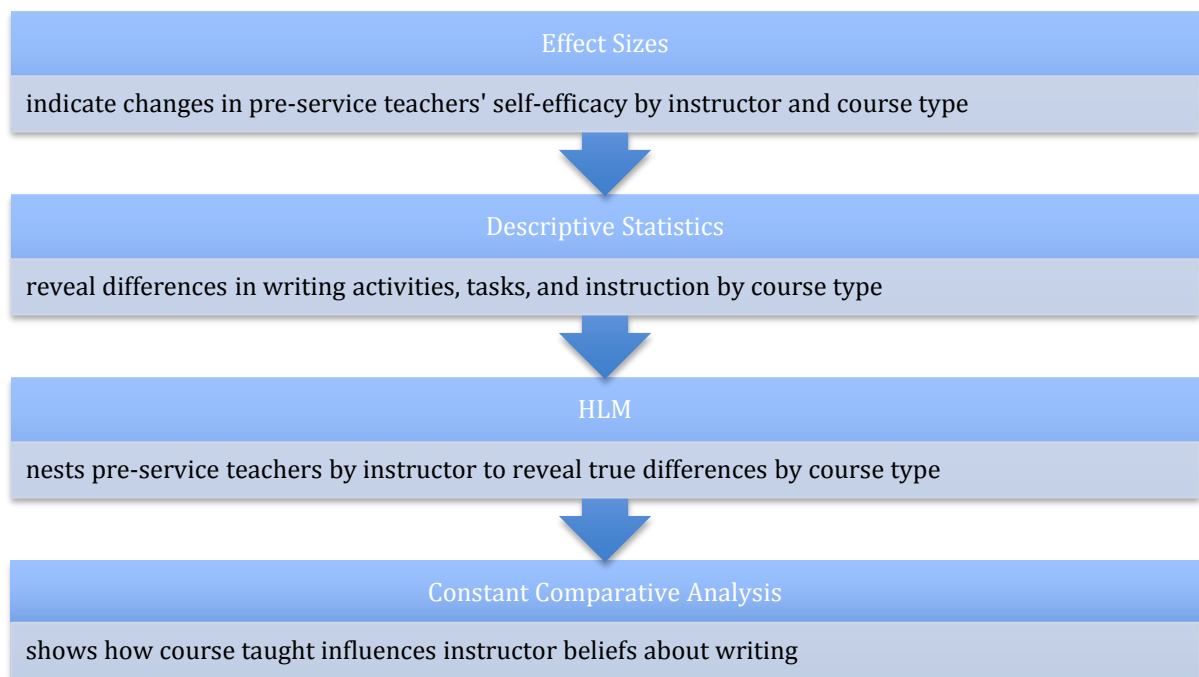
Effect Sizes. Using Cohen's *d* with a pooled standard deviation (Grissom & Kim,

2012; Thompson, 2006), I evaluated effect sizes for each instructor, just writing-

intensive courses, just general education courses, and overall averages for each scale.

$$d = \frac{M_{post} - M_{pre}}{sd_{pooled}}$$

The post-version of the survey acted as the "experimental" group while the pre-version of the survey was the "control" group. In this way, I could measure growth or regression from September to November.

Descriptive Statistics. Because a primary purpose of this study is to show differences between writing-intensive and general education courses based on writing activities from the perspective of the instructor, I provide descriptive statistics by comparing means. The means represent the amount of time I observed a certain behavior such as whole-group instruction or low stakes writing. I include *p*-values for each mean comparison to indicate whether the differences are statistically significant. This allows me to show where differences in classroom practices might exist.

Hierarchical Linear Modeling. Preservice teachers in the present study are nested within classrooms of different instructors. Because of this inherent nesting, the preservice teachers cannot be evaluated independent of the instructor whose class they participated. Multi-level modeling, such as hierarchical linear modeling, allows for exploration of how the individual instructors, writing strategies they incorporated into lessons, and their instructional practices influenced the self-efficacy for writing and writing instruction of the preservice teachers (O'Connell & McCoach, 2008; Raudenbush & Byrk, 2002).

Self-efficacy for writing and self-efficacy for writing instruction were the outcome variables. I entered course type and instructor identification as the predictor variables to indicate how much of the overall variance in the outcome variables could be explained by the course preservice teachers enrolled in and the instructor they had. The

134

instructor variable is based upon the classroom observations, which show the writing

strategies, instructional practices, and writing skills taught in the class sessions.

Constant Comparative Analysis of Instructor Questionnaire. Using constant

comparative analysis, I analyzed the *Instructor Questionnaires* for themes relating to

their beliefs about writing (Creswell, 2013). First, I organized the results into two

categories, writing-intensive and general education. Then, I coded the answers based on

three themes, which naturally emerged. These themes are: (1) instructor as writer; (2)

preparedness to teach writing; and (3) classroom practices for writing. I then compared

themes based on the type of course to show any differences in beliefs about writing.

Results

The following sections are organized by themes presented through the research

questions and results that specifically address that them.

Effects of Instructor on Preservice Teachers' Shifts in Self-Efficacy

For the present study, I examined students enrolled in writing intensive and

general education courses taught by thirteen different instructors. I measured preservice

teachers' perceptions of how prepared they feel to teach writing through their teacher

education program, how efficacious they feel about teaching writing, and how

efficacious they feel about the task of writing.

Table 25 shows the effect sizes, evaluated with Cohen's *d*, for each instructor and

each type of course. I also provide the overall average effect sizes for each scale.

Overall, students within general education courses showed a small increase in preservice

teacher self-efficacy for writing instruction ($d = 0.02$) and a small increase in preservice

teacher self-efficacy for writing ($d = 0.02$). Students enrolled in writing-intensive

courses showed a moderate overall increase in preservice teacher self-efficacy for

writing instruction ($d = .19$) and an increase in preservice teacher self-efficacy for

writing ($d = .22$). Both general education and writing-intensive courses showed a

moderate increase in preservice teachers perception of the effectiveness of their teacher

preparation program of .15 and .19, respectively. Overall, preservice teachers showed a

moderate increase in their perception of the effectiveness of their teacher education

program ($d = .18$), and increases in both self-efficacy for writing instruction ($d = .14$)

and self-efficacy for writing ($d = .15$).

Table 25. Effects of Instructors for Preservice Teachers' Shifts in Self-Efficacy

Instructor ID	Writing-Intensive or General Education Course	Effect Size – Effectiveness of Teacher Preparation Program	Effect Size – Self-Efficacy for Writing Instruction	Effect Size – Self-Efficacy for Writing
1	General	0.19	-0.26	-0.98
2	General	0.86	0.02	-0.18
3	General	-0.29	-0.14	-0.13
4	General	-0.15	0.47	1.35
5	Writing	0.47	0.22	0.14
6	Writing	0.31	0.33	0.08

Table 25. Continued

Instructor ID	Writing-Intensive or General Education Course	Effect Size – Effectiveness of Teacher Preparation Program	Effect Size – Self-Efficacy for Writing Instruction	Effect Size – Self-Efficacy for Writing
7	Writing	0.24	0.22	0.35
8	Writing	-0.33	0.24	0.67
9	Writing	0.13	0.45	0.10
10	Writing	0.16	0.28	0.36
11	Writing	0.54	0.07	0.10
12	Writing	0.13	0.23	0.10
13	Writing	0.06	-0.35	0.05
Writing-Intensive		0.19	0.19	0.22
General Education		0.15	0.02	0.02
General Education (without Instructor 4)		.25	-0.13	-0.43

Table 25. Continued

Instructor ID	Writing-Intensive or General Education Course	Effect Size – Effectiveness of Teacher Preparation Program	Effect Size – Self-Efficacy for Writing Instruction	Effect Size – Self-Efficacy for Writing
Overall		0.18	0.14	0.15
Overall (without Instructor 4)		0.21	0.11	0.05

As displayed in Table 25, one outlier does exist in the data, Instructor 4.

Instructor 4 shows data that is inconsistent with the other instructors of general education

courses. This instructor's preservice teacher self-efficacy for writing instruction (d = .47)

and preservice teacher self-efficacy for writing (d = 1.35) scores are higher than any

other instructor and do not show the same pattern as the overall effect sizes for the

general education instructors. When this instructor is removed, the overall effect sizes

for general education shift. The general education course self-efficacy for writing

instruction now shows a small decrease (d = -0.13) where before a small increase

existed. The self-efficacy for writing scale now shows a moderate decrease (d = -0.43)

again where a small increase existed before. Also notable are the overall self-efficacy for

writing scale scores. When Instructor 4, who had the largest effect size for this scale, is

removed, a small increase is shown.

Instructor Differences in Classroom Writing Pedagogy and Practices

Using the *TROS-adapted* instrument, I documented what occurs in writing-intensive and general education courses. The observations were focused on (1) setting of the classroom, (2) focus of the instruction, (3) writing strategies, and (4) instructional practices. The mean inter-rater agreement across five trained observers was moderately high (83.5%) and the reliability was also moderately high ($\alpha = 0.80$) for 52 observation items. Table 26 shows the means and standard deviations for writing-intensive and general education courses based on the setting of the classroom. Each mean is based on the percentage of time a certain behavior was observed during the class session, ranging from 0% (indicating the behavior was never seen) or 100% (meaning during every 30-second interval, this behavior was observed).

No significant differences exist between writing-intensive and general education courses for *setting*. The means for time spent in whole-class instruction are comparable, 72.44% of the time for writing-intensive and 75.63% of the time for general education. Writing-intensive course instructors spent more time with preservice teachers in small groups ($M = 16.59$) while general education instructors spent more time with preservice teachers in groups of two, or dyads, ($M = 7.50$). Additionally, writing-intensive instructors allowed students to work individually more often ($M = 14.39$) than general education instructors ($M = 6.25$).

Table 26. Average Percentage of Class Session Observed for each Setting Type

Item	Writing-Intensive (*n* = 41)		General Education (*n* = 16)		Overall (*n* = 57)		Range		*p*
	M	SD	M	SD	M	SD	Min	Max	
Whole Class	72.44	28.62	75.63	26.58	73.33	27.86	0.00	100.0	.70
Small Group	16.59	20.57	9.38	14.82	14.56	19.28	0.00	70.0	.21
Dyad (2 students)	1.46	5.27	7.50	24.89	3.16	13.91	0.00	100.0	.14
Individual	14.39	24.70	6.25	12.58	12.11	22.18	0.00	100.0	.22

Note: *p* < .05; **p* < .01; ***p* < .001

According to the ranges provided for setting in Table 26, I noted that there is great variability in the amount of time instructors allow students to engage in each type of classroom setting. For example, the overall means for *individual setting* are small with both types of courses spending less than 15% of the class session engaged in *individual* activities. However, at least one instructor spent an entire class session with students working in an *individual setting*. When this was observed, it was during an in-class writing workshop.

Table 27 shows differences between writing-intensive and general education courses for the *focus of instruction*. Here, the first significant differences emerge. Writing-intensive instructors modeled writing strategies (M = 5.37) significantly more (*p* < .05) more than general education course instructors, who were not observed modeling writing strategies. While this difference is statistically significant, it is still a low mean

for both course types as at least one instructor spent 30% of the class session modeling

writing strategies. In comparison, the averages are quite low. Writing-intensive

instructors also emphasized practicing writing (M = 27.32) significantly ($p < .01$) more

than general education course instructors (M = 1.88). Again, looking at the overall

ranges from the observations shows that at least one instructor spent an entire class

session allowing students to practice writing. This occurred during in-class writing

workshops or work periods for students to collaborate on group writing projects.

Table 27. Average Percentage of Class Session Observed For Each Instructional Focus

Item	Writing-Intensive ($n = 41$)		General Education ($n = 16$)		Overall ($n = 57$)		Range		p
	M	SD	M	SD	M	SD	Min	Max	
Course Content	84.39	27.21	79.38	39.74	82.98	30.94	0.00	100.0	.587
Direct Instruction of the Writing Process	21.22	29.68	5.63	19.99	16.84	28.04	0.00	100.0	.058
Direct Instruction of Writing Strategies	10.00	15.49	5.63	17.88	8.77	16.15	0.00	70.0	.363
Modeling Writing Strategies	5.37	8.69	0	0	3.86	7.74	0.00	30.0	.017*
Practicing Writing	27.32	31.86	1.88	5.44	20.18	29.42	0.00	100.0	.003**

Table 27. Continued

Item	Writing-Intensive (*n* = 41)		General Education (*n* = 16)		Overall (*n* = 57)		Range		*p*
	M	SD	M	SD	M	SD	Min	Max	
How to Teach Writing	12.20	25.05	13.13	27.50	12.46	25.51	0.00	90.0	.903
How to Assess Writing	21.95	32.19	10.63	19.14	18.77	29.40	0.00	100.0	.194

Note: *p < .05; **p < .01; ***p < .001

I observed differences in how writing-intensive and general education course instructors use *writing strategies*. While writing-intensive courses inherently focus on writing strategies, I wanted to evaluate how often writing strategies are used in general education courses, too. Table 28 shows the means for how often writing strategies were observed in each course type. Surprisingly, few significant differences existed between writing-intensive and general education courses. Writing-intensive course instructors taught the writing process (M = 37.80) significantly ($p < .01$) more than general education courses (M = 5.63). The ranges reveal that at least one instructor spent 100% of the observed course sessions teaching the writing process. In one example, the instructor provided a detailed overview, in collaboration with students, about the steps of the writing process in preparation for completing a course-required research paper.

Writing-intensive instructors also taught organization (M = 14.88) significantly ($p < .05$) more than general education courses. This mean is particularly low as at least one instructor spent 90% of the class session teaching organization. I observed detailed discussions of organization between the instructor and preservice teachers when instructors taught students how to synthesize research articles to build arguments in research papers or in teaching preservice teachers how to outline ideas for a longer writing assignment.

Additionally, writing-intensive course instructors focused more on procedures for re-writing. For example, writing-intensive instructors taught writing with evidence and using citations (M = 8.29) while general education courses did not teach this skill. In some writing-intensive courses, preservice teachers spent a large portion of at least one class session researching topics in the library and organizing scholarly articles using APA or MLA formatting. Both course types used peer- and self-evaluation, but writing-intensive instructors (M = 16.83) taught this skill significantly ($p < .05$) more than general education instructors (M = 1.23). Also noteworthy, general education instructors did not teach editing and revising, constructing thesis statements, developing voice as a writer, or writing conclusions. While writing-intensive instructors did teach these skills, they did not teach them significantly more.

Table 28. Average Percentage of Class Session Observed For Each Writing Strategy

Item	Writing-Intensive (n = 41)		General Education (n = 16)		Overall (n = 57)		Range		p
	M	SD	M	SD	M	SD	Min	Max	
Grammar	3.17	9.33	4.38	10.94	3.51	9.73	0.00	40.0	.678
Writing Process	37.80	39.34	5.63	17.88	28.77	37.47	0.00	100.00	.003**
Editing/Revising	9.27	19.03	0	0	6.67	16.62	0.00	80.0	.058
Sentence Structure	1.95	5.58	.63	2.50	1.58	4.92	0.00	20.0	.366
Organization	14.88	26.75	.63	2.50	10.88	23.55	0.00	90.0	.039*
Constructing a thesis Statement	6.34	16.39	0	0	4.56	14.15	0.00	80.0	.130
Synthesizing Research	16.59	30.87	19.38	36.60	17.37	32.27	0.00	100.00	.772
Writing with Evidence / Citation Use	8.29	16.26	0	0	5.96	14.25	0.00	80.0	.047*
Word Choice	6.83	16.34	6.88	24.96	6.84	18.91	0.00	100.00	.994
Production of Graphics / Visual Aids	4.15	15.65	.63	2.50	3.16	13.38	0.00	90.0	.377
Developing Voice as a Writer	2.44	6.24	0	0	1.75	5.39	0.00	30.0	.126
Self- / Peer- Evaluation	16.83	28.15	1.23	5.00	12.46	24.95	0.00	90.0	.033*

Table 28. Continued

Item	Writing-Intensive (n = 41)		General Education (n = 16)		Overall (n = 57)		Range		p
	M	SD	M	SD	M	SD	Min	Max	
How to Evaluate and Assess Future Students' Writing	10.24	24.75	10.00	24.77	10.18	24.53	0.00	100.00	.973
Writing Conclusions	1.22	5.10	0	0	.88	4.34	0.00	30.00	.345

Note: *p < .05; **p < .01; ***p < .001

The *instructional practices* in Table 29 show that limited differences in how instructors use writing in their classrooms are evident. Moreover, the relatively low means for the majority of items show that writing is not being incorporated into instructional practices, no matter the course taught. Several exceptions to this claim do exist. For example, both writing-intensive (M = 48.05) and general education (M = 43.75) instructors utilize metacognitive prompts for students to respond to during class. Examples of these prompts include quick writes, in-class jigsaw activities, and read-write-pair-share activities. While using metacognitive prompts shows some of the highest means observed in the class sessions, some instructors utilized these strategies 100% of the class session. The overall averages are about half of the class sessions, indicating that some instructors are using these prompts more often than others.

Significant differences between the two course types exist for student choice of topics for writing (p < .001) and low stakes writing (p < .05). For student choice of

topics for writing, writing-intensive instructors (M = 30.98) gave choice more than general education instructors (M = 4.38). Writing-intensive instructors (M = 19.51) used low-stakes writing activities more than general education instructors (M = 5.63). It is noteworthy that these means, while significant, are still relatively low indicating that on average, students are infrequently engaging in low stakes writing to deepen their understanding of topics nor given much choice on what to write about.

Table 29. Average Percentage of Class Session Observed For Each Instructional Practice

Item	Writing-Intensive (*n* = 41)		General Education (*n* = 16)		Overall (*n* = 57)		Range		*p*
	M	SD	M	SD	M	SD	Min	Max	
Student Choice of Topics for Writing	30.98	35.48	4.38	8.92	23.51	32.65	0.00	100.0	.005**
Evidence of Rubric Use Before/During/After Writing Process	12.44	28.79	6.88	13.52	10.88	25.44	0.00	100.0	.463
Providing Templates/ Examples for Writing	32.44	31.68	16.88	25.49	28.07	30.67	0.00	100.0	.085
Prewriting Strategies	11.22	23.37	1.25	3.42	8.42	20.33	0.00	100.0	.097
Referral to Tutoring Services	5.85	13.96	0	0	4.21	12.09	0.00	50.0	.101
Metacognitive Prompts	48.05	39.32	43.75	46.46	46.84	41.06	0.00	100.0	.726

146

Table 29. Continued

Item	Writing-Intensive (*n* = 41)		General Education (*n* = 16)		Overall (*n* = 57)		Range		*p*
	M	SD	M	SD	M	SD	Min	Max	
Charting Progress	3.90	13.58	0	0	2.81	11.61	0.00	80.0	.258
Peer Feedback During the Writing Process	9.77	21.74	1.25	5.00	7.37	18.95	0.00	90.0	.129
Goal Setting During the Writing Process	2.44	7.99	0	0	1.75	6.85	0.00	40.0	.230
Group Writing	9.76	19.04	2.50	7.75	7.72	16.90	0.00	70.0	.147
Using Electronic Data Bases for Research Organization	.98	4.36	1.25	5.00	1.05	4.51	0.00	20.0	.838
Low Stakes Writing	19.51	24.18	5.63	15.48	15.61	22.84	0.00	80.0	.038*

Note: *p* < .05; **p* < .01; ***p* < .001

Table 30. Random Coefficients Model Under REML (group-mean centering) For Self-Efficacy For Writing Instruction

Fixed Effects	Coefficient (SE)	t (df)	p
Model for mean self-efficacy for writing instruction			
Intercept	4.06 (.04)	128.56 (12)	.000***
Model for course type slope			
Intercept	.11 (.08)	1.31 (11)	.218
Random Effects (variance components)	*Variance*	*df*	*Chi-square (p)*
Var. in self-efficacy for writing instruction	.003	12	15.517 (p = .000)
Var. in course type	.0001	11	13.59 (p = .256)
Var. within instructors	.47		
Note: Deviance = 735.86; 2 estimated parameters			

Variance in Instructors and Course Type for Self-Efficacy for Writing Instruction

To evaluate differences in instructors based on the preservice self-efficacy for writing instruction, I conducted a hierarchical linear model using self-efficacy for writing instruction as the outcome variable, sorted by instructor identification (see Table 25). I predicted a difference existed based on type of course taught (writing-intensive vs. general education). Table 30 shows the results of the random coefficients model using group-mean centering. The average mean for self-efficacy for writing instruction is statistically different from zero ($p = .000$) and accounts for less than 1% of the total variance between instructors. When I added course type to the model, no significant

148

difference emerged between writing-intensive and general education courses ($p = .218$).

Instead, the amount of variance accounted for was explained by the instructors, not the

course type.

The comparison of means and effect size measures showed some differences

between writing-intensive and general education courses. However, when students are

nested within their instructors' classes, I did not see those same differences. Overall, the

differences are not statistically significant.

Variance in Instructors and Course Type for Self-Efficacy for Writing

To evaluate differences in instructors based on the preservice self-efficacy for

writing, I conducted a hierarchical linear model using self-efficacy for writing as the

outcome variable, sorted by instructor identification. I predicted a difference existed

based on type of course taught (writing-intensive vs. general education). Table 31 shows

the results of the random coefficients model using group-mean centering. The average

mean for self-efficacy for writing is statistically different from zero ($p = .000$) and

accounts for less than 2% of the total variance between instructors. When I added course

type to the model, no significant difference emerged between writing-intensive and

general education courses ($p = .434$).

Table 31. Random Coefficients Model under REML (group-mean centering)

Fixed Effects	Coefficient (SE)	t (df)	p
Model for mean self-efficacy for writing			
Intercept	3.47 (.04)	91.80 (12)	.000***
Model for course type slope			
Intercept	.07 (.09)	.81 (11)	.434
Random Effects (variance components)	*Variance*	*df*	*Chi-square (p)*
Var. in self-efficacy for writing	.006	12	20.98 ($p = .050$)
Var. in course type	.007	11	20.13 ($p = .043$)*
Var. within instructors	.30		
Note: Deviance = 735.86; 2 estimated parameters			

University Instructor Beliefs about Writing

The *Instructor Questionnaire* consisted of 14 items ranging from open-ended responses to ranking items to frequency items. Each item helped show how writing-intensive and general education instructors conceptualize writing, how they view writing, and their perceived strengths and weaknesses of the preservice teachers in their classes. The results of the questionnaire are presented as three themes, which emerged through constant comparative analysis, related to writing: (1) instructor as writer; (2) preparedness to teach writing; and (3) classroom practices for writing. This information provides more depth to interpret the quantitative results described above.

Instructor as Writer

Much of the research on writing posits the belief that in order to be an effective teacher of writing, the instructor must view him- or herself as a writer (Morgan, 2010; Zimmerman, Morgan, & Kidder-Brown, 2014). In the present sample, 67% of general education instructors and 89% of writing-intensive instructors view themselves as writers. More than half of general education instructors are working on at least one writing project and prefer working independently. As one instructor writes, she prefers to work independently, *"partly due to not feeling very confident of my writing, partly due to not enjoying the writing process."*

In contrast, more than half of the writing-intensive instructors were working on three or more writing projects and had varying views about writing collaboratively or independently. One outright stated preferring independent writing over collaborative writing, "*I come from a background where writing is done independently, and I prefer to do as much on my own as possible,*" while four preferred to write collaboratively. The remaining instructors all indicated appreciating both and preferring a combination of writing styles. One instructor described this "mixture" by saying "*I learn so much from observing and reading the writing of others...I enjoy moving through the creative and writing process with different people.*" Another instructor described outlining and writing individual sections as being completed on one's own, while revision and editing should be done with others.

151

Preparedness to Teach Writing

From these results, I can determine that most instructors view themselves as writers, but have differing views of how writing should be conducted, whether in groups or individually. Next, I wanted to understand what elements of writing instructors viewed as important to teach to preservice teachers. Looking at Table 32, several interesting differences emerge. General education instructors did not rank paragraph structure, constructing a thesis statement, word choice, correct citation use, production of graphics and visuals, teaching students how to use peer review, or writing strong conclusions in the top five elements of writing to teach. However, at least one writing-intensive instructor placed each item in the top five. All of the general education instructors ranked revising skills highly, while both writing-intensive and general education instructors ranked organization as an important skill with 88.89% and 66.67%, respectively. More than half of the writing-intensive instructors ranked synthesizing research and developing self-efficacy as a writer as important skills.

Table 32. Frequency of Instructors Ranking Elements in Their Top 5 Most Important Areas of Writing

Writing Element	Writing-Intensive Instructors	General Education Instructors
Grammar	33.33%	33.33%
Editing Skills	44.44%	33.33%
Sentence Structure	11.11%	33.33%
Paragraph Structure	22.22%	0.00%
Organization	88.89%	66.67%
Revising Skills	33.33%	100.00%
Constructing a Thesis Statement	44.44%	0.00%
Synthesizing Research	55.56%	33.33%
Writing with evidence	44.44%	66.67%
Word Choice	33.33%	0.00%
Correct Citation use	33.33%	0.00%
Production of Graphics/Visuals	11.11%	0.00%
Developing Voice as a Writer	33.33%	33.33%
Developing Self-Efficacy as a Writer	55.56%	33.33%
Teaching students how to self-evaluate writing	22.22%	33.33%
Teaching students how to use peer evaluation	33.33%	0.00%

Table 32. Continued

Writing Element	Writing-Intensive Instructors	General Education Instructors
Teaching how to assess & evaluate future students' writing	44.44%	33.33%
Writing strong conclusions	22.22%	0.00%

These results compare with the quantitative results that showed writing-intensive instructors focus more on how to teach and assess writing by showing that instructors in writing-intensive courses rate this skill more highly than general education instructors. Interestingly, significant differences were shown for organization and revision in the student observation results, but both sets of instructors rate valuing these skills in teaching writing.

Overall, these beliefs are also influenced by how prepared the instructors feel to teach writing. 33.33% of the general education instructors felt adequately prepared to teach writing, while an additional 33.33% felt partially prepared to teach writing. One instructor did not feel at all prepared to teach writing. This instructor stated "*Actually, I had no training in how to teach writing. At this point in time, I would rely on information I have learned from attending…studios* [writing-focused groups for faculty and doctoral students]." The other instructors stated that their experience was based on *teaching elementary school students to write*, *reading professional texts and articles*, and

expository texts related to content area literacy. None of the instructors directly cited training for preparing preservice teachers to teach writing.

General education instructors indicated they felt most prepared to teach writing *at the basic level*, including *beginning the writing process* and *writing to inform or share information.* However, the areas in which they felt least prepared to teach writing include *grammar*, *scientific writing*, and *writing narrative, creative, or poetry pieces*. Interestingly, the idea of feeling most confident in helping students begin writing or writing informative pieces seems to be in contrast to teaching basic elements of grammar and scientific writing.

The writing-intensive instructors felt more prepared to teach writing, with 44.44% rating themselves adequately prepared to teach writing and 55.56% rating themselves highly prepared to teach writing. Three instructors cited their K-12 classroom teaching experiences, two included undergraduate or graduate work in writing, and the remaining discuss their own writing habits as preparation to teach the course. Three instructors cited specific writing training in the form of learning how to teach English Language Learners (ELLs) that focused specifically on *local and global errors that impact the overall quality of the writing*, an individual instructor who shared *ideas about how to guide students through the writing process*, and an on-campus writing studio for graduate students.

Writing-intensive instructors were again divided on their responses to what areas they feel most prepared to teach. Their answers fell into two distinct orientations, one focused on writing conventions and one focusing on writing ideas. One instructor cited

feeling best prepared to teach classroom application of writing, as she also emphasized her own elementary teaching experiences as part of her writing training. Two instructors felt most prepared to teach organization, three indicated feeling well prepared to teach mechanics, grammar, and formatting, and one instructor focused specifically on affective elements to writing. This instructor stated, "*I feel most prepared in terms of imparting a positive attitude and approach to writing… I enjoy talking through word choice, transitions, and voice as students work to create a coherent piece*.

These same instructors cited the same elements as areas in which they do not feel prepared to teach writing. For example, writing-intensive instructors said they felt unprepared to teach *grammatical aspects such as the use of prepositions*, how to *maneuver between different types of writing*, and how to *fully develop their ideas*. One instructor also revealed some frustration in understanding how to do something herself but not understanding how to teach this skill. She lamented, "*I feel least prepared in talking specifically about the organization of a paper. This is something I have intuited over the years as a writer but don't feel that I'm as clear in articulating these skills for others*."

For teaching writing strategies, 66.67% of general education instructors indicated feeling partially prepared to teach writing strategies, while 33.3% felt not at all prepared. A common idea in the instructors' responses showed that they taught writing strategies as a byproduct of activities in their course, but it was not a focus. One instructor said she did not provide "*any specific strategies*" but "*gave feedback after the fact*". Another

156

instructor suggested that students learned by doing through "*each assessment, the students were required to write up the results*".

In contrast, writing-intensive instructors felt more confident in the effectiveness of their course for teaching writing strategies. 11.1% of instructors rated their course as highly effective for teaching writing strategies, while 33.3% rated their course as adequately effective. Another 44.4% said their course was partially effective for teaching writing strategies and 11.1% reported their course was not at all effective. Interestingly, one instructor lamented a challenge preservice teachers have in transferring skills from course to course and later into their profession as "*I really don't think writing intensive courses are great for teaching writing. Most students tend not to carry over their writing experiences from prior classes.*" However, a second instructor describes the impact of allowing students to conduct in-class peer- and self-evaluations, "*I think it's a good practice for them to take turns explaining things and to give and receive feedback for their peers.*"

Classroom Practices for Writing

Next, I wanted to understand how instructors' preparedness to teach writing translates into classroom practices. First, I asked each instructor what percentage of class time was devoted to writing. For the general education instructors, two indicated that a single class session was devoted to writing while the others state they never focused specifically on writing. One instructor provided evidence that students were exposed to writing assessment by administering and interpreting elementary students' writing. A second instructor stated providing "*limited feedback on the students' writing, in terms of*

157

on line responses to discussion posts and responses," as the focus of the course was not on writing instruction.

The opinions of writing-intensive instructors varied greatly in terms of how much class time was devoted to writing and how much *should* be devoted to writing. Answers ranged from 15% to 55% class time including writing instruction. Two differing viewpoints are captured. One instructor sums up the challenge of a writing-intensive course by stating, "*Although this course is planned to be an intensive-writing course, not enough time is planned--in the syllabus--to be allocated for teaching writing techniques. Throughout the course, 2 or 3 out of 14 class sessions are spent teaching some basic concepts of writing.*" In contrast, another writing-intensive instructor feels that writing in prominently built into the syllabus stating, "*thankfully, writing is built into the content of this class, so we talk a great deal about writing itself in addition to specific days that are set aside for writing workshops and more focused writing instruction*".

In both groups, instructors reported feeling a lack of time as well as enthusiasm from preservice teachers as obstacles for creating a more writing-focused environment. One instructor summarized this challenge, "*I tried to include writing in some of the class activities, but many students did not take those opportunities to practice writing. Instead, they just took notes to complete the activities.*" This response shows that preservice teachers' views on writing, and more importantly their expectations of class time, might be a mitigating factor. For example, if students expect to take notes in class but not practice writing, they may feel negatively toward an instructor or negatively toward the act of writing by being asked to complete writing activities.

<center>**Discussion**</center>

From the results above, four themes emerge: (1) nesting data can lead to more meaningful implications of results; (2) the impact of the instructor strongly influences the beliefs of preservice teachers for writing; (3) writing practices vary between writing-intensive and general education pedagogy courses, but the distinctions are quite small; and (4) the instructor beliefs about writing may be more informative about the influence those instructors have on preservice teachers than classroom practices or preservice teachers' innate beliefs. In the following sections, I will discuss each of these four themes as well as address limitation and directions for future research.

Influence of Nesting Data

Nesting data through multilevel modeling is a relatively new measure of statistical analysis. Ignoring nesting, the assumption prevails that each student is mutually exclusive from all other students. However, in reality, if students are in the same classroom with the same instructor, they are receiving a similar treatment that is unique from students in other classrooms (O'Connell & McCoach, 2008). Nesting allowed me to account for this uniqueness.

When looking at the effect sizes, differences between courses appear. When comparing means for the descriptive statistics, differences between courses appear. When using multilevel modeling through hierarchical linear modeling, those differences disappeared. This suggests that course type alone is not what is showing differences in the preservice teachers' levels of self-efficacy for writing and writing instruction. Instead, another variable is resulting in these shifts of self-efficacy. Looking at the

<center>159</center>

hierarchical linear models, much of the variance left is within the instructors. Therefore, the model shows that students differ, not based on course, but based on instructor. The instructor has more influence over the preservice teachers' beliefs than their course type alone.

Impact of Instructors on Preservice Teachers' Beliefs about Writing

Course type alone does not correlate to improved self-efficacy for writing and writing instruction. According to the results, preservice teachers showed a small increase in their perception of the effectiveness of the teacher education program ($d = 18$), their self-efficacy for writing instruction ($d = 14$), and their self-efficacy for writing ($d = 15$) over the semester. However, when looking more closely at the individual effect sizes for general education instructors, half show a decrease in self-efficacy for writing instruction while all but one show a decrease for self-efficacy for writing. Additionally, Instructor 13, a writing-intensive instructor, shows a moderate decrease in preservice teachers' self-efficacy for writing instruction.

Instructor four, who is a general education pedagogy instructor, actually shows the largest increase in preservice teacher self-efficacy for writing ($d = 1.35$). This large effect size is surprising, given that the instructor's self-report data does not reveal an emphasis on writing instruction. In fact, the instructor stated, "*the students were required to write, to learn course related content regarding assessment; there was no focus on writing to learn instruction*". This suggests that, while the instructor did not perceive teaching writing, the students' viewpoint did emphasize writing in the course. When Instructor four, a statistical outlier, is removed from the calculations, the overall effect

160

size for the general education course instructors shows a small decrease in self-efficacy for writing instruction (d = -0.13) and a moderate decrease in self-efficacy for writing (d = -0.43).

Simply integrating writing instruction into a lesson will not automatically translate to preservice teachers' knowledge of effective teaching. Instead, explicit, direct instruction must be focused on what the instructor is doing and how that translates into a career as a teacher (Harris & Graham, 1996; Mason, 2004). Looking again at the individual effect sizes by instructor shows that instructors may have focused more heavily on different components of writing or different aspects of writing instruction. For example, the writing-intensive instructors' effect sizes for self-efficacy for writing instruction range from -0.35 to 0.45. Instructors with lower scores may not have emphasized writing instruction or specifically targeted preservice teachers' focus to the impact of their modeling writing strategies or practices.

In comparison, the writing-intensive instructors' effect sizes for self-efficacy for writing ranged from 0.05 to 0.67. Again, this shows that some instructors may have spent more time in their classes focusing on writing while others did not. As this data comes from the preservice teachers, it is also likely that their perceptions were influenced by outside factors such as the instructors' approachability, course content, and overall attitude toward the class.

Writing Practices

Overall, the results of the classroom observations indicate that writing is occurring slightly more in writing-intensive courses than general education courses;

however, it is rarely happening to a degree that would reveal statistically significant differences. Despite not being statistically significant, these slight differences could be contributing to the higher effect sizes seen in the writing-intensive courses. Preservice teachers are gaining self-efficacy for writing simply by being exposed to it, even if that exposure is limited. This finding is promising to teacher education programs that may have less time to devote to writing in their already overloaded programs. Even putting in minimal writing into courses improves preservice teachers' perception of the effectiveness of writing.

In addition to increasing the writing requirement, which all writing-intensive courses in this study did, the observations reveal that instructional practices are important to the overall impact of the course on the preservice teachers' self-efficacy. For example, in writing-intensive courses, preservice teachers were more likely to engage in individual or small group activities, while general education courses implemented more dyad work. Research on group work shows that students actually perform better in small groups rather than just in pairs (Johnson, Johnson, & Stanne, 2000), which could be a contributing factor to the differences in self-efficacy. In other words, the greater inclusion of written activities may be a catalyst for more effective group activities. Preservice teachers in writing-intensive courses worked more often in groups and showed higher levels of self-efficacy than preservice teachers in general education courses who did not work in groups as often. One exception for general education instructors is Instructor four, who actively promoted group work consistently and was a statistical outlier from the other general education instructors.

One of the most interesting findings is that writing-intensive courses provided nearly three times as many opportunities for preservice teachers to practice writing during class than general education courses. As a great deal of research shows that practicing writing increases self-efficacy (e.g., Elbow, 2004), the mere act of engaging in writing tasks could be helping preservice teachers more than the course requirements.

I expected to see large differences between the types of writing strategies and writing skills taught in each course. However, on the whole, these differences did not appear. Writing-intensive courses did focus on the writing process, organization, writing with evidence and citations, and peer- and self-reviews than the general education courses. But, general education courses required students to synthesize information more often than writing-intensive courses. General education course also taught word choice and how to evaluate and assess future students' writing equally as often as writing-intensive courses. This suggests that, on the whole, general education courses, without being required, taught basic writing elements. In fact, the only instructional practices that were statistically significantly different showed that writing-intensive course instructors gave students choice in their writing topics and asked students to participate in low-stakes, minimally graded assignments.

Using the overall classroom observation instrument, I discovered that both students and instructors in writing-intensive courses are more aware and cognizant of writing. Reflecting on a lesson observed in these classrooms showed that writing was often a cornerstone for learning and a vehicle in which students captured their learning.

While writing did occur in general education courses, writing-intensive courses appeared to emphasize writing explicitly while general education courses did not.

Influence of Instructors' Beliefs on Preservice Teachers

From the quantitative data, one theme keeps emerging: instructors influence the preservice teachers. Through the *Instructor Questionnaire*, I attempted to capture exactly what the beliefs are of the instructors about writing and writing instruction to better understand how those beliefs correlated to the instructors' classroom practices. Through the questionnaire, three major themes emerged: (1) instructor as writer; (2) preparedness to teach writing; and (3) classroom practices for writing. I will discuss how each of these themes compares with the quantitative data presented.

Instructor as Writer. Much of the writing research suggests that to be a good writing teacher, a teacher must view themself as a writer (Morgan, 2010; Zimmerman, Morgan, & Kidder-Brown, 2014). In this sample, the majority of teacher who taught writing-intensive courses viewed themselves as writers (89%) while only two-thirds (67%) of the general education instructors saw themselves as writers. This closely tied with how the instructors view writing, whether it is a collaborative or individual task. Most writing-intensive instructors viewed writing as a collaborative task in which they could observe and learn from others. Most general education instructors saw writing as an individual task.

Sociocultural theory posits that writing in a classroom setting is inherently collaborative and that every time a student writes, the teacher is a co-author on the piece of writing (Prior, 2006). This underlying belief could result in writing-intensive

instructors engaging in collaborative writing more often with their students, thus increasing the preservice teachers positive attitudes toward the act of writing. Additionally, viewing writing as a collaborative task could result in writing-intensive instructors modeling writing behaviors more often, as the observations showed they did. Seeing effective writing behaviors and practices would also influence self-efficacy. Seeing a task completed by an effective model has been shown to increase self-efficacy, according to social cognitive theory (Bandura, 1977).

Preparedness to Teach Writing. The Peter Effect states that teachers cannot teach what they themselves do not know (Applegate & Applegate, 2004). Alternatively, the "Pedagogies of Enactment" research states that teachers cannot teach what they do not have appropriate pedagogical strategies to teach (Grossman, Hammerness, & McDonald, 2009). This idea differs from the Peter Effect in that it focuses on the tools teachers use to instruct. According to this idea, teachers do not have to be expert writers, but rather, have to know how to teach writing effectively. They must know the processes behind writing, the theories of writing development, and effective practices to build writing skills. This comes from training and preparation for teaching writing.

From the results of the questionnaire, instructors reveal that their training to teach writing has primarily come from experiences teaching K-12 students, participating in writing studios (informal writing support groups focused on building a writing habit), and learning from other instructors. One instructor even stated not having specific training in writing. This reveals that while writing-intensive instructors view themselves as writers, and even general education instructors participate in writing, neither group

has had specific training on how best to teach writing. Similar to the preservice teachers, instructors are relying on their own schooling experiences primarily to inform their instructional practices. Returning to the concept of *pedagogies of enactment,* just as professional development is crucial for K-12 educators, it is important for teacher educators.

Classroom Practices for Writing. One of the most salient themes is that instructors do not feel adequately prepared to teach writing, nor do they feel their syllabus allows for enough time to effectively teach writing. Writing-intensive courses are designed to include additional requirements, focused on writing, to already full course expectations. Several instructors clearly expressed concern about getting everything accomplished within the limited class time. As such, the low percentage of writing practices, strategies, and skills observed in classrooms can be attributed to this fact: instructors feel overwhelmed.

Additionally, this overwhelming feeling to cram more requirements into the courses was also shown by the preservice teachers. Preservice teachers did not report strong gains in self-efficacy and instructors noted that preservice teachers did not seem particularly enthusiastic about completing writing tasks within the class sessions. This finding reveals that preservice teachers are likely not gaining additional knowledge about writing as they grapple with new content. Cognitive load theory (Sweller, 1988; Sweller, Ayres, & Kalyuga, 2011) explains the overwhelming feelings of the instructors as well as the lack of enthusiasm by the preservice teachers. Neither group is receiving

maximum benefits from the courses plus the writing requirements because the amount of content cannot be fully covered to the depth needed.

In summary, the present study shows that the instructors, not the course type, are the most prominent variable influencing preservice teachers' self-efficacy for writing and writing instruction. Additionally, the variables that make more effective instructors are not fully captured, even by the systematic classroom observation instruments. Writing practices between the two course types are not vastly different, possibly because instructors do not feel prepared to teach writing to future teachers and feel overwhelmed by the added responsibilities of integrating writing into already content-intensive courses. Finally, the instructors' own beliefs about writing show links to the preservice teachers beliefs about writing.

Limitations

Several limitations are present in the current study. First, to a degree, the John Henry effect is present in that the instructors knew they were being observed and could have altered their behaviors on days the observations took place. This limitation is inherent in any observational study. However, I attempted to ease the instructors' concerns by conducting multiple observations, thereby sensitizing the instructors to the presence of a researcher in the classroom. The observations were also observed by at least two different, trained observers who did not hold authority over the instructors. Each instructor had fair observations, the same instruments and fidelity checklists were completed each time I, or a member of the research team, was in the classroom. This

ensured consistency among the procedures and eased any pressure the instructors might have felt in being observed.

Second, selection bias exists in that the instructors were not chosen at random. Because the research design is quasi-experimental and instructors are assigned to teach courses based on availability, skill set, and experience, I had no control in randomizing instructors to courses. However, the writing-course instructors are simply regular members of the faculty who are content experts in the course content and do not receive specialized training for writing instruction. All writing-course instructors also teach general education courses.

Third, a threat to the instrumentation exists. The instrument is newly modified from an existing and nationally-used rubric; however, it has been adapted to focus on writing practices. Due to this narrow scope, the instrument does not capture many components that may be influencing writing practice indirectly. Though I've tried to encompass the entire classroom environment, instructor perspective, and student perspectives, what influences these writing beliefs have not been full achieved. Some additional variables not included within the instruments might be influencing these beliefs and the atmosphere. Namely, the quality of the instructor could be a contributing variable. The present study did not measure or rate instructor quality, which could be an avenue for future research. The instrument was used by five trained observers. Though the observers completed pilot testing and training with the instrument, some variation among observer scores did exist as the inter-rater reliability ranged from 83-91%.

Additionally, the three observations of each course are a sampling and may not represent all of the diversity within each course.

Fourth, because this was a naturalistic study, it was not possible to draw clear conclusions about specific instructional strategies' impact on student growth. While trends in instructional practices could be observed amongst the more effective instructors, these trends cannot be supported empirically at this time. More carefully controlled experimentally designed studies are needed to answer questions about specific practices.

Directions for Future Research

Presently, writing is under-researched at both the K-12 and teacher education level. Institutions, consumed with more requirements than ever before, provide writing-intensive courses as one of the only means of direct writing instruction. However, as shown through this study, these courses add additional pressures to both instructors and preservice teachers without yielding high gains. Teacher preparation programs, practitioners, and policy makers can use the findings of this study to develop future research. Additionally, the goals and focus for such courses needs to be made more clear and prioritized because instructors within this study felt overwhelmed with the breadth of material they are expected to cover.

Teacher education programs need more clear direction in evaluating teacher educators for specific skills. Because self-efficacy, which influences teacher quality, is content specific, the instruments modified for this study can be used by teacher education programs to evaluate what is occurring in their classrooms. These findings can

assist these programs in developing writing courses that might better suit the needs of their future teachers. Additionally, one major finding in this study is that instructor quality is paramount in influencing preservice teachers beliefs. This suggests that programs preparing teachers should identify effective instructors and analyze the specific practices of those instructors. Professional development and trainings for other instructors can be created from this information, potentially leading to greater gains in preservice teacher self-efficacy for writing and writing instruction.

Many preservice teachers enter the teaching profession feeling inadequately prepared to teach writing, and many inservice teachers report feeling avoidant toward writing (Cutler & Graham, 2008). These feelings can be combatted through improvements to teacher education programs. Preservice teachers, who are university students, are grapping with education theory, content knowledge, and other demands of schooling. Adding more requirements to their courses does not inspire, motivate, or engage them to learn both pieces of content well. Instead, they do not learn either to the degree of mastery.

Finally, policy makers are becoming consumed by legislation related to value-added and the Common Core State Standards. The Common Core challenges to teachers to incorporate more writing into their content areas and focus on writing texts from multiple genres such as narrative, expository, and poetry. Yet, preservice teachers are not seeing effective modeling of writing practices in their K-12 schooling or teacher preparation programs. This lack of attention to writing results in attitudes that writing is not important and does not have a place in curriculum. Value-added omits writing from

evaluating teachers, but studies have shown that improving writing skill improves other skills such as mathematics (Graham & Hebert, 2010). Writing has a place in legislation and policy and should be taken seriously as society focuses more on written communication through technology and social media outlets (Yancey, 2004).

Conclusion

The present study uses a mixed methods approach to demonstrate the correlation between effective teacher educators and the impact those teacher educators have on preservice teachers. Effective modeling and quality instructors are clear determinants of how successful preservice teachers will be in their future endeavors with K-12 students. The results of this study show that teacher education programs need to take a closer look at the quality of instruction they are providing. Best practices found through the classroom observations can be a starting point for developing professional development for teacher educators.

CHAPTER V

CONCLUSIONS AND IMPLICATIONS

Chapter II, *Developing the Preservice Teacher Self-Efficacy for Writing Inventory,* informs the field by creating a needed survey instrument, the Preservice Teacher Self-Efficacy for Writing Inventory (*PT-SWI*), to measure preservice teachers' self-efficacy for writing and writing instruction. This instrument was tested for reliability and validity of scores with multiple samples of preservice teachers. Chapter III, *The Impact of Writing-Intensive and General Education Courses on Preservice Teachers' Self-Efficacy for Writing and Writing Instruction,* uses the instrument created in Chapter I to compare outcomes of preservice teachers in writing-intensive education courses to those in general education pedagogy courses. The primary goal was to measure the effectiveness of the writing-intensive education courses. The secondary goal was to explore an underlying latent construct from the survey factors. Finally, Chapter IV, *The Impact of Instructors on Preservice Teachers' Beliefs about Writing,* uses quantitative data, informed by qualitative data, to measure and evaluate classroom practices related to writing. The impact of these instructional practices on preservice teachers' self-efficacy for writing and writing instruction was also analyzed.

According to social cognitive theory, which is an underlying framework for these studies and much recent writing research, students are influenced by behavior (writing and writing instruction), personal factors (self-efficacy), and environment (the classroom). Taking these three factors in unison, the present studies focused on the

relationships between effective teacher modeling, preservice teacher self-efficacy for writing, and preservice teacher self-efficacy for writing instruction. All of these constructs were examined in authentic education courses.

In general, research shows that teachers with higher levels of self-efficacy for teaching have students with higher academic achievement than teachers with low levels of self-efficacy (Tschannen-Moran & Johnson, 2011). Ultimately, this set of studies helps explain the relationships between these variables specific to the area of preparing preservice teachers for teaching writing. The present three studies illuminate three key conclusions for writing educators, teacher preparation programs, and policy makers: (1) the influence of the instructor strongly relates to preservice teacher self-efficacy; (2) viewing oneself as a writer and viewing oneself as a writing teacher are important to building self-efficacy beliefs about writing; and (3) self-efficacy beliefs are linked to construct exposure.

<div align="center">

Influence of the Instructor

</div>

First, the most important variable to consider in changing self-efficacy beliefs is the instructor. Instructors wield the most influence over their students' view of writing and how they perceive teaching writing. Prior research shows that preservice teachers learn the craft of writing from more knowledgeable others' – their instructors (Morgan, 2010; Vygotsky, 1978). According to the results presented in Chapter II, research has struggled to capture the self-efficacy beliefs of preservice teachers for both writing and writing instruction. Yet, inservice teachers' inadequate feelings about teaching writing solicit more concrete data about from where those beliefs originate. Using the *PT-SWI*, I

<div align="center">

173

</div>

found that increases in preservice teachers' self-efficacy for writing and writing instruction can only partially be explained by whether their teacher education courses focused on writing. Instead, Chapter IV illuminates the most salient conclusion is that the instructor influences these beliefs.

Instructor Influence Is Not Dependent on Course Type

According to the results of the hierarchical linear models in Chapter IV, the majority of the variance in preservice teacher self-efficacy beliefs comes from the instructors, not the official course type. When looking at the effect sizes to identify differences in preservice teachers' levels of self-efficacy by instructor, unequal changes in self-efficacy show that instructors focused on different elements related to writing. For example, Instructor nine showed a positive, moderate effect for self-efficacy in writing instruction, but a positive, small effect for self-efficacy for writing. In contrast, Instructor eight showed a positive, small effect for self-efficacy for writing instruction, but a positive, moderate effect for self-efficacy for writing. This reveals that students in Instructor nine's course finished the semester feeling more confident in their abilities to teach writing, while students in Instructor eight's course ended the semester feeling more confidence in their abilities to write. These differences could be the result of different emphases the instructors placed on each of the two constructs.

Such a finding also provides implications for the professional development of university instructors. University instructors are typically content experts, and have learned to write through more informal means and mentorship. Accordingly, they may not be equally informed of the research base for writing instruction. Instructors in the

present studies only cited informal professional development opportunities, indicating that purposeful training sessions for teaching writing were not either available or utilized. If teacher-preparation programs aim to make substantial improvement in their preservice teachers' writing, it may be advisable to invest time in professional development for faculty.

Additionally, instructors reported that they felt somewhat siloed in their attempts to instruct preservice teachers on writing. Therefore, creating professional communities of university instructors who are engaged in writing, may help build professional skills.

Increased Requirements Do Not Necessarily Increase Self-Efficacy Beliefs

Increased course requirements, such as expecting students to master writing components and education theories or practices in the same course, do not necessarily translate to increased self-efficacy beliefs for either education or writing content. Currently, public institutions are facing scrutiny about the high number of credit hours required to graduate, and in response, caps are being set in many state legislatures, including Florida, Texas, Louisiana and Wisconsin (Lumina, 2015). At the same time, for university accreditation and state certifications, additional requirements are being mandated. In response to both pressures, courses are pulling double duty with additional requirements, such as a content course which also serves for writing instruction.

Additionally, teacher preparation programs can also point to writing-intensive courses as a validation that preservice teachers are being prepared to teach writing. Rather than developing additional courses devoted to writing methods, and consequently, requiring more courses of undergraduate students, writing-intensive

education course get tasked with teaching *writing pedagogy* as well. These courses combine education-based content such as theory and pedagogical tools with the added bonus of directly instructing on writing processes, strategies, and skills. The added requirements could improve both content knowledge and writing knowledge, or could deter preservice teachers from mastering either discipline. Potentially, writing becomes a secondary curriculum which is eclipsed by the primary one. Unfortunately, this continues to perpetuate an expectation that writing is less important than other subjects, as evidenced by the current changes to the SAT, which no longer requires writing for college admissions.

Additionally, while instructors are presenting writing content to preservice teachers, they are not actively connecting what the preservice teachers are learning in class to their future careers as inservice teachers. Such instruction would be a third layer of instruction: 1) content 2) writing instruction 3) teaching writing instruction. Because writing only is designated as 1/3 of course time, there is limited time to reach levels of application to the K-12 classroom. Ideally, additional time and focus should be included in such courses to inform preservice teachers about how they can utilize writing in the future to help students master content. Instead, writing is presented as a means to a writing-based product or as an additional requirement.

Viewing Self as a Writer vs. Viewing Self as a Writing Teacher

Second, preservice teachers viewing themselves as writers is different from viewing themselves as writing teachers. This important distinction presents two competing research ideologies: (1) that preservice teachers must be good writers

themselves to teach writing (Morgan, 2010; Zimmerman, Moragan, & Kidder-Brown, 2014); and (2) that preservice teachers do not need to be writers themselves, but rather, need to understand how to teach writing effectively (Grossman, Hammerness, & McDonald, 2009).

Effective Writing Teachers Are Writers Themselves and Know Writing Pedagogy

Current research posits that teachers must be writers to effectively teach writing. The self-efficacy beliefs of preservice teachers and instructor beliefs about writing were collected to determine the relevancy of this notion. The *PT-SWI* confirms a latent correlation between self-efficacy for writing and self-efficacy for writing instruction, contributing to the idea that writers or those with positive attitudes toward writing also have positive feelings about teaching writing. Additionally, effect sizes generally showed that if preservice teachers increased in their self-efficacy for one construct, the other construct moved in the same direction. While such findings lends evidence to the ideology of "good teachers of writing must be writers", one limitation, however, is that those with high self-efficacy in one area are more likely to report high self-efficacy in another area (Tschannen-Moran & Woolfolk Hoy, 2001). Moreover, high self-efficacy does not innately lead to high achievement or quality of writing. Future research is still needed to further clarify these connections.

In the present study, instructors reported interesting statements to their preparedness to teach writing, prior experiences, and view of themselves as a writer. All but two instructors viewed themselves as writers. However, when analyzing these responses further, those instructors whose students showed the greatest gains in self-

177

efficacy were more open about their shortcomings related to writing. For example,

Instructor four, whose students showed the largest gains in self-efficacy for writing and

writing instruction, reported not emphasizing writing and having little training on how to

teach writing. This instructor attributed her knowledge of writing to graduate

coursework and reading professional journal articles about writing instruction. In

contrast, instructors whose classes showed smaller gains for self-efficacy reported their

experiences teaching K-12 students to write as evidence of their training and preparation

for teaching writing. However, they did not strongly report that they felt unprepared for

this task. In summary, the more self-critical instructors may have also been more self-

reflective and self-aware.

These results indicate a lack of awareness about the complexities for teaching

writing, even at the higher education level. If teacher educators are unaware of the

reality of their effectiveness in teaching writing, this lack of awareness could transfer to

the preservice teachers. This might reveal why preservice teachers report feeling

prepared to teach writing, while inservice teachers state they did not have adequate

preparation or avoid the task of teaching writing. The use of pre- and post-surveys and

writing assessments in writing-intensive classes, may help instructors be more aware of

which areas their students are relatively making gain and in which areas they are not.

Writing Is an Elusive Construct

Writing remains an elusive construct. Through the *PT-SWI*, I discovered that

preservice teachers have vastly different orientations toward writing (Graham et al.,

2002). Some preservice teachers view writing as a tool that can help them write notes or

organize daily plans with to-do lists. Others view writing as a process for completing a research paper or field reflections. Through the instructor questionnaire, I found that instructors view writing differently based on the perceived outcome. For example, some instructors indicated that their students participated in writing workshops and small group, low-stakes writing to improve their mastery of course content. Other instructors reported using activities in class that facilitated writing, but did not feel that writing was implemented heavily or prominently focused on during the class sessions. Finally, through the classroom observations, I noted that writing is used by instructors and students in varying forms from quick writes during class to written observations of field experiences. Yet, little consensus on a definition or purpose for writing exists.

Moreover, clear definitions for *quality writing* are still needed. For example, when asked to choose the five most important components of writing, instructors did not report the same elements. In fact, nearly every element out of a possible 18 choices was chosen at least once. None of the items were chosen by all instructors. This shows great inconsistency within what factors influence quality writing and has implications for how instructors prioritize time. Therefore, it is not surprising that writing exposure differs across courses, instructors, and class sessions. These views and inconsistencies transfer to the preservice teachers, resulting in possible confusion about how to define writing and how to present writing to future students. From the *PT-SWI* data, I found that preservice teachers noted which constructs different instructors emphasized about writing. This reveals that critical planning across courses and instructors could bolster preservice teacher knowledge by ensuring they get exposure to multiple constructs

related to writing and learn about the diverse elements required to teaching writing effectively.

In summary, while select recent research (Colby & Stapleton, 2006; Morgan, 2010; Zimmerman, Morgan, & Kidder-Brown, 2014) states that teachers viewing themselves as writers will improve their effectiveness, my research shows that while instructors might enjoy writing or feeling positive about their own writing experiences, they may not be prepared to teach writing. The larger concern is to develop self-efficacy and skill for the pedagogy of writing. Several instructors alluded to this need by stating that they knew how to write themselves but struggled to channel that knowledge to their students. While the debate in writing research continues to ask two questions, "do teachers need to be writers?" or "do teachers need to know how to effectively teach writing?", the present dissertation suggests that a healthy combination is needed. Teachers beliefs about writing influence their teaching and the perceptions preservice teachers get from them. Additionally, without sound pedagogy, even the most gifted writers might not reach students. Teachers need to be writers themselves in that they need to have experience with both the challenges successes of writing to inform their teaching, grounded in research-based approaches. This combination will best meet the needs of every preservice teacher and will help build their self-efficacy for both writing and writing instruction, which will aid them in assisting K-12 students.

Self-Efficacy Linked to Exposure

Third, self-efficacy is linked to exposure of the skill (Bandura, 1977, 2001). Social cognitive theory explains that seeing effective models and interacting with the

content can garner feelings that are representative of skill level. Looking closely at the observation data shows that, on average, teacher education instructors implemented writing strategies, practice writing, and writing instruction less than 33% of the class session. Some class sessions included more writing and some less, but only about one-third of overall time was spent on writing. While this requirement meets the overall expectation for the writing-intensive courses, this amount of exposure to writing does not yield statistically higher effects in self-efficacy.

Additionally, preservice teachers reported on the *PT-SWI* that they felt more prepared to teach certain components of writing such as organization, word choice, and sentence structures. When comparing these results with the systematic classroom observations, I found that instructors spent more time teaching these components than others. In fact, on average, instructors spent 15% of the class session teaching organization and almost 7% teaching word choice. Instructors also spent nearly 40% of the class session teaching the writing process, about 9% teaching editing and revising and more than 16% engaging students in peer- and self-evaluations. Spending time on these elements of writing signals to preservice teachers that they are important, adding value to the preservice teachers' judgment of them (Bandura, look up in proposal "value" equaling motivation). When certain components are more valued, the motivation and attitude toward them also increases.

In contrast, preservice teachers reported feeling inadequately prepared to teach voice and spelling. Instructors in writing-intensive courses spent approximately 2% of the total class session focusing on voice, and spelling was not observed in the class

181

sessions. As focusing on elements signals their importance and provides concrete information, ignoring elements signals their unimportance. When a skill is not focused on, the perpetuated idea is that it is not relevant. These logical connections between classroom observations and preservice teachers' self-report data could be small shifts in self-efficacy that I observed. This finding also signals a need for W-intensive course design to consider which aspects of writing should be emphasized. In the time of one semester, not every aspect of writing can be equally attended to, and therefore, using concepts of backwards planning for course design, needs to prioritize which aspects are most essential for future teachers.

Actively Practicing Writing Improves Attitude Toward Writing

   Attitudes toward writing are shaped through actively practicing writing. The more a person writes, the more confident the person feels in their writing. Much of the research on writing practice suggests that practicing writing can increase positive feelings about writing and competency with writing conventions, clarity of ideas, and efficient generation of text. Skilled novelists have written memoirs (see, *On Writing: A Memoir of the Craft* and *Writing Places*) to the fact that they write each day, consistently to improve their craft.

         Within the present studies, preservice teachers who reported writing more during the week, showed higher levels of self-efficacy for writing and writing instruction. While I did not analyze whether high self-efficacy results in more writing or more writing results in high self-efficacy, it is clear that a connection exists. This same connection is seen in instructors. Those instructors who reported working on multiple

projects had more positive attitudes about writing. Those attitudes influence the preservice teachers. Preservice teachers of instructors with more positive attitudes about writing showed greater overall gains in self-efficacy.

These findings indicate two implications for teacher education programs. First, teacher educators need to be encouraging students to write daily in their classes. This writing can include self-reflections on content learned in class, evaluations of teaching practices observed, or research-based essays about teaching strategies, theories, or policies. Second, teacher educators ideally should writing daily as well to harness positive attitudes about writing, which are transferred to preservice teachers. Being involved in research, writing about their teaching practice, or reflecting on their students' progress can impact the instructors' teaching practice and view on writing.

Impact of Collaboration

  Working collaboratively in groups has been shown to increase student achievement and performance in K-12 students (Johnson, Johnson, & Stanne, 2000). Writing research shows that when writing collaboratively, writers develop a greater sense of themselves as writers. Therefore, collaboration between teacher educators and preservice teachers, focusing specifically on writing, shows increased levels of self-efficacy for writing.

From the classroom observations, I found that writing-intensive course instructors allowed preservice teachers to work in small groups more than general education instructors. Writing-intensive instructors also allowed students to peer- and self-evaluate work in class sessions. Writing-intensive instructors also showed greater gains in preservice teachers' self-efficacy for writing and writing instruction. The

combination of spending more time in groups could be contributing to overall positive feelings about writing.

Sociocultural theory posits that writing does not occur in isolation, but instead is a constant collaboration between peers and teachers (Prior, 2006). In fact, through a sociocultural lens, every piece of writing is co-authored with teachers and students. This approach allows students to consistently learn from more knowledgeable others' about the different techniques and strategies for writing. As the teaching profession becomes increasingly collaborative in nature, this approach also allows preservice teachers to learn the basics of working with their soon-to-be teaching colleagues while improving their writing knowledge. Integrating collaborative writing tasks and opportunities into teacher education programs can help serve both purposes of building collaboration skills in general and building writing knowledge.

Implications

In conclusion, this compendium of three manuscripts from one larger study illuminate several concerns with undergraduate teacher education programs and address several topics debated in writing research:

- The instructor still has the largest influence over preservice teachers and their beliefs about writing

- The current debate about teachers being writers or teachers being effective writing instructors begs researcher to choose a side; however, this dissertation shows that both elements are critical in aiding preservice teachers

- Writing self-efficacy beliefs are linked with exposure to writing components and elements

- Positive beliefs about writing are influenced through continued, consistent practice of writing

- Writing collaboratively also contributed to increases in self-efficacy beliefs

- Writing remains ill-defined and an elusive construct for both instructors and preservice teachers

- Increasing course requirements does not correlate to additional course mastery

Results from this study should be used to support policy decisions, like the recent changes to the SAT. Rather than simply making changes based on commonly-held societal opinions about writing, these decisions should be informed by research. For example and relating to the recent changes to the SAT, research shows that writing is a key indicator of success in school, yet the writing tasks on the SAT are being minimized and made optional. These changes do not reflect research intentions. Policy changes should be grounded in practice to better serve K-12 students and preservice teachers. Future research is needed in all these domains, but this dissertation is a starting point to begin filling these gaps.

REFERENCES

Amrein-Beardsley, A., Collins, C., Polasky, S. A., Sloat, E. F. (2013). Value-added model (VAM) research for educational policy: Framing the issue. *Education Policy Analysis Archives, 21*(4), 2-9.

Appelgate, A. J., & Applegate, M. D. (2004). The Peter Effect: Reading habits and attitudes of preservice teachers. *The Reading Teacher, 57*(6), 554-563.

Applebee, A. N., & Langer, J. A. (2009). What is happening in the teaching of writing? *English Journal, 98*(5), 18-28.

Atwell, N. (1998). *In the middle: New understandings about writing, reading, and learning* (2nd ed.). Portsmouth, NH: Boynton/Cook.

Austin, P. C. (2011). An introduction to propensity score methods for reducing the effects of confounding in observational studies. *Multivariate Behavioral Research, 46*(3), 399-424.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84,* 191-215.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52,* 1-26.

Beal, S. J., & Kupzyk, K. A. (2014). An introduction to propensity scores: What, when and how. *The Journal of Adolescence, 34*, 66-92.

Bifue-Ambe, E. (2013). Developing successful writing teachers: Outcomes of

    professional development exploring teachers' perception of themselves as writers

    and writing teachers and their students' attitudes and abilities to write across the

    curriculum. *English Teaching: Practice and Critique, 12*(3), 137-156.

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956).

    Taxonomy of educational objectives: The classification of educational goals.

    New York: David McKay Company.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature*

    and design. Harvard University Press: Cambridge, MA.

Bronfenbrenner, U., and Ceci, S. J. (1994). Nature-nurture reconceptualized in

    developmental perspective: A ecological model. *Psychological Review, 101*(4),

    568-586.

Bronfenbrenner, U., & Evans, G. W. (2000). Developmental science in the 21st century:

    Emerging questions, theoretical models, research designs and empirical findings.

    Social Development, 9(1), 115-125.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In

    Lerner, R. M. (Ed.), *Handbook of child psychology* (5th edition, Volume 1) (pp.

    993-1028). New york: Wiley.

Brownell, S. E., Prices, J. V., & Steinman, L. (2013). A writing-intensive course

    improves biology undergraduates' perception and confidence of their abilities to

    read scientific literature and communicate science. *Advances in Physiological*

    Education, 37, 70-79.

Bruning, R., Dempsey, M., Kauffman, D. F., McKim, C., & Zumbrunn, S. (2013). Examining dimensions of self-efficacy for writing. *Journal of Educational Psychology, 105(*1), 25-38.

Century, J., Rudnick, M., & Freeman, C. (2010). A framework for measuring fidelity of implementation: A foundation for shared language and accumulation of knowledge. *American Journal of Evaluation, 31*, 199-218.

Chetty, R. (2012). Great teaching: Measuring its effects on students' future earnings. *Education Next, 12*(3), 58-64.

Chinn, C. A., & Brewer, W. F. (1993). The role of anomalous data in knowledge acquisition: A theoretical framework and implications for science instruction. *Review of Educational Research, 63*(1), 1-49.

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.

Cleophas, T., & Zwinderman, A. (2012). Propensity score matching. In T. J. Cleophas & A. H. Zwinderman (Eds.), *Statistics applied to clinical students* (pp. 329-336). Netherlands: Springer.

Colby, S. A., & Stapleton, J. N. (2006). Preservice teachers teach writing: Implications for teacher educators. *Reading Research and Instruction, 45*(4), 353-376.

Coskie, T. L., & Hornof, M. M. (2013). E-best principles: Infusing technology into the writing workshop. *The Reading Teacher, 67*(1), 54-58.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing among five*

approaches (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Cutler, L., & Graham, S. (2008). Primary grade writing instruction: A national survey. *Journal of Educational Psychology, 100*(4), 907-919.

Daddona, P. (2013). Writing across the K12 curriculum. *District Administration, 49*(2), 33-34.

Daly, J. A., & Miller, M. D. (1975). The empirical development of an instrument to measure writing apprehension. *Research in the Teaching of English, 9*(3), 242-249.

Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: Are implementation effects out of control? *Clinical Psychology Review, 18*(1), 23-45.

Darling-Hammond, L., Amrein-Beardsley, A., Haertel, E., & Rothstein, J. (2012). Evaluating teacher evaluation. *Phi Delta Kappan, 93*(6), 8-15.

Dempsey, M. S., PytlikZillig, L. M., & Bruning, R. H. (2009). Helping preservice teachers learn to assess writing: Practice and feedback in a web-based environment. *Assessing Writing, 14,* 38-61.

Dewey, J. (1938). *Experience and education.* New York: Collier Books.

Elbow, P. (1998). *Writing with power: Techniques for mastering the writing process.* New York: Oxford University Press.

Elbow, P. (2004). Writing first! *Educational Leadership, 62*(2), 8-13.

Farris, C., & Smith, R. (1992). Writing-intensive courses: Tools for curricular change. In S. H. McLeod & M. Soven (Eds.), *Writing across the curriculum: A guide to developing programs* (pp. 71-86). Newbury Park, CA: Sage Publications.

Faulkner, M. (2013). Remediating remediation: From basic writing to writing across the curriculum. *CEA Forum, 42*(2), 45-60.

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication, 32*(4), 365-387.

Fogarty, M. S. (2012). *A two-study investigation of fidelity of early reading interventions: Examining the quality of the research base and an application of program differentiation* (Doctoral dissertation). Retrieved from http : / /hdl .handle .net /1969 .1 /ETD -TAMU - 2012 -08 -11667.

Garbarino, J., & Abramowitz, R. H. (1992). The ecology of human development. In J. Garbarino (Ed.). *Children and families in the social environment* (2nd edition) (pp. 11-33). New York: Aldine de Gruyter.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76,* 569-582.

Gorsuch, R. L. (1983). *Factor analysis* (2nd edition). Hillsdale, NJ: Erlbaum.

Graham, S. (2006). *Writing*. In P. Alexander & P. Winne (Eds.). *Handbook of educational psychology* (pp. 457-478). Mahwah, NJ: Erlbaum.

Graham, S., Berninger, V., & Abbott, R. (2012). Are attitudes toward writing and reading separable constructs? A study with primary grade children. *Reading and Writing Quarterly, 28,* 51-69.

190

Graham, S., Gillespie, A., & McKeown, D. (2013). Writing: importance, development, and instruction. *Reading and Writing Quarterly, 26*(1)*,* 1-15.

Graham, S., Harris, K. R., Fink, B., & MacArthur, C. A. (2001). Teacher efficacy in writing: A construct validation with primary grade teachers. *Scientific Studies of Reading, 5*(2), 177-202.

Graham, S., Harris, K. R., MacArthur, C., & Fink, B. (2002). Primary grade teachers' theoretical orientations concerning writing instruction: Construct validation and a nationwide survey. *Contemporary Educational Psychology, 27*(2)*,* 147-166.

Graham, S., & Hebert, M. (2010). *Writing to read: Evidence for how writing can improve reading.* A report from the Carnegie Corporation of New York.

Graham, S., & Perin, D. (2007). A meta-analysis of writing instruction for adolescent students. *Journal of Educational Psychology, 99*(3), 445-476.

Grauerholz, L. (1999). Creating and teaching writing-intensive courses. *Teaching Sociology, 27*(4)*,* 310-323.

Gresham, F. M., MacMillan, D. L., Beebe-Frankenberger, M. E., & Bocian, K. M. (2000). Treatment integrity in learning disabilities intervention research: Do we really know how treatments are implemented? *Learning Disabilities Research & Practice, 15*(4), 198-205.

Grisham, D. L., & Wolsey, T. D. (2011). Writing instruction for teacher candidates: Strengthening a weak curricular area. *Literacy Research and Instruction, 50*(4)*,* 348-364.

Grissom, R. J., & Kim, J. J. (2012). *Effect sizes for research: Univariate and*

multivariate applications (2nd Ed.). New York: Routledge.

Grossman, P., Hammerness, K., & McDonald, M. (2009). Redefining teaching, re-imagining teacher education. *Teachers and Teaching: Theory and Practice, 15*(2), 273-289.

Hall, A. H., & Grisham-Brown, J. (2011). Writing development over time: Examining preservice teachers' attitudes and beliefs about writing. *Journal of Early Childhood Teacher Education, 32,* 148-158.

Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school.* New York: Teachers College Press.

Harris, K. R., & Graham, S. (1996). *Making the writing process work: Strategies for composition and self-regulation.* Cambridge, MA: Brookline Books.

Harris, K. R., Graham, S., & Mason, L. H. (2006). Improving the writing, knowledge, and motivation of struggling young writers: Effects of self-regulated strategy development with and without peer support. *American Educational Research Journal, 43*(2), 295-340.

Hayes, J. R. (1996). A new framework for understanding cognition and affect in writing. In C. M. Levy, & S. Ransdell (Eds.). *The science of writing: Theories, methods, individual differences, and applications,* (pp. 1-27). Mahwah, NJ: Erlbaum.

Hayes, J. R. (2006). New directions in writing theory. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.). *Handbook of writing research,* (pp. 28-40). New York: Guilford.

Hodges, T. S., McTigue, E. M., Douglass, A. G., Weber, N. D., Wright, K. L., & De la

Garza, A. (*in press*). *Instructor influences on preservice teachers.* In Y. Li & J.

Hammer (Eds.). *Teaching at Work.*

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure

analysis: Conventional criteria versus new alternatives. *Structural Equation*

Modeling, 6, 1-55.

Joshi, R. M., Treiman, R., Carreker, S., & Moats, L. C. (2008). How words cast their

spell: Spelling is an integral part of learning the language, not a matter of

memorization. *American Educator,* 6-16 and 42-43.

Kaufman, D. K. (2009). A teacher educator writes and shares student perceptions of a

publicly literate life. *Journal of Teacher Education, 60*(3), 338-350.

Kennedy, K., & Archambault, L. (2012). Offering preservice teachers field experiences

in K-12 online learning: A National survey of teacher education programs.

Journal of Teacher Education, 63(3), 185-200.

Kenney, R., Shoffner, M., & Norris, D. (2014). Reflecting on the use of writing to

promote mathematical learning: An examination of preservice mathematics

teachers' perspectives. *Teacher Educator, 49*(1), 28-43.

Kiuhara, S., Graham, S., & Hawken, L. (2009). Teaching writing to high school

students: A national survey. *Journal of Educational Psychology, 101,* 136-160.

Kolb, K. H., Longest, K. C., & Jensen, M. J. (2013). Assessing the writing process: Do

writing-intensive first-year seminars change how students write? *Teaching*

Sociology, 4(1), 20-31.

Kumashiro, K. K. (2015). *Review of proposed 2015 federal teacher preparation*

regulations. Retrieved from http://nepc.colorado.edu/thinktank/review-proposed-teacher-preparation

Lumina. (2015). *Through regulation or funding policy, enact credit hour limits, except in the rare cases in which program accreditation requires otherwise.* Retrieved on January 31, 2015 from http://strategylabs.luminafoundation.org/higher-education-state-policy-agenda/core-element-three/action-16/

Mackenzie, N., & Hemmings, B. (2014). Predictors of success with writing in the first year of school. *Issues in Educational Research, 24*(1), 41-54.

Martin, S. D., & Dismuke, S. (2015). Teacher candidates' perceptions of their learning and engagement in a writing methods course. *Teaching and Teacher Education, 46*, 104-114.

Mason, L. H. (2004). Explicit self-regulated strategy development versus reciprocal questioning: Effects on expository reading comprehension among struggling readers. *Journal of Educational Psychology, 96*(2), 283-290.

Massengrill, R. P. (2011). Sociological writing as higher-level thinking. *Teaching Sociology, 39*(4), 371-381.

McCarthey, S. J., Woodard, R., & Kang, G. (2014). Elementary teachers negotiating discourse in writing instruction. *Written Communication, 31*(1), 58-90

Meyers, L. S., Gamst, G., & Guarina, A. J. (2013). *Applied multivariate research: Design and interpretation* (2nd ed.)*.* Thousand Oaks, CA: Sage.

Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R., & Callazo, T. (2004).

Working toward third space in content area literacy: An examination of everyday funds of knowledge and discourse. *Reading Research Quarterly, 39*(1), 38-70.

Morgan, D. N. (2010). Preservice teachers as writers. *Literacy Research and Instruction, 49*(4)*,* 352-365.

Nagengast, B., Marsh, H. W., Hau, K-T. (2013). Effects of single-sex schooling in the final years of high school: A comparison of analysis of covariance and propensity score matching. *Sex Roles, 69*, 404-422.

National Center for Education Statistics (2012). *The Nation's Report Card: Writing 2011* (NCES 2012–470). Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

National Commission on Writing (April, 2003). The neglected "R": The need for a writing revolution. New York: College Board. Retrieved from http://www.writingcommission.org/prod_downloads/writingcom/writing-school-reform-natl-comm-writing.pdf

National Commission on Writing. (2004). *Writing: A ticket to work…or a ticket out.* New York: College Board.

National Governors Association. (2010a). *Common Core State Standards*. Washington DC: National Governors Association Center for Best Practices, Council of Chief State School Officers.

Nystrand, M. (2006). The social and historical context for writing research. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.). *Handbook of writing research,* (pp. 11-27)*.* New York: Guilford.

O'Connell, A. A., &McCoach, D. B. (2008). *Multilevel modeling of educational data.* Charlotte, NC: Information Age Publishing Inc.

O'Shaughnessy, L. (2014, April 16). College board reveals SAT changes: What to expect. CBS *Moneywatch.* Retrieved from http://www.cbsnews.com/news/college-board-reveals-sat-changes-what-to-expect/

Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading and Writing Quarterly, 19*(2), 139-158.

Pajares, F., & Valiante, G. (2006). Self-efficacy beliefs and motivation in writing development. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.). *Handbook of writing research,* (pp. 158-170). New York: Guilford.

Patton, M. L. (2009). *Understanding research methods: An overview of essentials.* Glendale, CA: Pyrczak Publishing.

Prior, P. (2006). A sociocultural theory of writing. In C. A. MacArthur, S. Graham, & J. Fitzgerald (Eds.). *Handbook of writing research,* (pp. 54-66). New York: Guilford.

Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods* (2nd Ed.). Thousand Oaks, CA: Sage.

Reiss, Jr., A. R. (1971). Systematic observation of natural social phenomena. *Sociological Methodology, 3*, 3-33.

Rinke, C. R., Mawhinney, L., & Park, G. (2014). The apprenticeship of observation in

career contexts: A typology for the role of modeling in teachers' career paths. *Teachers and Teaching: Theory and Practice, 20*(1), 92-107.

Ritter, J. K. (2012). Modeling powerful social studies: Bridging theory and practice with preservice elementary teachers. *The Social Studies, 103*(3), 117-124.

Rosenbaum, P. R., & Rubin, D. B. (1983). The central role of the propensity score in observational studies for causal effects. *Biometrika 70*(1), 41-55.

Ross, S. M., & Smith L. J. (1996). *Classroom observation measure observer's manual*. Memphis, TN: University of Memphis, Center for Research in Educational Policy.

Ross, S. M., Smith, L. J., Alberg, M., & Lowther, D. (2004). Using classroom observation as a research and formative evaluation tool in educational reform: The school observation measure. In H. C. Waxman, R. G. Tharp & R. S. Hilberg (Eds.), *Observational research in U.S. classrooms: New approaches for understanding cultural and linguistic diversity* (144-173). Cambridge, UK: Cambridge University Press.

Rubin, D. B. (1977). Assignment to treatment group on the basis of a covariate. *Journal of Educational and Behavioral Statistics, 2*(1), 1-26.

Scherrer, J. (2012). What's the value of VAM (value-added modeling)? *Phi Delta Kappan, 93*(8) 58-60.

Shanahan, C., & Shanahan, T. (2014). The implications of disciplinary literacy. *Journal of Adolescent & Adult Literacy, 57*(8), 628-631.

Shanahan, T., & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents:

Rethinking content-area literacy. *Harvard Educational Review, 78*(1), 40-59.

Silvia, P. J. (2007). *How to write a lot: A practical guide to productive academic writing.* Washington, D. C.: American Psychological Association (APA).

Siwatu, K. O. (2011). Preservice teachers' sense of preparedness and self-efficacy to teach in America's urban and suburban schools: Does context matter? *Teaching and Teacher Education, 27*(2)*,* 357-365.

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education, 26*(4)*,* 1059-1069.

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science, 12*(2)*,* 257-285.

Sweller, J., Ayres, P., & Kalyuga, S. (2011). *Cognitive load theory.* New York: Springer.

Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences.* Thousand Oaks, CA: Sage.

Texas Education Agency. (2013). *Certified teacher demographics by preparation route 2008-2012* (Data file). Retrieved from http://tea.texas.gov/index2.aspx?id=5033&menu_id=680&menu_id2=-1%27&ekfxmen_noscript=1&ekfxmensel=e9edebdf8_680_2147483690.

Thompson, B. (Ed.) (2002). *Score reliability: Contemporary thinking on reliability issues.* Thousand Oaks, CA: Sage.

Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding*

concepts and applications. Washington, DC: American Psychological Association.

Thompson, B. (2006). *Foundations of behavioral statistics: An insights-based approach.* New York: Guilford.

Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*(2), 202-248.

Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Tschannen-Moran, M., & Johnson, D. (2011). Exploring literacy teachers' self-efficacy beliefs: Potential sources at play. *Teaching and Teacher Education, 27*(4), 751-761.

Wang, H., Hall, N. C., & Rahimi, S. (2015). Self-efficacy and causal attributions in teachers: Effects on burnout, job satisfaction, illness, and quitting intentions. *Teaching and Teacher Education, 47*, 120-130.

Waxman, H. C., & Padrón, Y. N. (2004). The uses of the Classroom Observation Schedule to improve classroom instruction. In H. C. Waxman, R. G. Tharp, & R. S. Hilberg (Eds.), *Observational research in U. S. classrooms: New approaches for understanding cultural and linguistic diversity* (pp. 72-96). Cambridge, UK: Cambridge University Press.

Waxman, H. C., Padrón, Y. N., Franco-Fuenmayor, S. E., Huang, S. L. (2009). Observing classroom instruction for ELLs from student, teacher, and classroom perspectives. *Texas Association for Bilingual Education Journal, 11*(1), 63-95.

Whitney, A. E., & Friedrich, L. (2013). Orientations for the teaching of writing: A legacy of the National Writing Project. *Teachers College Record, 115*(7), 1-37.

Woolfolk Hoy, A., Davis, H., & Pape, S. J. (2006). Teacher knowledge and beliefs. In P. Alexander & P. Winne (Eds.), *Handbook of educational psychology* (pp. 715-737). Mahwah, NJ: Erlbaum.

Yancey, K. B. (2004). Using multiple technologies to teach writing. *Educational Leadership, 62*(2), 38-40.

Yildirim, K., & Ates, S. (2012). Turkish pre-service teachers' perceived self-efficacy beliefs and knowledge about using expository text as an instructional tool in their future classroom settings. *Australian Journal of Teacher Education, 37*(8), 1-27.

Zimmerman, B. J., & Bandura, A. (1994). Impact of self-regulatory influences on writing course attainment. *American Educational Research Journal, 31*(4), 845-862.

Zimmerman, B. S., Morgan, D. N., & Kidder-Brown, M . K. (2014). The use of conceptual and pedagogical tools as mediators of preservice teachers' perceptions of self as writers and future teachers of writing. *Action in Teacher Education, 36*(2), 141-156.

APPENDIX A INSTRUCTOR OBSERVATION INSTRUMENT (SYSTEMATIC)

Date: Observer ID:

Instructor ID: Length of Observation: # of Students:

(30 second time intervals)	1	2	3	4	5	6	7	8	9	10	Total
Setting (check all that apply)											
Whole class											
Small group (more than 2 students)											
Dyads (2 students)											
Individual											
Other:											
Interactions (check all that apply)											
No interaction											
With student(s) (instructional)											
With student(s) (managerial)											
With student(s) (social, personal)											
With student(s) (collaborative)											
With students(s) (providing feedback)											
Other:											
Purpose of Interaction (check all that are observed)											
Focus on content through writing											
Focus on the writing process											
Focus on the writing-based product											
Connect writing to other disciplines											
Connect writing to real life issues											
Other:											
Focus of Instruction (check all that apply)											
Focus is on course content											
Focus on direct instruction of writing process											
Focus is on direct instruction of writing strategies											

Focus is on modeling writing strategies										
Focus is on practicing writing										
Focus is on how to teach writing										
Focus is on how to assess writing										
Writing Strategies Addressed (check all that are observed)										
Grammar										
Writing Process										
Editing/ Revising Skills										
Sentence Structure										
Organization										
Constructing a Thesis Statement										
Synthesizing Research										
Writing with Evidence/Citation Use										
Word Choice										
Production of Graphics/Visual Aids										
Developing Voice as a Writer										
Self-/Peer-Evaluating Writing										
How to Evaluate and Assess Future Students' Writing										
Writing Conclusions										
Instructional Practices (check all that are observed)										
Student choice of topics for writing (note: can be a limited choice)										
Evidence of rubric use before/during/after the writing process										
Providing templates/examples for writing (published sources, previous students' work, instructor's own writing)										
Prewriting practices (e.g., mapping, planning)										

Referral to Tutoring services (e.g., UPM, Writing Center)												
Metacognitive Prompts (e.g., having students reflect on their own writing progress – both verbal and written prompts)												
Charting progress (having students chart progress)												
Peer feedback during the writing process (e.g., writing groups)												
Goal Setting during writing process												
Group writing (e.g., partners or small groups produce a multiple-authored work)												
Using Electronic Data bases for research organization (e.g. Refworks)												
Low stakes writing (i.e., ungraded, or minimally graded writing assignments to emphasize thinking and processing of content)												
Other:												

1. Briefly sketch the layout of the classroom (include the way the desks are arranged, where students are sitting, and where the instructor's set-up is located).

2. Before beginning the observations: In a few sentences or less, explain what the class will be about today?
   _____

_____

3. Include additional field notes here:

_____

_____

_____

_____

_____

APPENDIX B INSTRUCTOR QUESTIONNAIRE

1. What do you see is the primary **aim(s)** of writing intensive courses?

2. What number of class sessions <u>or</u> percentage of the overall course instruction do you feel you spend on the teaching of writing as in contrast to focusing on the course content? (e.g., a class meets for 14 weeks, you spend 2 weeks doing writing instruction = roughly 15%)

3. How **prepared are your students** for writing at the college level <u>before</u> taking this class? (Please circle)

1	2	3	4
Not at all	Partially	Adequately	Highly

4. How **prepared are your students** for writing at the college level <u>after</u> taking this class? (Please circle)

1	2	3	4
Not at all	Partially	Adequately	Highly

What are the most common gaps/weaknesses in your students writing?

5. How **confident do your students feel** about embarking on a college level long (5+ pages) writing project <u>before</u> taking this class?

1	2	3	4
Not at all	Partially	Adequately	Highly

6. How **confident do your students feel** about embarking on a college level long (5+ pages) writing project <u>after</u> taking this class?

1	2	3	4
Not at all	Partially	Adequately	Highly

What areas may make your students most anxious (e.g., writing process, getting started, editing, sharing)?

7. How **prepared do you feel to teach writing** to preservice teachers?

1	2	3	4
Not at all	Partially	Adequately	Highly

   a. What experiences or training have most influenced how you teaching writing?

   b. In what areas do you feel most prepared to teach writing?

c. In what areas do you feel least prepared to teach writing?

8. How **effective have your writing intensive course(s) been for teaching** writing?

1	2	3	4
Not at all	Partially	Adequately	Highly

a. What are strategies that you have implemented that have been most helpful for facilitating the writing process?

b. What are strategies that you have implemented which have not worked well?

9. Of the following areas, what do you think are the most important ones to focus on in your writing intensive class? (Circle the Top 5)
   o Grammar
   o Editing Skills
   o Sentence Structure
   o Paragraph Structure
   o Organization
   o Revising Skills
   o Constructing a Thesis Statement
   o Synthesizing Research
   o Writing with evidence
   o Word Choice
   o Correct Citation use
   o Production of Graphics/Visuals
   o Developing Voice as a Writer
   o Developing Self-Efficacy as a Writing
   o Teaching students how to self-evaluate writing
   o Teaching students how to use peer evaluation
   o Teaching how to assess & evaluate future students' writing
   o Writing strong conclusions

10. Do you view yourself as a writer?   Select: Yes No

11. If yes, what type of writing do you regularly do?

12. How many projects are you currently working on collaboratively? (Select a range)

0	1-2	3-4	5+

13. Do you prefer working collaboratively or independently when writing? Please explain.

14. Rate the following instructional practices by the frequency that you use them in one semester.

Instructional Strategy	0	1	2-3	4+
Student choice of topics for writing (note: can be a limited choice)				
Rubrics used <u>before</u> the writing process (e.g., preview rubric before commencing writing)				
Rubrics used <u>during</u> the writing process (e.g., do guided revision based on rubric)				
Rubrics used <u>after</u> the writing process (i.e., assessment)				
Providing examples using published sources (e.g., articles, chapters) of the target genre				
Providing examples of previous student work				
Providing models of your own writing.				
Direct modeling of the writing process (e.g., think-alouds)				
Prewriting practices (e.g., mapping, planning)				
Directed in-class Grammar Instruction (e.g., give instruction about common comma mistakes)				
Directed in-class Revision activities (e.g., focus students to revise 1 aspect of writing)				
Directed in-class Editing activities (e.g., use of checklists)				
Number of times students are required to attend a tutoring services (e.g., UPM, Writing Center)				
Metacognitive Prompts (e.g., having students reflect on their own writing progress)				
Charting progress (having students chart progress)				
Peer feedback during the writing process (e.g., writing groups)				
Guided Goal Setting during the writing & revising process				
Group writing (e.g., partners or small groups produce a multiple-authored work)				
Multiple due dates with intermediate drafts for one project				
Calibrated Peer Review (each writing assignment is considered 1 time)				

Using Electronic Data bases for research organization (e.g. Refworks)				
Low stakes writing (i.e., ungraded, or minimally graded writing assignments to emphasize thinking and processing of content)				
Other Strategies:				