LITERACY INSTRUCTIONAL COACHING IN THE REALM OF WRITING: AN EXAMINATION OF WRITING COACHING PRACTICES IN GRADES K-6

by

Jadelyn Abbott

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Jadelyn Abbott

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The following individuals read and discussed the dissertation by student Jadelyn Abbott, and they evaluated the student's presentation and response to questions during the final oral examination. They found that the student passed the final oral examination.

Katherine Landau Wright, Ph.D.	Chair, Supervisory Committee
Sherry Dismuke, Ed.D.	Co-Chair, Supervisory Committee
Hannah Carter, Ph.D.	Member, Supervisory Committee
Peter Boedeker, Ph.D.	Member, Supervisory Committee

The final reading approval of the dissertation was granted by Katherine Landau Wright, Ph.D., Chair of the Supervisory Committee. The dissertation was approved by the Graduate College.

DEDICATION

In dedication to my husband, Levi, who believed in me and gave me the confidence to embark on this challenging journey. I could not have done this without your ongoing love and support. And for my mother, Julie, who has always been my biggest cheerleader.

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ABSTRACT

Due to the lack of focus on writing in teacher preparation programs and in-service professional development, teachers often feel unprepared to teach writing. One way to mitigate these feelings is through the use of literacy instructional coaches. Literacy instructional coaches are specialists who collaborate with teachers to help them develop specific skills, knowledge, and dispositions related to literacy instructional practices and students' literacy performance. Existing research indicates that teachers who receive instructional coaching are more likely to use research-based practices, however, research on writing coaching is minimal. This three-study dissertation explores how literacy coaches are supporting and influencing teachers in writing and writing instruction. Additionally, I examined if and how coach self-efficacy influences their writing coaching practices. In this study, 66 K-6 teachers who are receiving literacy instructional coaching and 115 K-6 coaches completed a researcher-created survey.

In Study I, I used mixed methods procedures to examine how coaches and teachers perceive their instructional coaching related to teaching (1) writing across the curriculum, (2) stages of the writing process, and (3) writing skills. Findings suggest that coaches support teachers in English Language Arts writing but are less frequently supporting teachers in disciplinary writing methods for diverse learners. Additionally, multiple chi-square analyses suggest that coaches and teachers sometimes do not hold the same perception of the frequency of coaching writing practices employed within the K-6 setting. Implications for both researchers and practitioners are discussed.

In Study II, I used survey responses to explore how teachers perceive writing coaching to impact their knowledge, skills, and dispositions toward writing and writing instruction. Results indicate that teaching in writing is sparse, but those who do receive coaching feel more competent and confident in writing instruction. Teachers' preferred writing coaching practices are explored.

Lastly, in Study III, I explored if and how self-efficacy for writing, writing instruction, and teaching writing elements relates to instructional coaches' use of research-based writing practices during their coaching sessions. Through analysis of multiple logistic regressions, I identified that self-efficacy for writing and teaching writing elements predicts the likelihood of a coach using research-based writing practices, while self-efficacy for writing instruction was not a significant predictor of any practices. Implications for administrators and professional development agencies are discussed.

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LIST OF ABBREVIATIONS

ALT	Adult Learning Theory
CCSS	Common Core State Standards
IT-SWI	In-service Teacher Self-Efficacy Writing Inventory
M	Mean
PD	Professional Development
SCT	Social Cognitive Theory
SD	Standard Deviation
TROS-W	Teacher Record Observation Survey-Writing
WAC	Writing Across the Curriculum
WOF	Writing Observation Framework
WSI	Writing Survey Instrument
ZPD	Zone of Proximal Development

CHAPTER I: INTRODUCTION

Writing is an important, yet demanding skill that is often overshadowed by reading in today's classrooms (Graham & Harris, 2019; Shanahan, 2009). Although writing is often put second to reading, it is a critical skill to learn. First, writing is an essential skill to ensure social justice and the ability to engage in civic, political, cultural, and economic discourse (Banks, 2003; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2016). Writing is also fundamental for decision-making, personal empowerment, and participation in local and global social communities (Stromquist, 2005). Furthermore, writing is critical for post-secondary endeavors (i.e., college and career readiness) (Perin, 2013) and benefits multiple aspects of academic knowledge such as reading (Graham & Hebert, 2011), science (Demirdag, 2014; Hand et al., 2004) and other discipline specific subjects (Klien & Boscolo, 2016). While writing is an imperative skill for multiple reasons, findings from national, industry, and educational data suggest that student writing skills need more attention and focus within schools, with only one-quarter of students meeting the proficient level for writing (National Center for Education Statistics, 2017).

Thankfully, since the adoption of the Common Core State Standards (CCSS) in 2010, there has been an increased focus on writing across multiple disciplines (Mo et al., 2014). However, the increased focus on writing observed in CCSS has not increased the quality of writing instruction in today's classrooms (Graham et al., 2012). For instance, many teachers are applying research-based writing practices infrequently (Gilbert &

Graham, 2010) and spend minimal time on explicit writing instruction (De Smedt et al., 2016). The lack of research-based writing practices observed within the classroom is affecting students' motivation to perform at their highest levels (Bruning & Horn, 2000; Boscolo & Gelati, 2013). As Boscolo and Gelati (2013) state, "…instructional practices may influence a student's attitude either negatively or positively. Promoting motivation to write means reconstructing students' attitudes toward writing through activities from which a view of writing as a meaningful activity can emerge" (p. 306). Thus, teachers' instructional practices can not only impact students' writing performance but also their motivation to write.

Even though teacher instruction has shown to have effects on student achievement and motivation (Boscolo & Gelati, 2013; Bruning & Horn, 2000; Nye et al., 2004), previous studies indicate that ample elementary teachers do not view themselves as prepared to integrate effective writing instruction into their classrooms (Brindle et al., 2016; Gilbert & Graham, 2010; Hodges et al., 2019). This lack of preparation for writing instruction may be due to limited opportunities to engage in college writing preparation courses and in-service training opportunities specific to writing (Roberts & Wibbens, 2010). One way to remediate this issue is through sustained, individualized, and content-based professional development (Page-Voth, 2010) that can be provided through instructional coaching (Desimone & Pak, 2017).

Recently, instructional coaching has garnered attention as a means to increase teacher quality and implementation of research-based practices (Deussen et al., 2007; Wilson et al., 2012). Research on instructional coaching has shown positive effects on teachers in multiple subjects and with varying student groups (Hammond & Moore,

2018). For instance, coaching of teachers who serve students with autism showed positive outcomes on teachers' preparedness to implement an effective intervention (Wilson et al., 2012). Coaching has also had positive impacts on teachers of emergent readers (Rezzonico et al., 2015), rural science teachers (Lee et al., 2018), and mathematics student teachers (Averill et al., 2016).

While instructional coaching has shown to be beneficial within these varying contexts, coaching specific to writing is often minimal within school districts (Kane & Rosenquist, 2018). One reason writing coaching may be minimal is due to the current landscape of the profession. For example, some school districts can only afford one or two coaches who are stretched very thin between schools, teachers, and leadership responsibilities (Walpole & Blamey, 2008), and simply, writing may not be their priority. Furthermore, schools often do not have coaches who only coach within one content area. In other words, coaches may not just focus on writing, but may also coach in the domains of reading, classroom management, math, science, etc. Unfortunately, previous research specific to literacy focuses on how coaching impacts teachers' reading instruction (see Deussen et al., 2007; L'Allier et al., 2010), while other literacy subjects are often neglected.

The lack of training, comfort, and self-efficacy that coaches have in writing and writing instruction may also explain why writing coaching is not as prevalent as coaching in reading or other subject areas. For example, if a coach is not comfortable with writing or writing instruction, they may avoid coaching writing and stick to content they feel more comfortable teaching. Through this dissertation, I aim to identify what is happening within writing coaching to provide a better understanding of why writing coaching may

be minimal. I also aim to identify avenues to better support school districts' literacy and writing programs.

Even though there is vast research on instructional coaching, there is a gap in the literature on K-6 instructional coaching in the realm of writing. Some previous research on instructional coaches and writing focuses on the effects of coaching on adult writers (Gardiner et al., 2012), newspaper writers (Wolf & Thomason, 1986), and teachers (Dierking & Fox, 2012; McKeown et al., 2016; Steckel 2009; Tanner et al., 2017), however, the research is sparse. Hence, this dissertation looks to explore if and how K-6 literacy instructional coaches are supporting teachers in writing and writing instruction and if their efforts are helping to solve problems related to lack of training, preparation, and confidence to teach writing effectively. The questions for this inquiry are:

1. Are literacy instructional coaches supporting K-6 teachers in writing and writing instruction? If so, in what ways?
2. Do literacy coaches and teachers hold the same perception of the writing practices and skills most frequently used?
3. How does having an instructional literacy coach influence K-6 teachers' perceived knowledge, skills, and dispositions towards writing and writing instruction? What do K-6 teachers perceive to be the coaching practices that contribute to these influences?
4. Does coach self-efficacy for writing, teaching writing elements, and writing instruction, as measured by the adapted IT-SWI, relate to their writing coaching practices above and beyond years of coaching, years of teaching, amount of

writing courses taken, and the average amount of writing professional development they receive in a year?

Theoretical Frameworks

Below, I discuss the three theoretical lenses that frame this inquiry. In all three studies, I lean on the work of Vygotsky's zone of proximal development (ZPD) and social learning, Knowles's theory of andragogy, and Bandura's construct of self-efficacy embedded within the social cognitive theory. Within this section, I explore each of these theories and discuss (a) a general overview of each theory, (b) how the theories inform this research, (c) other researchers that have used the theoretical underpinnings to frame their work, and (d) how my dissertation adds to previous inquiries. After discussing the three theoretical frameworks, I provide a brief description of how they are all connected.

Sociocultural Theory

Vygotsky (1978) framed learning as a social process where social interaction is critical for learning to occur. More specifically, sociocultural theory values how "social, cultural, and historical processes" shape teaching and learning within the "social context of relationships" (Tharp et al., 2000, p. 44). The sociocultural theory places individuals, such as the teacher, other adults, and more knowledgeable peers, in the crucial role of mediating learning for those trying to learn a new or challenging skill (Gavelek & Raphael, 1996). This mediation of learning occurs within the learner's zone of proximal development (ZPD), which is the distance between a person's actual developmental level and potential developmental level with guidance (Vygotsky, 1978). Guidance within the ZPD can help a person go from needing assistance on a skill, to being able to do it independently (Vygotsky, 1978).

All three studies in this dissertation are viewed through the lens of Vygotsky's sociocultural theory because, through this lens, coaches are considered the mediators of knowledge in their relationships with teachers. Instructional coaches may work within the teacher's ZPD to mediate the transfer of skills from professional development training to their classroom instruction. For instance, teachers may learn many new skills and strategies in professional development, but they may struggle with transferring and transforming the information to meet their current understanding of instruction within their classroom. Transferring knowledge and skills is often difficult for teachers because they either do not know how to apply it on their own or are too set in their current routine to change their teaching (Knight, 2007). Knight (2007) highlights the challenge of changing teacher practice when he noted, "Changing the way we teach requires us to change habits of behavior and changing habits of behavior is not easy" (p. 5). Thus, instructional coaches act as the mediator by providing teacher support within their ZPD, to help them integrate newly learned practices within their instruction. As Teemant et al. (2011) state,

> When coaching focuses on instructional practices, the coach serves as a more knowledgeable other, who assists and collaboratively develops a lesson plan with a teacher, provides data-rich feedback following an observation, and then engages in cycles of reflection and action to support implementation of new practices (pp. 686-687).

When coaches work within a teacher's ZPD, it can help teachers feel less overwhelmed when learning to integrate the new skill on their own. However, expecting too much

change that teachers are not ready for, or trained for, can lead to frustration levels and avoidance of integration of the skills into their classrooms (Teemant et al., 2011).

Not only is this current dissertation informed by Vygotsky's ZPD, but it is also informed by his contention that learning takes place through social interaction. Coaching through social interaction, such as modeling, co-teaching, and collaborative learning, aids teachers in learning and implementing research-based instructional practices. Through this lens, teachers do not learn best in isolation and do not go through stages of learning development on their own; rather, learning and change can be described as "the internalization and transformation of cultural tools that occur as individuals participate in social practice" (Gallucci et al., 2010, p. 549). Coaching is a way for teachers and coaches to learn through their social interactions, and hopefully is a chance for coaches to quicken a teacher's professional growth beyond what they could accomplish alone (Teemant et al., 2011).

Other literature on coaching has also referred to the theoretical underpinnings of Vygotsky's sociocultural theory to inform their research. For instance, Teemant and colleagues (2011) defined and evaluated a sociocultural professional development model of instructional coaching that supports teachers in meeting the needs of diverse learners. Gallucci et al. (2010) drew off the Vygotskian sociohistorical notions and focused on the "interplay between collective and individual spheres such as public learning opportunities and individual practices to highlight the role of the organization in professional learning." Furthermore, Milburn and colleagues (2015) used sociocultural theory to look at coaching effects on educators who teach phonological awareness strategies. While previous researchers have used sociocultural theory to frame their studies, this current

research extends on their inquiries by exploring the coach and teacher relationship from both coach and teachers' perspectives, rather than just teacher perspectives.

When examining instructional coaching, this dissertation highlights the coach and teacher relationship as integral to both teacher and coach learning and growth. Specifically, when coaches interact with teachers through modeling, co-teaching, and collaborative learning, these interactive practices are viewed as more effective for teachers than direct instructional experiences (e.g., professional development, conferences) or teaching in isolation. When teachers interact with coaches through discussions about lesson planning, feedback, and student outcomes specific to their class, coaches gain insights on how to interact and work with multiple teachers within differing ZPDs. Thus, instructional coaching is a way for teachers and coaches to learn from each other through social interactions and is a chance for coaches to quicken a teacher's professional growth.

Adult Learning Theory of Andragogy

All three studies in this dissertation are also informed by Knowles's (1980) adult learning theory (ALT) of andragogy. The ALT of andragogy focuses on how adults learn most effectively and is often defined as "the process of engaging adult learners with the structure of learning experiences" (Swift & Kelly, 2010, p.19). Andragogy emphasizes that adult learners achieve at their highest levels if given the opportunity for experiential self-directed learning (Knowles, 1980). Adult learners are also motivated by their immediate needs and interests, or problems they need to solve (Knowles, 1980). If adults feel the need to learn the material (i.e., relevance to their immediate needs) and perceive the learning experience to align with their goals, they are more likely to learn and less

likely to be reluctant (Knowles, 1980). Adults also need a feeling of mutual trust and respect to be successful learners; this enables them to express their ideas and feel accepted through differences (Knowles, 1980). By using the guidelines of andragogy, adult educators will likely be more successful in working with adult learners (Knowles, 1980). As stated by Larsen and Allen (2014), "Charged with the responsibility of building teacher capacity, literacy coaches must not only have a sound understanding of the content of their coaching area but must also work effectively within the domain of adult learning" (p.1).

All three studies are framed within the ALT of andragogy because instructional coaching involves a relationship where an adult (i.e., teacher) supports and gains knowledge from another adult (i.e., instructional coach). Specifically, these studies examine how coaches are interacting with teachers to help them become more prepared writers and teachers of writing. Andragogy provides a framework for what coaching and teacher relationships should look like for best results in teacher learning and implementation of research-based practices.

Other studies on coaching have used the underpinnings of ALT as a framework for their research. For example, Swift and Kelly (2010) explore adult learning theories and research within the educational community and suggest that professional development should be "on-going, related to personal needs, reflective, involve change, understand human development, and honor intuition and learner experience" (p. 25). Reddy and colleagues (2017) used Knowles's theory of andragogy to explore how a data-driven coaching approach influenced teachers' use of specific evidenced-based instructional and behavioral management practices. They allude to Knowles's (1984)

work by explaining how adult learners are "(a) problem focused and goal oriented, (b) practical in their approach to learning, and (c) able to learn best by doing" (Reddy et al., 2017, p. 47). Thus, coaches should focus on the teachers' goals, encourage teachers to identify immediate areas of improvement, and include active learning. Lastly, Thomas et al. (2015) used Knowles's (1990) work to identify how teacher and coach conversations changed over time. They highlighted the importance of adults learning through active experiences and their desire for control over what is learned (Thomas et al., 2015). This previous research has highlighted the importance of understanding Knowles's ALT of andragogy within the realm of coaching. However, this current research extends on previous literature by helping coaches identify practices specific to writing that will help them become more effective adult educators.

Social Cognitive Theory

This dissertation is also informed by Albert Bandura's (1977) Social Cognitive Theory (SCT). The SCT emphasizes that the human mind is generative and proactive rather than just reactive (Bandura, 2001). In other words, humans do not just thoughtlessly react to a stimulus, but rather, they mindfully make decisions based on their knowledge and previous experiences. When humans are faced with a task, they act mindfully to make desired things happen rather than simply "undergo happenings" (Bandura, 2001, p.5).

SCT considers the unique way in which individuals acquire and maintain behavior, while also considering the social environment in which these behaviors are occurring. SCT considers past experiences, expectations, and expectancies, which all shape the way humans behave (Bandura, 2001). For example, people who are positively

reinforced by previous experiences, are more likely to engage in that specific behavior in the future. Likewise, if the person has a bad experience or feels negatively about their experience, they are less likely to engage in that task in the future. SCT "subscribes to a model of emergent interactive agency. Thoughts are not disembodied, immaterial entities that exist apart from neural events. Cognitive processes are emergent brain activities that exert determinative influence" (Bandura, 2001, p.4).

One significant aspect of SCT is self-efficacy. According to Bandura, self-efficacy is belief in one's ability to carry out a desired course of action (1982). A person's self-efficacy influences the way they think, their actions, and emotional arousal in a situation (Bandura, 1982). Bandura (1982) found that in causal tests, a higher level of self-efficacy led to higher performance on a task and a lower level of emotional arousal. It was also concluded that if a person had high levels of self-efficacy, they would expend more effort and persist longer through a challenging task. Thus, teachers' self-efficacy beliefs are essential to cultivate because they are related to the effort they invest in teaching, the goals they set, their persistence when things do not go smoothly, and their resilience in the face of setbacks (Bandura, 1977). Teachers' self-efficacy contributes to their motivation (Tschannen-Moran & McMaster, 2009) and their willingness to deploy their attention and effort to the demands of a task, even when faced with obstacles (Bandura, 2001, p. 10).

Bandura outlines the four sources of creating and strengthening one's self-efficacy as: (a) mastery experiences, (b) social persuasion, (c) vicarious experiences, and (d) physical states. The most effective way to create a strong sense of self-efficacy is through mastery experiences (Bandura & Ramachaudran, 1994). The effect of a mastery

experience on self-efficacy levels are determined by how successful a person is when completing a task. More specifically, self-efficacy is built when people successfully master a task, however, failure undermines it. The second source of self-efficacy is social persuasion. People who are verbally persuaded that they "possess the capabilities to master given activities are likely to mobilize greater effort and sustain it than if they harbor self-doubts and dwell on personal deficiencies when problems arise" (Bandura & Ramachaudran, 1994, pp. 2-3). Another way of building and increasing self-efficacy is through vicarious experiences. Seeing people with similar abilities as oneself complete a task through extended effort raises the observer's belief that they too have the capabilities to master the skill at hand. And lastly, physiological states can impact self-efficacy beliefs. One's physical reactions to a situation or task can impact how they interpret the situation, which then influences their self-efficacy levels.

When comparing the four sources of self-efficacy to coaching, this dissertation is mainly influenced by three of the sources including social persuasion, vicarious experiences, and mastery experiences. First, throughout the coaching cycle, coaches provide teachers with ample amounts of feedback. When coaches provide positive feedback and encouragement, this is likely to increase teachers' self-efficacy through social persuasion. On the contrary, negative and demeaning feedback can poorly impact teacher self-efficacy. Second, teachers' levels of self-efficacy can be influenced through vicarious experiences. If teachers have the opportunity to observe a high-quality model (e.g., high-quality coach) and believe they too can master the skill, they are likely to have an increased level of self-efficacy for that particular skill. Third, mastery experiences are also relevant to coaching. Coaches should work with a teacher on a specific skill until

they are able to master it and be successful without support. This aligns with the idea of a teacher's ZPD and becoming independent with enough guidance when learning a new skill. Once a teacher masters a skill, they are more likely to have positive beliefs and high levels of self-efficacy when completing the skill.

The SCT, especially the concept of self-efficacy, informs this current study in two more ways. First, this SCT informs Study II because the effects of instructional coaches on teachers' dispositions (e.g., self-efficacy) is examined. Secondly, SCT informs Study III because I investigate instructional coaches' self-efficacy for writing and writing instruction and its relationship to their coaching practices. Since studies have shown teachers' self-efficacy beliefs are related to their efforts and investment in teaching (i.e., the goals they set, their persistence when things do not go smoothly, and their resilience in the face of setbacks) (Assaf et al., 2016; Bandura, 1977; Collet, 2017; Dempsey et al., 2009; Dierking & Fox, 2012; Troia et al., 2011), it is important to see if the same relationship is present with coaches and their investment in coaching.

Other researchers who have explored instructional coaching have investigated coaching through the lens of the SCT and its construct of self-efficacy. For instance, Goker (2006) used Bandura's General Self-Efficacy Scale as a lens for identifying the impact of coaching on teacher's self-efficacy to teach English as a Foreign Language (TEFL). Tschannen-Moran and McMaster (2009) used the SCT framework to determine if self-efficacy to teach reading improved more for teachers who had coaches than those who did not have coaches (but had training and professional development). Furthermore, Ross (1992) examined teacher efficacy and the effects of coaching on student achievement. However, when specifically investigating coaching self-efficacy and its

impact on coaching practices, previous researchers have mostly studied this construct within sports coaching (Chase et al., 2005; Feltz et al., 1999; Kavussanu et al., 2008).

The above-mentioned studies are similar to this dissertation in that they are using self-efficacy as an important indicator of teacher effectiveness, and they investigate coaching impacts on teacher self-efficacy levels. However, this dissertation adds to existing research on self-efficacy by exploring how coaching impacts teacher dispositions specific to writing and how coach self-efficacy impacts their writing coaching practices.

Connection Between Theoretical Frameworks

While all three of these theories have distinct underpinnings that contribute to this research, they all connect to provide an overarching and integrated framework. Taken all together, I view learning as a social phenomenon where coaches should work within teachers' ZPD to help increase teacher levels of self-efficacy. Coaches can increase teachers' levels of self-efficacy by providing both verbal feedback and encouragement (i.e., social persuasions) and vicarious experiences (i.e., modeling). However, since adults learn best from active experiences rather than passive, coaches should act as a mediator by helping teachers become independent with a strategy, and thus, increase their self-efficacy through mastery experiences. In Figure 1.1**,** I provide an overview in how each theory is related to one another and an overall synthesis of how all three come together to frame my dissertation.

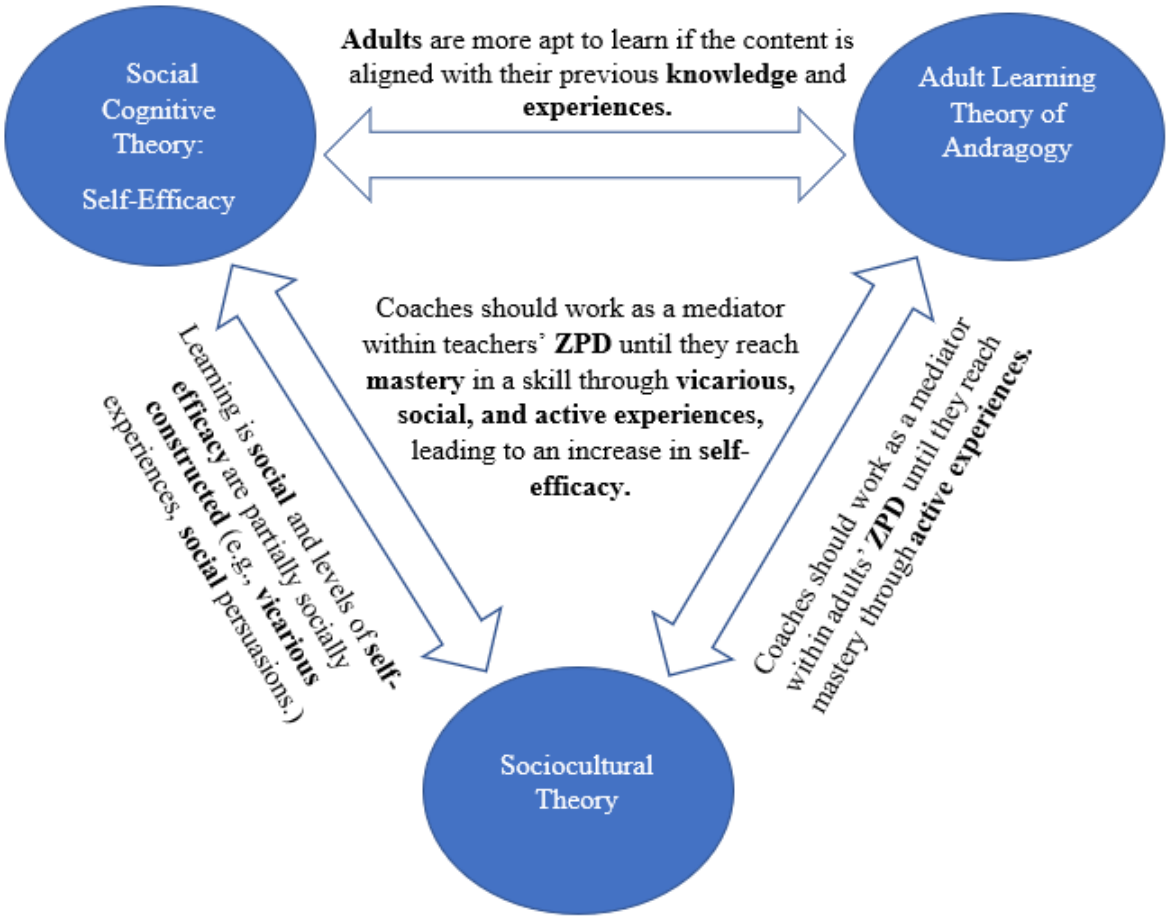

Figure 1.1 Connection Between Theories

Operational Definitions

Before diving into each study, I define key constructs to ensure consistency throughout all three studies.

Instructional Coaches

There are many definitions of instructional coaching and coaches (Denton & Hasbrouck, 2009). Although most instructional coaching programs share several key features, no definition can fully capture the various models of coaching seen in schools (Kraft et al., 2018). Within these working definitions, many contradict each other because

of coaches' numerous roles and expectations within school districts (Kraft et al., 2018). Even though instructional coaching looks different within diverse contexts, many researchers define instructional coaching as a type of ongoing professional development provided by experts (i.e., instructional coaches). For example, according to Knight (2007) an instructional coach is defined as a "professional that collaborates with teachers so they can choose and implement researched-based interventions to help students learn more effectively" (p. 13). Additionally, instructional coaches are "full-time professional developers, on site in schools" (Knight, 2007, p. 12) who help teachers implement what they have learned from a single day professional development into their everyday instruction. This is similar to Joyce and Showers (1981) who characterized literacy coaches as professionals who serve teachers through an "observation and feedback cycle in an ongoing instructional or clinical situation" (p.170).

Other researchers have defined coaching in a similar light but focus more on the relationship aspects of coaching when defining the construct. For example, McKeown and colleagues (2016) define coaching as a "form of professional development that involves a collaborative relationship between an expert and a teacher to help the teacher develop specific knowledge and skills related to practice" (p.1111). All of the provided definitions are related in that instructional coaching is a form of ongoing professional development. For the purpose of this dissertation, I define instructional coaches as professional developers who collaborate with teachers to help them develop specific skills, knowledge, and dispositions related to impacting instructional practices and students' academic performance.

Literacy Instructional Coaching

Many United States school districts are implementing instructional coaching to improve adolescent literacy (Sturtevant, 2003). Key players in this new movement are literacy coaches, defined as experts "who provide essential leadership for the school's entire literacy program" (Sturtevant, 2003, p.11). For this study, I aimed to learn more about instructional coaches who do intensive coaching in literacy. Due to the various titles given to coaches across districts and states, I will use the general term *literacy instructional coach* to avoid narrowing the scope and neglecting participants who may not have the title "literacy coach" but are still actively coaching literacy. Thus, for this study, *literacy instructional coaches* are defined as professional developers who collaborate with teachers to help them develop specific skills, knowledge, and dispositions related to impacting teachers' instructional *literacy* practices and students' *literacy* performance.

Research-Based Writing Practices

Research-based writing practices are defined as instructional practices that researchers have found to create a positive, collaborative, and engaging environment for student learning and achievement. Research-based writing practices are identified by examining professional writers, teachers of writers, and scientific studies of writing interventions (Graham & Harris, 2019). Some examples of research-based writing practices include: (1) creating a supportive classroom, (2) teaching the writing process, (3) teaching writing as an interdisciplinary skill, (4) providing students with clear and specific goals, (5) giving choice in writing topics, (6) making writing authentic, and (7) teaching strategies for each stage in the writing process (Graham & Harris, 2016).

Writing

Simply stated, writing is a way of communicating thoughts and knowledge on paper (both physical and digital) (Miller, 2014). It includes simultaneously engaging cognitive, physical, social, and affective processes to convey a message or idea (Myers et al., 2016). For effective communication, writers need to acquire knowledge of the writing process (i.e., planning, drafting, revising, editing, publishing, and presentation), purposes of writing, audience, and genre, and should be able to adhere to writing's various forms and functions. For the purpose of this study, writing refers to the type of writing most typically taught in English language arts classes. This includes the ability to successfully adhere to English conventions, genre guidelines, and organizational structures. These skills are necessary for effective written communication across an array of writing purposes and expectations.

Three-Article Dissertation

To answer the proposed research questions, I engaged in a three-article dissertation. Below, I describe the three connected studies that constitute my dissertation and how they contribute to the existing literature. In these studies, I explore (1) how instructional coaches are supporting K-6 teachers in writing and writing instruction, (2) if and how teachers perceive their coaching experience has influenced their writing instruction, and 3) if and how coach self-efficacy for writing, writing instruction, and teaching writing elements relates to their coaching practices. In Table 1.1, I demonstrate how I split the research questions into the three studies.

Table 1.1 Research Questions and Study Designs

Study	Research Questions	Study Design
Study I:	1. Are literacy instructional coaches supporting K-6 teachers in writing and writing instruction? If so, in what ways? 2. Do literacy coaches and teachers hold the same perception of the writing practices and skills most frequently being used?	Parallel-Convergent Mixed Methods Design
Study II:	3. Do K-6 teachers perceive that coaches have influenced their knowledge, skills, and dispositions for writing and writing instruction? If so, what do they perceive to be the coaching practices that contribute to these influences?	Parallel-Convergent Mixed Methods Design
Study III:	4. Does coach self-efficacy for writing, writing instruction, and teaching writing elements as measured by the adapted IT-SWI, relate to their writing coaching practices above and beyond years of coaching, years of teaching, amount of writing courses taken, and the average amount of writing professional development they receive in a year?	Quantitative, Logistic Regression

Study I Overview

Due to the lack of writing preparation programs and in-service writing opportunities, teachers often feel unprepared to teach writing. One way to mitigate feelings of unpreparedness is through coaching. Existing research indicates that teachers who receive coaching are more likely to use research-based practices. However, research within the realm of coaching writing is sparse. Through this study, I use survey responses from both K-6 teachers and coaches to identify how coaches are supporting educators in teaching (1) writing across content areas, (2) stages of the writing process, and (3) writing skills. Findings suggest that coaches support teachers in ELA writing but are less frequently supporting teachers in disciplinary learning for diverse learners in content

areas such as science, social studies, and math. Implications for administrators and professional development agencies are discussed.

Study II Overview

Educators often avoid teaching writing due to the complexity of the subject matter and the lack of preparation and training in writing. Teachers' avoidance and feelings of being unprepared often leads to less frequent writing instruction within their classrooms. Literacy coaching is one way to provide support in writing and writing instruction; however, research on writing coaching is inadequate. Through this mixed-methods study, I use survey responses to explore how teachers perceive writing coaching to impact their knowledge, skills, and dispositions toward writing and writing instruction. Results indicate that teaching in writing is sparse, but those who do receive coaching feel more competent and confident in writing instruction. Teachers' preferred writing coaching practices are explored.

Study III Overview

Self-efficacy has shown to be an important variable in teacher effectiveness and longevity. Research indicates that higher levels of self-efficacy result in more resilience and willingness to persevere through challenging tasks such as teaching. However, research on how self-efficacy impacts coaches' effectiveness is scarce. Thus, this study explores if and how self-efficacy for writing, writing instruction, and teaching writing elements relates to instructional coaches' use of research-based writing practices during their coaching sessions. Through analysis of multiple logistic regressions, I identified that self-efficacy for writing and teaching writing elements predicts the likelihood of a coach using research-based writing practices, while self-efficacy for writing instruction was not

a significant predictor of any practices. Implications for administrators and professional development agencies are discussed.

Survey Development and Data Collection

To answer all of the research questions, I developed a survey that was administered to both K-6 teachers and literacy instructional coaches. Since this single survey was used to answer the research questions in all three studies, I describe how the survey was developed and administered below rather than within each individual study. However, I provide more information pertaining to survey items and adaptations specific to each research question within the methods sections of each individual study.

Survey Development

Since there were no published surveys to directly answer all my research questions, I developed a survey. To create the S*upports in K-6 Writing and Writing Instruction* survey, I identified published and researcher-created measures within the realm of writing best practices and literacy coaching. The survey included open-ended, *Yes* or *No*, and 5-point Likert-type questions ranging from *Strongly Agree* to *Strongly Disagree*. *Yes* or *No* questions were utilized rather than *Check All that Apply* to increase the participants' attention to each item (Dillman et al., 2014). A 5-point Likert scale was chosen because scales of this length have shown to be more reliable and valid than those of longer or shorter scales (Dillman et al., 2014). Furthermore, I provided respondents a "neutral" option so that if they were truly neutral on the topic, they were not forced to choose an inaccurate response (Dillman et al., 2014). Literature suggests that whether one provides a neutral survey option or not, has little effect on the resulting quality and conclusions drawn from the data (Andrews, 1984; Schuman et al., 1981).

Since my survey had two participant types (i.e., teachers and coaches), I first created separate survey items; ones specific to teachers and ones specific to instructional coaches. All participants used the same link to complete the survey, and then after answering demographic questions, they were presented with either the teacher or coach version of the survey.

Validity

I selected survey instruments that have been established or were derived from reliable and valid measures. Reliability is required for validity (Wright, 2013). According to McMillan (2007) the reliability of a survey is "concerned with the consistency, stability, and dependability of scores" (as cited in Yu & Richardons, 2015, p. 128). When determining the reliability of a measure, raw alpha scores from 0.7 to 0.8 are deemed as respectable or acceptable, 0.8 to 0.9 are identified as very good, and 0.9 or above the internal consistency is excellent and means the survey items tend to pull together (i.e., a participant who answers positively for one item is more likely to answer positively on other items within that construct) (Arifin, 2017; Blunch, 2008). Below I discuss previous reliability scores of the measures I used to develop the S*upports in K-6 Writing and Writing Instruction* survey.

Five measurement tools were used to develop the survey for this dissertation (See Table 1.2). First was the *Writing Survey Instrument* (WSI) (Cutler & Graham, 2008). For the WSI, the published coefficient alphas were provided for each set of questions. For example, eleven of the items on the survey were specific to supporting students' writing of specific products ($\alpha = .78$), six examined teaching basic writing skills ($\alpha = .84$), four assessed how frequently writing processes were directly taught ($\alpha=.85$), three assessed

more general instructional procedures (α = .62), six addressed motivational activities and procedures (α =.70), four assessed the use of assessment practices (α=. 75), and three items were specific to writing across the curriculum (α = .83). Second, the *Teacher Record Observation Survey- Writing* (TROS-W) (Hodges, 2015) was adapted from the *Teacher Roles Observation Schedule* (Waxman & Padrón, 2004) and had previously documented reliability of .828 and .915 (Hodges, 2015). Third, Hodges's (2015) *In-service Teacher Self-Efficacy Writing Inventory* (IT-SWI) was also embedded into the survey. This instrument was modeled after the *Preservice Teacher Self-Efficacy for Writing Inventory* and previous administrations have yielded alphas ranging from .828 to .915 (Hodges et al., 2021). Since these instruments have shown to be valid when examining a population similar to the population of this dissertation, external validity was also increased.

Reliability scores were not provided for the other two measures used to create this survey (i.e., *Writing Observation Framework, Online Coaching Survey).* However, other information was provided to help reduce threats to internal validity. Research on the *Writing Observation Framework* (WOF) (Henk et al., 2003) provides information on how the measurement was both validated and norm referenced. Similarly, research on the *Online Coaching Survey* (Blamey et al., 2008) indicates that the items were derived from the 2006 International Reading Association (IRA) standards. These standards "rest on understandings about assessment, language, and literacy generated by research over the past 40 years" (National Council of Teachers of English [NCTE]. 2009).

After combining items to create the *Supports in K-6 Writing and Writing* survey*,* I administered pilot surveys. Three literacy experts working in a university piloted both the

teacher and coach survey items. One practicing elementary instructional coach piloted the coaching items and three practicing teachers (1st grade, 3rd grade, and middle school English language arts) piloted the teacher items. I administered the pilot surveys to identify spelling errors, overall cohesiveness, and confusing vocabulary and questions. Table 1.2 further details the measurement tools that I adapted to create the survey.

Table 1.2 Existing Measures Used to Create Survey

Measure	Authors	Description	Score Calculation
Writing Survey Instrument (WSI)	Cutler & Graham (2008)	Provided information about teachers themselves, the composition of their classrooms, their attitudes and perceptions about writing and writing instruction, and their writing practices.	-Frequencies of primary grade teachers' use of specific writing practices -Means of teacher perceptions of their effectiveness of teaching writing (Scale 1-6)
Online Coaching Survey	Blamey et al., (2008)	A 25-item online survey consisted of forced-choice and open-ended questions.	Frequencies of the roles and responsibilities of coaches as collaborators and coaches as evaluators.
Writing Observation Framework (WOF)	Henk et al., (2003)	Writing Observation tool that focuses on classroom climate, teacher practices, and instruction of the writing process	-Evaluator marks each item with an (o) observed, (c) commendation, (r) recommendation, (n) not applicable. -Evaluator averages the amount of each to identify areas of needed training.
Teacher Record Observation Survey- Writing (TROS-W)	Hodges (2015)	Observation tool that focuses on classroom setting, teacher writing instructional practices, and writing strategies addressed	Average scores are calculated from each observation.
In-service Teacher Self-Beliefs Writing Inventory (IT-SWI)	Hodges (2015)	Provides information about in-service teacher self-efficacy for writing, teaching writing elements, and writing instruction.	Average self-efficacy scores are calculated for self-efficacy for writing, writing instruction, and teaching writing elements constructs.

Data Collection

I administered my researcher- created survey titled *Supports in K-6 Writing and Writing Instruction* to answer the research questions proposed in each study. First, I sent the survey through mass email to professional organizations such as ListServs, Facebook

groups, coaching networks, and special interest groups (SIGS) in hopes to get both K-6 teachers and instructional literacy coaches to participate. The email included an abstract explaining the study, the parameters for who can participate, and who will receive a stipend for participating. The stipend included a $50.00 Amazon gift card drawing for every 20 participants.

For SIGs and ListServs, I sent the surveys through Literacy Research Association (LRA) ListServs, the Writing and Literacies SIG ListServ, and ILA's Literacy and Social Responsibility SIG. I also sent the survey through the following American Educational Research Association (AERA) SIG ListServs: Professional Development School Research, Action Research, Classroom Observation, Early Education and Child Development, Rural Education, and School Effectiveness and Improvement. Additionally, I sent the survey to coaching networks such as the Educational Coaching Network, the Illinois Council of Instructional Coaches, the Chicago Coaching Center, the Instructional Coaching Group, and the Idaho Coaching Network. Through email, I sent the survey to personal contacts as well as to addresses that other survey takers provided (i.e., those who submitted prospective participant emails while taking the survey). My supervisors also used email to share the survey with their networks and personal contacts.

In addition to email, I used social media as a form of participant recruitment. First, I joined multiple coaching and teaching groups on Facebook to share my survey. These Facebook groups included: Literacy Coaches Corner, Coaching4 Literacy, Literacy Coaching, Reading Specialist, and Instructional Leaders, AERA Writing and Literacies,

AERA Rural Education, and Language and Learning-Leaders in Literacy. I also used Facebook and Twitter to share my survey with my friends, family, and followers.

Trustworthiness

Lincoln and Guba (1985) identified credibility, transferability, and confirmability as important factors in establishing trustworthiness in qualitative research. Below I discuss the measures I took to increase the trustworthiness of Studies I and II.

To increase trustworthiness in Study I and Study II, I welcomed feedback and scrutiny through debriefings with peers, including other writing teachers as well as my dissertation committee (Anney, 2014). Receiving feedback from peers allowed time for me to challenge my assumptions, refine my methods, develop a greater explanation of my design, and strengthen my arguments (Shenton, 2004). I also examined previous research findings to identify how my study aligned with other results on the topic (Shenton, 2004). In taking these measures, I increased both the credibility (i.e., the confidence that can be placed in the truth of the research findings (Anney, 2014)) and dependability (i.e., "stability of findings over time" (Bitsch, 2005, p.86)) of my study.

Another way I increased the dependability of my study was through the code-recode method. More specifically, I coded all my qualitative data, discussed my codes with a committee member, and then coded the data again to ensure that my codes and categories were consistent. After I code-recoded the data, I checked my coding by having two writing teachers use my categories and codes to complete a sort and see if my categories were clearly defined and the codes made sense within them. I had them do the sorting together so they could discuss why each code belonged in each category. One coder was an elementary teacher, while the other coder was a middle school ELA teacher.

I chose two writing teachers because they have content specific knowledge (e.g., understanding of terms) and pedagogical content knowledge (e.g., understanding of how to teach) within the realm of writing. The inter-rater reliability rate was 94% for Study I and 90% for Study II. Once they completed the sort, we discussed which items they had sorted differently than I did. From that conversation, we decided if I should keep the codes where I had originally categorized them or move the code to a different category.

Furthermore, I provided a subjectivities section (see page 28) to provide readers insight into my potential biases and experience with the constructs of focus (Shenton, 2004). The purpose of providing a subjectivities section was to increase credibility and confirmability (i.e., degree to which the results of an inquiry could be confirmed or corroborated by other researchers" (Anney, 2014, p. 279). I also used reflective commentary by recording (in an e-journal) my initial and ongoing interpretation and impressions of the data (Anney, 2014). Reflective commentary allowed me to make realizations about how I developed my own constructions around the topic and also increased the credibility, dependability and confirmability of this research.

To enable readers to judge how the current findings will transfer to their context, I provided information about the participants, including the state they educate in, the type of school they work in (urban or rural), as well as other demographic information. This increased the transferability, or the degree to which results can be generalized or transferred to other contexts with other respondents (Bitsch, 2005; Tobin & Begley, 2004), of my studies. Lastly, I provided an "in-depth methodological description to allow the integrity of research results to be scrutinized" (Shenton, 2004, p. 73), which increased the confirmability of my studies.

Subjectivities

My previous experiences, beliefs, and assumptions have shaped my decision to research literacy instructional coaching. As a previous teacher myself, I felt unprepared to teach writing, and therefore, I grew interested in wanting to help teachers feel more prepared and comfortable with doing so. Teachers often leave college feeling unprepared to teach writing (Brindle et al.,2016; Gilbert & Graham, 2010; Hodges et al., 2019) just as I did. Then, as they progress through teaching, they often get vague writing professional development opportunities (Roberts & Wibbens, 2010), and are ultimately left teaching writing based on their own K-12 educational experiences. Therefore, I researched this topic to find ways to help teachers feel more confident in their writing instruction. Although previously being a teacher has shaped my interest in this topic, it may have also affected the categories and codes I created based on what stands out to me as most beneficial and the most important to implement into coaching (i.e., looking at it through a teacher lens). To mitigate the biases of my previous experiences, I did reflexive journaling throughout data analysis to note my ongoing interpretations and impressions of the data. In addition, I had two writing teachers (elementary and middle school ELA) do a sort of my categories and codes to make sure they are clear and objective.

Ethical Considerations

To conduct this research, I first ensured that I had the Ethical Procedures Approval from the IRB (approval # 101-SB20-176)**.** I also protected the participants from pressure to participate and privacy risks. For instance, there was a consent form embedded within the first page of the survey. Within the survey, identifying items (e.g., their email address) were optional questions. Additionally, participants could withdraw

from the survey if they did not feel comfortable answering the questions. I keep all data confidential by storing them in privacy folders that were saved on a password-protected computer.

Limitations Across Studies

While I made every effort to be as thorough as possible, a few limitations were present throughout the three studies. First, due to COVID-19, I was not able to conduct observations of teachers and coaches to get a more accurate and nuanced understanding of what is happening within the domain of writing coaching. Therefore, I was only able to collect self-report data sources (i.e., surveys). While self-report tools are easy to administer to large groups and do not disturb the participants during their teaching or coaching activities (Schellings & Van Hout-Wolters, 2011), they often call for the participant to recollect activities and feelings, which may lead to error in accuracy (Veenman, 2011). Thus, the data I collected may have left information about the construct unsurfaced or slightly inaccurate (Schellings & Van Hout-Wolters, 2011).

A second limitation was that the survey I used was researcher-created. While I combined multiple published, reliable, and valid surveys, I have not validated the survey as a whole. Additionally, to be able to answer all the research questions, the survey was lengthy and had multiple short answer items, which may have caused survey fatigue in some participants. If teachers and coaches decided the survey was too long and did not complete it, I may have lost data that could have been valuable for analysis. Due to the survey's length, teachers and coaches may not have been as thoughtful or thorough when answering the items at the back end of the survey. To try to remediate this limitation, I

did a $50 Amazon gift card drawing for every 20 participants that completed the survey. Other limitations specific to each study are included in the subsequent chapters.

CHAPTER II: K-6 LITERACY INSTRUCTIONAL COACHING PRACTICES IN WRITING AND WRITING INSTRUCTION

Since the adoption of Common Core State Standards in 2010, writing instruction has gained attention, particularly writing across disciplines (Mo et al., 2014). However, due to the lack of pre-service and in-service training in writing instruction, elementary teachers are often left unprepared to teach writing, nonetheless teach writing in multiple content areas (Brindle et al., 2016; Gilbert & Graham, 2010; Hodges et al., 2019). In order to better support teachers in their writing and writing instruction, it is important to identify the strategies and practices instructional coaches are utilizing within the domain of writing. Identifying how coaches are supporting teachers in writing will allow us to begin to explore if writing and writing instruction are areas of needed attention when training coaches for literacy instruction.

Literacy coaching in writing is a vastly understudied topic. Through this study, I aim to supplement the sparse research in the field. I investigate how literacy coaches are supporting teachers in teaching writing and writing instruction and if teachers and coaches hold the same perception of the frequency of writing coaching practices being employed. These findings will allow school administrators and professional development agencies to identify whether coaches need further training in writing and writing instruction. If coaches need further training, this study will help identify possible gaps in coach knowledge and usage of research-based practices. Results will also provide useful information for faculty members designing undergraduate and graduate level literacy

specialist programs. Overall, the purpose of this study is to identify if and how literacy instructional coaches are supporting teachers in writing and writing instruction.

Research Question and Hypothesis

To address the purpose of this research study, I will investigate the following research questions and hypotheses:

1. Are literacy instructional coaches supporting K-6 teachers in writing and writing instruction? If so, in what ways?
2. Do coaches and teachers hold the same perception of the writing coaching practices most frequently being used?

H0= The frequency of writing coaching practices and skills reported is unrelated to whether the participant is a teacher or a coach.

H1= The frequency of writing coaching practices and skills reported is related to whether the participant is a teacher or a coach.

Literature Review

In the following section, I discuss the impact of instructional coaching on teacher effectiveness. I will then review best coaching practices before discussing research specific to (1) writing across the curriculum, (2) the writing process, and (3) writing instruction and strategies.

Impact of Writing Coaching on Teacher Effectiveness and Student Achievement

Writing coaching has shown to influence teachers' dispositions toward writing as well as their writing instructional practices. For example, Hall (2016) identified that teachers who received one-on-one coaching show more confidence in their ability to teach point of view, clincher sentences, grammar, syntax, and colons and semicolons.

Teachers also revealed more confidence in their ability to teach various genres (e.g., narrative, informative, persuasive). The teachers who received one-on-one coaching on a new writing instructional skill showed higher levels of self-efficacy before, during, and after their session. Similarly, Steckel (2009) identified that teachers who receive coaching in writing are more likely to (1) use formative assessments, (2) match materials to instructional needs, (3) collect and organize materials in classroom libraries, (4) take part in teacher-led, small group guided writing sessions, (5) confer with individual students to provide feedback, (6) allot more time to writing, (6) provide opportunities for student choice in writing topics, and (7) model skills for students based on their needs.

Researchers have also explored how writing coaching has influenced student achievement. McKeown and colleagues (2016) identified that coaching teachers in self-regulated strategy development (SRSD) influenced students' use of story elements in their writing, though it did not influence their holistic quality of writing. Professional development on early literacy interventions followed by literacy coaching has also had positive effects on the general classroom environment and student achievement (Powell et al., 2010). Children in classrooms that received coaching on interventions had significant gains in letter knowledge, concepts about print, and writing, amongst other skills when compared to students in classrooms whose teachers did not receive instructional coaching on interventions (Powell et al., 2010). This is similar to findings by Garcia (2012) who concluded that schools with instructional coaches had higher writing performance on state tests than those who did not utilize instructional coaches. However, this finding was only significant for 8th-grade classrooms.

While there is some research specific to the impacts of writing coaching on teacher instruction and student achievement, there is sparse research specifically on strategies that coaches are employing to support teachers in writing. Thus, this study looks to extend current research to learn more about writing coaching.

Researched-Based Coaching Practices

Below I discuss some practices research suggests are effective when coaches work with teachers. This includes (1) providing teacher-oriented support, and (2) providing support before, during, and after a writing lesson or unit (i.e., the coaching cycle).

Teacher-Oriented Coaching

One key component to literacy coaching is being teacher-oriented. There are various types of coaches in today's schools, some are data-oriented (i.e., work with assessment data), some are student-oriented (i.e., work directly with students throughout the day), others are managerial coaches (i.e., facilitate meetings and complete paperwork), and some are teacher-oriented coaches (i.e., who work directly with teachers) (Deussen et al., 2007). Being a teacher-oriented coach is a key component to coaching because the goal of literacy coaching is to help teachers integrate research-based literacy practices into their instruction and become more confident in doing so (Knight, 2007).

If coaches are teacher-oriented, they are better able to meet the teacher where they are at and differentiate their coaching style and instruction based on their needs. Based on the theory of andragogy, and adults' willingness to learn, "adults themselves are at different stages of development and are ready to learn different things and in

different ways" (Knowles, 1980, p.51). Thus, it is important to make literacy coaching relevant to each teacher and how they learn best. If coaches are working with teachers rather than students, data, or paperwork, they are more likely to benefit more students through increased teacher quality and capacity. While research suggests that teaching-oriented coaching models are best for building capacity, more research is needed specific to how coaches spend their time supporting teachers within writing and writing instruction.

The Coaching Cycle

Another key component of coaching is providing teachers ample support throughout the entire process of learning and implementing researched-based practices, also known as the coaching cycle (Eisenberg, 2015). A coaching cycle is a continuous series of steps that coaches follow when working with teachers to improve their effectiveness and use of research-based strategies in the classroom. Throughout this process, literacy coaches should partake in a gradual release of responsibility, where they provide more modeling in the beginning stages of a new strategy. Then, slowly, coaches give more control to the teacher while observing, giving feedback, and helping the teacher reflect on their growth towards their goals (Collet, 2012). Eventually, the teacher should become independent in that particular writing instruction practice, and with the coach's guidance, decide on next steps in writing instruction and practices that align with their needs, the writing curriculum, as well as research-based writing practices in writing instruction. Then the coaching cycle continues with a new set of goals.

Instead of a linear set of steps, a coaching cycle is circular, which allows teachers to reflect and adapt practices based on their (and their students') needs (Eisenberg, 2015).

Until the teacher can implement a new skill on their own, the coaching cycle ensures repetitions (Eisenberg, 2015). One of the ways for coaches to support effective instructional writing practices is through the approach called the *Before, During, and After* (BDA) cycle of consultation (Eisenberg, 2015). Hall (2016) identified that the one-on-one coaching using the BDA model increases teachers' reported self-efficacy related to writing instruction. Figure 2.1 provides an overview of the elements that typically make up the three stages of a BDA coaching cycle. In the following sections, I describe the *Before, During*, and *After* stages in more detail.

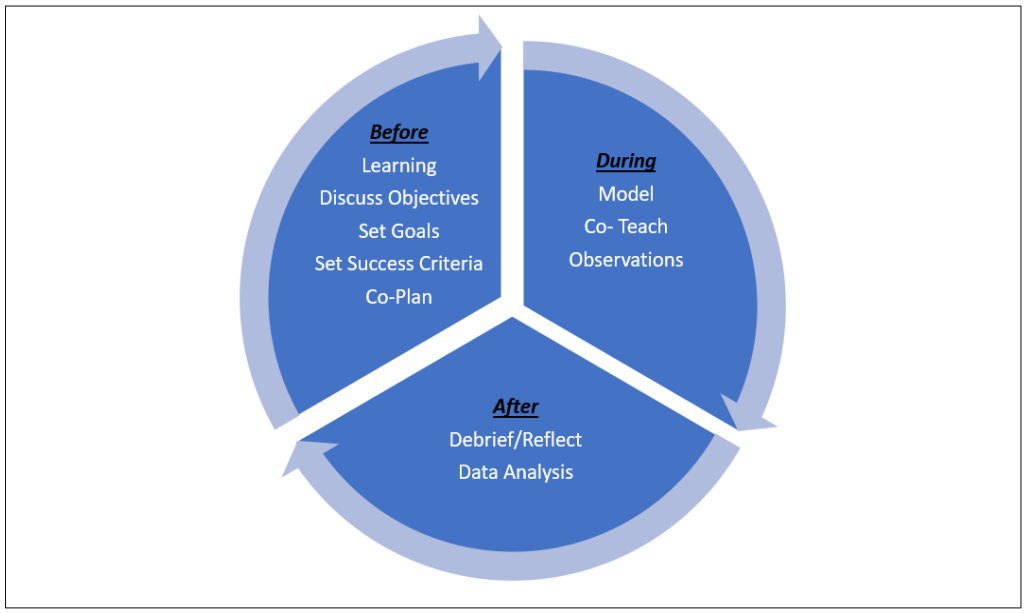

Figure 2.1 Coaching Cycle: Before, During, After

Before the Writing Lesson

Ideally, learning a new skill, strategy, or instructional tool to implement into practice happens during the *Before* stage of coaching. This learning happens within professional development (PD) or workshops (often run by coaches), where teachers can learn new strategies (Desimone & Pak, 2017). After the PD, coaches' support should be sustained by helping teachers modify or adapt the learned skill within their own classrooms (Darling-Hammond et al., 2017). However, since PD is not usually frequent in schools, this step is not always present within every coaching cycle.

After PD (if applicable) and before planning begins, it is important that literary coaches meet with their teachers to discuss and mutually create the objectives and goals for instruction to best support the students' needs (based on post-assessment data from the previous coaching cycle). It is essential for teachers to have a voice when creating goals and objectives because they thrive in environments that support self-direction, and they are more willing to learn if they are involved in the planning process (Knowles, 1980). Hence, it is important for teachers to clarify their own goals (and goals for their students) and help diagnose the gap between their goals and their current level of performance (Knowles, 1980).

Once the objectives and goals are established, a coach should provide support in planning (i.e., co-planning). Co-planning should incorporate student success criteria, teacher goals, state standards, and student data to drive instruction (Irvine & Telford, 2015). In hopes to best support students, coaches should support teachers in making sure that their lesson plans consider all the above-mentioned aspects.

During the Writing Lesson.

After teachers and coaches have discussed goals and planned for instruction, the literacy coach should model relevant research-based practices (Collet, 2012; Showers & Joyce, 1996). First the coach should model the strategy while the teacher observes and takes notes (Knight, 2004). After modeling, the coach and teacher can co-teach. Co-teaching occurs when two or more people share responsibility for teaching a group of students, whether it be an entire class or a small group. Conderman (2011) describes it as, "Two or more educators working collaboratively to deliver instruction to a heterogeneous group of students in a shared instructional space" (p.3). There are various types of co-teaching, but for coaching purposes, supportive co-teaching allows the most time for the teachers to observe the coach. Supportive co-teaching includes the coach taking the lead, while the teacher observes and practices the strategy with support (Conderman, 2011; Thousand et al., 2006). After modeling and co-teaching, the teacher and coach should debrief about the lesson. If coaches only model and do not provide follow-up discussions or feedback, the lesson is not as effective (Desimone & Pak, 2017).

Once teachers have modeled the targeted writing practice, they then release responsibility to the teacher and observe while they practice the skills independently. Literacy coaching is most successful when teachers have frequent opportunities to first practice what they have learned, and then receive feedback (Desimone & Pak, 2017). Coaches should guide teachers as they assess their own progress toward their goal (Knowles, 1980). More specifically, rather than telling the teachers what they did wrong and right, coaches should have teachers make sense of their own observation data (Knight, 2004). This helps to create a trusting and non-evaluative relationship.

After the Writing Lesson

The last stage of the coaching cycle includes the coach reflecting and debriefing with the teachers after an observation (Barlow et al., 2014; Joyce & Showers, 1982). According to Trotter (2006), "The aim of adult education should be to promote individual development by encouraging reflection and inquiry" (p.12). During reflection of the lessons or skills, the coach should use probing questions, listen to the teacher, make recommendations, and guide the teacher towards their next steps (Collet, 2012). It is important for coaches to help teachers re-diagnose their needs rather than evaluate (Knowles, 1980). Therefore, reflection should be a time where the teacher and coach discuss the next steps in writing instruction and re-evaluate the needs of the teacher based on the student data.

Once the coach and teacher have debriefed about the lesson, they should analyze the collected data, including formative or summative feedback. Data analysis can be in the form of meetings or informal discussions. During this time, the teachers and coaches can look over student writing samples and discuss the outcomes. This will then bring them back to the first stage of the coaching cycle: learning and goal setting. While there is some research on how the coaching cycle benefits teacher instruction (See Irvine & Telford, 2015; Teemant, 2014), there is scarce literature on if and how coaches are utilizing this cycle to coach writing. Below, I discuss researched based-writing practices that coaches should be discussing, employing, and modeling within the coaching cycle to support the teaching of specific writing strategies as well as writing pedagogy.

Research-Based Writing Instructional Practices

In this section, I review research-based practices for writing and writing instruction specific to (1) writing across the curriculum, (2) teaching the stages of the writing process, and (3) writing instructional practices and skills. Literacy coaches should have knowledge of these practices to best support teachers in writing instruction.

Writing Across the Curriculum

Allowing students to write frequently across the curriculum is a research-based writing practice that helps students become more effective writers (Graham & Harris, 2019). Writing across the curriculum (WAC) is defined as "a comprehensive program that transforms the curriculum, encouraging writing to learn and learning to write in all disciplines" (McLeod & Soven, 1992, p.4). Writing-to-learn includes having students write to solidify, demonstrate, and make their learning "visible" (Bye & Johnson, 2004). This includes having students complete writing activities such as taking notes, summarizing, responding to content specific prompts, and journal writing (Karchmer-Klein et al., 2019; McLeod & Soven, 1992). By contrast, learning- to-write includes having students write within a discipline-specific genre (e.g., learning to write a lab report in science class). Learning to write emphasizes more formal assignments, where teachers demonstrate writing as a form of social behavior in an academic or discourse community (McLeod & Soven, 1992). Allowing students time to learn-to-write and write-to-learn in multiple content areas has proven to be an essential tool for preparing K-12 students for post-secondary endeavors (Palmquist et al., 2020).

Researchers have identified frameworks specific to teaching writing throughout multiple subjects. Below, I review two of these frameworks and discuss what coaches

should consider as they work with K-6 teachers in the realm of writing across the curriculum.

Content Area Literacy Approach.

Historically, educators have approached literacy learning in the generalist way (Shanahan & Shanahan, 2008). In other words, educators provide general and basic skills for students to be able to read and write about subject matter specific text. This is known as the content area approach. The content area approach focuses on developing students' ability to effectively use reading and writing as a way to learn content across disciplines (Bean et al., 2011). Content area literacy involves explicit teaching of generic literacy strategies to be used across content areas (e.g., summarizing and note-taking) (Shanahan & Shanahan, 2012). Furthermore, content area literacy proponents believe that teaching students general literacy skills can provide them the necessary foundational skills to be successful in all content areas (Fang & Coatoam, 2013). While basic generalizable skills are important for writing development and disciplinary learning, teachers should also provide opportunities for students to learn and engage in discipline specific ways.

Disciplinary Literacy Approach.

While it is important to teach general literacy skills, students also need explicit teaching of genres, specialized language conventions, disciplinary norms, and higher level interpretive processes to be able to communicate effectively in ways similar to content experts (Fang, 2012). The disciplinary literacy approach emphasizes the importance of teaching specialized knowledge and abilities of those who work, communicate, and use knowledge within various disciplines (Shanahan & Shanahan, 2012). More specifically, disciplinary literacy is defined as the unique ways literacy is

used in different disciplines (Moje, 2008). When discussing the disciplinary approach, Fang and Coatoam (2013) state:

> The approach is grounded in the beliefs that (a) school subjects are disciplinary discourses recontextualized for educational purposes; (b) disciplines differ not just in content but also in the ways this content is produced, communicated, evaluated, and renovated; (c) disciplinary practices such as reading and writing are best learned and taught within each discipline; and (d) being literate in a discipline means understanding of both disciplinary content and disciplinary habits of mind (p. 628).

While some researchers believe disciplinary literacy should only be addressed in middle school, high school, or college (See Heller, 2010), others believe that it is never too early to integrate disciplinary literacy into the classroom (Shanahan & Shanahan, 2014). Elementary school children can understand that people may write or explain concepts in different ways. As an example, a teacher in a second-grade classroom provided students with multiple opportunities to use writing and drawing to observe, record, and classify as scientists (Welsh et al., 2020). Students constructed concept maps, technical drawings, used writing to problem solve, and connected scientific concepts with the results, as a scientist would do (Welsh et al., 2020). Her students were able to take part in an authentic experience where they practiced their science skills and developed scientific writing simultaneously (Wollman-Bonilla, 2000). Below (Figure 2.2) is modeled after Shanahan and Shanahan's (2008) diagram which illustrates how disciplinary literacy is different from having basic or intermediate literacy knowledge. Notice, both basic and intermediate literacy skills are more generalized, while

disciplinary literacy is specialized. However, having the basic literacy skills as a foundation is important for students as they work toward disciplinary literacy skills.

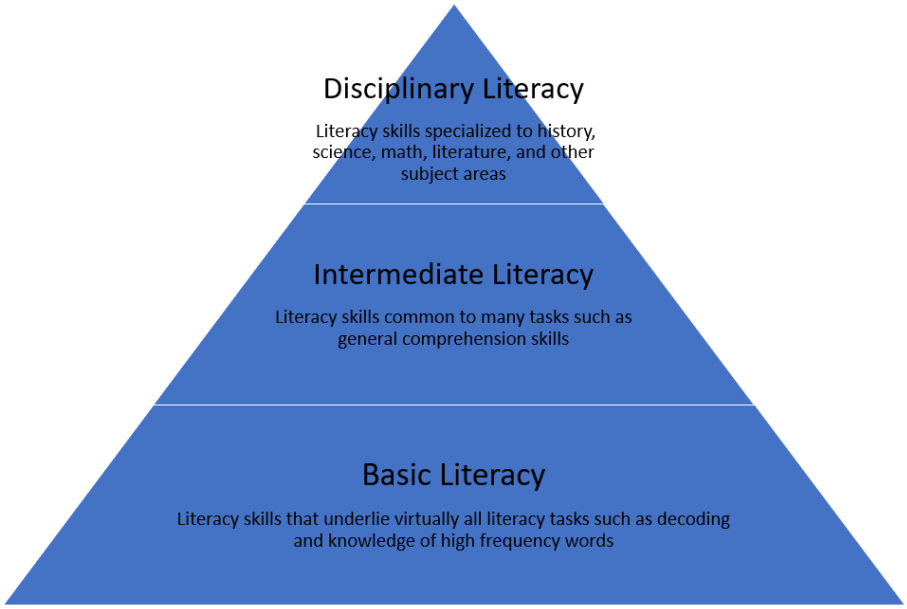

Figure 2.2 Shanahan and Shanahan's (2008) Model of Disciplinary Literacy

Some researchers propose that literacy instruction within various subject areas should not take the general content area approach or the disciplinary approach. Rather, instruction should be in the "radical center" (Brozo et al., 2013). Replacing one approach with the other is ultimately unproductive (Connor, 2017). However, meeting the two approaches in the middle allows for educators to build on what they have learned about strategy instruction in order to create classroom activities that are specific to their classroom context, and that also highlight the processes unique to discipline experts in the field (Brozo et al., 2013; Connor, 2017). Overlaying generic content with discipline-specific writing practices can help teachers meet the needs of all students learning within each content area (Brozo et al., 2013). Overall, exploring how coaches are supporting teachers in teaching writing across the curriculum will provide information on whether

training on content area literacy, disciplinary literacy, or the radical center will be necessary for coaches.

The Writing Process

Another important research-based writing approach is a focus on process writing. Process writing is an approach where writers "focus on the process by which they produce their written products rather than on the products themselves" (Onozawa, 2010, p.154). The process method incorporates a broad range of strategies including planning, drafting, revising, and editing, and publishing (Goldstein & Carr, 1996). The writing process encourages students "to think about writing in terms of what the writer does (planning, revising, and the like) instead of in terms of what the final product looks like (patterns of organization, spelling, and grammar)" (Applebee, 1986, p. 96). While the writing process has multiple stages, it is not linear. Instead, it is a recursive process where the writers move within the steps (i.e., sometimes moving forward and sometimes retracing their steps) (Onozawa, 2010). Research suggests that explicitly teaching and assisting students in strategies for each step of the writing process improves the quality of written products (Graham et al., 2006). These improvements are enhanced when students are taught skills to self-regulate and set goals throughout the writing process (Graham & Harris, 2019)

Instructional Skills and Practices

Along with teaching writing across the curriculum and the stages of the writing process, teachers should explicitly teach writing skills. De La Paz and Graham (2002) identified that students who were directly taught writing strategies— as well as the knowledge and skills needed to carry out these strategies— produced essays that were

longer, contained more mature vocabulary, and were qualitatively better than those who did not receive the same instruction. Explicitly teaching writing strategies requires (1) providing clear expectations for the purpose and rationale for the strategy, (2) explaining when and where to use the strategy, (3) modeling how to use the strategy, (4) assisting the students with using the strategy until they can apply it independently, and (5) facilitating the use of the strategy. While taking students through the process of learning a new strategy, it is important that teachers create routines for writing, provide direct instruction of the skill (e.g., mini-lessons), and let students practice using the skill by engaging in activities such as writing centers and responding to writing prompts (Graham & Harris, 2019). To effectively support student writing processes and craft, teachers should explicitly teach writing strategies for each stage of the writing process as well as how to integrate the 6+1 traits (Culham, 2005) into their writing. Is it important to teach writing traits, such as word choice, organization, sentence fluency, and voice, because these have shown to have a positive impact on student writing (Coe et al., 2011; Collier-Frendenberg, 2018; Nordhaus, 2017; Spandel, 2013). In the following sections, I outline the methods that were used to answer the research questions.

Methods

In the following sections, I describe the methods used specific to this study. More specifically, I explain: (1) the research design and rationale, (2) the legitimation of this study, (3) the measures used to answer the research questions, (4) the participants, and (5) the data analysis procedures.

Research Design and Rationale

For this study, I employed a convergent-parallel mixed methods design (Tashakkori et al., 1998) to investigate literacy instructional coaching within writing. Mixed methods research is formally defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (Johnson & Onwuegbuzie, 2004, p. 14). I chose a mixed methods design for multiple reasons. First, my research questions were more fully answered through mixed research analysis (Johnson & Onwuegbuzie, 2004, p.18) because I was able to broadly explore how coaches support teachers in writing and writing instruction (i.e., qualitative analysis) and then look more closely at if coaches and teachers hold the same perception of the frequency of the writing coaching supports (i.e., quantitative analysis). By examining the topic both quantitatively and qualitatively, mixed methods procedures allowed me to produce a more complete picture of the knowledge necessary to inform both theory and practice (Johnson & Onwuegbuzie, 2004). Mixed methods procedures also result in "stronger evidence for a conclusion through convergence and corroboration of findings" (Johnson & Onwuegbuzie, 2004, p.21). Thus, analyzing both qualitative (i.e., themes, categories) and quantitative (i.e. percentages, chi-square results) data provided a more nuanced view of what is happening in the realm of writing coaching. In the following section, I detail my mixed methods procedures.

Mixed Methods Procedures

Within this mixed methods study, I used the convergent-parallel approach (Tashakkori et al., 1998) to gain an understanding of writing coaching in the K-6 context

and whether or not coaches and teachers hold the same perceptions of the most frequent writing coaching supports. According to Edmonds and Kennedy (2017), the convergent-parallel approach “involves the collection of different but complementary data on the same phenomena " (p. 181). In other words, the qualitative and quantitative results provide different perspectives on the same topic being examined (Teddlie & Tashakkori, 2006).

Within this design, I collected qualitative and quantitative simultaneously and weighted them equally (Morse, 1991). Additionally, quantitative and qualitative data were analyzed independently and then the results were compared and interpreted within the discussion section (Creswell & Plano-Clark, 2011). The discussion section is where I made inferences after looking across the two data types (Natesan et al., 2011). Figure 2.3 shows the research design I utilized in this study.

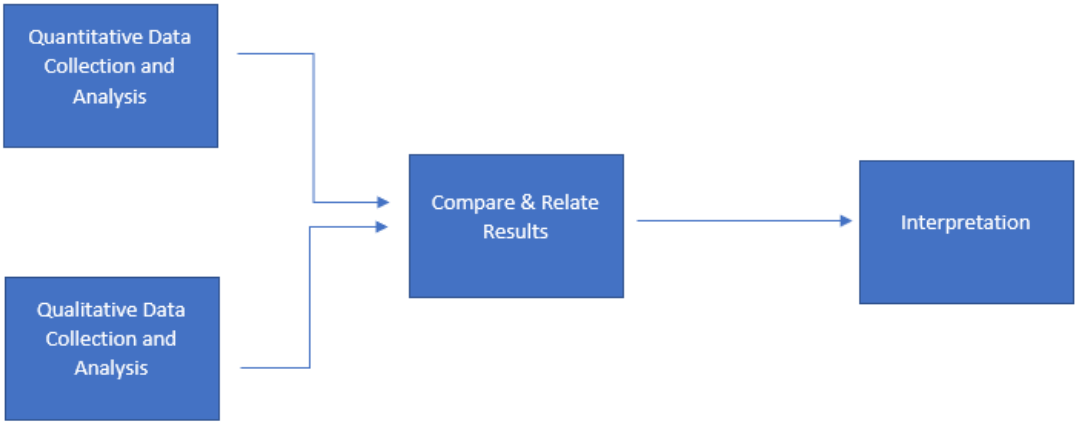

Figure 2.3 Convergent-Parallel Approach

Legitimation

Legitimation is the validity of the mixed methods study (Onwuegbuzie et al., 2011). To legitimize a mixed methods design, it is important to highlight the strengths

and minimize the overlapping weaknesses of each method individually (i.e., weakness minimization) (Onwuegbuzie & Johnson, 2006). Weakness minimization refers to "the extent to which the weaknesses from one approach (i.e., qualitative or quantitative) are addressed by the strengths from the other approach (i.e., quantitative or qualitative)" (Onwuegbuzie et al., 2011, p. 1261). The weakness of the qualitative phase within this current study was that some of the short answer responses were vague, and therefore getting more information through quantitative analysis was beneficial. The weakness of the quantitative phase was that there may have been over or underreporting of coaching strategies, and thus short answer responses provided another layer of information specific to the supports coaches were providing. Overall, the qualitative phase provided a narrative on how coaches were supporting teachers while the quantitative phase provided further information on if coaches and teachers hold the same perceptions of coaching supports.

Conversion is another way to legitimize mixed methods results. Conversion includes data quantitizing or qualitizing (Onwuegbuzie et al., 2011). Within this study, I quantitized data by converting qualitative data into numerical codes that were further analyzed (Tashakkori et al., 1998). More specifically, I quantitized my data by counting the number of codes that made up each theme. Quantizing themes "can help prevent mixed methods researchers from over-weighting or under-weighting these themes" (Onwuegbuzie et al., 2011, pp. 1262-1263).

Measure

To identify how coaches are supporting teachers in writing, I used elements of the S*upports in K-6 Writing and Writing Instruction* survey that I created. The items I used to

answer the research questions specific to this study included both closed and open-ended questions. *Yes* or *No* questions were used to identify the frequency of various writing coaching practices and short answer questions allowed for participants to further articulate the writing coaching practices employed. Short answer questions were often optional in hopes to reduce survey fatigue among participants. Survey elements were either researcher created or adapted from one of three measures, including the *Writing Observation Framework* (WOF) (Henk et al., 2003), *Teacher Record Observation Survey-Writing* (TROS-W) (Hodges, 2015), and the *Writing Survey Instrument* (WSI) (Cutler & Graham, 2008). Below, I discuss the survey items that were created specifically for the purposes of this study.

Coach Survey Items

To identify and answer the research questions specific to this study, I compiled all the questions and statements from the *Writing Survey Instrument* (WSI) (Cutler & Graham, 2008), the *Writing Observation Framework* (WOF) (Henk et al., 2003), and the *Teacher Record Observation Survey-Writing Instrumen*t (TROS-W) (Hodges, 2015). I used these instruments because the items are focused on identifying (through observation or self-report) if teachers are implementing research-based writing practices in their classrooms. Once compiled, I removed questions that did not specifically address the research questions and then condensed overlapping or similar questions and statements from the multiple tools. For example, I took out the question, “During an average week, how many minutes do your children spend writing?” from the WSI because it does not relate to specific writing instructional practices.

Once I condensed all the statements and questions, I adapted the wording of the WSI items (Cutler & Graham, 2008) to correspond with coach rather than teacher participants. For example, I changed the WSI item, "Do you use a commercial program to *teach* writing, handwriting, spelling, or any other aspect of composing?" to, "Do you use a commercial program to *coach* writing, handwriting, spelling, or any other aspect of composing?" Additionally, since the WOF and TROS-W are both observation tools, I adapted the formatting of the content to be survey-friendly. Specifically, I adapted them from a checklist format to a question-and-answer format geared toward coaching practices.

After combining the previously mentioned measures, I realized that the majority of items were focused on writing instruction and the writing process. Since research suggests that teaching writing across the curriculum is important for students' writing development (Graham & Harris, 2019), I added questions specific to how coaches support teachers in teaching writing across the curriculum. I created questions that asked coaches to explain if and how they support teachers in science, math, English language arts (ELA), and social studies writing. For instance, they had to respond *Yes* or *No* to the following statement, "As a coach, I have supported K-6 teachers in developing and implementing instructional strategies to improve academic writing in mathematics." If they responded *Yes*, they were prompted to provide examples or a brief explanation of how they supported teachers in that content area.

Teacher Survey Items

Since the purpose of my survey was to receive information about writing coaching practices from both teachers' and coaches' perspectives, I aimed to ask the

teachers the same questions that I asked coaches. To create survey items for teacher participants, I made minimal changes to the wording of the items I created for coaches (discussed in the previous section). I changed the wording of the coaching survey items to be geared toward teachers' experiences with writing coaches (rather than coaches' experiences with coaching writing). For example, I changed the following *Yes* or *No* item from, "As a coach, I have supported K-6 teachers in developing and implementing instructional strategies to improve academic writing in mathematics" to, "Has your coach supported you in developing and implementing instructional strategies to improve academic writing in mathematics?" Ultimately, teacher and coach items had the same underlying focus, but I worded items differently based on the participant's role in their school district (i.e., teacher or coach).

Participants

For this study, I recruited both K-6 teachers who receive literacy instructional coaching and K-6 literacy instructional coaches. Below, I review the demographics of the overall sample. Then, I provide the demographics for both coach and teacher participants separately.

Overall Sample

When looking at coach and teacher data combined, there were a total of 181 participants in this study. Thirty-four different states were represented in the final sample, with nine participants living outside of the United States. Ninety-five percent of participants identified as female and 5% as male. Furthermore, 84% of the participants were White, 6% Black/African American, and 5% Hispanic. Native Americans, Asian/Pacific Islanders, and people who identified as multiple ethnicities each

represented less than 5% of the sample. Table 2.1 illustrates the different states that were represented in this study and the number of participants from each state.

Table 2.1 Participant Contexts

N	**States Resided**	
1	Indiana Kentucky Oklahoma	Oregon Pennsylvania Utah
2	Arkansas California Colorado Connecticut Louisiana	Minnesota Mississippi Ohio Virginia
3	Florida Michigan	Wisconsin
4	South Carolina	Washington
5	Iowa Kansas	New Jersey North Carolina
6	Georgia Massachusetts	Missouri Nevada
7	Alabama	
8	New York	
11	Tennessee	
13	Illinois	
21	Texas	
27	Idaho	

Note. Nine participants resided outside of the United States

Out of the 181 total participants, 134 (75%) completed the full survey (i.e., 93 coaches, 41 teachers). More specifically, 81% of coaches completed the survey and 62% of teachers completed the survey. All open-ended responses were coded for partial and

complete surveys. Percentages and other quantitative analyses were based on the number of participants that answered each specific question. In Table 2.2, I provide information outlining the years of experience of both teachers and coaches.

Table 2.2 Participants' Years of Teaching and Coaching

Years Teaching	**1-3**	**4-6**	**7-10**	**11-20**	**20+**
Number of Teachers	17 (26%)	16 (24%)	13 (19%)	13 (19%)	7 (11%)
Years Coaching	**1-3**	**4-6**	**7-10**	**11-20**	**20+**
Number of Coaches	46 (40%)	34 (30%)	18 (16%)	13 (11%)	4 (3%)

Coaches

There were 115 coach participants in this study. Ninety-four percent of the coaches within this sample were female and 6% were male. Additionally, 85% of the participants identified as White, 5% as African American, and 5% as Hispanic or Latino. Native Americans, Asian/Pacific Islanders, and participants who selected multiple ethnicities accounted for the remaining 5% of participants.

Coach participants in this study resided in 33 different states, with seven participants living outside of the United States. Texas, Idaho, and Illinois represented the majority of the coach sample. Of this sample, 20% worked in rural areas, 50% coached in urban areas, and 30% coached in mixed contexts of both rural and urban characteristics. The majority of participants (87%) worked in public schools.

Teachers

There were 66 teacher participants in this study. Ninety-seven percent of the teachers within this sample were female and 3% were male. Additionally, 82% of the participants identified as White, 6% as African American, 4% as Hispanic or Latino, and 3% as Asian/Pacific Islander. Native Americans and participants who selected multiple ethnicities accounted for the remaining 5%. Table 2.3 below provides information on the grades the teacher participants currently teach.

Table 2.3 Grade Currently Teaching

Grade	K	1st	2nd	3rd	4th	5th	6th
Frequency	6	11	7	19	7	8	8

Teacher participants in this study resided in 23 different states, with two participants living outside of the United States. Idaho, Tennessee, and Alabama represented the majority of the teacher sample. Of this sample, 17% of the coaches worked in rural areas, 51% coached in urban areas, and 32% coached in mixed contexts of both rural and urban characteristics. The majority of participants (92%) worked in public schools.

Data Analysis

Below, I discuss how the data from both the qualitative and quantitative items of the survey were analyzed.

Qualitative Data Analysis

To answer research question 1 (*Are literacy instructional coaches supporting K-6 teachers in writing and writing instruction? If so, in what ways?*) I analyzed participants'

short answer responses. In the following sections, I further explain my coding procedures and how I categorized and collapsed data to create themes.

Coding procedures

I used NVivo8® qualitative data analysis software to manage coding. I conducted line-by-line coding of each open-ended response that teachers and coaches provided. Furthermore, I coded all coach responses to one survey item and then coded all the teacher responses for that same survey item before moving to the next question. Coding included both latent and semantic statements (Braun & Clarke, 2012). Meaning, I coded what was explicitly stated by participants, as well as what was implied. For instance, participants explicitly stated that coaches worked with teachers on genre instruction *(*e.g., *"The use of direct instruction when analyzing and introducing new genres"),* as well as implicitly reported that they provided support on genre instruction (e.g., *"Informational, persuasive, and narrative"* and *"We have worked a lot with the structure of different writing"),* and therefore they were given the same code. It is important to note that some units were double coded. For example, when a coach reported, *"We focus on modeling the process of writing through the scientific method,"* I coded this as supporting teachers across content areas through *modeling* as well as *teaching writing through the scientific method.* It is also important to note that after I coded both the coach and teacher data, I combined the data because I wanted to look across coaches' and teachers' perspectives to identify commonalities in how they describe writing coaching.

During coding, I applied a four-level coding scheme, detailed in Table 2.4, to every meaningful unit (e.g., phrases, sentences, words). Each code included four parts - three a priori codes and one open code. The first level of coding was a priori because

participants' responses were based on the sections of the survey. For example, the survey prompted participants to explain how they have coached or have been coached in (1) writing across the curriculum, (2) the writing process, or (3) writing instructional practice. Survey items specific to these three domains were included within the survey to capture an understanding of how coaches are supporting teachers within them.

Table 2.4 Four-Level Coding Scheme Application

	Level 1	**Level 2**	**Level 3**	**Level 4**
Type of Coding	A priori	A priori	A priori	Open (determined in the moment)
Codes	a. Content Area b. Writing Process c. Writing Instruction	a. Coach b. Teacher	a. Content Area • ELA • Science • SS • Math b. Writing Process • Planning • Drafting • Editing • Revising c. Writing Instruction	Varied- Descriptive Codes

Note. ELA= English Language Arts, SS= Social Studies

The second level of coding was a priori because I coded whether the participants were coaches or teachers to help me decipher between the two (if needed) after I combined the data. The third level of coding was also a priori because, based on the survey items, participants were either describing coaching practices specific to a content area (i.e., social studies, science, math, ELA), stage of the writing process (i.e., planning, drafting, editing, revising), or a writing instructional practice. Lastly, the fourth level of coding was open coding (i.e., determined at the moment) (Saldaña, 2016). Open coding provided

further detail as to how the coaches were supporting teachers in these three domains. While the coding was open, the codes assigned to the data were descriptive codes (Saldaña, 2016). A descriptive code "assigns labels to data to summarize in a word or short phrase-most often a noun- the basic topic of a passage of qualitative data" (Saldaña, 2016, p.292). The descriptive codes were later collapsed and categorized. Some examples of descriptive codes include *Lucy Calkins, writing rubrics*, *academic language,* and many more. To demonstrate how my four-level coding scheme was applied, see Table 2.5.

Table 2.5 Four Level Coding Scheme Examples

Meaningful Unit of Data	**Level 1 Code**	**Level 2 Code**	**Level 3 Code**	**Level 4 Code**
"I think one of the most useful and creative things that I utilize with my students that my coach provided is a draw and write prompt. The students get to draw a picture then create a story."	Writing Process	Teacher	Planning	Draw and Write Prompt
"In 4/5 grade we incorporate science in ELA and students write scientific articles based on the information they've learned."	Content Area	Coach	Science	Writing Scientific Articles
"I coached teachers on instructional strategies to use with individual struggling students."	Writing Instruction	Coach	Writing Instruction	Strategies for struggling students

Categorization and Collapsing

While NVivo8® was used for coding, I created spreadsheets to categorize and collapse the data. To conceptualize how coaches were supporting teachers in writing, I

broke up the coded data into spreadsheets based on their level 1 codes. This resulted in three spreadsheets that housed data specific to (1) writing across the curriculum, (2) the writing process, and (3) writing instructional practices. Below, I will discuss how I categorized and collapsed data within each spreadsheet.

Writing Across the Curriculum

To categorize data specific to writing across the curriculum, I first read the level four codes (i.e., descriptive codes) one by one and then started to group them based on similarities. For example, the descriptive codes *workshops* and *professional development* were categorized together because they both are a type of formal training to better prepare teachers. After participant responses were categorized by their similarities, I created names for each category based on what the housed codes ultimately represented. For instance, the descriptive codes *modified plans for student needs* and *ELL scaffolds* were grouped (with others) and assigned the category of *Differentiating/Scaffolding*. Categorizing the data resulted in 24 total categories. Last, I grouped similar categories to create themes. For instance, I combined categories that are relevant to the coaching cycle (e.g., modeling, co-planning, debriefing, etc.) to create the "Sustained Coaching in Writing" theme. I also combined the categories *General Writing Support* and *Disciplinary Writing Support* to create the theme "Lack of Disciplinary Specific Writing Support". This was the theme I created because general writing supports drastically outnumbered discipline specific writing supports. It is important to note that disciplinary literacy within ELA is sometimes a gray area, thus, when coding I considered anything that was not basic literacy (according to Shanahan & Shanahan's 2008 model, see page 43) to be disciplinary literacy. After themes were developed that housed all categories, I

looked at the enumerated themes. In other words, I identified the count of each code in that theme to determine the most and least prominent themes in the data. The final themes specific to how coaches are supporting teachers in writing across the curriculum included (1) Sustained Coaching Writing Support through the Coaching Cycle, (2) General Writing Support, (3) Teacher-oriented Writing Support to Meet Students' Needs, and (4) No/Limited Writing Coaching Support.

Writing Instruction and Skills.

To categorize data specific to writing instructional practices, I grouped the codes based on similarities between their level-four codes (i.e., descriptive codes). For example, the descriptive codes *lesson planning* and *intervention planning* were categorized together and were given the title *Planning*. This resulted in eight total categories including *Limited or No Coaching in Writing, PD, Use of Resources*, and W*riting Trait Support*. After categories were created, I grouped similar categories to create themes. From the eight categories, I created three themes and I named the themes based on what the grouped categories represented. For example, I grouped the categories labeled *Planning*, *Use of Resources*, *Assessment, Varied Teacher Supports,* and *Online Teaching* to create the theme "General Pedagogical Support" because they were all referring to how coaches supported teachers pedagogically rather than specific to writing. After the three themes were developed that housed all categories, I looked at the enumerated themes to determine the most and least frequently reported codes in the data. The final themes specific to how coaches are supporting teachers in writing instructional practices include (1) General Pedagogical Support (Teacher-Centered), (2) Limited, No, or Atypical Support in Writing, and (3) Support in Writing Skills (Student-Centered).

Writing Process.

To identify how coaches were supporting teachers in each stage of the writing process, I put all the coded data related to the writing process in one of three categories - planning, drafting, or revising/editing (i.e., categorized based on their level 3 codes). The codes specific to each stage of the writing process provided information about how coaches were supporting teachers in each stage of the writing process, however, due to the lack of responses to the optional survey items (e.g., there were only nine codes specific to drafting) no real themes were evident. Therefore, I did not analyze the data any further. However, I was later able to combine and collapse the codes from the writing process spreadsheet across the categories that were identified on the other two spreadsheets (i.e., writing across the curriculum and writing instructional skills and strategies spreadsheets). I explain how I collapsed across the spreadsheets in the following section.

Collapsing Across Spreadsheets

After categorizing and collapsing on all three spreadsheets, I was left with themes and categories specific to how coaches support teachers in teaching writing across the curriculum, the writing process, and writing instructional practices. The next step in data analysis involved looking across all three of these domains. When doing so, it was apparent that the participants were responding about the same ideas across the three phases. Thus, my next step was collapsing the categories across the three spreadsheets (Saldaña, 2016). For example, I was able to collapse the theme "General Pedagogical Support (Teacher-Centered)" from the writing instruction and skills spreadsheet with the "Teacher-Oriented Writing Support to Meet Students' Needs" theme from the WAC

spreadsheet. Both of these themes were discussing how coaches were supporting teachers pedagogically. After that, I collapsed the "Support in Writing Skills (Student-Centered)" theme from the writing instructional skills spreadsheet with the "Lack of Disciplinary Specific Writing Support for WAC" theme within the writing across the curriculum spreadsheet. More specifically, I was able to collapse the codes within the "Support in Writing Skills (Student-Centered)" theme into either the *General Writing Support* category or the *Discipline Specific Writing Support* category embedded within the "Lack of Disciplinary Specific Writing Support for WAC" theme. Collapsing these two themes further supported my finding that coaches are drastically supporting teachers in more general writing practices than they are supporting them in discipline specific writing practices.

Next, I collapsed the codes on the writing process worksheet across the categories that were developed on the other two spreadsheets. For example, for the planning stage of the writing process, participants discussed that coaching support included how to use planning resources such as thinking maps and graphic organizers. These codes were collapsed within the *Co- Planning, Alignment, and Support with Resources* category within the "Sustained Writing Coaching Support through the Coaching Cycle" theme.

After collapsing across the three spreadsheets, I was left with four overall themes including (1) Sustained Writing Coaching Support Through the Coaching Cycle, (2) Lack of Discipline Specific Writing Support, (3) Teacher-Oriented Writing Support to Meet Students' Needs, and (4) Limited or No Writing Coaching Support. Since I was able to collapse across all three spreadsheets, this further strengthens my themes specific to how coaches are (or are not) supporting teachers in writing and writing instruction.

Quantitative Data Analysis

To statistically identify if coaches and teachers hold the same perception of what coaching practices are being used (i.e., research question 2), I conducted several chi-square tests of independence. The purpose of this test is to determine whether two categorical variables forming a contingency table are associated (Field, 2018). More specifically, the chi-square test is appropriate for evaluating if statistically significant differences in the distribution of a categorical variable exists between two groups (which are also categorical variables). The first categorical variable for these analyses was whether the participant was a teacher or coach. The second categorical variable was whether the participant answered *Yes* or *No* to providing or receiving support in various writing instructional practices. Thus, the chi-square test of independence allowed me to identify if the distribution of perceived implemented practices was independent of whether the respondents were K-6 teachers or coaches.

To run 42 chi-square tests, I used R software version 4.05 (R Core Team, 2020). I created contingency tables of observed and expected participant responses. Then, I ran a Pearson's Chi-Square test to identify if the chi-square statistic was statistically significant (i.e., $p < 0.05$) and greater than the critical value of 3.841on the χ^2 distribution. However, since I conducted multiple tests, there was an inflation to the family-wise error rate that I needed to account for. Therefore, I calculated Bonferroni's correction by dividing the desired family-wise error rate of 0.05 by the number of tests conducted (i.e., 42) and compared each of the p-calculated values to this new threshold ($p < 0.001$).

For each analysis, I reported the chi-square statistic, degrees of freedom (i.e., (rows-1) (columns-1)), *p*-values, and the Phi (φ) effect size. I chose to measure the effect

size by calculating Phi because my contingency table was 2 x 2 (rather than a larger contingency table) (Zaiontz, n.d.). For Phi values, 0.1 is considered a small effect, 0.3 is a medium effect, and 0.5 a large effect (Zaiontz, n.d.). Then, I identified whether to reject or fail to reject the null hypothesis for each analysis based on the 0.05 *p*-value threshold and the critical value (i.e., 3.841). I further identified which items remained statistically significant against the 0.001 threshold after correcting for multiple tests. Ultimately, results provided information on whether the frequency of writing coaching practices reported were related to whether the participant was a teacher or a coach.

Testing Model Assumptions.

Before running chi-square tests of independence, I evaluated the viability of meeting chi-square assumptions. First, I identified if the data cells were frequencies, or counts, rather than percentages (McHugh, 2013). Second, I identified if the variables were mutually exclusive, and participants only contributed to one cell in the contingency table. Third, I identified if groups were independent of one another (McHugh, 2013). Last, I verified that the variables were nominally scaled and that the *"expected"* cell exceeded five in each chi-square analysis (McHugh, 2013).

Results

Below I provide results specific to research question 1 and 2.

Research Question 1

To answer research question 1, I created themes based on coach and teacher short answer responses. The themes and categories are listed in Table 2.6 and are discussed in more detail in the following sections.

Table 2.6 Themes and Categories Specific to Writing Coaching

Codes	Themes and Categories
49.84 %	**Sustained Writing Coaching Support through the Coaching Cycle**
	PD, PLCs, Workshops
	Set Goals, Objective, and Student Success Criteria
	Co-Planning, Alignment, Support with Resources
	Modeling for Teachers
	Co-Teaching
	Observations
	Debriefing
	Assessment of Instruction and Student Outcomes
20.84 %	**Lack of Discipline Specific Writing Support**
	Frequent use of General Writing Strategies
	Minimal use of Discipline-Specific Writing Strategies
20. 36 %	**Teacher Oriented Writing Support to Meet Students' Needs**
	Mode of Instruction (Whole, Small Group, Independent)
	Scaffolding/Differentiating
	Academic Language/Vocabulary Support
	Conferring with Students/Providing Feedback
	Support in Best Practices
	Distance/Online Teaching
	Named Methods, Engagement, Motivation
	Peer Review Methods
	Creating Interventions
8.96 %	**Limited or No Writing Coaching Support**

Theme 1: Sustained Writing Coaching Support through the Coaching Cycle

My first finding was that coaches were providing sustained support throughout the coaching cycle. Within short answer responses, participants often indicated that they were either providing or receiving coaching for writing through the stages of the coaching cycle. This included (1) training through PD, PLCs, and/or workshops, (2) setting goals and discussing objectives and student success criteria, (3) co-planning for data-driven instruction, alignment, and use of resources, (4) modeling, (5) co-teaching, (6) providing feedback and debriefing, and (7) assessing instruction and students outcomes. One participant discussed their sequence of the coaching cycle by stating that they supported writing instruction by:

> Looking at student data during PLC meetings to drive next steps in instruction for whole class and small group, planning additional supports or lessons (utilizes resources such as Writing Strategies such as the Writing Strategies book), and then co-teaching or modeling lessons/small groups. Then a debrief and next steps conference after.

The Co-*Planning, Alignment, and Support with Resources* category made up the highest percentage of responses (19.54%). Participants discussed that coaches were supportive in planning writing lessons specific to the standards and their students' needs. For instance, one participant stated that they worked with their coach to “plan Lucy Calkins lessons, adapting them for our students”. Specific to resources, participants' responses indicated that coaches were supportive in helping them use, navigate, and create resources to teach writing across the curriculum, such as curriculum, graphic organizers, and named programs (e.g., Nearpod). Support in various curriculum included

guidance in Lucy Calkins, Making Meanings, Write Bright, LETRS, Pearson/Savvas ReadyGen, Being a Writer Curriculum, among others. Participants also discussed coach-created units to help integrate writing across the curriculum. For instance, one coach stated, “We rewrote all of our ELA curriculum to be more interdisciplinary with our unit-based themes”.

Overall, the *Sustained Writing Coaching Support through the Coaching Cycle* theme made up 49.84 % of all codes specific to how coaches support teachers in writing and writing instruction. In Table 2.7, I provide examples of representative quotes from each stage of the coaching cycle.

Table 2.7 Representative Quotes: The Coaching Cycle

Stage of the Coaching Cycle	Representative Quotes
PD, PLCs, Workshops	"When we first adopted Lucy, we received PD and follow-up sessions." (Teacher)
Set Goals, Discuss Objectives and Student Success Criteria	"We mapped out our scope and sequence of skills and then developed learning outcomes and objectives to match each unit." (Coach)
Co-Planning, Alignment, and Use of Resources	"I have worked with teams to analyze writing samples and how to use the data to plan instruction." (Coach)
Modeling	"We have adopted Eureka Math within the past two years in my district. Prior to that, we took a deep dive into the standards, and one big focus was getting students to talk about and write about their thinking. We modeled and helped teachers implement this into their daily math lessons. Our math resource now has this embedded within it." (Coach)
Co-Teaching	"Co-planning and coteaching math and adding language strategies such as talk read, talk write." (Teacher)
Observations	"My coach comes into my classroom a few times a week to informally observe me teaching." (Teacher)
Debriefing and Feedback	"My Reading Specialist offers constructive feedback concerning my lessons." (Teacher)
Assessment of Instruction and Student Outcomes	"I've been working especially hard on developing common assessments, both formative and summative, that are highly targeted and allow us to measure our students' progress toward proficiency in writing." (Coach)

Note that in Table 2.7 above, most of the representative quotes for the stages of the coaching cycle are general writing supports rather than specific to the discipline they are

teaching. This leads to our next finding that coaches are mostly providing general rather than discipline specific support.

Theme 2: Lack of Discipline Specific Writing Support for WAC

My second finding was that coaches provided more general than discipline specific writing support. For the category *General Writing Strategies*, participants reported that coaching support included writing strategies that students could use in all content areas such as note-taking, summarizing, writing in notebooks, RAFT (Role, Audience, Format, Topic) strategies, RACE (reword, answer, cite and explain) strategies, and Cornell note-taking. Furthermore, when asked how they supported teachers in writing in ELA, science, SS, and math, many of those participants frequently responded with a short answer of "Same as [other content areas])". This response further indicates that coaches worked with teachers on general writing strategies that can be utilized within any discipline. This subcategory made up 15.31% of all codes.

Coaches also supported teachers in teaching discipline-specific strategies, but much less frequently (5.53%). Only one participant reported support in a discipline-specific social studies strategy, which included help with primary and secondary sourcing. Science writing support included writing lab reports, writing scientific articles, and writing through the scientific method. For example, one participant stated, "In 4/5 grade we incorporate science in ELA and students write scientific articles based on the information they've learned". Discipline-specific math support included how to write numbers and how to write word problems. One coach noted that they support teachers in writing in math by "Getting students to write and read in math through word problems and creating word problems." Lastly, discipline-specific ELA writing support included

coaching in word choice, structures of writing, evidence-based writing responses, selecting evidence, quoting sources, and identifying the target audience. It is important to note that disciplinary literacy within ELA is sometimes a gray area, thus, when coding I considered anything that was not basic literacy (according to Shanahan & Shanahan's 2008 model) to be disciplinary literacy. Theme 2 made up 20.84 % of all codes. Table 2.8 provides side-by-side examples of the difference between the general and discipline-specific support participants reported. Note that in Table 2.8, only a few general writing examples are presented, however, the discipline-specific list of examples is exhaustive of the participants' responses.

Table 2.8 Examples of General vs. Discipline-Specific Writing Support

Subject	General	Discipline-Specific
ELA	• Spelling • Grammar	• Quoting Sources • Identifying Target Audience
Math	• Journaling • Writing "How-Tos"	• Writing Math Word Problems • Writing Numbers
Science	• Sketch Noting • Claim, Evidence, Reasoning	• Writing Scientific Articles • Lab Reports
Social Studies	• Organization • RAFT writing	• Primary Versus Secondary Sourcing

Theme 3: Teacher-Oriented Writing Support to Meet Students' Needs

My third finding was that coaches provided guidance to teachers in meeting students' needs to be successful writers. This includes support in (1) mode of instruction, (2) differentiating and scaffolding, (3) academic language/vocabulary support, (4) conferencing with students, (5) support in best writing practices, (6) distance/online

teaching, (7) named methods (specific to writing, motivation, and engagement), (8) strategies for interactive writing with peers, and (9) creating interventions.

Participants reported that coaches frequently supported teachers in their instruction mode (e.g., whole group, small group, independent). Participants stated that coaches were supporting them in both small guided writing groups (and workshops) and whole group lessons and mini-lessons. One coach reported, "Mostly [I help teachers] plan for whole group writing lessons that support the comprehension skill and integrate science." Participants also reported supporting teachers in modeling explicit strategies and skills for students. One coach noted, "Oftentimes teachers are very uncomfortable teaching writing. I usually support them by suggesting shared writing, modeling (LOTS OF MODELING), writing stems and frames, providing ongoing teacher feedback, color coding, annotating, analyzing anchor papers."

Furthermore, participants discussed how coaches supported teachers in academic language within writing. One coach stated, "I worked with a team of 4th-grade teachers to embed social studies content into a non-fiction writing unit, with a focus on academic language, including authoritative voice, content vocabulary, and structures of writing". Coaches also supported teachers through the use of sentence and paragraph frames to scaffold writers.

Other writing pedagogy support included teaching the writing process within content areas, using named methods (e.g., Hochman Method, Gillingham Strategies), and helping teachers with peer writing instructional strategies. Named methods and approaches coaches and teachers mentioned were the Daily 5, Science Heuristic Approach, Kagan cooperative strategies, and Hattie strategies. One coach reported, "We

focus on Hattie Strategies that have a high impact such as feedback and clarity". Overall, this theme made up 20.26% of codes. Table 2.9 below provides representative quotes for the categories that made up this theme.

Table 2.9 Representative Quotes: Supporting Students' Needs for WAC

Categories	Representative Quotes
Mode of Instruction	"We've examined learning targets and success criteria, implementing mini-lessons and guided practice, monitoring student evidence, and verifying student success." (Coach)
Differentiating/Scaffolding	"[I have] supported teachers in identifying strategies that would support struggling students with writing as well as challenge higher performing students in writing." (Coach)
Academic Language/Vocabulary Support	"Our district utilizes number talks to develop oral language skills in mathematical (explanation) and we have worked to support the growth in academic math oral language translating into writing through planning and designing mathematics instruction across 45 campuses." (Coach)
Conferring with Students	"I have worked with teachers on how to teach effective writing mini lessons and how to conduct writing conferences with students." (Coach)
Support in Best Practices	"I have helped teachers plan writing instruction and use best practices in writing instruction." (Coach)
Distance/Online Learning	"The pandemic has forced us to go virtual, hybrid, and inversion at various times. I have assembled writing materials for each scenario for writing instruction." (Coach)
Named Methods, Engagement, and Motivation	"Using the Writing Revolution, I have worked closely with a learning partner whose goal was to increase writing in SS. She focused on content vocabulary and implemented strategies using the Hochman method." (Coach)
Strategies for Peer Support	"Orally tell the writing to a partner, consider generating more ideas." (Coach)
Creating Interventions	"I am personally designing an intensive writing intervention for grades 5-8 based on best practices and high-leverage writing strategies, which includes significant amounts of direct practice (Coach)".

Theme 4: Limited or No Writing Coaching Support

The final finding was that coaching in writing is often limited or absent. Within this category, coaches reported things such as “writing is the least spent activity”, “writing is not a priority unfortunately because it is not assessed” and, “I have not been helped/received support in writing from my Instructional Coach”. This theme also included atypical coaching due to COVID-19. One respondent noted,

> At this point of the academic year, under extreme circumstances and disruption caused by corona, we are cycling our interventions with preliminary efforts focusing on language and reading. Our plan is to focus on writing intensively in the second half of the academic year.

Lastly, participants discussed how they were not the coach’s focus or that they were provided no coaching in writing. For instance, one teacher stated, “Writing hasn't been a focus area for kindergarten”. While another teacher noted, “My instructional coach has not worked with me to improve writing”. This category made up 8.96% of codes. Table 2.10 provides additional representative quotes specific to this theme.

Table 2.10 Representative Quotes: Lack of Writing Coaching

Representative Quotes
• "I'm sorry to say that in my area, we have been online and in school learning, but with a very tight COVID-19 haze of safety precautions which has narrowed coaching work into a multitude of silos rather than our expansive work of the past. I am assigned to work specifically in the area of mathematics at this time, however teachers continue to reach out for a multitude of needs. We are truly missing collaboration and the collective efficacy it brings." (Coach)
• "Coaching has been greatly affected by Covid in my area. The past 12 months are not typical." (Coach)
• "Sorry...the emphasis at the school is heavy vocabulary and reading.... unfortunately, writing isn't assessed in [my state]; therefore, it isn't taught at this school." (Coach)
• "Our teachers do a lot of this in their classrooms, but I generally do not coach any writing." (Coach)
• "Writing is not a priority in the urban charter school where I coach. Yes, it is sad." (Coach)
• "I am pretty much left alone." (Teacher)

Research Question 2

To answer research question 2, (i.e. *Do coaches and teachers hold the same perception of the writing coaching practices most frequently being used?)* I ran multiple chi-square tests of independence. Below, I discuss specifics on how I tested model assumptions. Then I report the chi-square results specific to (1) teaching across the curriculum, (2) teacher-oriented coaching of writing strategies and skills, and (3) coaching support through the coaching cycle.

Testing Model Assumptions

Before running chi-square tests of independence, I evaluated the viability of meeting chi-square assumptions. First, I identified that the cells were frequencies rather than percentages (McHugh, 2013). My data consisted of the number of coaches and teachers who answered *Yes* or *No* to survey items. Then, I identified that the variables were mutually exclusive because participants could only be a teacher or a coach (i.e., they could not identify as both) and they had to respond to survey items with either a *Yes* or *No*. Next, I identified if the groups of participants were independent of one another (McHugh, 2013). There is a slight possibility that some of the teachers were embedded within coaches (i.e., a teacher participant was coached by a coach participant). While highly unlikely because participants were from all over the United States and beyond, a small number of the teacher participants may have been coached by a coach participant which could be a potential concern. However, since the survey was anonymous, I was unable to identify if teachers and coaches were dependent on one another. Last, I verified the variables were at the nominal level and identified that the *"expected"* cell exceeded five in each chi-square analysis (McHugh, 2013).

Results: Writing Across the Curriculum

After accounting for multiple tests (i.e., Bonferroni's correction, threshold of 0.001), Chi-square tests of independence analysis revealed that the distribution of perceived frequency of coaching support practices employed for writing across the curriculum is not independent of whether the respondent was a coach or teacher for three out of four analyses. Thus, we can reject the null hypothesis that the frequency of writing coaching practices reported for ELA $\chi^2(1) = 21.533$, $p < 0.001$, $\varphi = 0.345$, science $\chi^2(1) =$

17.762, $p < 0.001$, $\varphi=0.313$, and social studies $\chi^2(1) = 4.322$, $p < 0.001$, $\varphi= 0.387$ are unrelated to whether the participant is a teacher or a coach. For these items, coaches statistically significantly reported *Yes* more frequently than teachers did. While teachers reported that coaches most frequently supported them in ELA writing (50%), 82% of coaches reported *Yes* on this same item.

Furthermore, we fail to reject the null hypothesis for math $\chi^2(1) = 4.322$, $p = 0.038$, $\varphi= 0.155$. For math, both teachers (13.85%) and coaches (26.96%) reported that the writing support was rare within this subject area. Table 2.11 provides chi-square results for the survey items specific to coaching support for writing across the curriculum.

Table 2.11 Chi Square Results: Writing Across the Curriculum

Survey Item	Chi-Square Value	DF	Phi φ
ELA	21.533*	1	0.345
Math	4.322	1	0.155
Science	17.762*	1	0.313
Social Studies	26.933*	1	0.387

Note. * $p < 0.001$

Results: Writing Instructional Skills and Strategies

I conducted chi-square analyses for each of the survey items specific to coaches employing various writing instructional skills and strategies. Out of the 24 chi-square tests, 10 remained statistically significant after correcting for multiple tests (See Table 2.12). This indicates that we can reject the null hypothesis that the frequency of writing coaching practices and skills reported is unrelated to whether the participant is a teacher or a coach for the 10 statistically significant chi-square tests. We fail to reject the null hypothesis for the 14 research-based outcomes that were not statistically significant.

Notice the survey items *Using writing and reading to support each other* $\chi^2(1) = 26.240$, $p < 0.001$, $\varphi = 0.415$ and supporting teachers in *Student choice of topics for writing* $\chi^2(1) = 25.315$, $p < 0.001$, $\varphi = 0.419$ have the highest chi-square and Phi (φ) values (all medium effect sizes). Furthermore, the survey item *Providing writing instruction that is sensitive to the diversity of students' experiences and their social, cultural, ethnic, and linguistic needs* was also statistically significant $\chi^2(1) = 12.407$, $p < 0.001$, $\varphi = 0.286$. In the above-mentioned survey items, coaches more frequently reported that they were providing support, while teachers had a different perception. For example, even though using reading and writing to support each other was the most frequently reported support from both teachers and coaches, over 95% of coaches reported that they provided support in this skill while only 61% of teachers reported being provided this support.

The four lowest chi-square values that were not statistically significant before or after Bonferroni's correction include: (1) conducting writing centers $\chi^2(1) = 0.052$, $p = 0.820$, $\varphi = 0.018$ (2) creating writing lessons that have multiple instructional goals $\chi^2(1) = 3.565$, $p = 0.059$, $\varphi = 0.153$, (3) utilizing group writing strategies $\chi^2(1) = 4.618$, $p = 0.032$, $\varphi = 0.179$, and (4) goal setting during the writing process $\chi^2(1) = 4.955$, $p = 0.026$, $\varphi = 0.185$. For these items, both coaches and teachers reported that these writing practices were rarely integrated into coaching practices. Table 2.12 provides chi-square results for the survey items specific to the writing instructional skills and strategies.

Table 2.12 Chi-Square Results: Writing Instructional Skills/Strategies

Survey Item	Chi-Square Value	DF	Phi φ
Pacing and Flow of writing lesson	11.679*	1	0.277
Providing writing instruction that is sensitive to the diversity of students' experiences and their social, cultural, ethnic, and linguistic needs.	12.407*	1	0.286
Integrating writing instruction into multiple disciplines	10.248	1	0.260
Assisting students with writing strategies	9.079	1	0.244
Making clear expectations for the writing process	7.338	1	0.220
Making clear expectations for writing products	10.227	1	0.259
Providing direct instruction regarding writing	7.008	1	0.215
Using writing to guide exploration of course content	6.491	1	0.207
Scaffolding students' independent use of a skill or strategy	10.843*	1	0.267
Providing mini-lessons on writing skills	9.896	1	0.255
Conducting writing centers	0.052	1	0.018
Creating writing prompts or topics	7.330	1	0.220
Using writing and reading to support each other	26.240*	1	0.415
Creating writing lessons that have multiple instructional goals	3.565	1	0.153
Encouraging students to use writing for authentic purposes	14.355*	1	0.307
Encouraging students to write at their own pace	8.920	1	0.242
Teaching multiple genres of writing	18.825*	1	0.353
Teaching the Writing Process	13.311*	1	0.304
Student choice of topics for writing	25.315*	1	0.419
Providing templates/examples for writing	16.060*	1	0.334
Goal Setting during the writing process	4.955	1	0.185

Utilizing group writing strategies (e.g., partners or small groups produce a piece of writing)?	4.618	1	0.179
Assignments to emphasize thinking and processing of content	13.445*	1	0.306
Teaching Genre elements	4.195	1	0.171

Note. * $p < 0.001$

Results: Support Throughout the Coaching Cycle

I conducted chi-square analysis for each of the survey items specific to coaches employing support through the coaching cycle. Out of the 14 chi-square tests, four remained statistically significant after correcting for multiple tests (See Table 2.13 below). This indicates that we can reject the null hypothesis that the frequency of writing coaching practices reported specific to the stages of the coaching cycle is unrelated to whether the participant is a teacher or a coach for the four statistically significant chi-square tests. The statistically significant survey items include: (1) working with teachers individually to provide support on a full range of writing strategies $\chi^2(1) = 22.506$, $p < 0.001$, $\varphi = 0.367$, (2) assessment support $\chi^2(1) = 18.677$, $p < 0.001$, $\varphi = 0.367$, (3) selecting appropriate writing tasks $\chi^2(1) = 13.480$, $p < 0.001$, $\varphi = 0.298$, and (4) assisting teachers with improving writing instruction, student writing, and appropriateness of writing instruction and assignments $\chi^2(1) = 11.825$, $p < 0.001$, $\varphi = 0.226$. In the above-mentioned survey items, coaches more frequently reported that they were providing support, while teachers had a different perception. For example, 86.11% of coaches reported *Yes* to working with teachers individually to provide support on a full range of writing strategies, while only 37.29 % of coaches reported *Yes* to the same survey item.

Furthermore, we fail to reject the null hypothesis for the 10 research-based outcomes that were not statistically significant. Four out of six of the lowest chi-square results were specific to providing discipline specific writing support within the coaching cycle. These included: (1) helping teacher determine which writing strategies are best to use with the specific content being taught $\chi^2(1) = 0.000$, $p = 0.984$, $\varphi = 0.002$, (2) developing and implementing PD related to the integration of writing across multiple disciplines $\chi^2(1) = 2.129$, $p = 0.145$, $\varphi = 0.113$, (3) assisting teachers in developing instruction designed to improve students' abilities to writing and understand writing within multiple content areas to spur students' interests $\chi^2(1) = 2.223$, $p = 0.136$, $\varphi = 0.115$, and (4) sharing and modeling various strategies for integrating writing across disciplines $\chi^2(1) = 3.793$, $p = 0.051$, $\varphi = 0.151$. For these items, both coaches and teachers moderately reported *Yes* indicating there was no difference in how the two groups responded to these items. For example, 58.33% of coaches reported *Yes* to helping teachers determine which writing strategies are best to use with the content being taught, while 49.15% of teachers reported *Yes* to this same item. Table 2.13 provides chi-square results for the survey items specific to writing coaching support through the coaching cycle.

Table 2.13 Chi-Square Results: The Coaching Cycle

Survey Item	Chi-Square Value	DF	Phi φ
Facilitated small and large group discussions about students' writing skills	8.879	1	0.231
Helped align writing curriculum to state and district requirements	0.023	1	0.012
Selecting appropriate writing tasks	13.480*	1	0.298
Worked with teachers individually, providing support on a full range of writing strategies	22.506*	1	0.367
Worked with teachers in collaborative teams, providing support on a full range of writing strategies	2.821	1	0.130
Assisted teachers in developing instruction designed to improve students' abilities to write and understand writing within multiple content areas to spur students' interests	2.223	1	0.115
Developed and implemented PD related to the integration of writing across multiple disciplines	2.129	1	0.113
Shared and modeled various strategies for integrating writing across disciplines	3.793	1	0.151
Helped teachers determine which writing strategies are best to use with the specific content being taught	0.001	1	0.002
Assisted teachers with improving writing instruction, student writing, and appropriateness of writing instruction and assignment	11.825*	1	0.226
Conducted observations of writing across multiple disciplines.	4.943	1	0.172
Helped teachers use the analysis of various assessment results to determine which strategies will support higher writing achievement.	4.252	1	0.160
Provided ongoing support to teachers as they try writing strategies out themselves	6.762	1	0.201
Assessment Support	18.677*	1	0.367

* $p < 0.001$

Discussion

Research in the K-12 context suggests that writing coaching influences teachers' practices and dispositions toward writing (Hall, 2016; Steckel, 2009). Literacy instructional coaching has also shown to impact student achievement in writing (Garcia, 2012; McKeown et al., 2016; Powell et al., 2010). However, research on how literacy instructional coaches are supporting teachers in writing is limited. For this study, I explored how coaches are supporting teachers in writing and writing instruction. I also examined if coaches and teachers hold the same perceptions of the frequency of coaching practices that are being employed.

To answer research question 1 (*Are literacy instructional coaches supporting K-6 teachers in writing and writing instruction? If so, in what ways?*) I created four themes based on teacher and coach short answer survey responses. These four themes included: (1) Sustained Writing Coaching Support through the Coaching Cycle, (2) Lack of Discipline Specific Writing Support, (3) Teacher-Oriented Writing Support to Meet Students' Needs, and (4) Limited or No Writing Coaching Support.

To answer research question 2 (*Do coaches and teachers hold the same perception of the writing coaching practices most frequently being used)* I ran multiple chi-square tests of independence. Results indicate that after accounting for multiple tests (Bonferroni's correction threshold of 0.001), 17 out of 42 analyses remained significant. This suggests that coaches and teachers sometimes do not have the same perception of the frequency of coaching writing practices employed within the K-6 setting. Both coaches and teachers rarely to moderately agreed that various writing skills were being

employed. However, for all other survey items, the percentage of coaches who reported *Yes* was always higher than the percentage of teachers who reported *Yes.*

These findings have implications for both researchers and practitioners. Specifically, educator preparation programs and professional development providers should shift the narrative surrounding writing and should enhance their emphasis on writing assessment and data-driven writing instruction for diverse learners within professional development and other faculty collaborations. I discuss these implications in the following sections.

Teacher-Oriented Coaching Support Throughout the Coaching Cycle

When coaches do provide support in writing, the support is teacher-oriented and sustained throughout the coaching cycle. Out of the 14 chi-square tests specific to teacher-oriented support, 10 chi-square tests were not statistically significant and indicated that both coaches and teachers moderately reported *Yes* to writing coaching support through the coaching cycle. While quantitative results suggest that support in the coaching cycle was moderate, participants discussed these supports frequently within their short answer responses. For example, qualitative results indicate that coaches supported teachers *Before, During,* and *After* a writing lesson or unit, with the *Before* stage of coaching through *Co-Planning, Alignment, and Data-Driven Instruction* being the most frequently supported stage of the coaching cycle. This finding aligns with research which suggests that supporting teachers throughout the coaching cycle is essential for building teacher capacity (Russell, 2015) and that teacher-oriented support (rather than student or data-oriented) is the most effective coaching model for impacting teacher performance and student achievement (L'Allier et al., 2010).

Throughout the coaching cycle, participants reported that coaches were providing teacher-oriented support to meet students' needs through scaffolding, differentiating, interventions, vocabulary support, conferencing, among others. However, supporting English Language Learners (ELLS), special education students, and the gifted and talented (GAT) were rarely reported. While some participants discussed differentiation and scaffolding generally, they did not provide specific evidence or examples of ways they support ELL, GAT, or special education students. These details are important because working with a student new to a language may be vastly different than working with a student with a specific learning disability, or a student who is gifted and talented. Supporting teachers in distinct ways to meet students' diverse needs can be challenging, yet it is essential for student academic writing achievement.

The overall lack of discussion on coaching writing to diverse learners was not surprising because of the many roles and expectations that coaches have (Ippolito, 2010; Mraz et al., 2008; Walpole & Blamey, 2008). Thus, coaches may not have the necessary background knowledge and support to be proficient in coaching writing for diverse learners within multiple grade levels (along with their various other roles), especially since writing is known for being notoriously neglected in educator preparation programs (Myers et al, 2016). This suggests that educator preparation programs and professional development providers should enhance their emphasis on writing assessment and data-driven writing instruction for diverse learners.

Overall, findings from this current study highlight that coaches who are supporting teachers in writing are often doing great things (i.e., providing sustained teacher-oriented support through the coaching cycle), however, short-answer responses

suggest that there is a lack of guidance with specific strategies for meeting the needs of diverse learners. To be able to close achievement gaps, it is essential for teachers to be well versed and supported in meeting these diverse needs within their classroom. Future researchers should identify if the scaffolding coaches provide is effective and relevant to diverse learners.

Lack of Writing Across the Curriculum Support

Since the adoption of Common Core State Standards in 2010, writing across the curriculum (WAC) has gained attention (Mo et al., 2014). Allowing students the chance to write frequently across the curriculum has shown to help students become more effective writers (Graham & Harris, 2019). However, based on previous research, many teachers report that teaching writing seems "impossible" (Hall, 2016), with teaching writing across the curriculum adding another dimension of difficulty to the task. Literacy instructional coaching may be one way to mitigate this issue through increased support in discipline specific writing strategies.

According to this current study, teachers and coaches have different perceptions of the frequency of writing support coaches provide within English language arts (ELA), science, and social studies. More specifically, the frequency of reported coaching practices was related to whether the participant was a teacher or a coach on three of the four items specific to WAC. For these items, coaches reported *Yes* statistically significantly more frequently than teachers. Even in ELA, a subject area that has writing instruction embedded within, only half of the teachers reported *Yes* to getting support while 82% of coaches reported *Yes*. This may be the case because many of the teacher participants did not receive any coaching in writing from their literacy instructional

coach, while the majority of the coaches have provided writing support in some capacity to at least one of the multiple teachers they work with.

Furthermore, the frequency of reported coaching practices was not related to whether the participant was a teacher or a coach for writing in math because teachers and coaches agreed that coaching support in this subject area was rare. One reason why coaching in math writing may be rare is because math coaches are common in schools (Campbell & Griffin, 2017). If a teacher has a math coach, it is likely they (instead of their literacy coach) will work on best practices for teaching math, including math specific writing tasks. While how math coaches are being trained to implement writing within math is beyond the scope of this study, further research should explore how discipline specific coaches are being trained to coach literacy within their content area.

Qualitative results from this study indicate that when coaches did support teachers in writing across the curriculum, their support was more frequently general (that could be used within all content areas) than disciplinary-specific. This was evidenced by their more general support for student writing strategies as well as the participants' "Same as other [content area]" responses. This suggests that coaches do not tailor their writing instructional practices for each of the content areas. This may be the case because historically, teachers have used the content area approach to teach literacy (i.e., general writing strategies to use in all content areas) (Shanahan & Shanahan, 2008). Not until more recently have the disciplinary literacy approach (i.e., strategies to write like an expert in the field) gained traction (Fang, 2012). However, researchers have suggested the radical center (i.e., a combination of general and discipline specific strategies) as the ideal approach to take when teaching writing across disciplines (Brozo et al., 2013). This

indicates that coaches may need training in disciplinary literacy and finding the radical center to better support students in writing like an expert in each content area.

Looking across both qualitative and quantitative analyses, results suggest that teachers believe there is a lack of coaching writing across the curriculum, specifically within social studies, math, and science. Coaches, on the other hand, believe that coaching in these subject areas is moderate. From both perspectives, it is evident that writing within science, math, and social studies needs to be more prevalent. When coaches do provide support in WAC instructional practices, their supports are more frequently general rather than discipline specific.

This finding highlights that while the CCSS's focus on interdisciplinary writing looks promising for the future of writing instruction, there may be a lack of understanding on what that ideally should look like in the classroom. Historically, writing has been used as a rudimentary skill to assess knowledge of other content areas, rather than a skill that was explicitly taught within content areas (Yancey, 2009). Since educators often teach based on how they were taught in schools (Oleson & Hora, 2013), they may not have much experience with interdisciplinary writing due to this practice being a more current push within state standards. Solely recognizing and discussing that writing should be incorporated into all subject areas does mean that teachers know how to effectively make a shift in their practice. This suggests that both coaches and teachers may need explicit examples of how interdisciplinary writing looks in K-6 classrooms and effective methods for instruction. Shifting the narrative and preparation surrounding interdisciplinary writing would be one step in the right direction. This includes training

with explicit resources and preparation provided for educators including effective methods for integrating writing into multiple subject areas.

More Writing Coaching Support is Needed

Looking across both quantitative and qualitative analyses, results suggest that there needs to be more coaching specific to writing within the K-6 context. Quantitative analysis revealed that most writing coaching supports were reported to be only rarely to moderately provided. This aligned with the qualitative theme "Limited or No Coaching Writing Support*"*. Even though this finding was expected because reading is often the focus of literacy coaching (Deussen et al., 2007; Rezzonico et al., 2015), it provides evidence that coaching in writing needs more attention within schools. More specifically, it is time for principals and other stakeholders to take the necessary measures to make sure writing is no longer the "Neglected R" (Mo et al., 2014). This change starts in shifting the importance and emphasis that state and school personnel put on writing. For example, within some states, writing is not assessed, and therefore is not valued or viewed as essential to coach or teach throughout the day (Wright et al., 2020). While writing may not be assessed in all states, it is still an essential skill for students to possess so they have equal access to post-secondary opportunities.

Limitations

While I made every effort to be as thorough as possible, there were a few limitations present throughout this study. First, chi-square results suggest that teachers were not always feeling supported by their coaches, while on the other hand, coaches felt that they were providing these various supports. One explanation for these results could be response bias. Since coaches knew that they were being studied, they could have

modified their behaviors to seem as if they were supporting teachers in writing more than they really were. This is known as socially desirable responding (SDR), which is the tendency for people to present a favorable image of themselves, which can ultimately obscure results (Van de Mortel, 2008). Coaches may have also recalled events that did not happen (Kjellssona et al., 2014).

Similarly, teachers may have underreported the coaching support that they were receiving. They may have underreported in order to make a statement that they need more support and resources in writing. This is known as motivated underreporting (Tourangeau et al., 2012) or motivated misreporting (Tourangeau et al., 2015). For instance, teachers may have been motivated to underreport how their coaches were supporting them in hopes that this research would lead to changes in the amount of writing instructional support coaches are providing or the amount of training their coaches receive.

Another limitation to this study was the teacher sample size. Only 41 (62%) teachers completed the survey, while the rest only partially completed the survey. More information from teachers would help get a better understanding of what is happening in the realm of writing coaching based on teachers' perspectives.

Conclusions

The purpose of this study was to identify if and how coaches are supporting K-6 teachers in writing and writing instruction. Findings from this study suggest that while coaches are providing sustained teacher-oriented support through the coaching cycle, this support is limited. Furthermore, interdisciplinary coaching for diverse learners was sparse. This indicates that educational leaders should provide support to coaches specific

to writing across the curriculum. Training coaches the components of disciplinary literacy as well as the radical center (i.e., the overlay over general and disciple specific instruction) (Brozo et al., 2013) approach would help coaches support K-6 teachers in teaching writing in various subjects. This includes coaching teachers how to support their students through writing like an expert in the field. Having students write as if they were mathematicians, scientists, historians, etc. will not only help them better understand the material but will provide them with the practice and skills to write for multiple audiences and purposes specific to the content (Shanahan, 2019). Focusing on the content area approach (i.e., generalizable writing skills to be used in all content areas) will help students write-to- learn, however, only focusing on this approach will not help students learn to write as if they were an expert in the field.

Furthermore, findings from this study suggest that there is a lack of coaching support for teachers specific to scaffolding and differentiation for diverse learners. This indicates that training may be needed for coaches in how to teach writing to ELL, special education, and gifted and talented students. ELL and GAT support was rarely mentioned, while support for special education students was not reported at all. Knowing how difficult writing is to teach and that teachers often avoid it in the classroom (Fry & Griffin, 2010; Troia & Graham, 2003; Troia & Maddox, 2004) it is reasonable to hypothesize that teachers need support from their coaches in differentiating writing instruction for the various needs in their classroom.

CHAPTER III: K-6 TEACHERS' PERCEPTION OF INSTRUCTIONAL COACHING PRACTICES IN WRITING

Teachers often leave their teacher preparation courses feeling unprepared to teach writing (Brindle et al.,2016; Gilbert & Graham, 2010; Hodges et al., 2019) and lack ample writing training opportunities as in-service teachers (Roberts & Wibbens, 2010). Due to this lack of preparation, it is important for teachers to feel supported in writing and writing instruction when working with a literacy instructional coach. If the goal of writing coaching is to increase teacher effectiveness through the use of research-based writing practices (Knight, 2007), then it is critical to identify if teachers perceive the literacy coaching they receive to be influential. If they believe the coaching to be influential, then it important to further identify which specific coaching practices are impacting teachers' knowledge, skills, or dispositions for writing and writing instruction.

Identifying coaching practices teachers find to be effective or non-effective in influencing their writing and teaching of writing can benefit current and future coaches seeking information on what teachers want, rather than solely coaching based on theory or instinct. Most importantly, this study will signify if teachers find coaching to be an effective way to mitigate feelings of unpreparedness to teach writing. If teachers are not perceiving literacy instructional coaching to be beneficial to their writing and writing instruction, then there may need to be more extensive training in place to ensure that coaches can support teachers with their writing instructional needs and goals. Previous researchers have identified effective coaching practices for general instruction (Joyce &

Showers, 1982; Knight, 2007; Desimone & Pak, 2017), but effective coaching practices geared towards writing and writing instruction are lacking in the research. Since writing is a difficult skill to teach and learn, it is important to identify what teachers want and need to influence their knowledge, skills, and dispositions toward writing and writing instruction. Thus, the purpose of this study is to identify if K-6 teachers are feeling more competent to write and teach writing after receiving instructional coaching. I also aim to identify specific writing coaching supports that teachers find to increase their knowledge, skills, and dispositions toward writing.

Research Questions

To address the purpose of this research study, I will investigate the following research question, *Do K-6 teachers perceive that coaches have influenced their knowledge, skills, and dispositions for writing and writing instruction? If so, what do they perceive to be the coaching practices that contribute to these influences?*

Literature Review

In the following sections, I discuss research on how instructional coaching influences teachers' knowledge, skills, and dispositions. I also review coaching practices that have shown to impact teachers' knowledge, skills, and dispositions.

Effects of Instructional Coaching on Teacher Knowledge, Skills, and Dispositions

Below I explore what we already know about instructional coaching and its influence on teachers' knowledge, skills, and dispositions. First, I discuss the effects of instructional coaching on teacher knowledge, skills, and dispositions more broadly. Then I explore its effects specific to writing and writing instruction.

Influence of Instructional Coaching on Teacher Knowledge

Since the ultimate goal for coaching is to improve student learning through increased teacher effectiveness, one role coaches have is building teachers' knowledge of current best practices and supporting them as they adopt and implement new instructional approaches (Kinnucan-Welsch et.al, 2006; Quintis, 2011). However, research on how instructional coaching directly impacts teacher knowledge of content and best practices has mixed results.

Some researchers have identified instructional coaching as being valuable in increasing teachers' awareness and knowledge of best practices (L'Allier & Elish-Piper, 2006; Saphier & West, 2010). For instance, Knight (2018) identified that coaching had statistically significant impacts on teachers' knowledge when compared to traditional professional development methods. More specifically, he found that teachers who received coaching were more likely to remember the content of the training and planned to implement the content knowledge they acquired. Similarly, Nugent et al. (2017) identified that teachers who participated in a summer institute with a virtual coaching treatment showed positive changes in knowledge of science practices. Not only has coaching shown to increase teacher knowledge in content and best practices, but it has also shown to have impacts on teacher knowledge of interventions. Wilczynski and colleagues (2017) reported an increase in a preschool teacher's knowledge of autism spectrum disorder interventions after a combination of web and video-based coaching.

While researchers have identified coaching to have positive effects on teacher knowledge, Neuman and Cunningham (2009) found no significant differences in teacher knowledge between groups who were coached and not coached. These findings could be

due to the fact that teachers in this study already demonstrated prior in-depth knowledge of early literacy concepts prior to their coaching. This current study looks to extend and update the research on how coaching impacts teacher knowledge by identifying practices that influence teachers' knowledge in writing and writing instruction.

Influence of Instructional Coaching on Teacher Skills

Research confirms that coaching can greatly impact teacher skills and fidelity of research-based practices (Sonesh et al., 2015). For example, Hammond and Moore (2018) found that coaching improved teachers' ability to use the instructional principles of explicit instruction in their teaching, and teachers continued to improve the more they got coached. Similarly, Jacobs and colleagues (2018) concluded that teachers who were receptive to the coaching of collaborative strategic reading (CSR) were able to implement the strategies with more fidelity on their own. They also found that teachers who were resistant to coaching showed no growth in their teaching over the course of the study. This aligns with Neuman and Cunningham (2009) who identified there to be a significant difference in the quality of instructional practices between groups who received coaching and those who did not. Teachers who were coached had higher quality instruction when teaching language and literacy within their context than those who were not coached. These shifts in teachers' skills have shown to be related to the continuous support and feedback from instructional coaches (Ortiz, 2020).

Researchers have also compared differences in teacher skill acquisition based on whether teachers had traditional professional development workshops or professional development workshops paired with instructional coaching. Cornett and Knight (2009) identified that when teachers were solely given a description of new instructional skills

during traditional workshops, only 10% used the skill in the classroom. However, when coaching was added to the staff development, approximately 95% of the teachers implemented the new skills in their classrooms.

Professional development coupled with web conference coaching has also shown to increase targeted skills. Carmouche and colleagues (2018) found that middle school special education teachers that received coaching through web conferencing were able to decrease disruptive and undesirable behaviors. Similarly, alternatively certified math teachers reported gains in instructional skill efficacy after receiving e-coaching (Anthony & Gimbert, 2011). These studies suggest that instructional coaching (either face-to-face or web-based) coupled with quality professional development has a positive impact on teacher implementation of newly learned skills.

Overall, research suggests that instructional coaching leads to the transfer of new teaching skills from a workshop to the classroom (Cornett & Knight, 2009; Teemant et al., 2011; Teemant, 2014) and has led to both immediate and sustainable teaching improvements (Teemant, 2014). Although research has identified a positive relationship between coaching and skill transfer, this current study looks to explore how teachers perceive coaches are supporting their skill transfer in the domain of writing and writing instruction.

Influence of Instructional Coaching on Teacher Knowledge and Skills Specific to Writing

While research is minimal on how coaches support and influence teachers' writing and writing instruction, a few researchers have examined the construct. For example, Steckel (2009) found that teachers who received instructional coaching for literacy: (1) increased their use of formative assessments, (2) were better at matching

materials to instructional needs, (3) were better able to collect and organize literacy materials, (4) provided teacher-led small group writing sessions, (5) engaged in one-on-one conferencing to provide feedback, (6) allotted more time for independent writing, (6) provided more choice in writing topics, and (7) engaged in more direct instruction in the form of mini-lessons which were designed to model skills and strategies based on student needs. This suggests that there are multiple benefits of having a literacy instructional coach.

Other researchers have also identified coaching to have a positive impact on teachers' knowledge and skills for writing and writing instruction. In 2016, McKeown and colleagues concluded that the coaching of writing approaches (i.e., Specific Self-Regulated Strategy Development or SRSD) led to higher fidelity of using the approach for most teachers, but only while coaching lasted. In other words, teachers who received coaching after professional development on SRSD were more likely to implement it, however, they did not sustain the approach after the coaching ended. Interestingly, class data indicated that teachers who were coached in SRSD and implemented it into their instruction impacted student outcomes and performance in the ability to integrate story elements into their writing. Similarly, a participant in Tanner and colleagues' (2017) case study who received coaching in writing found that observational feedback and the opportunity to plan lessons collaboratively based on student outcomes led to students' increased dispositions and skills within writing. The participant reflected that she "had never appreciated what an impact having someone assist her in looking at students' writing on a daily basis would have on students' ability in, and attitude toward, writing" (Tanner et al., 2017, p. 34).

While some researchers have examined coaching in writing, the quantity is sparse. This current study looks to extend the current research on how instructional coaches are supporting K-6 teachers' skills and knowledge in writing and writing instruction.

Influence of Instructional Coaching on Teacher Dispositions

Teacher dispositions can be defined as, **"**The attitudes, values, and belief systems that lie beneath teacher behaviors and teacher characteristics" (Wasicsko et al., 2004, p.3). Dispositions include constructs such as self-efficacy, motivation, and confidence. The majority of research that explores coaching effects on teacher dispositions has found a positive relationship between the two constructs. For instance, Tschannen-Moran and McMaster (2009) identified that teachers who receive follow-up coaching sessions have an increased sense of self-efficacy for reading instruction. They reported that teachers who received coaching, "experienced increases in both general teacher self-efficacy and teacher self-efficacy for reading instruction, and nearly 4 in 10 experienced gains of more than a standard deviation in both types of self-efficacy" (p. 241). Other researchers have identified a difference in perceived self-efficacy levels between teachers who receive coaching versus those who receive traditional professional development, with those who receive coaching reporting higher levels of self-efficacy beliefs (Hammond & Moore, 2018). Lastly, Stahl and colleagues (2016) identified that the real-time coaching model (i.e. coaching via headset) with pre-service teachers "has the capacity to foster a sense of confidence and ownership of learning by developing practical skills alongside affective attributes such as resilience, efficacy, and a disposition toward continual improvement"

(p. 726). These findings suggest that instructional coaches can positively impact teacher dispositions in varying contexts and subject areas.

Influence of Instructional Coaching on Teacher Dispositions Specific to Writing

Little research has been conducted specifically on literacy instructional coaching and its influence on teacher dispositions toward writing and writing instruction. However, one study identified that one-on-one coaching experiences impact teachers' confidence in "their ability to teach writing skills such as first, second, and third person, clincher sentences, grammar syntax, and colons and semicolons" (Hall, 2016, p. 161). Her research revealed that teachers who were coached in writing had more confidence in their ability to teach narrative, descriptive, expository, and persuasive essays. Furthermore, specific features of collaboration that have been found to increase levels of teacher self-efficacy for writing instruction include ongoing coaching sessions that are relevant to teachers' needs (Cantrell & Hughes, 2008; Dierking & Fox, 2012).

While there is numerous research on how coaching impacts teachers' dispositions, more information is needed on the specific strategies coaches implement to increase teacher dispositions in writing and writing instruction. We know that teachers often feel ill-prepared and lack confidence in their writing teaching, and thus, this study looks to identify specific strategies to increase teacher dispositions specific to writing and writing instruction.

Influential Coaching Practices

Based on empirical evidence about teacher education (both pre-service and in-service) there are various key components that are important for coaches to implement to help impact teachers' knowledge, skills, and dispositions toward instructional practices in

various subject areas. In this section, I explore what researchers have found to be the most effective components of coaching. While research on general coaching practices has been identified, it is important to examine if these same coaching practices are effective for coaching specific to writing. In the following sections, I discuss the importance of coaches: (1) building trusting relationships with teachers, (2) providing one-on-one support, (3) providing sustained coaching support, (4) engaging in a coaching cycle, and (5) being teacher-oriented.

Building Trusting Relationships

One essential component of coaching is building a trusting relationship with teachers (Anderson & Wallin, 2018; Darling-Hammond et al., 2017; Joyce & Showers, 1982; Salavert, 2015). Researchers have noted that "personal interactions with teachers are the heart of the coaching initiative" (Lowenhaupt et al., 2014, p. 749) and that "…relationships are the cornerstone of any coaching program" (Anderson & Wallin, 2018, p.56). Building a trusting relationship allows coaches to more accurately support teachers based on their needs, preferences, and their group of students (Ottenbreit-Leftwich et al., 2020). The practice of forming trusting relationships corresponds with the adult learning theory of andragogy which states that for adults to learn, the adult educator and the adult learner must be joint inquirers in which they are free to express their ideas without fear of ridicule (Knowles, 1980).

To build a trusting relationship, the coach and teacher need to be viewed as equals, where no one's views are held to a higher regard than the others (Israel et al., 2018; Knight, 2007). Therefore, there should be a partnership mindset where each partner expects to get as much as they give during collaboration and value one another's

experiences, knowledge, and decisions (Anderson & Wallin, 2018; Knight, 2004). Lofthouse (2019) discovered that the most successful coaching practice was co-construction "where ideas were generated in that moment, related closely to the shared knowledge of the context, drawing on the contributions of both the coach and coachee and being built on cumulatively through the coaching process" (pp.37-38), indicating how important it is that both the coach and teacher work together. According to Cutrer-Párraga and colleagues (2021), empathy, encouragement, and authentic praise enhances teachers' trust in their instructional coach.

Another way to create a trusting relationship is for coaches to never serve in an evaluative manner (Showers & Joyce, 1996; Swift & Kelly, 2010). According to Finkelstein (2019) nonjudgmental feedback is essential for teacher progress and the integration of coached strategies. Although coaches should never take that evaluative role, oftentimes they are asked to report back to the administration to identify what teachers are doing. When this happens, coaches are lumped into the administrator category and they lose credibility with teachers, which often weakens relationships (Niedźwiecki, 2007). Mraz and colleagues (2008) found that all three of their teacher participant groups found literacy coaches beneficial, but feared coaches were evaluating and reporting back to administrators, even though many coaches were not. Therefore, it is important for coaches to build trusting relationships with teachers by making it clear that they are not taking an evaluative role. This can be made easier by working with principals who are effective instructional leaders and do not count on coaches as a form of teacher evaluation (Knight, 2004).

Overall, the coach and teacher must be co-learners with mutual trust and respect (Knowles, 1980), and "coaches should believe that teachers' knowledge and expertise are as important as their own" (Knight, 2007, p. 27). If coaches work with teachers more frequently it could help yield stronger relationships (Ottenbreit-Leftwich et al., 2020).

One-On-One Coaching Support

Another key component of literacy coaching is one-on-one coaching within one school. Hall (2016) found that when teachers were coached one-on-one in writing instruction (rather than in a traditional PD setting), they showed more confidence and self-efficacy in their ability to teach writing. Moreover, when coaching sessions are one-on-one, coaches are able to embed discussions and activities to meet the specific needs of the teacher (Desimone & Pak, 2017).

In addition to one-on-one coaching, it is important for coaches to work with fewer teachers within one school. For instance, Piper and Zuilkowski (2015) found that coaches who had a larger zone size (i.e., more schools and teachers to coach) were associated with lower student outcomes in reading assessments. This may be related to the notion that when coaches only spend part of their time at a school, they have limited ability to meet with teachers, provide feedback, and support teachers on a regular basis (Niedźwiecki, 2007). Also, when coaches are not as integrated into a school, teachers may not reach out for support due to the lacking relationship, leading to coaches being less invested and motivated to transform practices (Niedźwiecki, 2007). Researchers have also found irregularity in coach and teacher collaborations to be ineffective, which supports the idea that coaching fewer teachers is better (Desimone & Pak, 2017). Cutrer-Párraga et al. 's (2021) participants described having consistent coaches that were frequently present

during the reading intervention as one of the most important aspects of the coaching support. Similarly, Anderson and colleagues (2014) found there to be a "strong correlation between improvements in teacher practice and the time teacher and coach spend together, the focus of their work (narrow as opposed to broad); and most importantly, the quality of their professional relationship" (p. 23).

Together these findings indicate that the quantity and quality of time spent with a coach is important for improving teacher practice. They also indicate that district leaders must ensure that coaches are not spread too thin across too many schools (Kane & Rosenquist, 2018). Instead, coaches must be allowed to work in ongoing ways within one school to build a trusting ongoing relationship with the teacher and the principal in hopes to make more than marginal improvements (Kane & Rosenquist, 2018).

Sustained Coaching Support

Researchers who have explored coaching practices that impact teacher confidence have found ongoing support provides teachers with time to collaborate with a colleague and gain knowledge of new strategies, which in turn, positively impacts their confidence levels (Ortiz, 2020). For example, Ortiz (2020) states, "It was due to this continuous support that teachers felt confident because they were also provided with non-evaluative feedback that enhances their positive relationships with coaches and colleagues" (p. 99). Furthermore, Stahl et al. (2016) illuminated the importance of deliberate ongoing practice which focuses attention on layered feedback. These researchers identified that ongoing layered feedback increases teachers' confidence in their instruction. Overall, coaches who provide consistent and sustained support, rather than infrequent support

with large time gaps between them, are more effective in influencing teachers (Lekwa et al., 2017).

The Coaching Cycle

When providing ongoing teacher support, there are various strategies that coaches employ to aid teachers in learning how to implement research-based practices within their classrooms. One common practice is partaking in a coaching cycle. After professional development or training has been implemented, the coaching cycle may resume with the coach (1) discussing objectives, setting goals and success criteria, and co-planning (i.e., before the lesson activities), (2) modeling, co-teaching, and observing (i.e., during the lesson activities), and (3) reflecting, debriefing, and analyzing data (i.e., after the lesson activities) (Eisenberg, 2015).

Before the lesson, coaches should support teachers in areas such as data-driven lesson planning that aligns with students' needs, curriculum, and standards (Irvine & Telford, 2015). During this planning, coaches should help teachers create assessments and student success criteria as well as plan data-driven lessons (Anderson & Wallin, 2018). Then, during modeling, the instructional coach should teach a lesson while modeling research-based practice for the teacher (Anderson & Wallin, 2018; Collet, 2012; Knight, 2007; Showers & Joyce, 1996). Model lessons provide a chance for teachers to learn many techniques that may not have been learned within their preservice and in-service training experiences (Knight, 2007) or that were modeled during PD but need further explanation within their classroom context (Anderson & Wallin, 2018). Engaging in a discussion about what the teacher observed within the model lesson can

promote engagement and understanding of next steps for their own implementation (Desimone & Pak, 2017).

After modeling, coaches and teachers often co-teach. Within co-teaching, there are four approaches: supportive teaching, parallel teaching, complementary teaching, and team teaching (Thousand et al., 2006). Supportive teaching is when the coach takes the lead, while the teacher observes and provides student support. Parallel teaching is when the teacher and coach work with different students in different areas of the room. Complementary teaching is when the coach aids the teacher in enhancing their instruction. Last, team teaching is when both the teacher and the coach are equally active in a joint lesson (Conderman, 2011). All four forms of co-teaching include the teacher and coach working together to provide instruction; however, supportive co-teaching is the most effective as a form of modeling for the teacher as they work with students to try out the strategies (Thousand et al., 2006).

After co-teaching, the coach should gradually release more control (Casey, 2006) by observing the teacher during a lesson. While observing the teacher, the coach does the same thing the teacher did while watching the model lesson, which includes observing the teacher based on identified goals (i.e., specific teaching behaviors to work on) (Knight, 2007). After the lesson, the coach and teacher should reflect and debrief. The coach should also provide feedback, help the teacher identify goals for future lessons (Barlow et al., 2014; Joyce & Showers, 1982), and identify areas for improvement based on student assessment data. This way, the teacher creates self-directed goals that are specific to their students' needs.

When debriefing and providing feedback, it is important for coaches to be reflective (i.e., ask questions and reflect with teachers) rather than directive (i.e., coaches tell teachers what to do and when to do it (Deussen et al., 2007). Being a directive coach eliminates the teacher's voice and opinions from the situation, which are two important aspects of a strong relationship (Knight, 2007). Instead, coaching should consist of reflective dialogue about teaching rather than one person telling the other what to do (Israel et al., 2018). Reflective dialogue should invite teachers to create solutions to their problems and self-direct their next steps (Deussen et al., 2007).

Teacher-Oriented Coaching

To best support teachers, literacy instructional coaching should be teacher-oriented (i.e., coaches who work directly with teachers rather than students or data) (Deussen et al., 2007; Kane & Rosenquist, 2018). If coaches are teacher-oriented, they work to meet the teacher where they are and differentiate their coaching style and instruction based on their needs. Based on the theory of andragogy, and adults' willingness to learn, "adults themselves are at different stages of development and are ready to learn different things and in different ways" (Knowles, 1980, p.51). Thus, it is important to make literacy coaching relevant to each teacher and how they learn best. However, Kane and Rosenquist (2018) identified that although principals reported that coaches' most important role was to work with teachers to improve instruction, most of them spent ample time collecting student test data and teaching and tutoring students instead. If coaches are working with students, data, and curriculum rather than teachers, there is a missed opportunity to build teacher capacity and thus benefit more students through increased teacher quality.

Purpose

There is a lack of research on effective coaching strategies within the realm of writing and writing instruction. Since writing is a difficult skill to teach and therefore coach, it is important to identify coaching practices that are most effective in preparing educators to teach writing. Thus, the purpose of this study was to identify if and how teachers perceive coaches influence their knowledge, skills, and dispositions toward writing and writing instruction. In the following sections, I discuss the methods used to conduct this study.

Methods

In the following sections, I describe the methods used for this inquiry. More specifically, I explore the: (1) research design and rationale, (2) legitimation of this study, (3) measures used to answer the research questions, (4) participants, and (5) data analysis.

Research Design and Rationale

For Study II, I employed a convergent-parallel mixed methods design to investigate writing as part of literacy coaching. Mixed methods research is formally defined as "the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study" (Johnson & Onwuegbuzie, 2004, p. 14). I chose a mixed-methods design to broadly explore how K-6 teachers perceive coaches have influenced their knowledge, skills, and dispositions for writing and writing instruction (i.e., quantitative analysis) and then look more closely at what writing coaching practices were most effective in making these influences (i.e., qualitative analysis). Mixed methods allowed me to produce a more complete picture of the knowledge necessary to inform both theory and practice (Johnson

& Onwuegbuzie, 2004) by not only exploring frequencies and means specific to teachers' beliefs, but also exploring their thoughts through open-ended responses.

Mixed Methods Procedures

Within this mixed methods study, I used the convergent-parallel approach (Tashakkori et al., 1998) to gain an understanding of teachers' perception of if and how coaching influences their knowledge, skills, and dispositions toward writing and writing instruction (see Figure 2.3 in Chapter II).

Within this design, I collected qualitative and quantitative simultaneously. Quantitative and qualitative data were analyzed independently and then the results were compared and interpreted within the discussion section (Creswell & Plano-Clark, 2011). I weighted qualitative and quantitative data equally since they were compared side-by-side to provide an overall picture (rather than one analysis having priority over the other) (Morse, 1991). The discussion section is where I made inferences after looking across the two data types (Natesan et al., 2011).

Legitimation

Legitimation is the validity of the mixed methods study (Onwuegbuzie et al., 2011). To legitimize this study, I used the same conversion process described in Study I (Chapter II). I also used weakness minimization to highlight the strengths and minimize the overlapping weaknesses of each method individually (Onwuegbuzie & Johnson, 2006). According to Onwuegbuzie (2003), the strengths of quantitative analyses is their "empirical precision", whereas the strengths of qualitative techniques include their ability to obtain "descriptive precision". Taken together, they can be used to examine the macro

and micro levels of the study and minimize the weakness of one another (Onwuegbuzie & Leech 2005).

While quantitative analyses within this study allowed me to identify whether teachers feel more competent in writing and writing instruction due to coaching, the weakness lies in the inability to use this information to further explore the specifics to why teachers felt this way. If I only presented quantitative findings, coaches would not have practical strategies to implement within their own practices moving forward. Furthermore, the weakness of the qualitative phase was that I was unable to use the data to identify the frequency of teachers who felt that their writing coaching was influential. Thus, the quantitative phase provided information at the macro level (i.e., if coaches are generally feeling more competent due to coaching) and the qualitative phase provided a more in-depth narrative (at the micro level) on how teachers feel coaches have influenced their knowledge, skills, and dispositions toward writing and writing instruction.

Measure

To identify how coaches are supporting teachers in writing, I used elements of the S*upports in K-6 Writing and Writing Instruction* survey I created. The items specific to this study included *Yes* or *No*, Likert-type, and open-ended questions. With the *Yes* or *No* questions, I identified the percentage of teachers who reported *Yes* to receiving various writing support from coaches. *Yes* or *No* questions were also used to identify if teachers feel more competent in teaching writing due to receiving instructional literacy coaching. I utilized Likert-type questions to identify how coaching support influences teachers' dispositions toward writing and writing instruction on a scale from 1-5 (Strongly Disagree- Strongly Agree). For items specific to teacher dispositions, I used confidence

as a proxy for dispositions because it is a term that reflects teachers' feelings and attitudes and is widely used and understood (whereas terms such as self-efficacy may need further explanation). Lastly, open-ended questions allowed for teachers to further articulate which coaching practices were or were not impacting their writing and writing instruction. Open-ended questions were optional in hopes to decrease participant fatigue and increase completion rates. Furthermore, survey elements were either researcher created or adapted from one of four measures, including the *Writing Observation Framework* (WOF) (Henk et al., 2003), *Teacher Record Observation Survey-Writing* (TROS-W) (Hodges, 2015), *Writing Survey Instrument* (WSI) (Cutler & Graham, 2008), and the *Inservice Teacher Self-Beliefs Writing Inventory* (IT-SWI). Below, I discuss the survey items that were created specifically for the purposes of this study.

Survey Items

To answer the research questions posed in this study, I adapted questions from each of the selected surveys (i.e., WOF, TROS-W, WSI, IT-SWI) to be specific to teachers and how they perceive their coaches influence their knowledge, skills, and dispositions toward writing and writing instruction. For example, from the WSI, I changed the item, "Circle how often students select their own writing topics" , to the *Yes* or *No* item, "I have received coaching in providing student choice of topics for writing". Additionally, I changed the following Likert-type item from the IT-SWI, "I feel confident in my ability to integrate writing into all subject areas" to, "Coaching has influenced my confidence in integrating writing into all subject areas". Both the WOF and TROS-W observation tools were revised to be *Yes* or *No* items specific to receiving writing coaching. For example, the WOF observation item, "The teacher selected writing tasks

appropriate and relevant for students of this ability and grade level", was changed to the following *Yes* or *No* statement, "I have received coaching in selecting writing tasks that are appropriate and relevant to my students".

Furthermore, when teachers reported *Yes* to receiving support in a writing skill or strategy, I added another *Yes* or *No* item that asked if they feel more competent in teaching that skill or strategy due to receiving literacy instructional coaching. One example is the following *Yes* or *No* statement, "I feel more competent assessing student writing after receiving instructional coaching". In the following section, I describe the study participants.

Participants

Sixty-six K-6 teachers participated in this study. Ninety-seven percent of the teachers within this sample were female and 3% were male. Additionally, 82% of the participants identified as White, 6% as African American, 4% as Hispanic or Latino, and 3% as Asian/Pacific Islander. Native Americans and participants who selected multiple ethnicities accounted for the remaining 5% of the participants. Out of the 66 total participants, 41 (62%) completed the full survey. All open-ended responses were coded for partial and complete surveys. Percentages and other quantitative analyses were based on the number of participants that answered each specific question. In Table 3.1, I provide information outlining the teachers' years of experience.

Table 3.1 Participants' Years Teaching and Years Coaching

Years Teaching	1-3	4-6	7-10	11-20	20+
Number of Teachers	17 (26%)	16 (24%)	13 (19%)	13 (19%)	7 (11%)

Participants in this study resided in 23 different states, with two participants living outside of the United States. Idaho, Tennessee, and Alabama represented the majority of the teacher sample. There were no follow-up questions regarding context for the teachers that resided outside of the United States. Table 3.2 illustrates the different states that were represented in this study and the number of participants from each state. Of this sample, 17% of the teachers worked in rural areas, 51% taught in urban areas, and 32% taught in mixed contexts of both rural and urban characteristics. The majority of participants (92%) worked in public schools.

Table 3.2 Participant Contexts

N	**State Resided**	
1	Arkansas California Colorado Connecticut Illinois Iowa	Louisiana Michigan New Jersey Ohio Virginia Wisconsin
2	Georgia	Missouri New York
3	Kansas	Washington
4	Massachusetts	Nevada Texas
6	Alabama	
10	Tennessee	
12	Idaho	

Note. Two participants resided outside of the United States.

Data Analysis

Below, I discuss how I analyzed the data from both the qualitative and quantitative items of the survey.

Quantitative

To identify the ways K-6 teachers perceive that coaches have influenced their knowledge, skills, and dispositions for writing and writing instruction, I calculated general frequencies (i.e., percentages, averages) based on survey responses. For example, I identified what percentage of teachers are receiving coaching in each domain, strategy, or skill and then identified the percentage of those teachers that feel more competent teaching that skill due to coaching. For instance, if a teacher responded *Yes* to receiving support, I further calculated the percent of teachers who felt more competent in that skill due to coaching. For Likert-type questions, I determined averages and standard deviations. More specifically, I determined the mean scaled responses on a scale from 1-5. Standard deviations were also calculated to identify the variability in participant responses.

Qualitative

To answer the second portion of my research question (*What do K-6 teachers perceive to be the coaching practices that contribute to these influences?*) I completed one coding cycle and then categorized and collapsed codes to determine themes. Below I will discuss these procedures in more detail.

Step 1: Initial Categorization.

First, to identify what teachers find to be the most effective coaching strategies for influencing their writing knowledge, skills, and dispositions, I did a round of

structural coding of short answers (Saldaña, 2016). I chose structural coding because it is question-based coding and "initially categorizes the data corpus to examine comparable segments commonalities, differences, and relationships" (Saldaña, 2016, p. 98). In other words, I first categorized all data specific to practices that influence teacher *knowledge*, *skills*, and *dispositions* (based on my research question). On the survey, I explicitly asked teachers the practices they perceived that influence their knowledge, skills, and dispositions, and then their answers to those survey items were put into one category (e.g., survey question one asks about dispositions, so the responses to all of those questions go in the same category). For initial categorization, I had three different spreadsheets that housed all responses specific to each of the three domains (i.e., knowledge, skills, dispositions).

Step 2: Descriptive Coding

Once I completed my initial categorization, I then conducted line-by-line coding of each open-ended response using NVivo8®. Coding was done question by question rather than by participant. During coding, I conducted open coding (i.e., determined in the moment) to provide further detail into the specific practices teachers thought were beneficial. When open coding, I assigned descriptive codes to the meaningful units of data (Saldaña, 2016). All descriptive codes were specific coaching practices that teachers reported. Some examples of descriptive codes within the skills category included *newsletters* and *weekly meetings.*

While reading responses, I realized some participants were mentioning or inferring that coaches had no influence on their knowledge, skills, or dispositions toward writing and writing instruction. Therefore, I assigned these responses with a *No Influence*

descriptive code. I created a different spreadsheet for all of the responses coded with *No Influence*. This resulted in a total of four spreadsheets.

Table 3.3 below provides examples of how I coded the data. Each descriptive code was a specific coaching practice that teachers' found influential. A piece of data could be coded twice because teachers often listed more than one influential coaching strategy within their responses.

Table 3.3 Descriptive Coding Examples

Meaningful Unit of Data	Initial Category	Descriptive Code
"I think the thing that has influenced my knowledge of writing practices is having the opportunity to collaborate and co-teach with our reading specialist. It has been amazing to learn from her".	Knowledge	Collaboration Co-Teaching
"The coaching practices that have influenced my usage of writing have been collaboration and observations".	Skills	Collaboration Observations
"The coaching practices that have influenced my confidence in writing instruction are co-teaching and collaboration."	Dispositions	Co-teaching Collaboration
"I know teachers in several districts and writing coaching is lacking. It is needed greatly. PD is made available yearly, but not required, and there's no consistent coaching in the individual schools."	Dispositions	No Influence

Step 3: Sub-Category Creation

To categorize the data once they were separated onto each of the spreadsheets and assigned descriptive codes, I read the codes one by one and grouped them based on similarities. For example, the descriptive codes *Professional Development (PD)* and

Professional Learning Communities (PLC), on the *Knowledge* spreadsheet, were grouped together because they are both a type of training to better prepare teachers. After participant responses were grouped by similarities, I created a name for each group based on what the housed codes ultimately represented. For instance, when identifying how teachers' perceived coaches influence their knowledge, the descriptive codes *group meeting, meeting, conversations,* and *one-on-one meetings* were grouped (with others) and assigned the title of *Meetings* because they all entailed the coach and teacher meeting to discuss their writing or writing instruction. Grouping of the data resulted in nine total influential practices. For the initial category *Knowledge*, the three influential coaching practices included: (1) *Meetings,* (2) *Support with Instructional Resources and* (3) *Coaching Cycle.* For the *Skills* category, there were two influential coaching practices including (1) *Meetings* and (2) *Coaching Cycle.* Lastly, for *Dispositions*, there were three influential coaching practices including (1) *Meetings*, (2) *Coaching Cycle,* and (3) *Providing Instructional. Resources and Strategies.* Figure 3.2 below provides a representation of the first three steps of the coding and categorizing process.

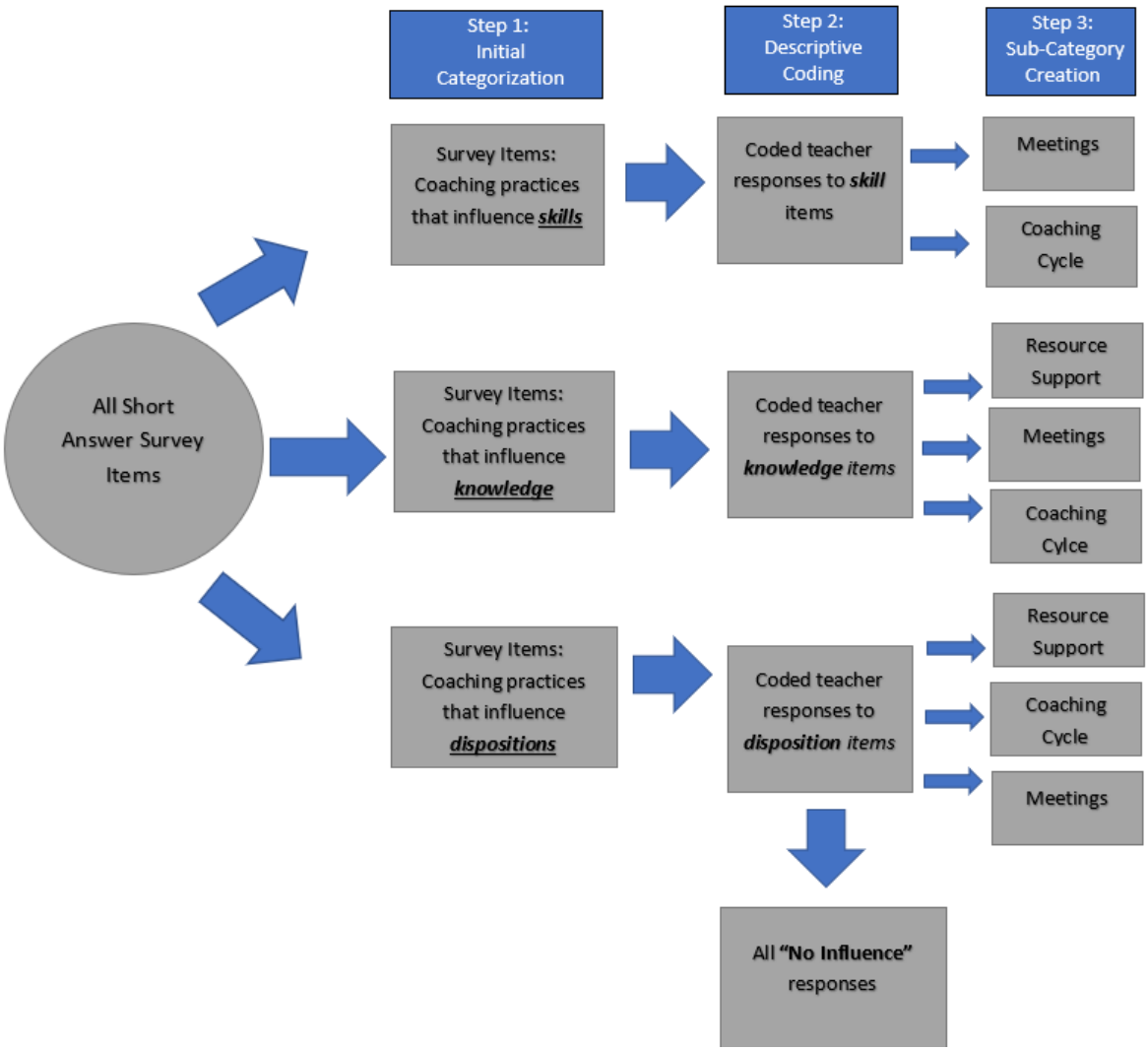

Figure 3.1 Structural Coding Diagram

Step 4: Collapsing Across Knowledge, Skills, and Disposition Categories

After identifying the coaching practices that influence teachers' knowledge, skills, and dispositions, I realized that teachers were either talking about the coaching cycle, meetings, or resources support. Therefore, I collapsed the data specific to each influential practice across the three spreadsheets. For example, all of the codes specific to the *Coaching Cycle* were collapsed across the three spreadsheets to create one category. Since the *No Influence* responses all had the same code, there was no need to look across

these codes to categorize any further. Thus, these codes comprised the “No Influence” theme.

After collapsing, I created themes based on what each of the categories represented. For instance, the *Coaching Cycle* category was given the theme title “Sustained Writing Support Through the Coaching Cycle” because participants were discussing how coaching support was ongoing through the stages of the coaching cycle. Furthermore, the *Meetings* category was given the theme title “Collaboration Through Meetings, Check-ins, and Updates”, because participants appreciated meeting with coaching formally, but also appreciated more informal meetings through check-ins and other updates. In the end, I had four overarching themes including, (1) “Sustained Writing Coaching Through the Coaching Cycle”, (2) “Collaboration Through Meetings, Check-ins, and Updates", (3) “Support with Instructional Resources and Strategies” and, (4) “No Influence”.

Results

To identify if teachers perceive that coaches have influenced their knowledge, skills, and dispositions towards writing and writing instruction and the coaching practices they perceive to contribute to those influences, I (1) identified the percentage of teachers that felt more competent in teaching different aspects of writing due to receiving coaching, (2) calculated averages (on a scale from 1-5) identifying the level of participants’ agreeableness to survey items specific to coaches’ influence on their knowledge, skills, and dispositions towards writing and writing instruction, and (3) created themes based on teachers’ short answers. Below, I review quantitative results

(i.e., percentages, averages) followed by qualitative results (i.e., themes) specific to the coaching practices teachers perceive to be influential.

Quantitative Results

To identify how K-6 teachers perceive that coaching has influenced their knowledge, skills, and dispositions toward writing and writing instruction, I calculated percentages of *Yes* or *No* responses as well as means and standard deviations of Likert-type responses. Below, I detail these analyses in more detail.

Percentages

To identify if K-6 teachers perceive that coaches have influenced their knowledge, and skills for writing and writing instruction, I first identified if they were getting support from teachers in various writing instructional practices. If they were, I then asked them a follow-up question specific to whether or not they feel more competent teaching or using that writing skill or strategy due to coaching. Below, I provide the percentages specific to writing instructional strategies, writing skills, stages of the writing process, and writing assessments.

Writing Instructional Strategies.

First, I identified if teachers perceive that coaches have influenced their knowledge, skills, and dispositions toward various writing instructional strategies. Table 3.4 provides the percentages of teachers who received coaching on each of the survey items specific to writing instructional practices as well as the percentage of those participants that feel more competent in those strategies due to receiving writing coaching. Notice that on *most* survey items, less than 50% of teachers reported that coaches were providing them support, however, the majority of the teachers that were

provided support felt more competent in those pedagogical strategies. For instance, while only 29% of teachers reported that coaches were providing them support in group writing practices, 100% of those teachers felt more competent in group writing due to literacy instructional coaching.

Table 3.4 Writing Instructional Strategies

Writing Instruction	Reported Yes	Feel More Competent
Selecting writing tasks that are appropriate and relevant for students in their classroom	53%	92%
Pacing and Flow	49%	88%
Providing writing instruction that is sensitive to the diversity of students' experiences and their social, cultural, ethnic, and linguistic needs.	31%	87%
Integrating writing instruction into multiple disciplines	29%	93%
Assisting students with writing strategies	49%	92%
Making clear expectations for the writing process	55%	85%
Making clear expectations for writing products	43%	86%
Providing direct instruction regarding writing	49%	84%
Using writing to guide exploration of course content (i.e. science, social studies, math)	29%	86%
Scaffolding students' independent use of a skill or strategy by providing multiple opportunities for its application in meaningful contexts	39%	79%
Providing mini-lessons on writing skills	49%	88%
Conducting writing centers	24%	75%
Creating writing prompts or topics	37%	100%
Using writing and reading to support each other	61%	93%
Creating writing lessons that have multiple instructional goals	45%	86%
Encouraging students to use writing for authentic purposes	47%	91%
Encouraging students to write at their own pace	47%	91%
Teaching multiple genres of writing	41%	100%
Student choice of topic	33%	100%

Providing templates/examples	38%	94%
Teaching the writing process	48%	100%
Group writing	29%	100%
Assignments to emphasize thinking and processing of content	26%	91%

Writing Skills

Next, I identified if teachers perceived that coaches were supporting them in teaching writing skills. In Table 3.5, I provide the percentage of teachers that reported coaches have supported them in teaching various writing skills and if they feel more competent in those skills due to receiving coaching. The most frequently reported coached skill was goal setting during the writing process (40%) and the least reported support was in sentence structure/construction (14%). While most of the teachers are not being provided support in teaching these writing skills, the majority of those who are receiving support feel more competent. More specifically, 83-100% of participants receiving support in these writing skills feel more competent due to instructional coaching support. Even though only 14% of participants responded that they received support in sentence structure/construction, 93% of those participants feel more competent in this writing skill. Similarly, only 29% of participants received coaching in handwriting and writing conclusions, however, 100% of those participants feel more competent in teaching those skills.

Table 3.5 Coaching Support in Writing Skills

Writing Skill	Reported Yes	Feel More Competent
Spelling	33%	100%
Capitalization	31%	85%
Punctuation	29%	92%
Handwriting	29%	100%
Grammar	33%	86%
Sentence Structure/Construction	14%	93%
Organization	24%	95%
Constructing a Thesis Statement	33%	83%
Synthesizing Research	24%	100%
Evidence/Citation Use	33%	93%
Word Choice	38%	88%
Developing Voice	31%	85%
Writing Conclusions	29%	100%
Goal Setting during the Writing Process	40%	94%
Identifying Genre Elements	38%	88%

The Writing Process

To identify if teachers feel that coaches have influenced their competence in teaching different stages of the writing process, I asked them questions specific to coaching within planning, drafting, editing, and revising teaching practices. In Table 3.6, I provide the percentage of teachers that reported receiving support in the different practices as well as the percentage of participants that feel more competent due to working with their literacy instructional coach. The most frequently reported support was

relating the purpose or objective of a lesson to the previous writing lessons or activities (a drafting skill) (45%), while the least reported skills were emphasizing the importance of audience awareness (17%), encouraging students to use precise word choice (17%), and encouraging students to use writing tools (online or print) during the revision process (17%). Even though the majority of teachers reported that coaches were not supporting them in skills for different stages of the writing process, most of the participants that were receiving support felt more competent in using the skills after working with their literacy instructional coach. However, after coaching, only 57% of teachers felt more competent in teaching audience awareness and 63% felt more competent in helping students determine the appropriate layout or format for their writing. While 57-63% is still the majority of participants, these were the lowest percentages of increased competence across all findings.

Table 3.6 Coaching Support Specific to the Writing Process

Support Specific to the Writing Process (Stage of the Writing Process)	Reported Yes	Feel More Competent
Relating the purpose or objective to previous writing lessons/ activities. (Planning)	45%	95%
Activating students background knowledge about the writing topic and intended audience. (Planning)	45%	89%
Encouraging students to prewrite using a variety of organizers such as concept maps, webs, lists and outlines. (Planning)	31%	92%
Helping students generate possible language for their writing. (Planning)	31%	92%
Emphasizing the importance of audience awareness. (Drafting)	17%	57%
Encouraging students to get their ideas down on paper and not to focus too intently on handwriting or spelling. (Drafting)	21%	78%
Helping students determine the appropriate layout or format for their writing. (Drafting)	19%	63%
Encouraging students to use more precise word choice within their drafts. (Revision)	17%	86%
Providing instruction that helped students elaborate using specific details to develop content, clarity, and coherence. (Revision)	19%	88%
Providing instruction that helps students organize their ideas in a logical order by including a beginning, middle, and end. (Revision)	21%	78%
Encouraging students to use writing tools such as a dictionary and thesaurus during the editing process (online or in print). (Editing)	17%	86%

Writing Assessment.

Last, I identified if teachers perceived that coaches were supporting them in writing assessments. In Table 3.7, I provide the percentage of teachers that reported coaches have supported them in different forms of writing assessments and if they feel more competent in those assessment skills due to receiving coaching. Only 14-24% of teachers reported receiving support in various assessments. The most frequently reported support was using rubrics to evaluate the quality of students' writing (24%) and the least reported support was providing opportunities to have peer conferences to discuss student writing with a partner or in small groups (14%). While coaching support in assessment was rare, the majority of those who received support feel more competent in using these assessment tools. More specifically, 75-100% of participants receiving support in writing assessment techniques feel more competent due to instructional coaching support. For example, even though only 14% of participants responded that they received support in providing opportunities to have peer conferences to discuss student writing with a partner or in small groups, 100% of those participants feel more competent in using this form of assessment. Similarly, while only 19% of participants received coaching in holding writing conferences to assist students with their prewriting, drafting, revising, editing, and publishing, 100% of those participants feel more competent in this assessment strategy.

Table 3.7 Coaching Support Specific to Writing Assessment

Assessment Specific Support	Reported Yes	Feel More Competent
Providing time to share writing with peers and intended audience.	21%	78%
Providing students with a standardized checklist to edit their work prior to publication.	21%	78%
Using scoring rubrics to evaluate the quality of students' writing.	24%	90%
Providing opportunities for self-evaluation of writing (formal or informal).	21%	89%
Providing opportunity for peer-evaluation of writing (formal or informal).	19%	75%
Providing feedback on individual student's writing.	19%	100%
Holding writing conferences to assist students with their prewriting, drafting, revising, editing, and publishing.	17%	100%
Providing opportunities to have peer conferences to discuss student writing with a partner or in small groups.	14%	100%

Averages

To learn more about how teachers perceive writing coaching has influenced their knowledge, skills, and dispositions toward writing, I asked them to rank their level of agreeableness (i.e., Strongly Disagree to Strongly Agree) to different survey items. Below, I discuss how teachers viewed coaches influence their writing instructional skills and knowledge. Then, I discuss how teachers viewed coaches influenced their dispositions toward writing. It is important to note that reported means are on a scale from 1-5.

Knowledge and Skills

On average, teachers moderately agreed that coaches influence their knowledge of writing instructional practices (M = 3.54, SD = 1.45). While teachers also moderately agreed that coaches influenced their knowledge of writing instructional practices across disciplines (M = 3.07, SD = 1.51), they felt the least influenced by this support. For example, 24% of teachers felt that coaches strongly influence their writing instructional practices across disciplines while almost the same percentage (22%) strongly disagreed. Teachers also moderately agreed that coaches impacted their writing skill usages (M = 3.59, SD = 1.47), which was the highest average of reported influence. See Figure 3.2 for a visual representation of variability in teacher responses.

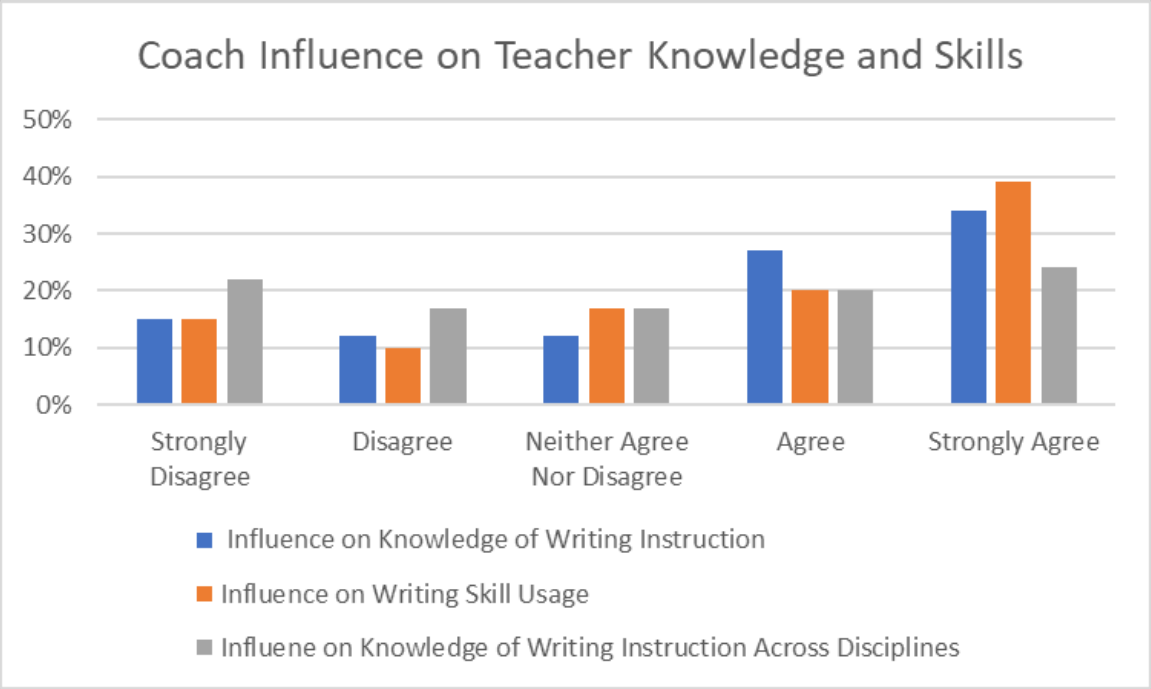

Figure 3.2 Coach Influence on Teacher Knowledge and Skills

Dispositions

On average, teachers moderately agreed that coaches influenced their confidence in writing (M = 3.54, SD = 1.48) and writing instruction (M = 3.66, SD = 1.51). While teachers reported that coaches moderately influenced their confidence in teaching writing across disciplines, it was the lowest average (M = 3.12, SD = 1.45). Twenty-two percent of teachers felt that coaches strongly influenced their confidence in writing instructional practices across disciplines while a similar percentage (20%) strongly disagreed. Teachers most strongly felt that coaches influenced their confidence in writing instruction, with 61% of participants reporting that they agree to strongly agree to this survey item. However, coaches' influence on teachers' confidence for writing was not far behind with 56% of participants reporting to agree or strongly agree to the statement. See Figure 3.3 for a visual representation of how teachers responded to items specific to coaches' influence on their dispositions.

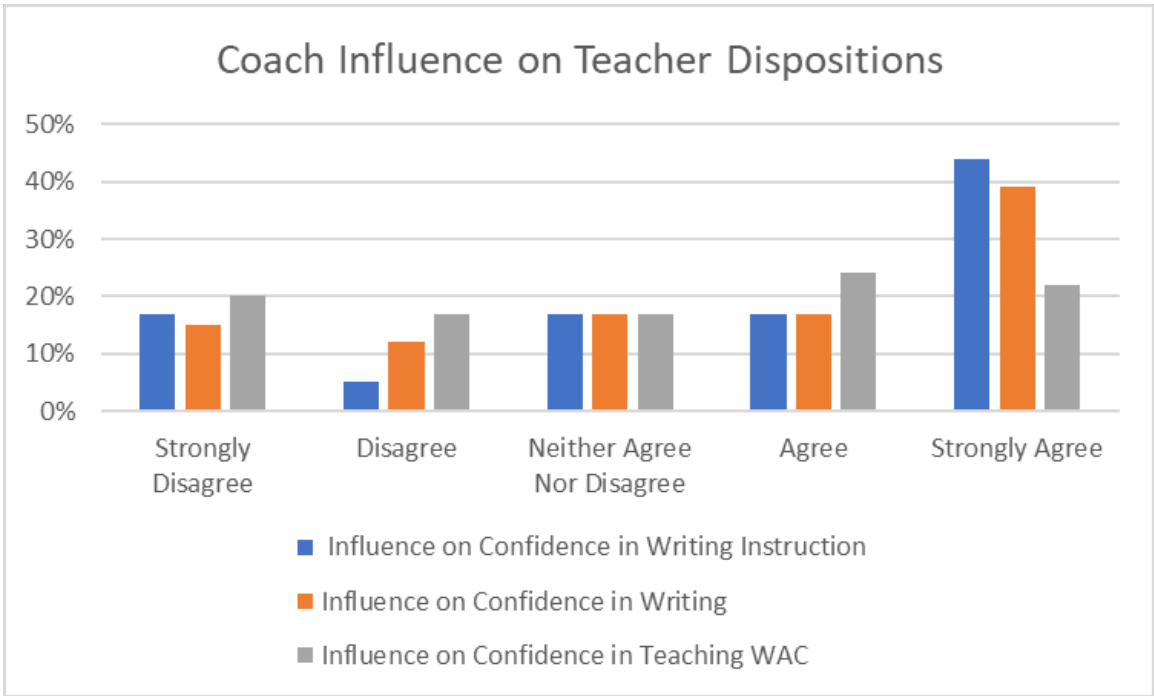

Figure 3.3 Coach Influence on Teacher Dispositions

Qualitative Results

To answer *What do K-6 teachers perceive to be the coaching practices that contribute to these influences*, I identified themes based on teacher participants' responses to open-ended survey items. In Table 3.8, I provide the themes that emerged from the data as well as the percent of codes that made up each theme and category. In the following sections, I provide more details specific to each theme. The themes are described below beginning with the specific ways coaching influenced teachers' knowledge, skills, and dispositions toward writing and then shifting to their lack of influence.

Table 3.8 Short Answer Themes

Codes	Themes and Categories
40.36%	**Sustained Support Through the Coaching Cycle**
	Professional Development and Workshops
	Co-Planning
	Modeling
	Co-teaching
	Observations
	Reflecting, Debriefing, and Feedback
28.93%	**Collaboration Through Meetings, Check-ins, and Updates**
14.46%	**No Influence**
12.65%	**Support with Instructional Resources and Strategies**

Note*:* The other 3.60% of codes were labeled as "Other" and did not fit within any category

Influential Coaching Practice 1: Sustained Support Through the Coaching Cycle

The most prevalent way participants indicated that coaches were influencing their writing knowledge, skills, and dispositions was by providing sustained writing support through the coaching cycle. Specific to support before the writing lesson or unit, one participant reported that coaches increased their knowledge of writing instruction through "a PD that told us the state would be testing revising and editing and we need to teach it with intentionality from January on." Furthermore, teachers reported modeling and observation to be influential. One teacher reported that a coach positively influenced their confidence by modeling how to teach handwriting and later observing them while they taught. They stated, "She has modeled teaching handwriting in front of my class before. She gave me a Handwriting Without Tears Booklet [a handwriting curriculum] and observed me teach handwriting".

Specific to co-planning, one teacher stated that their coach increased their knowledge by, "Working together to plan Lucy Calkins lessons, adapting them for our students". Another teacher wrote, "I like talking to someone to plan. My coach is great to bounce ideas off of." Lastly, teachers appreciated the feedback they received while reflecting and debriefing about the lesson. One teacher appreciated the tremendous amount of feedback they received to reflect on. While another teacher reported that they appreciated the feedback they received from the coach's observations as well as their experience. The theme "Sustained Writing Support through the Coaching Cycle" made up 40.36% of all codes.

Influential Coaching Practice 2: Collaboration through Meetings, Check-ins, and Updates

The second most prominent theme was collaboration through meetings (both one-on-one and group), check-ins, and other updates. Teachers reported that meetings were influential in increasing their knowledge, skills, and dispositions toward writing. One participant explained that one-on-one meetings influenced their knowledge of writing instruction, specifically when the meeting was tailored to the needs of the students. While one-on-one meetings were more frequently reported, teachers also appreciated group meetings with the coach. This included group meetings over Zoom and collaborating with the coach and other teachers face-to-face. A teacher stated that "bi-weekly meetings with our collaborative group" impacted their writing instructional skills. Another coach reported that it was beneficial to have time to meet with their coach over Zoom while online learning during COVID-19.

Teachers found regular meetings to be most beneficial. More specifically, during regular check-ins, one teacher reported that focusing on student writing with their coach was beneficial to their practices. Another teacher reported on how frequent communication impacted their dispositions, stating, "Weekly communication definitely helps my confidence". Other teachers reported that just having informal conversations and updates were the most impactful to their writing instruction. This included activities such as "Talking at lunch" or even getting "newsletters" from their coaches. This theme made up 29.93% of all codes.

Influential Coaching Practice 3: Support with Instructional Resources and Strategies

The theme "Support with Instructional Resources and Strategies" indicated that coaches influenced teachers' knowledge, skills, and dispositions by sharing instructional

strategies and resources. This included resources such as “examples of past lessons and outcomes”, graphic organizers (e.g., Thinking Maps), curriculum and books (e.g., Handwriting Without Tears, Words Their Way), and engagement resources. One teacher even reported that their coach shared different writing strategies in their weekly newsletter which was helpful. Additionally, one teacher stated that their coach influenced their writing knowledge through discussion and communication of skills, needs, and materials. They stated that their coach, “...is very knowledgeable and up to date on the new strategies that help my students.” This is similar to another teacher’s response who stated that their coach helped them with strategies to develop their students’ writing through revision, working with peers, and a writer's workshop. Lastly, one teacher wrote that their coach supported them with research-based resources for interdisciplinary writing. They mentioned that they needed that support from their coach because “I feel like I don't know where to start in terms of the different 'structures' when writing about math and science.” Overall, the theme “Support with Instructional Resources and Strategies” made up 12.65% of all codes.

No Influence

Many teachers reported that their coach had no impact on their knowledge, skills, and dispositions toward writing and writing instruction. Teachers described that coaches had no impact on their writing and writing instruction because they were rarely (or never) providing support in that that area. For instance, one teacher mentioned, “In the school district, it would be awesome to have consistent writing support and coaching. It's next to non-existent”, and another teacher stated, “I haven’t been observed and I haven’t had feedback from my IC [instructional coach] in multiple years”. One teacher mentioned

that they did not receive coaching in writing because their coach "doesn't really observe us or do coaching cycles unless there's a teacher who is struggling." Another teacher mentioned that they do not receive coaching in writing because their coach was less qualified and trained then they were. They wrote:

> I have the same training as my Literacy Coach in my school. We also took the classes together. We were on the same grade level team for years. We have also been teaching the same number of years, if anything, she comes to me for guidance.

Many of the teachers also reported that they do not receive coaching in writing due to reading or other subject areas having precedence over writing instruction. For instance, they noted that their coaches focus their instruction on reading and math. One teacher stated, "The bulk of the day is spent on teaching students HOW to read and do basic math." Lastly, a teacher noted that due to the COVID-19 pandemic, reading and math get more attention because students need to catch up within these subjects due to school closures. Due to this lack of writing coaching, teachers reported that they are often "on their own" and have to teach themselves. One teacher wrote:

> I feel that I was really on my own with how I can assist all student writing levels especially since some could not write yet. I did it the best I knew how with labels, word lines, first letter practice, and phonetically sounding out.

They also discussed going elsewhere for writing support since their coach does not work with them on writing or writing instruction. More specifically, they seek support through writing webinars, professional development (not provided by the coach), books, writing groups, writing networks, and LETRS training.

While teachers reported a lack of writing support from their coaches, they recognized the importance of and need for support in writing and writing instruction. One coach stated, "I know teachers in several districts and writing coaching is lacking. It is needed greatly." While another coach stated how influential coaching *could* be, they wrote, "When I've had coaching that is planned and effective, it's been powerful." Overall, the theme "No Influence" made up 14.46% of codes.

Discussion

Instructional coaching has shown to influence teachers' use of instructional practices (Nugent et al., 2017; Sonesh et al., 2015), teachers' self-efficacy for instruction (Jacobs et al., 2018; Tschannen-Moran and McMaster, 2009), and student achievement (Tanner et al., 2017) in various contexts and content areas. However, research on instructional coaches' influence on teachers' knowledge, skills, and dispositions specific to writing and writing instruction is sparse. Since teachers often leave their teacher preparation program feeling unprepared to teach writing (Brindle et al., 2016; Gilbert & Graham, 2010; Hodges et al., 2019) and professional development specific to writing and writing instruction is often lacking (Roberts & Wibbens, 2010), I examined if and how literacy instructional coaches mitigate these issues by supporting teachers in writing and writing instruction. More specifically, I explored the research questions, *Do K-6 teachers perceive that coaches have influenced their knowledge, skills, and dispositions for writing and writing instruction? If so, what do they perceive to be the coaching practices that contribute to these influences?*

Looking across both quantitative and qualitative data, results indicate that many teachers in this study do not receive literacy instructional coaching specific to writing and

writing instruction, and thus, they do not believe literacy coaching influences their writing skills or practices. However, those who do receive writing coaching believe that, on average, it moderately increases their knowledge, skills, and dispositions toward writing and writing instruction. Teachers perceive (1) sustained coaching support throughout the writing cycle, (2) collaboration through meetings, check-ins and updates, and (3) receiving support specific to resources and strategies to be the most influential writing coaching practices.

Lack of Writing Coaching

Based on both qualitative and quantitative analyses**,** coaching within writing and writing instruction is limited, and therefore, is not influential to those who do not receive support. On most survey items, well below 50% of teachers responded *Yes* to receiving support within the majority of the various skills/strategies specific to writing. These quantitative findings aligned with qualitative results that suggest writing in coaching has "No Influence" on teachers' writing coaching practices due to the lack of coaching. Due to both the lack of research in this domain and reading often taking precedence over writing (Shanahan, 2009), this result is unsurprising.

With a lack of writing coaching, there comes a missed opportunity for coaches to influence teachers' knowledge, skills, and dispositions toward writing and writing instruction. Since we know teachers often avoid teaching writing based on their own negative writing experiences (Street & Stang, 2009) and have low levels of self-efficacy to teach writing (Hall, 2016), it is integral for coaches to spend time fostering teachers' beliefs and enhance their knowledge and skills specific to writing. Since nearly three-quarters of students in the United States are not meeting proficiency in writing (National

Center for Education Statistics, 2017), coach support in writing is crucial for working to close achievement gaps and prepare students for their post-secondary endeavors. This shift beings with school district personnel and policy makers putting more emphasis on the importance of writing within the K-6 curriculum and beyond. Emphasizing the importance of rich and explicit writing instruction is not only necessary for students to be successful in their post-secondary endeavors but is essential to ensure social justice.

Influence of Writing Coaching on Teacher Knowledge, Skills, and Dispositions

While coaching within writing is infrequent, the majority of teachers who receive writing coaching believe that it impacts their competence in various writing instructional skills/strategies. For example, although only 14% of participants reported that their coaches supported them in peer conferencing, 100% of these participants believed that coaching increased their competence in this assessment practice. These current findings align with research on coaching that suggests that coaching increases teachers' competence (Hammond & Moore, 2018), however, my results further support the notion that more writing in coaching is needed because it would benefit underprepared teachers within the domain of writing.

Participants who do receive writing-related support believe that their coaching support moderately influences their knowledge, skills, and dispositions for writing and writing instruction. Specific to how coaching influenced participants' knowledge and skills, teachers most strongly agreed that coaches impacted their usage of research-based writing skills ($M = 3.59$, $SD = 1.47$). While the average was only moderate, this may be due to the fact that many of the teachers did not receive any instructional coaching in writing, which possibly influenced the average. However, the teachers who did receive

support often reported that they agree or strongly agree that the coaching was influential. This aligns with Jacobs and colleagues' (2018) research that identified that teachers who receive reading instructional coaching (and are receptive to coaching) are more likely to implement coached skills with fidelity. These results also correspond to Cornett and Knight's (2009) research which found that only having a high-quality workshop resulted in 15% implementation rate of new skills while having quality workshop followed by coaching resulted in 85% of teachers who implemented new skills with fidelity.

When it comes to how coaches have influenced teachers' dispositions, on average participants believed that coaches' biggest influence was on their confidence in writing instruction (M = 3.66, SD = 1.51) and writing (M = 3.54, SD = 1.48). Even though averages were moderate, more than half (61%) of participants agreed to strongly agreed that coaching influenced their confidence in writing instruction, while 56% agreed to strongly agreed that coaching influenced their confidence in writing. Results from this study align with research confirming that teachers who receive instructional coaching are able to implement coached instructional activities with more confidence (Hammond & Moore, 2018; Jacobs et al., 2018).

While results were still moderate, teachers reported that their coaching support was least influential in impacting their knowledge (M=3.07, SD=1.50) and dispositions (M=3.12, SD=1.45) specific to writing instruction across the curriculum (WAC). These results were not surprising because there is often a lack of training specific to writing in teacher preparation programs, which limits the amount of time teacher educators have to teach interdisciplinary writing methods (Myers et al., 2016). Coaches also may not have the time (due to their various responsibilities) or the content knowledge (Ottenbreit-

Leftwich, 2020) to incorporate writing across multiple disciplines (in addition to the more general writing skills and strategies). However, being able to support teachers in instruction for writing across the curriculum is essential for coaches as they support various grade levels and subject areas in literacy research-based practices.

Influential Writing Coaching Practices

Working with teachers in various writing supports was often lacking, however, when coaches did provide writing support, teachers perceived various coaching practices to be influential in increasing their knowledge, skills, and dispositions toward writing and writing instruction. First, findings from this study indicate that teachers find sustained support through coaching cycles to be influential. This includes support through professional development and workshops, co-planning, modeling, co-teaching, observing, reflecting, debriefing, and providing feedback. Other researchers have also identified that professional development support (such as coaching) should be continuous to enable teachers time to integrate what they learned in their workshops or seminars into their own classrooms (Garet et al., 2001; Ortiz, 2020). It has been identified that traditional one-shot PD does not have a significant impact on teacher instruction (Knight, 2007). However, literacy coaches who support teachers through a sustained coaching cycle gives teachers an opportunity to engage in ongoing planning, modeling, feedback, and collaboration to best support writing instruction (Page-Voth, 2010; Roberts & Wibbens, 2010). My findings suggest that neglecting to meet with teachers often and in various stages of the coaching cycle may impact the degree of influence coaches have on teachers.

According to participants in this study, the most influential support within the coaching cycle was reported to be debriefing and feedback. These results align with Connor (2017) who states, “Without effective feedback, coaching is unlikely to be effective” (p. 81). Similarly, other researchers have identified that non-evaluative and layered feedback, modeling, and debriefing are some of the most effective coaching practices in enhancing teacher confidence (Cornett & Knight, 2009; Ortiz, 2020; Stahl et al., 2016).

Additionally, participants identified collaborating with their coaches through meetings, check-ins, and updates to be influential to their knowledge, skills, and dispositions toward writing and writing instruction. These findings suggest that teachers appreciate having someone to frequently speak with about their writing and writing instruction. Participants reported that one-on-one and group collaboration, as well as formal and informal collaborations, were beneficial to their instruction. These findings are similar to other research that indicates having reflective dialogue, collegial conversations, and opportunities to share insights with colleagues has an impact on teacher beliefs about student learning and their own practice (Denton & Hasbrouck, 2009; Ortiz, 2020; Rodgers & Rodgers, 2007). This finding also highlights the importance of coaches working with fewer teachers to be able to have ample time to collaborate with all of their teachers.

Lastly, teachers found support with writing resources and strategies to impact their knowledge, skills, and dispositions toward writing. This support may be useful due to the lack of writing curriculum and resources found in schools (Applebee & Langer, 2009) or the lack of follow-up training on curriculum that is provided. In most K-6

classrooms, teachers have a curriculum for reading and math, while curriculum in writing is not usually present (Yancey, 2009). Therefore, it may be challenging for teachers to identify writing resources and strategies to meet the needs of their diverse students. Thus, having a coach that is knowledgeable about research-based writing resources and strategies, and also supports teachers in using the resources throughout sustained coaching cycles, can benefit teachers' writing and writing instruction.

Limitations and Future Research

A few limitations were present throughout this study. First was the sample size. Out of the 66 total participants, only 41 (62%) completed the entire survey. Having a small sample size decreases the generalizability of the results. Therefore, results should be suggestive of coaching practices that teachers may find influential to their writing and writing instruction.

Another limitation was that only surveys were conducted rather than surveys and interviews. I wanted to conduct interviews with teachers who receive literacy coaching to better understand how they perceive their coaching experience and what they find beneficial (or not) to their writing and writing instruction. However, due to COVID-19, I was unable to meet with teachers. Future research should include teacher interviews to learn more about what coaching practices they find influential.

Conclusions

The purpose of this study was to identify if K-6 teachers believe that literacy instructional coaches impact their knowledge, skills, and dispositions toward writing and writing instruction. This study also aimed to identify coaching practices that teachers felt impacted their writing and writing instruction. Results suggest that while the frequency of

coaching in writing and writing instruction is sparse, the majority of teachers who received coaching in this area reported that it increased their competence. Similarly, on average, teachers reported that coaches moderately influenced their knowledge, skills, and dispositions toward teaching writing skills.

My findings suggest that coaching specific to writing skills should be more prevalent within K-6 schools because teachers find it beneficial to their instruction. Providing more support in writing coaching starts with stakeholders putting more emphasis on the importance of writing within schools. For example, if reading is the main focus within literacy professional development and superintendents and principals are pushing an agenda to increase reading assessment scores, this may influence how teachers and literacy coaches are spending their time. More discussion and training around writing standards, interdisciplinary writing integration, and writing for diverse learners would be beneficial for the development of coaches, teachers, and students within the realm of writing. More specifically, if coaches are better prepared for strategies to teach writing to diverse learners, they can better support teachers, who then can better support their students.

Themes from this study suggest that support through the coaching cycle, especially reflecting, debriefing, and feedback, was the most influential on teachers' knowledge, skills, and dispositions specific to writing and writing instruction. Furthermore, the use of frequent collaboration through informal and formal meetings was important to teachers. These results provide evidence for depth over breadth with coaches. In other words, coaches should work with fewer teachers within fewer schools so they can spend more time to meet with teachers, provide feedback, and collaborate

with teachers on a regular basis (Niedźwiecki, 2007; Piper & Zuilkowski, 2015). If coaches are spread too thin, they will not be able to provide sustained coaching support or be able to meet and collaborate with teachers frequently. Unfortunately, research has found that literacy coaches have large caseloads that result in long spans between meetings, which then decreases the accessibility of the coach and their ability to meet teachers' time sensitive needs (Lekwa et al., 2017). Hence, leading to the implication that less is better when it comes to the number of schools and teachers that coaches work with or within.

However, having coaches work with fewer teachers may not be plausible due to school funds. If this is the case, then having coaches collaborate more frequently throughout the coaching cycle may be challenging. One way to mitigate this issue is through technology. Integrating technology into coaching helps promote immediate and effective communication between the coach and their teacher (Nugent et al., 2017). For example, coaches can observe over live video to minimize transportation times between classrooms or buildings, and thus, be able to work with more teachers across various schools more effectively and efficiently.

Overall, this current study provides coaches with valuable insights on coaching practices that teachers find to be the most effective in influencing their knowledge, skills, and dispositions specific to writing and writing instruction. The increase in teachers' competence in writing instruction due to coaching provides evidence to administrators and stakeholders that coaching in writing is an area of needed attention within schools. Together, the findings from this current study reveal that coaching in writing is sparse but influential in impacting teachers' competence. These findings are hopeful as we strive to

find methods to better prepare teachers for writing and writing instruction within their classrooms.

CHAPTER IV: K-6 COACH SELF-EFFICACY AND ITS INFLUENCE ON THEIR WRTITING COACHING PRACTICES

The purpose of Study III is to explore the relationship between literacy instructional coaches' self-efficacy for writing, writing instruction, and teaching writing elements and their writing coaching practices. More specifically, I examine whether having higher self-efficacy in these three writing domains increases the likelihood of coaches using research-based writing practices. Researchers have identified that teachers' self-efficacy beliefs influence their use of research-based practices (Troia et al., 2011; Tschannen-Moran & Johnson, 2011; Wolters & Daughtrey, 2007), but have yet to identify whether the same is true for instructional coaches as they support teachers in writing.

Considering that teachers often feel unprepared to teach writing (Brindle et al., 2016; Gilbert & Graham, 2010; Hall, 2016; Hodges et al., 2019) and students are largely underperforming in writing (NAEP, 2017), it is essential to provide teachers with effective literacy coaches. Since providing teachers with adequate coaches is important, then examining the factors that impact coach effectiveness is also important. Results from this study can provide stakeholders (e.g., superintendents, professional development agencies) with helpful information to effectively train their literacy coaches in writing. Overall, the investigation of coach self-efficacy beliefs, and how they influence writing coaching practices, brings us one step closer to understanding variables that impact coaches' effectiveness and their ability to "accelerate teacher effectiveness, build teacher

leadership, increase student learning, and support equitable outcomes for every learner" (New Teacher Center, 2018, p. 1).

Research Question and Hypothesis

To address the purpose of this research study, I investigated the following research question and hypotheses:

(1) Does coach self-efficacy for writing, writing instruction, and teaching writing elements, as measured by the adapted IT-SWI, relate to their writing coaching practices above and beyond years of coaching, years of teaching, amount of writing courses taken, and the average hours of writing professional development they receive in a year?

H0: Literacy instructional coaches' self-efficacy for writing, writing instruction, and teaching writing elements, as measured by the adapted IT-SWI, does not relate to coaches' writing practices above and beyond years of coaching, years of teaching, amount of writing courses taken, and the average hours of writing professional development they receive in a year.

H1: Literacy instructional coaches' self-efficacy for writing, writing instruction, and teaching writing elements, as measured by the adapted IT-SWI, does relate to coaches' writing practices above and beyond years of coaching, years of teaching, amount of writing courses taken, and the average hours of writing professional development they receive in a year.

Literature Review

Self-efficacy is defined as: "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1977, p.1044). Bandura (1977, 1982, 2001) identified that self-efficacy plays an influential role

in the choices we make, the effort and perseverance we put forth, and the level of success we can obtain. Research on literacy instructional coaches' self-efficacy beliefs is sparse. However, there is ample research specific to teacher self-efficacy and its impacts on their instructional practices. The following review demonstrates why self-efficacy for writing, writing instruction, and teaching writing elements are essential to explore within coaching. While the review is based on what we already know about teacher self-efficacy, it reveals the gap in the literature within the realm of coaching self-efficacy. In this review, I explore 1) self-efficacy as a content and task specific construct, 2) self-efficacy for writing, writing instruction, and teaching writing elements, 3) coach self-efficacy, and 4) the importance of coaches having both specialized content knowledge and pedagogical content knowledge (e.g., knowledge of research-based practices).

Self-Efficacy as a Content and Task Specific Construct

Self-efficacy beliefs influence teacher instructional practices (Allinder, 1994; Guskey, 1988; Tschannen-Moran & Hoy, 2001; Wolters & Daughtrey, 2007) and student achievement within varying contexts and domains (Bal-Tastan et al., 2018; Mojavezi & Tamiz, 2012; Shahzad & Naureen, 2017; Tschannen-Moran & Hoy, 2001). However, existing findings about self-efficacy cannot be generalized across content areas because self-efficacy is both content and task-specific (Graham et al., 2001; Whitacre, 2019). This means that having high self-efficacy in one content area (e.g., science) does not necessarily translate into having high self-efficacy in other content areas (e.g., writing). Similarly, having high self-efficacy for a task such as writing a narrative does not translate to having high self-efficacy in writing within other genres. Self-efficacy beliefs can also vary within the same content area or task at hand. Interestingly, Bruning and

colleagues (2013) found that self-efficacy for writing ideation and self-regulation were statistically significantly more strongly related to liking writing than self-efficacy for writing conventions. These findings demonstrate that multiple interrelated dimensions of self-efficacy can be present when completing a single task such as writing.

Since self-efficacy is both context and subject-matter specific, coaches may feel very confident in their ability to coach mathematics or reading, but fairly inefficacious when coaching writing and various writing strategies (Roberts & Wibbens, 2010). This is worrisome considering that only 38% of literacy instructional coaches have advanced literacy training (Deussen et al., 2007), and therefore, may not be self-efficacious in the realm of teaching writing. Research suggests that there is also a greater focus on reading than writing in the field (Andrews, 2008), which may impact coaches' writing self-efficacy beliefs, the amount of time spent coaching writing, and the research-based writing practices they provide. Since research is scarce within the realm of self-efficacy for writing, and even more scarce within self-efficacy for coaching, these fields are important to explore in hopes to better prepare coaches for their work with writing teachers.

In the following sections, I examine self-efficacy specific to three dimensions of writing investigated in this study (i.e., self-efficacy for writing, writing instruction, and teaching writing elements). Examining these three domains of writing self-efficacy can help determine if all, some, or none of these self-efficacy constructs are important to foster within literacy instructional coaches.

Self-Efficacy for Writing

Self-efficacy for writing is defined as one's "belief that they can effectively accomplish writing tasks even if the tasks are difficult or challenging" (Hodges et al., 2021, p.6). Self-efficacy for writing includes one's (a) ability to self-monitor during the writing process, (b) confidence in writing for various audiences and genres, (c) confidence in sharing writing with others, and (d) overall feelings toward writing and using writing to complete daily tasks (Hodges, 2015). For educators to teach writing, they should be proficient writers themselves. As suggested by Perez (1983), one reason students are underperforming in writing may be due to teachers who do not write often or well. However, teachers who enjoy and are enthusiastic about their writing are the best models for their students (Perez, 1983; Street, 2003).

While research on self-efficacy for writing beliefs is sparse in the educational context, it has shown to be an essential variable in a teacher's ability to self-critique and persevere when writing becomes a challenge (Lavelle, 2006). More specifically, teachers' writing self-efficacy beliefs have demonstrated to be important in understanding how they think about and proceed with their writing when faced with challenges (Lavelle, 2006). It has also been linked to their writing performance (Zimmerman & Bandura, 1994; Pajares & Johnson, 1993) and the development of writing skills (Frank, 2003). Thus, it is a reasonable hypothesis that self-efficacy for writing can also impact coaches' writing performance and skills in the same way.

While we can hypothesize that coaches' self-efficacy for writing may impact their writing performance and skills, it also may influence how they coach the subject. Research indicates that teachers who view themselves as good writers have positive

attitudes toward writing and have more confidence when teaching writing (Haskins, 2017). For instance, teachers with higher self-efficacy beliefs have their students spend more time writing each week (Tschannen-Moran & Johnson, 2011). Other findings suggest that teachers who report a high sense of self-efficacy to write are more likely to provide a supportive learning environment, interact with students in positive ways, and increase student motivation to write (Guo et al., 2012). It stands to reason, then, that coaches' self-efficacy for writing may be positively related to teachers' instructional writing performance, just as teachers' self-efficacy for writing is related to students' writing performance.

Current teacher education programs aim to foster "teachers as writers" to enhance teacher self-efficacy for writing and student writing achievement. One basic tenet of the National Writing Project (i.e., a project that prepares teachers to enhance student writing) is "to teach writing, you need to be able to write" (Andrews, 2008, p.8). This tenet highlights the importance of teachers being proficient writers if they want to be successful teachers of writing. Therefore, it is likely that for coaches to be successful coaches of writing, they should also be proficient writers themselves. While self-efficacy beliefs do not *always* correlate with ability (Lytzerinou & Lardanou, 2020), there is often a relationship between self-efficacy and achievement (Bal-Tastan et al., 2018; Mojavezi & Tamiz, 2012; Shahzad & Naureen, 2017; Tschannen-Moran & Hoy, 2001). To my knowledge, there is no research on how coaches' self-efficacy to write influences their writing coaching practices.

Self-Efficacy for Writing Instruction

Self-efficacy for writing instruction is “one’s belief in their ability to effectively instruct writing to improve students' overall writing achievement” (Hodges et al., 2021, p. 7). This includes one's beliefs in their ability to (a) teach writing to students, (b) integrate writing into the classroom daily, (c) integrate writing across the curriculum, (d) use writing to engage students, (e) provide consistent assessment of writing to build student confidence, and (f) build a positive classroom community (Hodges et al., 2021). Self-efficacy beliefs specific to writing instruction provides information on one’s underlying beliefs, or orientations, about writing (Graham et al., 2001).

Research that investigates self-efficacy for writing instruction mainly focuses on teachers’ beliefs and how it impacts their instructional practices. Researchers have identified that teachers’ beliefs about their ability to teach writing influence how they use their skills and knowledge about teaching writing during writing instruction (Graham et al., 2001; Pajares, 1992; Rietdijk et al., 2018); this ultimately impacts the quality of their instruction (Tschannen-Moran et al., 1988). Researchers indicate that teachers who have higher levels of self-efficacy for writing instruction are more likely to spend time teaching writing and demonstrate more elements of quality writing instruction (Brindle et al., 2016; Troia et al., 2011). They are also more likely to adapt their writing instruction to struggling writers than those with low levels of self-efficacy for writing instruction (Troia et al., 2011). Furthermore, Burke (2017) identified that efficacy for teaching writing was statistically significantly correlated to whether or not a teacher (1) supports student writing, (2) teaches basic writing skills (e.g., spelling, handwriting), (3) teaches the writing processes, (4) teaches general instructional practices (e.g., mini-lessons,

multi-goal lessons), (5) promotes motivation, (6) assesses student writing in content areas, and (7) extends writing to content areas. Her results also indicate that efficacy for teaching writing is the most strongly correlated with teaching the writing processes. Since research suggests that teachers' self-efficacy for writing instruction influences their use of research-based practices, it is fair to hypothesize that coach self-efficacy for writing instruction may also impact their writing coaching practices.

Teacher self-efficacy to teach writing has also shown to be a unique and statistically significant predictor of teachers' reported use of research-based practices (Graham et al., 2021). Unfortunately, similar to the domain of self-efficacy for writing, coaches' self-efficacy for writing instruction has not been a well explored area of research. However, coach self-efficacy for writing instruction is important to investigate because it may impact the emphasis coaches place on various writing practices as well as influence teacher choice in instructional writing practices.

Self-Efficacy for Teaching Writing Elements

Self-efficacy for teaching writing elements is one's "belief that they can effectively teach specific elements of writing and the writing process" (Hodges et al., 2021, p.7). This sub-construct differs from self-efficacy for writing instruction because it emphasizes specific writing skills and components that teachers may teach, such as the writing traits and stages of the writing process (Hodges, 2015). While there is not much research specific to self-efficacy for teaching writing elements, researchers have identified that teachers with higher self-efficacy beliefs report spending more time teaching grammar and usage as well as basic writing processes (e.g., planning, text organization, and revising) than their counterparts who are less efficacious about their

capabilities to teach writing elements (Graham et al., 2001; Grisham & Wolsey, 2011). These results indicate that those with higher self-efficacy to teach writing elements are more likely to use research-based practices when teaching writing components. Therefore, it is reasonable to speculate that coaches' self-efficacy for teaching writing elements may also influence their writing coaching practices. Similar to the constructs of self-efficacy for writing and writing instruction, researchers have yet to explore if coaches' self-efficacy for teaching writing elements impacts their coaching instructional practices. In the following section, I explore what we *do* know about coach self-efficacy.

Coach Self-Efficacy

Most research associated with coaching and self-efficacy looks to identify how coaches impact teacher self-efficacy. However, a few researchers have explored variables that influence coach self-efficacy. McCrary (2011) identified that one variable that influences coach self-efficacy is education. For instance, if a coach has an educational background within the content area that they are coaching (e.g., literacy or mathematics) they are statistically significantly more likely to have higher self-efficacy beliefs compared to those coaching outside of their educational background. Another variable that influences coaches' self-efficacy is years of coaching experience. McCrary (2011) identified that "As years of coaching experience increase, one becomes more confident in their ability to produce desired results as it relates to student-centered general pedagogical coaching of teachers" (p. 90). He found that the coaching-teacher relationship was the strongest predictor of instructional coaches' behavior and impact on teachers (McCrary, 2011). This is similar to findings by De Haan and colleagues (2016) who identified that the strength of the working relationship and alliance between the

coach and teacher mediates the impact of self-efficacy on coach effectiveness. Lastly, Cantrell and colleagues (2015) identified that while coaches' first experience in the field often leads to a decrease in their sense of self-efficacy (due to overwhelming and competing responsibilities), their self-efficacy increases over time due to growth in their competence and student learning.

Few other researchers have investigated how coach self-efficacy beliefs influence their coaching practices and effectiveness. Volk (2020) studied general self-efficacy in K-12 coaches and found that instructional coaches believed “efficacy is at the heart of everything they do” (p.66.). Self-efficacy keeps coaches motivated to support teachers through difficult, uncomfortable, or overwhelming tasks (Volk, 2020). Her research further suggests coaches’ high self-efficacy beliefs positively impact teachers, similar to how teachers’ high self-efficacy beliefs impact student achievement. Volk (2020) states:

> Coaches with high self-efficacy are likely to experience a number of accomplishments: (a) gain increased confidence in their abilities, (b) persist longer in difficult situations, (c) provide more focused coaching sessions, (d) incorporate more effective forms of feedback, (e) feel less emotionally exhausted, and (f) possess an increased sense of personal accomplishment. Therefore, coaches with high self-efficacy will have a greater impact on effective teacher practices and student achievement. (p.86)

While few studies have focused on instructional coach self-efficacy, none to my knowledge have investigated coach self-efficacy in dimensions of writing and its influence on writing coaching practices. However, it is plausible to suggest that coaches with higher levels of self-efficacy for writing, writing instruction, and teaching writing

elements will more likely meet the challenges and complexities of coaching writing with confidence in comparison to those with lower self-efficacy beliefs. Below, I discuss the importance for coaches to have both content knowledge and pedagogical content knowledge (e.g., knowledge of research-based practices) when working with teachers in the realm of writing.

Specialized Content Knowledge and Pedagogical Content Knowledge

To effectively support teachers in various content areas, coaches should acquire specialized knowledge within their coaching content (L'Allier et al., 2010). L'Allier and colleagues (2006) identified that students who were supported by literacy coaches with a reading teacher endorsement had the highest average reading score gains, while students who were supported by coaches without an advanced degree in reading had the lowest average gains. This demonstrates the importance of coaches having specialized content knowledge within the content area in which they are teaching.

Not only is it important for coaches to have specialized content knowledge, but they also need pedagogical content knowledge (PCK). PCK can be described as the characteristic that separates a person with content knowledge from a person who can support someone in "com[ing] to know" the content (Shulman, 1987, p. 7). PCK for writing can be demonstrated in the differences between an author's and a teacher's approaches to teaching writing. The author in this scenario could thoroughly describe a topic and their own writing methods, however, an effective writing teacher plans lessons based on students' needs, appropriate content, and research-based writing practices (Graham & Sandmel, 2011). Research supports a connection between PCK, effective instruction, and student achievement (McCutchen et al., 2002; Gelfuso, 2017). Thus, this

suggests the importance of not only acquiring specialized content knowledge but also the knowledge of *how* to teach the content most effectively.

Specifically, to be successful coaches of *writing*, coaches need to have content knowledge and PCK to help foster motivated, engaged, and competent writers and teachers of writing. Understanding the writing content and how to best support students in learning the content (e.g., research-based writing practices) can help coaches determine what to focus on while coaching writing and how to best support teachers and students with varying levels of knowledge. In the following section, I present research-based practices that researchers have established in writing. These practices are essential for coaches to be mindful of as they support teachers in their writing instruction.

Research-Based Writing Practices

One research-based writing approach that is important for coaches to know and implement within their coaching practices is a focus on process writing. Process writing refers to a broad range of strategies that include pre-writing activities, planning, drafting, revising, and editing (Goldstein & Carr, 1996). Teaching the process of writing (Goldstein & Carr, 1996; Graham & Harris, 2013; Roberts & Wibbens, 2010), coupled with explicit strategies for student success, is effective in preparing students to focus on the quality of their writing (Bruning & Horn, 2000; Graham & Harris, 2016; Graham et al., 2012; Troia & Graham, 2003). Additionally, explicitly teaching the writing traits (i.e., conventions, sentence fluency, voice, organization, ideas, word choice, and presentation) throughout the writing process is effective for enhancing writing quality and craft (Spandel, 2013).

In addition, teachers should create a safe writing environment by providing opportunities for choice, collaboration, self-regulation, goal setting, and writing for authentic audiences (Boscolo & Gelati, 2013; Bruning & Horn, 2000; Graham & Harris, 2016; Pajares, 2003; Pajares & Valiante, 2006; Troia et al., 2010). Writing tasks should be challenging yet achievable through scaffolding (Boscolo & Gelati, 2013; Troia et al., 2010), and teachers should provide feedback through frequent conferences and the use of rubrics (Harward et al., 2014). Last, teachers should provide frequent writing opportunities and integrate writing into multiple subjects throughout the day, including writing in multiple genres (De Smedt et al., 2016; Graham & Harris, 2016).

Overall, within this study, I explore the relationship between coaches' self-efficacy for writing, writing instruction, and teaching writing elements and the frequency of providing support in research-based practices such as the ones reviewed above. Below I discuss the methods used to test my hypotheses.

Methods

For Study III, I employed a quantitative logistic regression design. I selected a logistic regression design for two reasons. First, the data to answer the research question included dichotomous outcome variables (i.e., a variable that can take only one of two values like selecting *Yes* or *No*) (Harkiolakis, 2018). Second, running these analyses allowed me to determine how improving self-efficacy for writing, writing instruction, and teaching writing elements by a specific numerical amount affects the odds of coaches implementing each research-based writing practice. For example, if a coach's self-efficacy for writing increased by one point (on a scale from 1-5), how does the odds of them implementing that research-based strategy increase? Through this investigation, I

was able to identify if and how a coach's self-efficacy for the three writing domains were related to the probability that they provide various research-based writing support to their teachers.

Measures

To investigate how coach self-efficacy for writing, writing instruction, and teaching writing elements influenced coaches' use of researched-based writing practices, I used elements of the *Supports in K-6 Writing and Writing Instruction* survey that I created. To develop this survey, I combined multiple published and researcher-created surveys specific to research-based writing practices, coaching, and self-efficacy domains. I embedded multiple *Yes* or *No* questions into the survey to identify the research-based writing practices that coaches employ. To determine coach self-efficacy beliefs for the three dimensions of writing, I used an adapted version of the *Inservice Teacher Self-Efficacy Writing Inventory* (IT-SWI) (Hodges, 2015). Below, I discuss these measures in greater detail.

Survey Items Specific to Researched-Based Writing Practices

The items I used from the *Supports in K-6 Writing and Writing Instruction* survey included questions that asked the coach to reply *Yes* or *No* to whether or not they are providing support to K-6 teachers in various research-based writing practices. Elements were either researcher-created or adapted from one of three measures, including the *Writing Observation Framework* (WOF) (Henk et al., 2003), *Teacher Record Observation Survey-Writing* (TROS-W) (Hodges, 2015), and *Writing Survey Instrument* (WSI) (Cutler & Graham, 2008) (See Table 4.1).

Table 4.1 Research-Based Writing Practices and Measures from which they are Derived

Instructional Task	Research-Based Practices/Topics	Measure
Determine the Writing Tasks	Select appropriate writing tasks	WOF
	Should be sensitive to diversity	WOF
	Have an authentic audience and purpose	WOF
	Allow student choice	TROS-W, WOF
	Ensure task prompt/topic encourages student writing	WSI
	Allows for students to write at their own pace	WOF
Teach Foundational Skills	Spelling	WSI
	Handwriting	WSI
Teach about the Genre and Final Product	Making clear expectations for the writing product	TROS-W
	Teach multiple genres of writing	Researcher Created
	Teach genre elements	
	Provide templates/examples for writing	Researcher Created
		TROS-W
Teach the Writing Process	Making clear expectations for the writing process	TROS-W
	Planning strategies	TROS-W
	Drafting strategies	WOF, WSI
	Editing and revising strategies	WOF, WIS
	Goal set during the writing process	TROS-W
Teach the Traits of Writing	Voice	TROS-W
	Word choice	TROS-W, WOF
	Organization	TROS-W, WOF
	Sentence fluency/construction	TROS-W, WOF, WSI
	Conventions (spelling, capitalization, punctuation, grammar)	TROS-W, WSI
Integrate Writing Across the Curriculum	Use writing to guide exploration of course content	TROS-W, WSI
	Integrate writing instruction into multiple disciplines	TROS-W
	Create writing lessons that have multiple instructional goals	WSI

Support Students' Writing	Provide direct writing instruction	TROS-W, WOF
	Assist students in writing strategies	TROS-W
	Scaffold multiple opportunities for skill application	WOF
	Provide mini-lessons on writing skills	TROS-W
	Conduct writing centers	WSI
	Assess students throughout the writing process	Researcher Created
	Consider the pace and flow of writing instruction and content	WOF

Note. TROS-W= Teacher Record Observation Survey-Writing, WOF= Writing Observation Framework, WIS= Writing Instruction Survey

IT-SWI

To operationalize self-efficacy for writing, writing instruction, and teaching writing elements, I embedded the *Inservice Teacher Self-Efficacy Writing Inventory* (IT-SWI) within the larger *Supports in K-6 Writing and Writing Instruction* survey. This instrument was modeled after the *Preservice Teacher Self-Efficacy for Writing Inventory* (Hodges et al., 2021, α = .828 - .915). The IT-SWI instrument includes 32 items for participants to self-report by ranking their feelings and beliefs on multiple aspects of writing and teaching writing. Overall, the instrument captures three constructs: the teachers' (1) beliefs about their writing, (2) beliefs about teaching specific components of writing, and (3) beliefs about teaching writing more generally.

I adapted the IT-SWI to be appropriate for literacy instructional coaches rather than teachers. For example, I changed the question, "How confident do you feel *teaching* writing?" to, "How confident do you feel *coaching* writing?" I also added a demographic section that did not influence the validity or reliability of the survey. The demographic items I added include: (1) their years of coaching, (2) the grade levels they coach, (3) the number of teachers they coach, (4) the number of schools they coach in, (5) previous

training in writing coaching, and (6) their previous occupation (if teacher, number of years and subject). I also removed some questions from the IT-SWI that did not apply to coaching writing. For example, I took out the statement, "Writing is an important skill for teaching my grade level*."* I took this item out because coaches usually work within multiple grade levels. In the following section, I discuss the participants of this study.

Participants

In this section, I describe: (1) how I calculated the estimated sample size, (2) what the actual sample size was, and (3) the participants' contexts (i.e., setting).

Estimated Sample Size

A power analysis using G*Power (Faul et al., 2009) was conducted to determine the sample size required to detect an odds ratio of 2.0 with a power of 0.80 within logistic regression analysis. I used the odds ratio of 2.0 because the self-efficacy scores are only on a scale from 1 to 5. With such a small scale, minuscule shifts in the odds would signify that there is not a meaningful relationship between self-efficacy and the coaching practice. I was interested in determining if the odds of implementing research-based practices at least doubled with a 1-point increase on the self-efficacy scale.

Additionally, since I expected there to be at least some correlation between self-efficacy (the focal predictor) and the covariates, I tested the R^2other than X values of 0.04, 0.16, 0.25, and 0.36 as a sensitivity analysis to see if the power was drastically affected across these different specifications. I chose these values because I wanted to see how the power was affected from a low correlation to a moderate correlation between the focal predictors and the covariates. The power was not drastically affected across these different R^2 values, and therefore, I calculated the sample size by entering the value 0.25

for R^2 other than X item on the G*Power software (Faul et al., 2009) because I expected there to be a moderate correlation between the focal predictors and the covariates. An R^2 of 0.25 indicates a moderate correlation of 0.5. I then calculated the input values which resulted in an estimated sample size of 109 coaches.

Actual Sample Size and Demographics

While the goal was to get 109 literacy instructional coaches to complete the survey, only 93 coaches participated which indicated that I was underpowered. I directly contacted 207 coaches through email, but also recruited coaches through ListServs, Special Interests Groups (SIGS), and social media. Out of the 130 coaches who started or viewed the survey, 72% (i.e., 93) completed it. After cleaning the data, my final sample included 92 coaches because one coach answered "5" for each Likert-type question, even the negatively worded ones.

Ninety-three percent of the participants within this sample were female, and 7% were male. Additionally, 85% of the participants identified as White, 5% African American, 4% Hispanic or Latino, and 4% Asian/Pacific Islander. Native Americans and participants who selected multiple ethnicities accounted for the remaining 6% of participants. Seventy-two percent of the participants were full-time coaches, while the remaining 28% (N=26) were part-time. In the following section, I discuss the setting of this study.

Participants in this study resided in 29 different states, with five participants living outside of the United States. Table 4.4 demonstrates the number of participants that completed the survey from the 29 states, with Texas, Idaho, and Illinois representing the majority of the sample. There were no follow-up questions regarding context for the

coaches that resided outside of the United States. Of this sample, 21% of the coaches worked in rural areas, 50% coached in urban areas, and 29% coached in mixed contexts of both rural and urban characteristics. The majority of participants (85%) worked in public schools.

Table 4.2 Participant Contexts

N	States Resided	
1	Alabama	Kentucky
	California	Mississippi
	Colorado	Oklahoma
	Connecticut	Oregon
	Louisiana	Pennsylvania
	Massachusetts	Utah
	Michigan	Virginia
2	Florida	Missouri
	Kansas	Nevada
	Minnesota	Wisconsin
3	New Jersey	North Carolina
4	Georgia	New York
	Iowa	South Carolina
10	Illinois	
14	Idaho	
15	Texas	

Note. Five participants resided outside of the United States

Data Analysis

I performed multiple logistic regression analyses using RStudio software version 4.05 (R Core Team, 2020) to identify if having higher levels of self-efficacy for writing, writing instruction, and writing teaching elements increased the probability of a coach providing research-based writing practices. I ran a logistic regression for each of the 35 dichotomous survey items specific to implementing research-based writing practices. The focal predictors were the three self-efficacy scores (i.e., self-efficacy for writing, writing instruction, and teaching writing elements). The dichotomous outcome variable was whether the coach answered *Yes* or *No* to coaching research-based writing strategies (e.g., genre development, the writing process, etc.).

Selection of Covariates

I included four covariates in this study. The covariates consisted of coaches' years of experience as a literacy coach, years of experience as a teacher, average hours of writing professional development (PD) per year, and the number of undergraduate and graduate level writing courses (specific to teaching writing) they have taken. These covariates were chosen because previous research indicates that they impact teacher and coach self-efficacy beliefs (Page-Voth, 2010; McCrary, 2011; Troia et al., 2011), and therefore may influence coaches' use of research-based practices. Controlling for these potential confounders is then necessary for deriving accurate estimates of the relationship between measures of self-efficacy and likelihood of responding *Yes* to the implementation of research-based practices. For the purpose of this study, I wanted to identify if self-efficacy for writing, writing instruction, and teaching writing elements are

significantly associated with coaches' use of research-based practices beyond these covariates.

Reliability of Measure and Self-Efficacy Scores

To reduce threats to internal validity, I identified the raw alpha scores for the IT-SWI survey data for the three self-efficacy constructs including self-efficacy for (1) writing, (2) writing instruction, and (3) teaching writing elements. To increase reliability, I identified and eliminated questions that had a large negative influence on the raw alpha scores. When determining the reliability of a measure, raw alpha scores from 0.7 to 0.8 are deemed as respectable or acceptable, 0.8 to 0.9 are identified as very good, and 0.9 or above the internal consistency is excellent and means the survey items tend to pull together (i.e., a participant who answers positively for one item is more likely to answer positively on other items within that construct) (Arifin, 2017; Blunch, 2008).

Then, to determine self-efficacy scores, I calculated the coach's mean score for each of the three writing constructs (on a scale from 1-5). This resulted in three self-efficacy scores per coach (i.e., a score for self-efficacy for writing, writing instruction, and teaching writing elements).

Data Cleaning and Testing Model Assumptions

After calculating self-efficacy scores, I evaluated the distributions of variables for outliers and influential cases and assessed the viability of meeting logistic regression assumptions. First, I created dummy variables for years of teaching (1= 0-6 years, 2=7-10 years, 3= 11-20 years, 4=20+ years), years of coaching (1= 1-3 years, 2=4-6 years, 3=7-10, 4=11+ years), average hours of writing professional development per year (1=0-4 hours, 2=5-10 hours, 3= 10+ hours), and the number of writing courses they have

completed (1= 0-1 course, 2=2-3 courses, 3=4+ courses). Then, I checked the assumption that there is a lack of strongly influential outliers (Field, 2018). I looked for signs of bias by checking the residuals such as outliers and influential cases (checking if Cook's distance < 1) (Field, 2018). Next, I identified if the data met the assumption of linearity of the logit by running logistic regressions with each self-efficacy variable to identify if they had a linear relationship to the log of the outcome variable (Field, 2018). I calculated the Variance Inflation Errors (VIF) to identify if multicollinearity was present in the data (Field, 2018; Myers, 1990). Last, I analyzed if participants were independent of one another.

Logistic Regressions

Once I made sure my data met the assumptions, I created and compared three logistic regression models for each outcome. I built the models hierarchically rather than putting all of the predictors in the model at once. The first model was the baseline model, which included the intercept but no predictors. Then, I built model 2 with all my covariates (i.e., years coaching, years teaching, hours of writing PD, and writing courses taken). Lastly, model 3 included all my covariates plus my three predictors of interest (i.e., self-efficacy for writing, writing instruction, and teaching writing elements). Improvement in fit was evaluated using nested chi-square tests. Specifically, I looked at the difference between model 2 and model 3 to evaluate if there was an increased predictive effect of self-efficacy over the covariates regarding each outcome. If self-efficacy predictors did not improve the model, it indicated that adding these predictors had virtually no impact on the model fit above and beyond the covariates.

When model 3 was statistically significant, I used Nagelkerke's R^2 to identify the deviances in prediction accuracy between model 2 and model 3. Nagelkerke R^2 is a scaled version of Cox and Snell's R^2 (Field, 2018), with the main difference being that Nagelkerke R^2 has a maximum of 1. Furthermore, Nagelkerke's R^2 is a Pseudo R^2 which indicates that results should be interpreted differently than R^2 in other regression analysis (Field, 2018). Nagelkerke's R^2 results are only used when comparing models, and values that are closer to 1 indicate better prediction accuracy than those closer to 0 (Field, 2018).

I also calculated the estimated coefficient of each focal predictor, including each estimate's standard error and significance. I then identified the odds ratios and the 95% confidence intervals of the odds ratio. Since I conducted multiple tests, there was an inflation to the family-wise error rate that I needed to account for. Therefore, I calculated the Bonferroni correction by dividing the desired family-wise error rate of 0.05 by the number of tests conducted (i.e., 35) and compared each of the p-calculated values to this new threshold.

Overall, these data helped determine if there was a statistically significant relationship between all or some of the three self-efficacy predictors and coaches' utilization of research-based writing practices above and beyond the covariates. More specifically, these relationships provide information on how the odds of implementing research-based writing practices changes as a coaches' self-efficacy for writing, writing instruction, and teaching writing elements increases.

Results

Whether or not a coach supports teachers in various research-based writing practices was predicted using coaches' self-efficacy for writing, writing instruction, and teaching writing elements scores as focal predictors within 35 logistic regression analyses. Logistic regression results indicate that the model including the three writing self-efficacy dimensions as focal predictors was a better model fit than the model with only the covariates (i.e., hours of PD, years coaching, years teaching, and the number of writing courses taken) as predictors for 16 out of 35 analyses. It is important to note that the odds ratios for most of the statistically significant outcomes were fairly high, possibly due to (1) the small-scale size or (2) the means for each self-efficacy predictor were high, indicating a 1-point increase in self-efficacy may be unlikely. Overall, results indicate that we can reject the null hypothesis that coach self-efficacy for writing and teaching writing elements does not relate to their writing coaching practices. However, we fail to reject the null hypothesis that coach self-efficacy for writing instruction does not relate to their writing coaching practices.

Achieved Power

While my planned sample size was 109, my final sample size was only 92 coaches. I used G*Power (Faul et al., 2009) to determine my achieved power. Given an alpha error probability of 0.05, a total sample size of 92, and an effect size of 2.0, my achieved Power was 0.705. This shows that I was underpowered and indicates that there is a 70.50 % chance of concluding when an effect indeed exists.

Covariate Distribution

I included four covariates in this study. The covariates consisted of coaches' years of experience as a literacy coach, years of experience as a teacher, average hours of writing professional development (PD) per year, and the number of undergraduate and graduate level writing courses (specific to teaching writing) they have taken. Table 4.2 illustrates the number of years that the participants have been coaching and their years of experience as certified teachers before becoming coaches. While more than half of the participants (64%) have only been coaching for one to six years, most (89%) were certified teachers for at least seven years.

Table 4.3 Participant Demographics: Years Coaching and Teaching

Years Coaching	**1-3**	**4-6**	**7-10**	**11+**
Number of Coaches	33 (36%)	31 (34%)	16 (17%)	12 (13%)
Years Teaching	**0-6**	**7-10**	**11-20**	**20+**
Number of Coaches	10 (11%)	21 (23%)	36 (39%)	25 (27%)

Below, in Table 4.3, I provide further covariate information, including coaches' educational experiences and training specific to writing (i.e., average hours of professional development in writing they receive per year, number of writing courses taken). Notice that while over half (54%) of participants have taken four or more classes specific to teaching writing, the majority (68%) of coaches only receive 0-4 hours of professional development specific to writing each year.

Table 4.4 Hours of Professional Development and Number of Writing Classes

Average Hours of PD Per Year	**0-4**	**5-10**	**10+**
Number of Coaches	58 (63%)	10 (11%)	24 (26%)
Writing Classes Taken	**0-1**	**2-3**	**4+**
Number of Coaches	16 (17%)	26 (28%)	50 (54%)

Reliability and Self-Efficacy Scores

To reduce threats to internal validity, I identified the raw alpha scores for the IT-SWI survey data for the three self-efficacy constructs including self-efficacy for (1) writing, (2) writing instruction, and (3) teaching writing elements. Two constructs (i.e., self-efficacy for writing and writing instruction) showed that they could be improved by eliminating two survey items. For the self-efficacy for writing construct, I eliminated the following two survey items, *Indicate how strongly you agree or disagree with each statement about your writing skills and habits (1) "The majority of time I spend writing is for enjoyment"* and (2) "*Writing is a challenging task for me".* Eliminating these two items increased the raw alpha of the self-efficacy writing construct from 0.75 to 0.86. For the self-efficacy for writing instruction factor, I took out the following statement, "*Indicate how strongly you agree or disagree with each statement about writing- The writing process is challenging to coach".* Taking out this item increased the reliability of the factor from a raw alpha score of 0.63 to 0.72. No survey items were taken out of the self-efficacy for teaching writing elements construct because the raw alpha score with all items included was 0.96.

After eliminating questions, I identified each coach's self-efficacy scores by calculating the means of items for each construct. This resulted in three self-efficacy scores per coach, which included their average self-efficacy for writing, writing instruction, and teaching writing elements scores. Descriptive statistics for each focal predictor are presented in Table 4.5. As mentioned previously, mean scores for each construct are high, indicating that a 1-point increase may be unlikely for many of the coaches.

Table 4.5 Focal Predictor Descriptive Statistics

Predictor	Mean	SD	Skewness
Writing	4.256	0.588	-1.198
Writing Instruction	4.427	0.402	-0.813
Teaching Writing Elements	3.985	0.787	-1.365

Note. SD=Standard Deviation

Testing Model Assumptions

After calculating self-efficacy scores, I evaluated the distributions of variables for outliers and influential cases and assessed the viability of meeting logistic regression assumptions**.** First, I checked the assumption that there is a lack of strongly influential outliers (Field, 2018). I looked for signs of bias by checking the residuals such as outliers and influential cases. Within each logistic regression model, Cook's distances were less than one for each participant, indicating that the data met the assumption. When checking the assumption of linearity of the logit, self-efficacy for writing instruction and teaching writing elements as focal predictors always showed a linear relationship to the log of the outcome variable. In some models, self-efficacy for writing did not show a linear relationship to the log of the outcome variable, and in these cases, I checked to make sure

that other assumptions were met. All Variance Inflation Factor (VIF) values were well below ten which indicated that multicollinearity was not an issue (Myers, 1990). Lastly, even though there were no pre/post measures and coaches could only complete the survey once, there may have been some dependency in the data. For example, if two or more coaches from the same school or same school district completed the survey they may be related in some way. However, since the survey was anonymous, I was unable to detect whether or not the coaches worked in the same school and were dependent on one another.

Bonferroni's Correction

Since I conducted several tests, there was an inflation to the family-wise error rate that I needed to account for. Thus, I completed a Bonferroni correction analysis by dividing 0.05 (i.e., the desired family-wise error rate) by 35 (i.e., the number of tests conducted). This resulted in a new threshold of 0.001. With this correction, coaches' use of writing assessment strategies was the only model that was still statistically significant ($p < 0.001$). Since I was underpowered, I still analyzed and interpreted the models with results that were statistically significant without the correction. However, these evaluations should be considered suggestive of future research or areas of investigation.

Chi-Square Results

Chi-Square results indicate that the model including the three writing self-efficacy dimensions as focal predictors is a better model fit than the model with only the covariates (i.e., hours of PD, years coaching, years teaching, and the number of writing courses taken) as predictors for 16 out of 35 analyses. In Table 4.6, I show the difference in chi-square values between model 2 and model 3 and the statistical significance of this

difference. Statistically significant results indicate that model 3 is a statistically significant improvement in model fit over model 2.

Table 4.6 Chi- Square Deviance and Statistical Significance

Research-Based Writing Practice/Topic	Chi-Square Deviance (Model 2 Vs. Model 3)
Writing instruction sensitive to diversity	3.735
Integrating writing instruction into multiple disciplines	1.151
Assisting students in writing strategies	2.682
Direct instruction in writing	2.756
Using writing to guide exploration of course content	2.756
Scaffolding students' independent use of a skill or strategy by providing multiple opportunities for its application in meaningful contexts	2.268
Providing mini-lessons on writing skill	3.541
Conducting writing centers	2.524
Creating writing prompts or topics to encourage student writing	4.007
Creating writing lessons that have multiple instructional goals	6.308
Encouraging students to write at their own pace	1.708
Teaching multiple genres of writing	4.631
Spelling	1.952
Capitalization	2.086
Punctuation	5.549
Handwriting	2.082
Providing templates/examples for writing	5.188
Genre elements	3.384
Drafting	4.472

Selecting appropriate writing tasks	8.255 *
Pacing and flow of writing content and instruction	8.865*
Making clear expectations for the writing process	8.853*
Making clear expectations for writing products	9.201 *
Writing for authentic purposes	9.182*
Grammar	11.783**
Teaching the Writing Process	10.296 **
Sentence Structure/Construction	9.511*
Organization	9.877 *
Word Choice	8.940*
Voice	10.245*
Student choice of topics for writing	9.095*
Goal Setting during the writing process	11.024*
Planning Strategies	13.374**
Revision Strategies	9.517*
Assessment Strategies	24.128***
Note. * $p < 0.5$, ** $p <$ 0.01 , ***$p < 0.001$	

Nagelkerke's R^2 Results

Within each of the statistically significant models, I calculated and compared Nagelkerke's R^2 results. Table 4.7 provides the Nagelkerke's R^2 deviances between models 2 and 3. Larger values closer to 1 indicate a better ability to predict the outcome than those closer to 0. Notice, in each analysis, model 3 is closer to 1 than model 2, which indicates better prediction accuracy.

Table 4.7 Nagelkerke's R^2: Model 2 Versus Model 3

Research-Based Writing Practice/Topic	Model 2 Accuracy of Prediction	Model 3 Accuracy of Prediction	Deviance Between Models
Selecting appropriate writing tasks	0.129	0.260	0.131
Pacing and flow of writing content and instruction	0.205	0.323	0.118
Making clear expectations for the writing process	0.118	0.245	0.127
Making clear expectations for writing products	0.105	0.230	0.125
Writing for authentic purposes	0.281	0.398	0.117
Grammar	0.322	0.446	0.124
Teaching the Writing Process	0.288	0.421	0.133
Sentence Structure/Construction	0.203	0.316	0.113
Organization	0.112	0.258	0.146
Word Choice	0.321	0.417	0.096
Voice	0.339	0.445	0.106
Student choice of topics for writing	0.218	0.341	0.123
Goal Setting during the writing process	0.339	0.454	0.115
Planning Strategies	0.295	0.447	0.152
Revision Strategies	0.234	0.348	0.114
Assessment Strategies	0.253	0.515	0.262

In the following sections, I explore each focal predictor separately. Within each section, I provide information about the research-based outcomes that were statistically significantly influenced by each focal predictor.

Self-Efficacy for Writing Results

Of the 16 statistically significant models, self-efficacy for writing was a statistically significant predictor (i.e., $p < 0.05$) of using three research-based writing practices. These research-based practices include coaching teachers in (1) making clear expectations for the writing process, (2) encouraging students to write for authentic purposes, and (3) teaching writing organization skills. Table 4.9 provides the logistic regression results showcasing self-efficacy for writing as a focal predictor for each research-based writing practice within the statistically significant models. While not all the models are statistically significant, 10 models have an odds ratio of less than 1. These findings indicate that as self-efficacy for writing increases, the odds of coaches using these research-based practices decreases. While these findings are interesting, they should not be overinterpreted.

Table 4.8 Logistic Regressions: Self-Efficacy for Writing as Focal Predictor

Research-Based Writing Practice	Estimate	SE	OR	OR 95% CI
Selecting appropriate writing tasks	-0.629	0.705	0.533	[0.124, 2.060]
Pacing and flow of writing content and instruction	0.156	0.654	1.169	[0.315, 4.291]
Making clear expectations for the writing process	-1.369*	0.665	0.254	[0.063, 0.883]
Making clear expectations for writing products	-0.317	0.591	0.728	[0.220, 2.302]
Writing for authentic purposes	1.841*	0.724	6.302	[1.685, 30.357]
Grammar	-0.485	0.692	0. 615	[0.148, 2.326]
Teaching the Writing Process	-1.265	0.741	0.282	[0.059, 1.131]
Sentence Structure/Construction	-0.328	0.627	0.720	[0.202, 2.450]
Organization	-1.529 *	0.708	0. 217	[0.049, 0.810]
Word Choice	-0.064	0.636	0.938	[0.263, 3.312]
Voice	1.121	0.683	3.067	[0.833, 12.524]
Student choice of topics for writing	0.656	0.659	1.928	[0.537, 7.411]
Goal Setting during the writing process	1.345	0.700	3.840	[1.027, 16.507]
Planning Strategies	0.879	0.686	2.409	[0.641, 9.862]
Revision Strategies	-1.139	0.659	0.320	[0.081, 1.105]
Assessment Strategies	-0.664	0.795	0.515	[0.097, 2.336]

Note. * $p < 0.5$, ** $p < 0.01$, ***$p < 0.001$. SE= Standard Error, OR= Odds Ratio, CI= Confidence Interval

Making Clear Expectations for the Writing Process

Whether or not a coach will support teachings in making clear expectations for the writing process was predicted using the coach's self-efficacy for writing, writing instruction, and teaching writing elements scores as focal predictors. The model with the focal predictors was a statistically significant improvement over the model with only the control predictors, $\chi^2(6) = 8.853$, $p < 0.05$. With an Nagelkerke's R^2 improvement from

0.118 in model 2 to 0.245 in model 3. However, it is important to mention that while adding the focal predictors (i.e., model 3) resulted in a better model fit than the model with only covariates (i.e., model 2), neither of the models were a statistically significant improvement from the baseline model. This indicates a relationship (above and beyond the covariates) between teacher self-efficacy for writing and making clear expectations for the writing process. However, adding the covariates and the self-efficacy predictors to the model did not improve the accuracy in prediction or the model fit compared to the baseline model. This may be the case because the prediction accuracy before adding predictors was already at 76.09%.

Self-efficacy for writing was the only statistically significant predictor of whether a coach supports teachers in making clear expectations for the writing process (odds ratio = 0.254, 95% CI [0.063, 0.883], $p < 0.05$). The coefficient for self-efficacy for writing indicated that for a single unit increase in self-efficacy for writing, there is a 1.369 point decrease in the log-odds that the coach will support teachers in making clear expectations for the writing process, holding all other variables constant. More specifically, the odds of supporting teachers in making clear expectations for the writing process decreased by 74.6% with a 1-point increase in self-efficacy for writing, given that their self-efficacy for writing instruction and self-efficacy for teaching writing elements remain constant.

Writing for Authentic Purposes

Whether or not coaches support teachers in encouraging students to write for authentic purposes was also predicted using the coach's self-efficacy for writing, writing instruction, and teaching writing elements scores as focal predictors. Model 3 was a

significant improvement over model 2 $\chi^2(6) = 9.182$, $p < 0.05$, with a Nagelkerke's R^2 improvement from 0.281 in model 2 to 0.389 in model 3.

Self- efficacy for writing was the only statistically significant predictor in this model (odds ratio = 6.302, 95% CI [1.685, 30.357], $p < 0.05$). The coefficient estimate indicated that for a single unit increase in self-efficacy for writing, there is a 1.841 point increase in the log-odds that the coach will support teachers in writing for authentic purposes, holding all other variables constant. Given that their self-efficacy in the other two domains remained constant, the odds of supporting teachers in writing for authentic purposes increased by 530.2%, with a 1-point increase in self-efficacy for writing,

Organization

Whether or not coaches support teachers in organization skills was predicted using the self-efficacy scores as predictors. The model that included the self-efficacy predictors was a statistically significant improvement over the model with only the covariates $\chi^2(6) = 9.877$, $p < 0.05$, with a Nagelkerke's R^2 improvement from 0.112 in model 2 to 0.258 in model 3. Similar to the model presented above (i.e., making clear expectations for the writing process), including the self-efficacy dimensions in the model was a better fit than the model with only the covariates, but there was not a statistically significant improvement from the baseline to model 3. This may be the case because the baseline prediction accuracy was already 78.3% before the addition of predictors.

Self- efficacy for writing was a statistically significant predictor in model 3 (odds ratio= 0.217, 95% CI [0.049, 0.810], $p < 0.05$). The coefficient for self-efficacy for writing indicated that for a single unit increase in self-efficacy for writing, there is a 1.529 point decrease in the log-odds that the coach will support teachers in writing for

authentic purposes, holding all other variables constant. More specifically, the odds of supporting teachers in organization strategies decreased by 78.3%, with a 1-point increase in self-efficacy for writing, given that their self-efficacy for the other writing domains stay constant.

Self-Efficacy for Writing Instruction Results

Self-efficacy for writing instruction was not a statistically significant predictor of whether or not a coach employed specific research-based writing practices within any of the 16 statistically significant models. Table 4.10 provides the logistic regression results with self-efficacy for writing instruction as the focal predictor in each statistically significant model. While none of the results are statistically significant, six models have an odds ratio of less than 1. These findings indicate that as self-efficacy for writing instruction increases, the odds of coaches using these research-based practices decreases. While these findings are interesting, they should not be overinterpreted.

Table 4.9 Results: Self-Efficacy for Writing Instruction as Focal Predictor

Research-Based Writing Practice	Estimate	SE	OR	OR 95% CI
Selecting appropriate writing tasks	-1.322	1.154	0.267	[0.024, 2.413]
Pacing and flow of writing content and instruction	-0.813	1.112	0.443	[0.046, 3.812]
Making clear expectations for the writing process	0.540	1.008	1.715	[0.242, 13.308]
Making clear expectations for writing products	1.342	0.977	3.827	[0.588, 24.493]
Writing for authentic purposes	0.856	1.122	2.354	[0.272, 24.392]
Grammar	-0.417	1.095	6.590	[0.073, 5.684]
Teaching the Writing Process	0.636	1.104	1.889	[0.220, 18.035]
Sentence Structure/Construction	-0.970	0.970	0.379	[0.053, 2.503]
Organization	-0.850	1.095	0.427	[0.047, 3.654]
Word Choice	-1.306	1.040	0.271	[0.032, 2.006]
Voice	0.094	1.031	1.099	[0.144, 8.682]
Student choice of topics for writing	0.041	1.065	1.042	[0.122, 8.717]
Goal Setting during the writing process	0.957	1.096	2.604	[0.321, 24.978]
Planning Strategies	-1.473	1.173	0.229	[0.020, 2.134]
Revision Strategies	0.236	1.003	1.266	[0.174, 9.324]
Assessment Strategies	1.632	1.159	5.112	[0.553, 56.117]

Note. * $p < 0.5$, ** $p < 0.01$, ***$p < 0.001$. SE= Standard Error, OR= Odds Ratio, CI= Confidence Interval

Self-Efficacy for Teaching Writing Elements

Of the 16 statistically significant models, self-efficacy for teaching writing elements was a statistically significant predictor (i.e., $p < 0.05$) of using 11 research-based writing

practices. In Table 4.10, I provide the logistic regression results with self-efficacy for teaching writing elements as the predictor in the 16 statistically significant models.

Table 4.10 Results: Self-Efficacy for Teaching Writing Elements as Predictor

Research-Based Writing Practice	Estimate	SE	OR	OR 95% CI
Selecting appropriate writing tasks	1.662*	0.665	5.268	[1.586, 22.960]
Pacing and flow of writing content and instruction	1.252*	0.606	3.496	[1.161, 13.167]
Making clear expectations for the writing process	1.288*	0.582	3.627	[1.229, 12.486]
Making clear expectations for writing products	0.681	0.526	1.975	[0.729, 5.970]
Writing for authentic purposes	-0.867	0.724	0.420	[0.117, 1.299]
Grammar	1.625 *	0.633	5.080	[1.637, 20.572]
Teaching the Writing Process	1.535*	0.662	4.642	[1.407, 20.080]
Sentence Structure/Construction	1.520*	0.598	4.573	[1.535, 16.550]
Organization	1.750 **	0.634	5.753	[1.800, 22.566]
Word Choice	1.654*	0.702	5.227	[1.451, 23.535]
Voice	0.558	0.635	1.748	[0.538, 6.641]
Student choice of topics for writing	0.763	0.614	2.144	[0.682, 7.879]
Goal Setting during the writing process	0.068	0.566	1.071	[0.356, 3.442]
Planning Strategies	1.521*	0.724	4.577	[1.290, 22.421]
Revision Strategies	1.470*	0.618	4.350	[1.411, 16.328]
Assessment Strategies	2.082*	0.838	8.023	[1.828, 51.131]

Note. * $p < 0.5$, ** $p < 0.01$, ***$p < 0.001$. SE= Standard Error, OR= Odds Ratio, CI= Confidence Interval

Selecting Appropriate Writing Tasks

When exploring the relationship between coach self-efficacy for writing, teaching writing, and teaching writing elements beliefs and whether or not they support teachers with selecting appropriate writing tasks, the model including the self-efficacy predictors was a statistically significant improvement over the model with only the covariates $\chi^2(6) = 8.255$, $p < 0.05$. There was an increase in Nagelkerke's R^2 from 0.129 in model 2 to 0.260 in model 3. While including the self-efficacy dimensions in the model was a better fit than the model with only the covariates, there was not a statistically significant improvement in model fit between the model with focal predictors and the baseline model $\chi^2(6) = 15.687$, $p = 0.266$.

Self-efficacy for teaching writing elements was the only statistically significant focal predictor in whether or not a coach supports teachers in selecting appropriate writing tasks within model 3 (odds ratio= 5.268, 95% CI [1.586, 22.960], $p < 0.05$). The coefficient estimate indicated that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.662 point increase in the log-odds that the coach will support teachers selecting appropriate writing tasks, holding all other variables constant. More specifically, the odds of coaches supporting teachers in selecting appropriate writing tasks increased by 426.8% with a 1-point increase in self-efficacy for teaching writing elements, given that their self-efficacy for the other writing domains stays constant.

Pacing and Flow of Writing Content and Instruction

While investigating the relationship between coach self-efficacy scores and their use of strategies to help teachers with pacing and flow of their writing content and

instruction, the model that included the self-efficacy predictors was a statistically significant improvement over the model that included only covariates $\chi^2(6) = 8.865$, $p < 0.05$. There was an increase in Nagelkerke's R^2 from 0.205 in model 2 to 0.323 in model 3.

Within model 3, self-efficacy for teaching writing elements was the only statistically significant predictor of whether or not a coach supports teachers in the pacing and flow of their writing content and instruction (odds ratio= 3.496, 95% CI [1.161, 13.167], $p < 0.05$). The coefficient for self-efficacy for teaching writing elements indicated that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.252 point increase in the log-odds that the coach will support teachers in pacing and flow within writing instruction and content, holding all other variables constant. More specifically, the odds of coaches supporting teachers in pacing and flow increases by 249.6% with a 1-point increase in self-efficacy for teaching writing elements, given that their other dimensions of writing self-efficacy remain constant.

Assessment Strategies

When identifying if there is a relationship between coach self-efficacy for writing, writing instruction, and teaching writing elements and their use of assessment strategies during coaching, model 3 was a statistically significant improvement over model 2 $\chi^2(6) = 24.128$, $p < 0.001$. There was a large increase in Nagelkerke's R^2 from 0.253 in model 2 to 0.515 in model 3. The outcome of assessment strategies was also the only statistically significant analyses after accounting for Bonferroni's correction.

Self-efficacy for teaching writing elements was the only statistically significant focal predictor of the odds of coaches using assessment strategies (odds ratio=

8.023, 95% CI [1.828, 51.131], $p < 0.05$). The coefficient estimate indicated that for a single unit increase in self-efficacy for teaching writing elements, there is a 2.082 point increase in the log-odds that the coach will support teachers with assessment strategies, holding all other variables constant. More specifically, the odds of coaches supporting teachers in assessment strategies increased by 702.3% with a 1-point increase in self-efficacy for teaching writing elements, given that their self-efficacy for writing and writing instruction remains constant.

The Writing Process

Whether or not coaches support teachers with multiple strategies throughout the writing process was investigated using the three dimensions of coach writing self-efficacy beliefs as focal predictors. Specifically, I explored if there is a relationship between coach-self efficacy beliefs and the odds that they support teachers in (1) how to teach the writing process, (2) making clear expectations for the writing process, and (3) planning, drafting, and revising strategies for the writing process. The models with the self-efficacy scores as focal predictors was a statistically significant improvement over the models with only the covariate for four researched-based writing outcomes specific to the writing process, including (1) teaching the writing process $\chi^2(6) = 10.296$, $p < 0.01$, with an increase in Nagelkerke's R^2 0.288 to 0.421, (2) making clear expectations for the writing process $\chi^2(6) = 8.853$, $p < 0.05$, with an increase in Nagelkerke's R^2 from to 0.118 to 0.245, (3) planning strategies $\chi^2(6) = 13.374$, $p < 0.01$, with in increase Nagelkerke's R^2 from 0.295 to 0.447, and (4) revising strategies $\chi^2(6) = 9.517$, $p < 0.05$, with an increase in Nagelkerke's R^2 from 0.234 to 0.348 . However, there was no

improvement from model 2 to model 3 for the model with drafting strategies as the outcome $\chi^2(6) = 4.472$, $p = 0.215$.

Teaching the Writing Process.

Self-efficacy for teaching writing elements was the only statistically significant focal predictor of the odds of coaches supporting teachers in teaching the writing process (odds ratio= 4.642, 95% CI [1.407, 20.080], $p < 0.05$). The coefficient estimate indicated that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.535 point increase in the log-odds that the coach will support teachers with strategies to teach the writing process, holding all other variables constant. Furthermore, given that coach self-efficacy for writing and writing instruction remains constant, the odds of coaches supporting teachers in teaching the writing process increases by 364.2%, with a 1-point increase in self-efficacy for teaching writing elements.

Making Clear Expectations for the Writing Process

Self-efficacy for teaching writing elements was also (along with self-efficacy for writing) a statistically significant predictor of the odds of coaches supporting teachers with setting clear expectations for the writing process (odds ratio= 3.627, 95% CI [1.229, 12.486], $p < 0.05$). More specifically, given that coach self-efficacy for writing and writing instruction remains constant, the odds of coaches supporting teachers in making clear expectations for the writing process increases by 262.7%, with a 1-point increase in self-efficacy for teaching writing elements. Additionally, the coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.288 point increase in the log-odds that the coach will support teachers withs setting clear expectations for the writing process, holding all other variables constant.

Planning Strategies

Self-efficacy for teaching writing elements was a statistically significant predictor of the odds of coaches supporting teachers with planning strategies (odds ratio= 4.577, 95% CI [1.290, 22.421], $p < 0.05$). Given that coach self-efficacy for writing and writing instruction remains constant, the odds of coaches supporting teachers in planning strategies increases by 357.7%, with a 1-point increase in self-efficacy for teaching writing elements. Furthermore, the coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.521 point increase in the log-odds that the coach will support teachers withs planning strategies, holding all other variables constant.

Revising Strategies

Lastly, when looking at researched-based outcomes specific to aspects of the writing process, self-efficacy for teaching writing elements was a statistically significant predictor of the odds of coaches supporting teachers with revising strategies (odds ratio= 4.350, 95% CI [1.411, 16.328], $p < 0.05$). Given that coach self-efficacy for writing and writing instruction remains constant, the odds of coaches supporting teachers in making clear expectations for the writing process increases by 335%, with a 1-point increase in self-efficacy for teaching writing elements. While holding all other variables constant, the coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.470 point increase in the log-odds that the coach will support teachers in revision strategies.

The Writing Traits

Whether or not coaches support teachers with the aspects of the writing traits was investigated using the three dimensions of coach writing self-efficacy beliefs as focal predictors. Specifically, I explored if there is a relationship between coach self-efficacy for writing, writing instruction, and teaching writing elements and the odds that they support teachers in the writing traits (i.e., conventions, voice, word choice, sentence fluency, organization). The conventions trait encompasses spelling, capitalization, grammar, and punctuation. The models with the self-efficacy as focal predictors was a statistically significant improvement over the models with only the control predictors for four researched-based writing outcomes including (1) word choice $\chi^2(6) = 8.940$, $p < 0.05$, with an increase in Nagelkerke's R^2 from 0.321 to 0.417, (2) sentence fluency $\chi^2(6) = 9.511$, $p < 0.05$, with an increase in Nagelkerke's R^2 from 0.203 to 0.316, (3) organization $\chi^2(6) = 9.877$, $p < 0.01$, with an increase in Nagelkerke's R^2 from 0.112 to 0.258, and (4) grammar $\chi^2(6) = 11.783$, $p < 0.01$, with an increase in Nagelkerke's R^2 from 0.322 to 0.446 . However, there was no improvement from model 2 to model 3 for the analyses with spelling $\chi^2(6) = 1.952$, $p = 0.582$, capitalization χ^2 (6) = 2.086, $p = 0.555$, and punctuation χ^2 (6) =5.549, $p = 0.136$, as the research-based writing outcomes.

Word Choice

Self-efficacy for teaching writing elements was a statistically significant predictor of the odds of coaches supporting teachers with word choice (odds ratio= 5.227, 95% CI [1.451, 23.535, $p < 0.05$). More specifically, given that coach self-efficacy for writing and writing instruction remains constant, the odds of coaches supporting teachers in strategies to teach students word choice increased by 422.7% with a 1-point increase in

self-efficacy for teaching writing elements. Additionally, the coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.654 point increase in the log-odds that the coach will support teachers with word choice, holding all other variables constant.

Sentence Fluency.

Self-efficacy for teaching writing elements was a statistically significant predictor of the odds of coaches supporting teachers with sentence fluency (odds ratio= 4.573, 95% CI [1.535, 16.550], $p < 0.05$). The coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.520 point increase in the log-odds and a 357.3% increase in the odds that a coach will support teachers with sentence fluency, holding all the other variables constant.

Organization

Along with self-efficacy for writing being a statistically significant predictor of a coach supporting teachers in writing organization strategies, self-efficacy for teaching writing elements was also a statistically significant predictor (odds ratio= 5.753, 95% CI [1.800, 22.566], $p < 0.01$). Unlike the self-efficacy for writing estimates, self-efficacy for teaching writing elements increased the odds of supporting teachers in writing organization skills rather than decreased. The coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.750 point increase in the log-odds and a 475.3% increase in the odds that a coach will support teachers with organization, holding all the other variables constant.

Grammar

Lastly, self-efficacy for teaching writing elements was a statistically significant predictor of the odds of coaches supporting teachers with grammar (odds ratio= 5.080, 95% CI [1.637, 20.572], $p < 0.05$). The coefficient estimate indicates that for a single unit increase in self-efficacy for teaching writing elements, there is a 1.625 point increase in the log-odds and a 408% increase in the odds that a coach will support teachers with grammar, holding all the other variables constant.

Other Significant Models

Four other models with self-efficacy for writing, writing instruction, and teaching writing elements as focal predictors were a statistically significant improvement over the model with only covariates as predictors. However, none of the self-efficacy focal predictors within these models were statistically significant. This was found within the models that had (1) making clear expectations for writing products, (2) voice, (3) student choice in writing topics, and (4) goal setting for the writing process as the research-based writing outcome. This indicates that the focal predictors and the covariates together all contribute to being a better model fit, however, none of the focal predictors were statistically significantly better predictors of the outcome. In other words, each variable is doing a little bit, and in the aggregate there is enough to achieve statistical significance for the overall model, but the little bit that each focal predictor is contributing is not sufficient for statistical significance.

Discussion

Self-efficacy beliefs have shown to be a significant predictor of teacher instructional practices (Allinder, 1994; Guskey, 1988; Tschannen-Moran & Hoy, 2001;

Wolters & Daughtrey, 2007) and student achievement (Bal-Tastan et al., 2018; Mojavezi & Tamiz, 2012; Shahzad & Naureen, 2017; Tschannen-Moran & Hoy, 2001) in various contexts and content areas. However, research on instructional coaches' self-efficacy beliefs is limited, especially within the domain of writing. Since self-efficacy beliefs can vary from discipline to discipline, and from task to task, I examined three self-efficacy constructs specific to writing including self-efficacy for writing, writing instruction, and teaching writing elements. I explored these self-efficacy dimensions in hopes to pinpoint specific self-efficacy beliefs that may need to be fostered. More specifically, I explored the research question, *Does coach self-efficacy for writing, writing instruction, and teaching writing elements as measured by the adapted IT-SWI, relate to their writing coaching practices above and beyond years of coaching, years of teaching, amount of writing courses taken, and the average hours of writing professional development they receive in a year?*

Results indicate that we can reject the null hypothesis that coach self-efficacy for writing and teaching writing elements does not relate to their writing coaching practices. However, we fail to reject the null hypothesis that coach self-efficacy for writing instruction does not relate to their writing coaching practices.

Self-Efficacy for Writing

It is a common belief that to be a successful teacher, teachers have to be self-efficacious and proficient writers themselves (Andrews, 2008; Perez, 1983). However, this may not be the case for literacy instructional coaches as they support teachers in writing instructional practices. Results from this study indicate that coach self-efficacy for writing was only a significant predictor of their use of three (9%) research-based

writing practices explored in this study. The three practices include 1) making clear expectations for the writing process, 2) writing for authentic purposes, and 3) organization skills. Surprisingly, the odds of implementing two of these research-based outcomes (i.e., making clear expectations for the writing process, organization) decreased as coach self-efficacy for writing increased.

These results contradict research on teacher self-efficacy, which suggests that teachers with high efficacious writing beliefs are more likely to provide students time to write and implement research-based writing practices (Guo et al., 2012; Tschannen-Moran & Johnson, 2011). This may be the case because, historically, there has been little explicit writing instruction within educational contexts (Yancey, 2009). Until more recently, being a skilled writer has been more of a natural (or automatic) skill than one explicitly taught in schools. This suggests that it may be difficult for writers to recognize the strategies they use to successfully compose a text because they were never explicitly taught the skills themselves. Similarly, the more automatic writing is for someone, the less likely they have learned (or taught themselves) explicit writing strategies to improve their writing. It is also important to consider that self-efficacy beliefs do not always correlate to ability (Lytzerinou & Lardanou, 2020). Thus, even though coaches report feeling self-efficacious about their writing, their beliefs may not correspond with their actual ability or knowledge of writing skills.

Results specific to self-efficacy for writing also align with what we know about pedagogical content knowledge (PCK). For instance, even if a coach has content-specific knowledge of how to write or the skills to be a good writer, it does not necessarily translate to the knowledge of how to coach others in “com[ing] to know " the content

(Shulman, 1987, p. 7). Lack of PCK may be due to the scarcity of training educators receive specific to writing instructional practices (Myers et al., 2016).

Overall, results suggest that coaches' self-efficacy for writing beliefs may not influence their instructional practices in the same way or to the same extent that they impact teacher instructional writing practices. This indicates that spending time cultivating coach self-efficacy for writing beliefs may not be an important focal goal while training coaches in the realm of writing.

Self-Efficacy for Writing Instruction

Surprisingly, self-efficacy for writing instruction was not a significant predictor of a coaches' use of any research-based writing practices. These findings contradict researchers who have identified that teachers with higher levels of self-efficacy for writing instruction utilize more research-based writing strategies (De Smedt et al., 2016; Troia et al., 2011) and positively influence student writing performance (De Smedt et al., 2016). This may be the case because, unlike teachers, coaches usually do not partake in writing instruction daily, so their beliefs about general writing instruction may not impact their coaching practices.

Furthermore, while most coaches in this study were previously teachers, they may not have been teachers of writing. As stated in *The Case for A National Writing Project for Teachers* report, a critical tenet of the program is, "The best teacher of writing teachers is another writing teacher" (Andrews, 2008, p.8). Coaches who were not previously writing teachers may not have training in specific research-based practices that are important to integrate into their coaching regimen. This is a reasonable hypothesis since many literacy instructional coaches do not have extensive literacy

training (Deussen et al., 2007) or have more training in reading rather than writing practices (Andrews, 2008; McCarthey, 2008). Interestingly, research indicates that educators learn how to teach writing from their own educational experiences; thus, coaches may not have the explicit knowledge to coach research-based practices due to their own experiences learning to write (Street, 2003).

Even though being a writing teacher before becoming a coach may be helpful when transitioning to a coaching position, it may not be enough. For instance, just because a coach knows how to teach writing to their past K-12 students, does not indicate that they know how to teach others how to teach writing. Although this contradicts the NWP tenet suggested above (i.e., "The best teacher of writing teachers is another writing teacher"), it aligns with what we know about the adult learning theory of andragogy (Knowles, 1980). Adults learn differently than children. Therefore, coaches need to not only know how to teach writing, but they also need to navigate coaching teachers how to teach writing. Coaching adults in how to teach writing is presumably a challenge because adults often resist change (Knowles, 1980).

Findings from this study reveal that self-efficacy for writing instruction is not a salient predictor of a coach's use of research-based writing practices. A possible hypothesis being one's self-efficacy for writing instruction does not translate to their self-efficacy for coaching writing instruction. Therefore, self-efficacy for general writing instruction may not need to be a construct of focus when preparing literacy instructional coaches for their work with K-6 teachers.

Self-Efficacy for Teaching Writing Elements

Self-efficacy for teaching writing elements is a sub-construct of self-efficacy for writing instruction. While self-efficacy for writing instruction, more generally, was not predictive of any research-based writing practices, self-efficacy for teaching writing elements was the most influential predictor of research-based practices identified in this study. Interestingly, results suggest that fostering coaches' self-efficacy for teaching writing elements may be important to consider when training coaches for their roles because it was a significant predictor of the use of 11 (i.e., 31%) research-based practices.

When looking specifically at the research-based outcomes that were statically significantly influenced by coach self-efficacy for teaching writing elements, eight out of eleven outcome variables were specific to the coaching of writing elements (e.g., the writing process, the writing traits). In other words, teachers with higher self-efficacy scores for teaching writing elements were more likely to coach teachers in practices specific to the traits of writing and the writing process than those with lower levels of self-efficacy. These results provide further evidence that self-efficacy for teaching writing elements is a domain-specific construct.

Out of the survey items specific to the writing process, coach self-efficacy for teaching writing elements was not predictive of their use of drafting skills. This finding is unsurprising because planning and revision are viewed as more critical processes of writing (De La Paz & Graham, 2002). Also, drafting is a difficult stage of the writing process to provide students explicit support, and thus, may also be true for coaches supporting teachers. These findings relate to Burke's (2017) and Graham and colleagues'

(2001) results which indicate that self-efficacy beliefs are related to teachers' use of strategies specific to the writing process, including planning and revising techniques.

Furthermore, out of survey items specific to traits of writing, coach self-efficacy for teaching writing elements was not predictive of their use of a few of the convention's trait components (i.e., spelling, capitalization, and punctuation skills). While the conventions trait is essential to teach to produce a final polished writing product, it is deemed as one of the least important traits to focus on because it often deters students from focusing on the overall message, coherence, or craft of the piece (Culham, 2005). Thus, it stands to reason that coaches who have higher levels of self-efficacy for teaching writing elements spend more time supporting coaches in other essential traits such as organization, sentence fluency, and word choice.

While the coaching of capitalization, spelling, and punctuation strategies were not statistically significantly related to coach self-efficacy for teaching writing elements beliefs, grammar (which is also a domain of the conventions trait) was statistically significantly related. These results align with Graham and colleagues' (2001) research which identified that teachers with higher self-efficacy beliefs report spending more time teaching grammar and usage than their counterparts who were less efficacious about their capabilities to teach writing elements. Researchers have also observed that teachers focus heavily on grammar during their writing instruction; therefore, it is likely that they request more support from coaches in grammar than other convention components (Graham et al., 2021).

In sum, findings suggest that self-efficacy for teaching writing elements is important to foster if the district's goal is to increase coaches' research-based writing

strategies specific to the writing traits and writing process. Self-efficacy for teaching writing elements was also related to whether or not a coach supports teachers in selecting appropriate writing tasks, the pacing and flow of their content and instruction, and assessment strategies, which are all essential skills for coaches to employ.

Limitations

While I made every effort to be as thorough as possible, a few limitations were present throughout this study. First, data specific to this study were self-report. Coaches may have over or underestimated their use of research-based writing practices and levels of self-efficacy. Thus, the data I collected may have left information about the construct unsurfaced or slightly inaccurate (Schellings & Van Hout-Wolters, 2011).

Another limitation was that coaches' self-reported self-efficacy scores were fairly high which makes a one-point increase in self-efficacy unlikely for coaches who had self-efficacy scores of four or above. Self-efficacy means were 3.9 or above (on a scale from 1-5) for all three constructs of self-efficacy. Another possible limitation associated with this is that responses were voluntary, and therefore, it is possible that only people with high self-efficacy beliefs would respond to a survey evaluating their self-efficacy.

One last limitation was sample size. While I intended to get 109 coaches to participate, my final sample size was 92 coaches. This indicates that I was underpowered. Due to being underpowered, I analyzed the logistic regression models against a *p*-value of 0.05 instead of the new threshold I calculated for the Bonferroni correction (i.e., 0.001). Thus, my results should be considered suggestive of future research or areas of investigation.

Conclusions

The purpose of this study was to identify if there is a relationship between coaches' self-efficacy for writing, writing instruction, and teaching writing elements and their writing coaching practices. My results indicate that self-efficacy for writing influenced coaches' use of three (i.e., 9%) research-based practices, and self-efficacy for teaching writing elements was related to coaches' use of 11 (i.e., 31%) research-based writing practices explored in this inquiry. Self-efficacy for general writing instruction was not a significant predictor of the use of any researched-based writing practices. After Bonferroni's correction, only the use of assessment strategies was a statistically significant outcome in the models with self-efficacy dimensions as focal predictors, and therefore, evaluations in this study should be considered suggestive of future research or areas of investigation.

These findings suggest that educational leaders may not need to foster coach self-efficacy in writing, writing instruction, and teaching writing elements. Cultivating self-efficacy in these writing domains may not be a good use of time or other resources because they only predicted the use of 40% of the research-based strategies investigated in this study. Unfortunately, the odds of implementing 6% of the practices decreased as self-efficacy for writing scores increased. However, if educational leaders want to specifically increase coaches' use of practices specific to the writing process and the traits of writing, it may be a good use of their resources to identify strategies to cultivate coach self-efficacy for teaching writing elements.

Many publications have highlighted the importance of fostering teachers' self-efficacy for writing and writing instruction because of their relationship to teacher

effectiveness (Brindle et al., 2016; Tschannen-Moran et al., 1988) and student achievement (De Smedt, 2016). However, findings in this study indicate that coach self-efficacy for writing and writing instruction (generally) may not influence coach effectiveness to the same extent as they do for teachers. Together, the findings reveal that even though a coach might have high self-efficacy to write and teach writing, it does not mean they know how to coach teachers in teaching research-based writing practices. This is similar to the notion that a teacher who is a good writer does not necessarily have the pedagogical content knowledge (PCK) to teach K-6 students how to write effectively. Future research needs to explore other reasons why coaches do, or too often do not, integrate research-based practices into their coaching.

CHAPTER V: CONCLUSIONS

When No Child Left Behind (NCLB) was adopted in 2001, literacy educators were obligated to focus their attention and efforts on students' reading achievement and test scores (McCarthey, 2008). During this time, writing was not an integral portion of the literacy curriculum, which ultimately impacted teacher morale and students' knowledge of successful writing strategies and achievement (McCarthey, 2008). Since then, the 2010 adoption of Common Core State Standards (CCSS) has not only emphasized the importance of writing but has also highlighted the importance of interdisciplinary writing (Daddona, 2013). While this shift in policy is promising for students' writing achievement and college and career preparation, many teachers feel unprepared to teach writing, nonetheless, to teach writing in various subject areas (Brindle et al., 2016; Gilbert & Graham, 2010; Hodges et al., 2019).

Beyond writing being an extremely challenging subject to teach, teachers' feelings of unpreparedness often stem from the lack of writing instructional courses embedded within teacher preparation programs (Gilbert & Graham, 2010; Myers et al., 2016) and the rarity of ongoing professional development specific to writing and writing instruction (Roberts & Wibbens, 2010). Since teachers often feel that teaching writing is extremely challenging (because it is too broad, difficult, and complicated) and have low levels of self-efficacy for writing instruction (Hall, 2016), it is important for researchers to identify how to better prepare and support teachers in writing and writing instruction in hopes to close student achievement gaps and increase students proficiency in writing.

This dissertation sought to address if and how instructional literacy coaches are mitigating the major issue of teachers feeling unprepared to teach writing. It also looked to identify how literacy instructional coaches' self-efficacy beliefs influence their writing coaching practices. First, I explored how literacy instructional coaches support K-6 teachers in writing and writing instruction and if teachers and coaches hold the same perception of these supports. Second, I examined if K-6 teachers believe that their literacy instructional coaches are influencing their knowledge, skills, and dispositions toward writing and writing instruction. This also included an investigation of the coaching practices that teachers identify to be the most impactful (or not) in making these influences. Third, I explored if coach self-efficacy for writing, writing instruction, and teaching writing elements impacts their use of researched-based writing practices. Throughout these three studies, I examined implications for how to better support K-6 teachers and coaches in writing and writing instruction.

Considered in concert, the conclusions from these three studies reveal three themes, which will be described in the remainder of this chapter. First, these studies demonstrate that even though current coaching practices in writing and writing instruction often align with research and are moderately to highly influential to teachers' knowledge, skills, and dispositions, the quantity of writing coaching is sparse. Second, these studies indicate that coaches commonly provide general writing support when teaching writing across the curriculum (WAC), which aligns with the content area writing approach. Lastly, coaches provide some support for meeting students' various writing needs, but there is a lack of coaching support in strategies to teach English Language

Learners (ELLS), Gifted and Talented (GAT), and special education students within writing.

Writing Coaching is Influential but Sparse

Instructional coaching has shown to influence teachers' knowledge, skills, and dispositions toward writing and writing instruction (Hammond & Moore, 2018; Knight, 2018; Sonesh et al., 2015), as well as student achievement (Tanner et al., 2017). While instructional coaching has shown to be effective in various subject areas and contexts, results from this dissertation suggest that writing coaching is very limited. This is unsurprising because historically writing has been coined the "Neglected R" (Mo et al., 2014) and has been predominantly used as a rudimentary skill to test students' knowledge on content (Yancey, 2009). However, due to the importance of writing for college and career readiness, it is time for explicit writing instruction and coaching to garner more attention.

Quantitative frequencies and qualitative themes from both Chapters II and III provide evidence that writing coaching is scarce within the K-6 context. For instance, writing supports are often infrequently or moderately implemented and many participants reported that writing is not the focus of the coach for various reasons (such as the lack of state assessments in writing), and thus, had no impact on some teachers' practices. Thankfully, the writing coaching support that is provided aligns with research and positively impacts teachers' knowledge, skills, and dispositions toward writing and writing instruction. Results from this dissertation indicate that writing should play a larger role within coaching practices to better prepare teachers and start closing the writing achievement gap for students.

While on average, coaches reported having moderate to high levels of self-efficacy (on a scale from 1-5) for writing and writing instruction, their self-efficacy did not typically have a relationship to their writing coaching practices (See Chapter IV). Coaches' levels of self-efficacy for writing and writing instruction may not have had a statistically significant influence on their use of researched-based coaching practices because reading often takes precedence over writing, as it commonly has in the past. While coaches feel self-efficacious for writing and writing instruction, they may not have an opportunity to work with teachers in writing due to the self-reported needs of the teachers as well as principal expectations. In other words, teachers may feel that they need more support in reading than they do writing, and thus, coaches may use their time to support teachers solely in reading.

Even though writing coaching is often sparse, ongoing professional development has shown to be effective in influencing teachers' knowledge, skills, and dispositions (Darling- Hammond et al., 2017; Desimone & Pak, 2017). Sustained writing coaching, specifically through the coaching cycle, allows for teachers to have support before, during, and after a lesson. This ongoing coaching support ensures ample time for reflecting, asking questions, and aligning assessment data to instruction to best meet students' needs. Results from Chapter II and III provide evidence of the importance of going beyond traditional one-shot professional development to a model that provides teachers a way to consistently monitor and adapt their teaching practices specific to their students. Sustained writing coaching support also provides teachers a time to work with their coaches to identify how to best utilize their strengths and consciously develop and reflect on their areas of improvement. Furthermore, constant collaboration with coaches

through the coaching cycle and other informal or formal meetings are essential for building a trusting teacher-coach relationship, and ultimately, impacting teacher practice (Lofthouse, 2019). Thus, just like other subject areas, sustained coaching support and collaboration are important for impacting teacher change and growth within the realm of writing.

Overall, the coaching practices that teachers find to be influential for writing are the same coaching supports that researchers have found to be influential within other content areas (Averill et al., 2016; Lee et al., 2018). However, the lack of time spent on coaching writing is something that needs attention, not only because teachers need support in teaching this challenging subject, but because only one-quarter of students are meeting the proficient level of writing (National Center for Educational Statistics, 2017).

Content Area Writing Approach for Writing Across the Curriculum

Allowing students to write frequently across the curriculum is a research-based writing practice that helps students become more effective writers (Graham & Harris, 2019). Three approaches to teaching WAC include: (1) the content area writing approach where educators provide general and basic skills for students to be able to write about subject matter specific text (Bean et al., 2011), (2) the disciplinary literary approach which emphasizes the importance of teaching specialized knowledge and abilities of those who work, communicate, and use knowledge within various disciplines (Shanahan & Shanahan, 2012), and (3) the radical center approach which is an overlay of generic and discipline specific writing practices (Brozo et al., 2013). Results discussed in Chapters II and III indicate that coaches rarely support teachers in writing within social studies, math, and science, and their support in these areas align with the generalist

content area writing approach. With both the rarity and generalist nature of the support, teachers reported coaching in WAC as the least influential to their knowledge, skills, and dispositions toward writing and writing instruction in comparison to all other supports coaches provide.

Success in teaching writing across the curriculum assumes that educators know how to support students as they not only explore writing more generally but also within various disciplines (Brock et al., 2014). Interdisciplinary writing instruction requires that teachers have knowledge of content, discourse patterns, literate practices, and habits of mind within multiple content areas (Fang & Coatoam, 2013). Since K-6 teachers teach multiple subjects, understanding how to teach disciplinary writing in all content areas may be a challenge. Moving forward, elementary and other content area teachers need to work more frequently with literacy coaches to develop an understanding of appropriate tools that will be useful to find the radical center and to support teachers' unique classroom contexts when learning how to successfully write across the curriculum (Brozo et al., 2013).

Coaching Writing Instruction for Diverse Learners

Teaching writing is a challenging task. Teachers need both knowledge of the content area as well as pedagogical content knowledge (PCK) (Shulman, 1987). They need to be well versed in: how writing develops, how to teach basic writing skills such as handwriting and spelling, how to teach the recursive stages of the writing process, and strategies to teach the audience, purpose, and features of various genres across multiple subject areas. Not only do teachers need to have experience and understanding of all the above-mentioned aspects of teaching writing, but they also need to know how to best

support their diverse learners (e.g., ELL, GAT, special education) in writing. Knowing how to provide differentiated instruction for writing and writing across the curriculum based on diverse students' needs makes teaching writing an even more challenging task. However, having coaching support in ways to teach diverse learners can be one way to help teachers feel more prepared to meet the varying needs of their students.

Results discussed in Chapters II and III indicate that coaches provide some support in differentiation for students, including creating interventions, generally teaching best writing practices, providing academic language support, and discussing ways to conference about students' writing. While these coaching supports are essential in influencing students' writing achievement, participants rarely discussed how coaches supported teachers in scaffolding and differentiating for ELL, GAT, and special education students. Understanding the different needs students have based on their background knowledge, current levels of understanding, culture, or disabilities is essential for both teachers and coaches. It is important to consider the difference between how to best support a student who is just learning a new language and someone who is ready to move beyond their current grades' objectives and expectations. Students learning a new language can be at various proficiencies and need unique support based on their native language. Furthermore, GAT students often struggle in writing (Baum et al.,2001), but their struggles are often different from those who are new to a language. Similarly, teaching writing to special education students will look different based on each student's disability and individualized education plan (IEP). Thus, having explicit coaching support in ways to best support diverse students in writing should be more prevalent within

literacy instructional coaching. Overall, writing should not be something that is reserved for the few, rather, it is key to equitable participation in society.

Conclusion

With nearly three-quarters of students in the United States not meeting proficiency in writing (National Center for Education Statistics, 2017), it is crucial for researchers, professional development providers, superintendents, and other stakeholders to start contemplating ways to close writing achievement gaps. Results from this dissertation suggest that literacy coaching in writing could be one answer to better support teachers for writing and writing instruction in hopes to prepare students for their post-secondary endeavors. However, writing coaching needs to be more frequent and literacy instructional coaches need additional training specific to WAC and meeting the writing needs of diverse populations.

In conclusion, it is time for writing and interdisciplinary writing skills to become more of an integral focus within today's classrooms. Many students are leaving high school without the skills necessary to be successful writers and communicators within society. Thus, educators and other stakeholders need to take the necessary measures to make sure writing is no longer the "Neglected R". This shift starts with a change in how educators are prepared to teach or coach writing in educator preparation programs and professional development. Addressing this need will help develop a generation of students who leave high school prepared to successfully write within whichever career path they choose.

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