THE INFLUENCE OF INSTRUCTIONAL COACHING ON TEACHER EFFICACY AND STUDENT ACHIEVEMENT

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ABSTRACT

THE INFLUENCE OF INSTRUCTIONAL COACHING ON TEACHER EFFICACY AND STUDENT ACHIEVEMENT

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The purpose of this mixed methods study was to examine the influence instructional coaching has on teacher efficacy and student achievement in reading. Survey, interview, and demographic data were collected from a purposeful sample of third and fourth grade reading teachers within a large suburban school district located in southeast Texas. The *Teachers' Sense of Efficacy Scale* (TSES) survey was used to determine teacher self-efficacy both pre- and post- instructional coaching. The *Developmental Reading Assessment – Second Edition* (DRA2) was used to determine student reading achievement both pre- and post-instructional coaching. One-on-one interviews of teachers and instructional coaches further explored the challenges and perceptions of influential factors associated with instructional coaching. Quantitative data were analyzed using frequencies, percentages, paired *t*-test, and Pearson *r*, while grounded theory

utilizing an open and continuous coding process analyzed the collected qualitative data. Quantitative analysis demonstrated teacher self-efficacy and student achievement in reading were not significantly influenced by instructional coaching despite the fact that there was an increase in both areas measured. The qualitative analysis provided supporting evidence of the importance of experience and knowledge, training, and communication skills of the instructional coaches as necessary to influence teacher selfefficacy and student achievement. Teachers described the greatest influence of instructional coaching was on their classroom management skills and positive reinforcement of their improved instructional practices which resulted in increased student achievement.

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CHAPTER I:

INTRODUCTION

The field of literacy education has long been concerned with the issue of how to help classroom teachers improve their practices so that students will improve as readers (Kennedy, 2016; Scott, 2015; Stephens et al., 2011). The study is designed to deepen our understanding of the potential influence an instructional coach has on teacher efficacy and how that efficacy affects student achievement. Teachers often begin their careers with high levels of self-efficacy, a belief in their ability to impact student learning through instructional, management, and collaboration skills (Epstein, 2015; Protheroe, 2008; Zee & Koomen, 2016). As teachers progress through their curriculum and gain a greater understanding of the complexity of teaching, levels of self-efficacy frequently decline (Black, 2007; Protheroe, 2008). Highly qualified teachers are leaving the field each year due to emotional exhaustion, lack of autonomy, and a sense of inefficacy (Aud et al., 2011). As a result of this trend, our students' achievement is being impacted (Desimone, Smith, & Phillips, 2013). This study will examine the influence of instructional coaching on teacher efficacy and student reading achievement.

Research Problem

Professional development (PD) has been identified as a critical mechanism that helps teachers increase students' achievement (Tournaki, Lyublinskaya, & Carolan, 2011). Over 90.0% of teachers are required to participate in workshop-style training sessions in an effort to improve instructional practices to elevate student achievement during a school year (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Desimone & Pak, 2017; Kennedy, 2016). Professional development is designed to improve teachers' knowledge and skills needed to address the needs of their students (Grimmett, 2014; Stronge, Ward, & Grant, 2011). School districts provide professional development as a strategy to ensure educators continue to strengthen their practice throughout their career. "Teaching and learning are at the core of educational practice, and as a significant body of research demonstrates, teacher quality is the most important school-level factor affecting student achievement" (Looney, 2011, p. 440).

Student achievement is measured in a much different manner than in previous years. Schools have shifted their focus from a pass or fail mentality to the amount of improvement or growth a student has made from year to year. This has shifted the focus of schools from an overall achievement to how much each individual student is learning over time, no matter their starting point. Over the past 20 years, the accountability system has evolved into an entirely new accountability system with a commitment to equal opportunity for all students. In addition to the evolving accountability system, the *Every Student Succeeds* Act (ESSA) (U.S. Department of Education, 2015) included legislation aimed at closing the gap between groups of students through greater accountability and action to provide critical protections for disadvantaged and high-needs students as well as opportunities for evidence-based innovations developed by local leaders and educators.

Under ESSA, if measurable progress is not achieved the mandated restructuring process can result in the principal's loss of employment. Ultimately, principals are held accountable for improving student achievement in their schools. With jobs on the line and school performance ratings such a public concern, the pressure to improve instruction in schools may be greater today than at any other time in our history. In response to an increasingly complex society and a rapidly changing, technology based economy, schools are being asked to educate the most diverse student body in our history to higher academic standards than ever before (Darling-Hammond, 1998; Dilekli & Tezci, 2016;

Klimova, 2012; Winch, 2010). Schools everywhere are searching for proven ways to improve student achievement.

Whenever schools appear to be failing to meet the achievement standards, critics invariably point to teachers (Lucas, 1999; Suarez, 2017; Zee & Koomen, 2016). To improve schools, improve teachers' instructional practices by providing highly effective learning experiences. Teachers need the opportunity to develop effective teaching strategies and a deep understanding of why these strategies work (Guskey, 2009; Lee & Hemer-Patnode, 2010; Lucas, 1999; Murray, Ma, & Mazur, 2009; Saroyan & Trigwell, 2015; Scott, 2015). One of the most significant challenges for a principal is selecting the staff development approach that aligns most clearly with the staff members' needs and produces the results expected for high student achievement (Neumerski, 2012; Range, Pijanowski, Duncan, Scherz, & Hvidston, 2014). The majority of public school teachers experience a three day approach to professional development. Typically, professional development begins in August before school starts and be followed up with one to two more sessions sprinkled throughout the fall and spring semesters. This approach to staff development rarely results in significant change due to the lack of practice, support, and accountability (Hirsh, 2015; Reeves, 2010; Zeggelaar, Vermeulen, & Jochems, 2018). As instructional leaders, principals face the challenge of providing professional development that develops content knowledge and instructional practices as well as positively impact student achievement.

To accomplish this goal, professional development must be planned and organized to engage all teachers regularly and to benefit all students (Darling-Hammond et al., 2009). As campus leaders, principals have the opportunity to develop teachers' knowledge and skills by providing effective professional development based on an analysis of student achievement data in order to identify what students are not learning,

find instructional gaps, and determine what students need to learn to help close those gaps (Guskey, 2009; Hirsch, 2015; Lee & Hemer-Patnode, 2010; Murray et al., 2009; Saroyan & Trigwell, 2015; Scott, 2015). Achieving at rigorous levels of student understanding requires immensely skillful teaching – and schools that are organized to support teachers' continuous learning (Darling-Hammond, 1998; Neumerski, 2012; Range et al., 2014). School reform includes the call for better teacher preparation, a stronger curriculum, and better diagnostic tools and assessments. Medrich, Fitzgerald, and Skomsvold (2013) found effective professional development is one key to improving the quality of instruction in schools. Providing educators with content knowledge, skills, practice, and support after they enter the teaching profession to meet the diverse academic and behavioral needs of student has been effective in improving student achievement and teacher self-efficacy (Desimone & Pak, 2017; Dilekli & Tezci, 2016; Reeves, 2010; Zee & Koomen, 2016). Improving professional learning for educators is a crucial step in transforming schools and improving academic achievement (Hirsch, 2015; Hord & Hirsh, 2009; Medrich et al., 2013).

With the daunting task of diversifying instructional strategies and activities, schools are turning to instructional coaches to provide sustained professional learning throughout the school year to support their teachers. Instructional coaching is an encouraging, reasonably priced way to improve classroom teaching and student learning (Black, 2007; Desimone & Pak, 2017; Suarez, 2017; Zeggelaar et al., 2018). Instructional coaches spend the majority of their time working directly with teachers on instruction in the classroom. The coaches build rapport and trust as they serve in the trenches alongside teachers. In 2013, Aguilar's (2013) study of coaching showed that an instructional coach can build will, skill, knowledge, and capacity because it can go where no other professional development has gone before: into the intellect, behaviors,

practices, beliefs, values, and feelings of an educator. Unlike the three day training approach, instructional coaching provides the opportunity for trying and testing, talking and reflecting, and evaluating the results of learning and teaching. As an instructional leader, a principal's goal is to develop competent and confident educators. The strategic delivery of coaching over time can have an impact on teachers' instructional practice and, in turn, this can help change the nature of teaching in ways that lead to improved student learning (Medrich et al., 2013; Zeggelaar et al., 2018).

Knight (2007), with the Center for Research on Learning at the University of Kansas, defines instructional coaches as individuals who are full-time professional developers, on-site in schools. The instructional coaching model begins with instruction being modeled through demonstration lessons, observations, videos, professional readings with discussion (Knight, 2007). Instructional coaches are trained in proven classroom management, content knowledge, instructional strategies, and formative assessments. As the teacher's degree of independence increases, a joint responsibility is formed between the two professionals within guided practice, co-teaching, observations with feedback, continued professional readings and discussions, and planning sessions.

In an effective instructional coaching experience, the final phase reveals a teacher successfully integrating the new approach into his or her teaching. Instructional coaching has been heralded as an opportunity to provide professional development that is job-embedded, ongoing, directly related to the challenges teachers face in the classroom each day, and provided by people familiar with the context of the teachers' work (Deussen, Coskie, Robinson, & Autio, 2007). When literacy coaches administer and discuss student assessments with teachers, observe teachers' instruction, and offer supportive feedback, conference with teachers about their instruction and students, and model instruction in

classrooms, student achievement in reading increases significantly (L'Allier, Elish-Piper, & Bean, 2010).

Currently under NCLB schools are given credit for the percent of students achieving the state's "proficient" level, regardless of how far students progressed to get to proficient (Hull, 2007). In 1993, the Texas Legislature enacted statutes that mandated the creation of the Texas public school accountability system to rate school districts and evaluate campuses (Texas Education Agency [TEA], 2014). The State of Texas Assessment of Academic Readiness (STAAR) is Texas' current student testing program. The assessments are based on the Texas Essential Knowledge and Skills (TEKS). Beginning in third grade, students are assessed in the core subject areas of reading, writing, mathematics, science and social studies. Within the TEA Accountability Rating System, every school earns one of two ratings: (a) met standard or (b) improvement required. Texas Education Agency focuses on four areas in determining a school's accountability rating: (a) student achievement, (b) student progress, (c) closing performance gaps among lowest performing students, and (d) postsecondary readiness. In response to accountability expectations calling for the implementation of evidencebased classroom practice that fosters the kind of improvement TEA describes, instructional coaches are frequently utilized as providers of professional development to improve teacher and student performance (Zeggelaar et al., 2018). Although there are multiple research studies that explore best practices of instructional coaching, few studies have delved into the impact on student achievement. This study will examine the influence of coaching on teacher efficacy and student achievement in reading.

Significance of the Study

Examining whether instructional coaching impacts teacher self-efficacy and student achievement could be beneficial for all school leaders as they select and plan professional development. Recent legislation in the U.S. has intensified public attention to teacher preparation in reading, evidence-based reading instruction, and student academic performance as measured by adequate yearly progress (U.S. Department of Education, 2001, 2002). Improving professional learning for educators is a crucial step in improving academic achievement (Hord & Hirsh, 2009). Although 80% of professional development focuses on state or district curriculum and performance standards, students are not reading proficiently in third grade. One in six children who are not reading proficiently in 3rd grade are reported to eventually drop out or fail to graduate on time from high school resulting in additional expense to the education system through interventions to remediate, grade repetition, truancy, and drop out rates (Hammond, 2018; Hernandez, 2011; Krashen, 2016).

Research Purpose and Questions

The purpose of this study was to examine the influence of instructional coaching on teacher efficacy and student reading achievement. The following research questions guided this study:

- 1. Does instructional support influence teacher self-efficacy?
- 2. Does instructional coaching influence student reading achievement?
- 3. What relationship, if any, is there between teacher efficacy and student reading achievement among teachers participating in instructional coaching??
- 4. How does instructional coaching influence teacher self-efficacy?
- 5. What kinds of support can be provided to teachers so their self-efficacy is strengthened within an educational setting?

Definitions of Key Terms

Elementary School: A school serving students in Kindergarten through Grade 4. *Instructional Coach:* Partner with teachers to help them incorporate research-based instructional practices into their teaching (Knight, 2009).

Gains: Increase in scores between a pre and post assessment (Smith et al., 2014) *Instructional Practices:* Strategies teachers use to facilitate student learning (Desimone et al., 2013)

Literacy Coaching: Model seeking to improve children's literacy achievement in elementary schools through the introduction of a comprehensive literacy framework and supporting teachers to develop expertise in the classroom (Atteberry & Bryk, 2011) *Professional Development:* A formal learning process such as a conference or workshop; collaborative learning between mentors and teachers to develop effective teaching strategies and a deep understanding of why these strategies work (Epstein & Willhite, 2015).

Reading Achievement: Expectations of student performance in relation to a range of text types and text difficulty and in response to a variety of assessments intended to elicit different cognitive processes and reading behaviors (NAEP, 2017).

Self-efficacy: People's level of motivation, affective states, and actions are based more on what they believe than on what is objectively the case (Bandura, 1997).

Teacher Efficacy: Teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (Bandura, 1997; Klassen & Chiu, 2010; Tschannen-Moran & Hoy, 2001).

Teachers' Sense of Efficacy Scale (TSES): A 12-item survey designed to measure teachers' efficacy in student engagement, instructional practices, and classroom management (Tschannen-Moran & Hoy, 2001).

Conclusion

This chapter provided an overview of the need for the study, significance of the problem, research purpose and questions, and key definitions pertaining to this study. The proposed study will be a contribution to determine the influence of instructional coaching on teacher efficacy and student achievement. The next chapter will be a literature review of the major topics that will support this study.

CHAPTER II: REVIEW OF THE LITERATURE

For centuries, teachers have faced the challenging task of educating students. Whether one thinks back to the one-room school house or today's self-contained classrooms, teachers must divide their time and energy to effectively teach students who span the spectrum of learning readiness, personal interests, and culturally shaped ways of seeing and speaking about and experiencing the world (Dilekli & Tezci, 2016; Tomlinson, 2014). According to National Assessment of Educational Progress (NAEP) scores, roughly two-thirds of U.S students read at the basic level or below. Educators have long recognized the importance of mastering reading by the end of third grade. Students who fail to reach this critical milestone often falter in the later grades and drop out before earning a high school diploma (Hammond, 2018; Hernandez, 2011; Krashen, 2016).

This literature review examines how instructional coaching influences the selfefficacy of third and fourth grade reading teachers, how teacher self-efficacy of teachers receiving instructional coaching differ from those not receiving instructional coaching, the influence of increased self-efficacy on student achievement in reading, and teachers' and instructional coaches' perceptions of factors influencing teacher self-efficacy and student achievement in reading.

In an effort to prepare teachers to meet the diverse needs of today's students, quality professional development is essential to ensure teachers have the knowledge and skills to produce high levels of learning and performance for students. By focusing teacher attention on the achievement gap and providing research-based instructional strategies, educators may be able to improve academic achievement for all students. The purpose of this study will be to examine the influence of instructional coaching on

teacher self-efficacy and student achievement in reading. To address these areas, this literature review focuses on: (a) understanding of efficacy, (b) effective professional development, and (c) classroom instruction and reading achievement.

Understanding of Self-Efficacy

There is strong evidence regarding the relationship between teacher efficacy and student achievement. Karimi (2011) conducted a quantitative study assessing the impact of professional development in enhancing teachers' beliefs about their teaching abilities. The purpose of this study was to determine the effects of professional development initiatives on English as a Foreign Language teachers' degree of self efficacy. The sample consisted of 60 junior high teachers ranging in age from 21 to 42, including male and female teachers. Data were reported from a sample of 60 junior high teachers teaching in the two western provinces of Iran – Ilam and Kermanshah. There were two groups of teachers participating in the study, the treatment and the control group. The treatment group consisted of 30 teachers accepted in Ilam Province Teacher Training Center. The purposefully selected control group was comprised of 30 teachers with similar characteristics to those in the treatment group. The two groups were analogous in length of service, age range, and gender representation. In addition, as an instructor in the center, the researcher was able to safely run the experiment (Karimi, 2011).

Each teacher was required to complete a *Teacher Sense of Efficacy Scale* (TSES) in a pre, post, and delayed post-test developed by Tschannen-Moran and Woolfolk Hoy (2001). Teachers' sense of efficacy was measured using a nine point continuum of 24 items. The TSES measures efficacy in the areas of instructional strategies, classroom management, and student engagement. This instrument was selected based on the high reliability in previous administrations (subscale range from .86 to .90). Once the researcher determined no significant difference between the two groups through the

TSES pre-test, the experimental group received three 16-session courses using the five Professional Development (PD) models including In-service training, Fellow Observation/Assessment, Development/Improvement Process, Mentoring, and Study Groups. Initially, the use of Independent sample t-tests revealed no significant difference between the self-efficacy beliefs of the two groups of teachers. At the conclusion of the experiment, each group completed the TSES as a post-test and again two to three months later as a delayed post-test. The researcher utilized Independent samples t-tests to determine the difference between the means of the two groups and Matched t-tests to investigate the difference between the pre-test/post-test results of the two groups. Following the professional development, a significant difference was observed between the two groups of teachers. The difference appeared in the teachers' beliefs for student engagement, instructional strategies, and classroom management (Karimi, 2011).

A teacher's sense of self-efficacy influences the effort they put into teaching, the goals they set, and their level of motivation (Epstein, 2015; Goddard, Hoy, & Hoy, 2000; Swackhamer, Koellner, Basile, & Kimbrough, 2009; Tschannen-Moran & Barr, 2004; Zee & Koomen, 2016). Teachers with a high sense of self-efficacy are more willing to implement innovative teaching strategies. These teachers approach problem-solving and risk-taking with high expectations for their own performance and the achievement of students. In a somewhat similar study focused on increasing student achievement, Lane, Robbins, and Price (2013) conducted a study to address the need for a valid appraisal instrument to assess whether literacy coaches are effective, productive, and improving student achievement. The purpose of this study was to assess whether the appraisal instrument derived from the International Reading Association's standards measures all facets of the role and responsibility of literacy coaches.

Lane et al. (2013) used a fully mixed concurrent equal status design to determine the validity of the performance appraisal instrument for literacy coaches. The study utilized a survey and face-to-face interviews to gather data. The population of this study include a convenience sample from members of the National Council for Teachers of English who participate in the organization's free, online social network. The subjects in this study sample were literacy coaches, campus principals, and supervisors of literacy coaches. From the 89 survey participants, 73 participants were selected based on meeting the criteria – level of education, job responsibilities, and certification areas. The researchers of this study utilized an online survey to collect quantitative data.

The initial portion of the survey included eight questions regarding demographics. In an effort to determine which items should be included in the appraisal instrument, the participants completed a 49-item survey. The third section of the online survey allowed participants the opportunity to rate the preconference portion of the appraisal instrument on a four-point Likert-type scale. The study collected qualitative data through openended questions on the online survey as well as face to face interviews. This section of the study focused on the self-efficacy of literacy coaches as it applies to the appraisal instrument. This convenience sample of literacy-related professionals were surveyed and interviewed to determine whether or not the appraisal instrument accurately assesses the responsibilities of a literacy coach (Lane et al., 2013).

In a school created to provide a particular type of learning environment for teachers, Epstein and Willhite (2015) conduct a study to provide insight regarding the development of teacher efficacy when working with mentor teachers through on-going, job embedded professional development. The study was carried out over a year long implementation of professional development in a mid-sized midwestern community to answer the question: How does job embedded professional development with a mentor

affect teachers' self-efficacy? The study included 14 mentor teachers: preschool (3), kindergarten (3), first grade (3), second grade (2), third grade (1), and fourth grade (2). Each mentor teacher was assigned to a teacher candidate within the Professional Development School.

Each mentor teachers' self-efficacy was measured through a pre and post survey, the short form of the *Teachers' Sense of Efficacy Scale* (Tschannen-Moran & Woolfolk Hoy, 2001). In addition to the 12 Likert scale questions, three open-ended questions were added to further study teachers' views of their teaching skills. Mentor teachers also participated in a focus group discussion that further addressed how the job embedded professional development experience affected their views of the following professional areas: individual relationships with students, classroom management, understanding of grade or age-level content, teaching strategies, assessment, and creativity.

Analyzation of the Likert item survey responses was achieved through a descriptive statistical analysis. Additionally, Epstein and Willhite (2015) independently coded and categorized focus group comments and survey responses through constant comparative analysis. Findings revealed that participants stated confidence in 11 of the 12 teaching skills assessed in the survey. The open-ended responses echoed the participants' confidence in the ability to positively influence learning by sharing their knowledge with teacher candidates. Through the coding process, enhanced reflection skills emerged as the strongest theme. In summary, the findings of this study suggest that teachers participating in job embedded professional development have strong self-efficacy and pass it along to teachers they are supporting as well as the students.

Zee and Koomen (2016) integrate 40 years of teacher self-efficacy research to explore the consequences on the quality of classroom processes, students' academic achievement, and teachers' psychological well-being. This study delves into the notion that a high sense of self-efficacy ensures a high-quality classroom environment that produces high student achievement.

A criteria-based review approach was employed to identify relevant studies on the consequences of teacher self-efficacy. Zee and Koomen (2016) searched articles from 1976 to March 2014 initially through a priori scoping search in an effort to define separate sets of key words to locate articles referring to teacher self-efficacy in relation to classroom instruction. The next stage of analysis required the researchers to combine teacher self-efficacy search terms with key words referring to classroom quality, students' academic adjustment, and teachers' psychological well-being. By limiting the detected journal articles to full-text versions published in peer-reviewed journals, the results included: 768 for classroom processes, 910 for students' academic adjustment, and 710 for teachers' well-being. Ultimately, five criteria was identified to include publications for review in this study: (a) focus on teachers' individual self-efficacy, (b) address a direct or indirect relationship between teacher self-efficacy and at least one factor associated with students' academic adjustment, teachers' well-being, or hypothesized classroom processes, (c) quantitative empirical data were used, (d) quantitative studies were required to use psychometrically sound, and (e) no limits were set for samples. A synthesis of the results of the study indicate teachers with high selfefficacy tend to effectively cope with a range of problem behaviors, yet only modestly associated with students' academic adjustment. However, the study noted aspects of students' motivation appeared to be more consistently predicted by teacher self-efficacy than their academic achievement. The greatest impact of high teacher self-efficacy seems to be on teachers' well-being. Findings indicate teachers with high levels of self-efficacy experience higher levels of personal accomplishment, commitment, and job satisfaction rather than being consumed by stress, emotional exhaustion, and job burnout.

As portrayed in the above studies, increased levels of teacher efficacy is positively related to professional development initiatives. It is critical to analyze which types of professional development have the greatest influence on instructional practices and student achievement. The next section will examine effective professional development.

Effective Professional Development

When examining factors that influence the relationship between teacher efficacy and student achievement, considering effective professional development may be critical. Each year, school districts provide professional development for their teachers in an effort to ensure quality classroom instruction for all students. Many professional development activities are designed to increase teachers' knowledge about their content in addition to developing their instructional practices. In order to find the potential relationship between teacher efficacy and student achievement, Desimone, Smith, and Phillips (2013) developed a study to examine the link between student achievement growth and professional development participation and changes to instruction. The purpose of the quasi-experimental longitudinal study increased the understanding of which types of professional development effectively change teaching practice in ways that boost student achievement. Findings suggested that teachers participating in professional development that focused on content and instructional strategies were more likely to teach in ways associated with student achievement growth.

In an attempt to summarize the qualities of high-quality professional learning, Desimone (2011) found that effective professional development includes: (a) content focus, (b) active learning, (c) coherence, (d) duration, and (e) collective participation. Desimone (2011) concludes that professional development effectiveness should be measured observations, interviews, and surveys. The bias can be largely reduced with the use of reliable and valid instruments. The districts should identify the evaluation tool most appropriate for the scope of their inquiry. Ensuring that professional development improves student learning begins by incorporating identified features of effective learning into teacher professional development.

In a similar study, Garet et al. (2008) use a national probability sample to provide the first large-scale empirical comparison of effects of different characteristics of professional development on teachers' learning. Results indicate three core features of professional development activities that have significant, positive effects on teachers' self-reported increases in knowledge and skills and changes in classroom practice: focus on content knowledge, opportunities for active learning, and coherence with other learning activities.

In a compelling study that analyzed the relationship between literacy coursework and coaching, Neuman and Wright (2010) examined different forms of professional development in early childhood and their impact on quality language and literacy practices. In the randomized controlled trials, the results indicated that coaching was a more effective professional development form than coursework for improving the structural characteristics in classrooms. Through pre and posttests, researchers measured the instructional and environmental supports in the preschool classrooms. Participants included 148 early childhood educators who were housed in 148 community centers or public schools in six cities in Michigan. Findings suggest that coaching appeared to support individualized, context-specific practices along with an accountability mechanism that provided real-time feedback to teachers (Neuman & Wright, 2010).

In an effort to understand authentic professional learning thus allowing the creation of an effective framework for professional development, Abu-Tineh and Sadiq (2018) explored the characteristics and models of effective professional development.

The following research questions guided their study: (a) What are the characteristics of effective professional development as perceived by independent school teachers in Qatar; (b) What are the most and the least effective models of professional development as perceived by independent school teachers in Qatar; (c) Do independent school teachers differ in rating the characteristics of effective professional development based on their gender, years of experience in teaching and school level; and (d) Do independent school teachers differ in rating the effective models of professional development based on their gender, years of experience in teaching and school level? The participants included 1,000 of the 14,000 Qatar government-funded independent school teachers. Through a proportional stratified random sampling technique, an equal representation of teachers from elementary, preparatory and secondary schools to include 283 elementary school teachers. Additional demographic information considered during the study included gender and experience in teaching.

The instrumentation used in this study was comprised of three sections: (a) characteristics of effective professional development; (b) models of professional development; and (c) demographic information. The first section of the instrument, used to measure characteristics of effective professional development, was adopted from Guskey (2003) with 21 items for participants to rate using a Likert-type scale ranged as follows: 1 = not at all, 2 = somewhat, 3 = moderately, and 4 = a lot. The second section of the instrument consisted of a questionnaire reviewed by 15 professors and professional development specialists in the educational field used to measure participants' perceptions of the effective models of professional development. The 15 item questionnaire was rated using a four point Likert rating scale: 1 = not at all to 4 = a lot. The final section was designed to gather demographic information about the participant regarding their

gender, school level, and years of experience in teaching. To ensure reliability of the first two sections of the instrument, Cronbach's alpha coefficients were calculated for each section revealing a 0.942 internal consistency rating for the characteristics of effective professional development scale and 0.867 for the models of professional development scale.

Through descriptive statistical analysis, results indicate that participants identified the characteristics of effective professional development as an enhancement to teacher's content and pedagogic knowledge (M = 3.60, SD = 0.65), followed by the promotion of collegiality and collaboration (M = 3.55, SD = 0.62) and a focus on individual and school improvement M = 3.52, SD = 0.70). The least effective characteristic was identified as involving families and other stakeholders (M = 3.10, SD = 0.88).

Using the same analysis process, the results of the study indicated that participants identified mentor/coaching model to be the most effective professional development model (M = 3.52, SD = 0.73). Workshop at school (M = 3.34, SD = 0.81) and study group (M = 3.26, SD = 0.83) were rated as the second and third most effective professional development models respectively. The online training courses (M = 2.65, SD = 0.97), followed by the action research model (M = 2.77, SD = 0.94) were perceived as the least effective professional development models.

The relationship between characteristics and models of professional development as demographic variables, was examined through *t* tests for independent samples and one-way analysis of variances. There was no significant differences between male and female teachers in rating the characteristics of the effective professional development. Similarly, there were no significant differences among independent school teachers in rating effective models of professional development that are attributed to their years of experience in teaching and school level (Abu-Tineh & Sadiq, 2018). Despite the fact that the ways of improving professional development may be unclear (Hirsch, 2015), the independent school teachers of Qatar understand the necessity for professional development and want it to be relevant, timely, and effective. Abu-Tineh and Sadiq (2018) encourage educators to use the characteristics of effective professional development proposed in this study and the school based professional development reform models to design and deliver professional development activities that may have a positive and significant impact on teacher performance and student achievement. With additional research, the ambiguity of the characteristics and model of professional development could be removed leading to the creation and sustainability of high impact professional learning.

Previous research has shown that instructional coaching provided by an experienced educator is the most effective approach for influencing teacher efficacy and instructional practices (Abu-Tineh & Sadiq, 2018; Bates & Morgan, 2018; Neumerski, 2012; Reeves, 2010). In a 2018 study, Cavazos, Linan-Thompson, and Ortiz delve deeper with further research examining the effects of job-embedded professional development (JEPD) in reading on the content knowledge and instructional practice of teachers of English learners (ELs). Through a mixed methods descriptive study, the authors examined the effect of this professional development model on four first grade teachers at one urban elementary school where the majority of first-grade ELs were performing below grade level in reading. The study was guided by the three questions: (a) How does JEPD in reading contribute to first-grade teachers' content knowledge about reading for English learners; (b) How does JEPD in reading influence first grade teachers' reading instruction for English learners; and (c) How do teachers of ELs perceive a job-embedded approach to professional development in reading instruction?

Five attributes of effective professional development were used in this descriptive study of the job embedded professional development model: content-focus, active learning, coherence, duration, and collective participation. The study site, a prekindergarten through fifth grade campus in a large urban school district, consisted of a student population of 93% of the students received free and reduced price lunch, 95% were students of color, and 58% were ELs. Results of a district required reading assessment revealing that 68% of first grade students were performing below grade level paired with classroom observations exposing lack of teaching phonemic awareness, difficulty structuring group work, and frequent off task student behavior identified professional development of the first grade teachers as a priority.

Instruments utilized in this study included context observation forms, teacher knowledge survey, observation logs, implementation observation forms, and interviews to gather data. Prior to the start of JEPD, the authors reviewed the student data, Teacher Knowledge Survey data, and context observation data with the teachers. Data analysis for the quantitative data included t tests to determine differences in the pre and post teacher knowledge surveys and descriptive statistics to analyze classroom observation data. The qualitative data were transcribed, reviewed, organized into categories, and color-coded using axial coding allowing the authors to interpret and draw conclusions from the patterns and themes (Cavazos et al., 2018).

Results of this study found that the JEPD allowed for time to build relationships, get to know the context, and provide differentiated instruction for the teachers resulting in individual and group growth. In addition, the customized approach of this professional development model increased learning and implementation of newly learned instructional practices. The findings extend previous research as an effective approach for improving teacher content knowledge, self-efficacy, and instructional practices.

Through effective professional development activities, teachers can develop the knowledge and skills need to provide quality instructional experiences for all students. As past and current research consistently shows, effective professional development may play a role in the relationship between teacher efficacy and teacher effectiveness. Considering this affirmation, it may be important to analyze the influence that professional development may have on classroom instruction and student achievement. The next section will explore in detail the specific types of professional development and the influence on student achievement.

Classroom Instruction and Reading Achievement

As educators search for strategies to improve the educational achievement for all students, one area of interest is the study of the effects of professional development on student reading achievement. Many education reforms rely on the improved instruction that ideally follows teacher learning as the primary method for increasing student learning (Desimone, 2011; Reddy, Dudek, & Lekwa, 2017). Despite the fact that 80% of professional development focuses on state or district curriculum and performance standards, students are not reading proficiently in 3rd grade (Hernandez, 2011). For the purpose of Hernandez's study, children were divided into three reading groups which correspond roughly to the skill levels used in the National Assessment of Educational Progress (NAEP): proficient, basic, and below basic. This national study calculated high school graduation rates for children at different reading skill levels. The results of this longitudinal study of nearly 4,000 students find that those who do not read proficiently by third grade are four times more likely to leave school without a diploma than proficient readers.

Fiester (2010) also explored the impact reading proficiently by the end of third grade. This report has made the case for grade level reading proficiency by the end of

third grade as a national priority, essential to closing the achievement gap, reducing high school dropouts, and growing the pool of high school and college graduates we need for a skilled and educated workforce (Fiester, 2010).

Teachers must employ instructional strategies that effectively improve student achievement. According to Desimone et al. (2013), there is a link between professional development and instruction that changes instructional practice. The longitudinal study looked at teachers' instructional practices and participation in professional development over three years and measure students' achievement growth over those three years associated with their teachers' instructional practices. The study was conducted with a sample of teachers and students in Title I schools, which spent significant amounts of money on interventions to help boost achievement for large numbers of struggling students. The researchers linked teaching practices with professional development as a catalyst for teacher change. Additionally, the research indicates that content-focused professional development holds the most promise for fostering teaching practice that boosts student achievement.

Elish-Piper and L'Allier (2011) explore the relationship between literacy coaching and student reading gains. The researchers in this study set out to prove that students make greater academic gains when teachers have a solid knowledge base and strong instructional skills. In this quantitative study, the researchers developed, field tested, and established the content validity of the Structured Literacy Coaching Log to serve as a data collection tool regarding how literacy coaches spent their time, including the specific activities, content and teacher with whom they worked. In a large urban school district, the first year Reading First grant participants voluntarily participated in the study which yielded the findings to support literacy coaching as a promising professional development approach for teachers to support student reading gains.

Instructional coaching, by design, is implemented to change the instructional practices of the teacher (Suarez, 2017; Thomas, Bell, Spelman, & Briody, 2015). However, Zakhavrov, Tsheko, and Carnoy (2016) analyze empirically the relationship between school inputs and student outcomes in three African countries to find which teacher and school resources may be important for raising student achievement. The principal objective of this study was to estimate how much student learning can be improved by improving teacher capacity. For the purposes of this study, the authors define teacher capacity as teaching experience, subject knowledge, and in-service trainings while school inputs include the availability of textbooks, teaching guides and other books for teachers, and the frequency of principal feedback on teachers' teaching. A reading and math assessment developed by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) Ministers from a careful analysis of the official school curricula, school syllabi, and textbooks used in SACMEQ school systems was administered one year before the final year of primary schooling. Although some commonalities across the three countries were identified through the fixed effect results, major differences were noted within differing contextual conditions. The authors illustrate this finding with the example that a teacher with less training at the college and university level may have decreased expectations of student achievement.

In a similar study, McLean, Sparapani, Toste, and Connor (2016) investigated how quality of the classroom learning environment influenced first grade students' literacy outcomes. The authors addressed the relations among classroom quality, student time spent in the two observed non-instructional activities (i.e. off-task and transitions), and their literacy outcomes through three research questions: (a) Is there a relation between observed classroom quality and student literacy growth in first grade; (b) Is there a relationship between classroom quality and students' time spent off-task and in

transitions; and (c) Does student participation in these non-instructional activities impact literacy skill growth, and does time in non-instructional activities mediate the association between classroom quality and student literacy achievement?

The authors used data from a longitudinal study (Connor et al., 2013) which examined the feasibility and effects of individualizing literacy instruction based on students' learning needs throughout elementary school. Participants of the current study included students and teachers. Of the 533 first grade students, 46% were African American, 45% were Caucasian, and the remaining 9% were other ethnicities including Hispanic and Asian. On average, teachers had about 12 years of teaching experience. The majority of the teaching staff were Caucasian (73%), with 24% African American or other ethnicities (3%) based on self-report.

Instrumentation included tests of the Woodcock-Johnson III Tests of Achievement (WJ III) to measure students' literacy skills: Letter-Word Identification (LWID), Passage Comprehension (PC), and Picture Vocabulary (PV). Once consent was obtained, the students were administered the WJ III literacy subtests three times throughout the year in the fall, winter, and spring. In addition, classroom video observations were captured for each of the 72 classrooms participating in the study. The observations were transcribed and coded using the Individualizing Student Instruction coding system to document the frequency and duration of all classroom activities experienced by each target student across three domains: content area, context/management, and instructional activity. The focus of the study was on the portion coded data that represented time spent in non-instructional activities. The classroom quality was assessed using the Quality of the Classroom Learning Environment (Q-CLE) rubric. The Q-CLE rubric is an observational measure that captures the contribution of teacher practices to the quality of the classroom learning environment (Connor et al., 2014).

Descriptive analysis revealed that students' performance on all WJ III literacy tasks fell within the expected range of first grade, with expected gains across the year (McLean et al., 2016). Correlations also revealed a negative relationship between time off-task and spring literacy task scores. As hypothesized by the authors, the findings indicate positive relations were found between Q-CLE and student literacy achievement.

Summary of Findings

In reviewing the literature related to professional development, the effects of professional development on classroom instruction, and the effects of classroom instruction on student achievement, the success of the professional development activities positively effecting student achievement rests with the classroom teacher (Desimone et al., 2013; Desimone, 2011; Desimone & Pak, 2017; Garet et al., 2008; Gulamhussein, 2013; Kennedy, 2016). Current research shows that when literacy coaches administer and discuss student assessments with teachers, observe teachers' instruction and offer supportive feedback, conference with teachers about their instruction and students, and model instruction in classrooms, student achievement in reading increases significantly (Elish-Piper & L'Allier, 2011; Grimmett, 2014; Stronge, Ward, & Grant, 2011). Professional development activities must be meaningful experiences for teachers and provide the strategies needed to successfully implement the knowledge and skills learned. In order to reduce the achievement gap and increase student achievement for all students, district and campus administrators must closely examine professional development practices and strive to provide high-quality experiences for all instructional staff.

Instructional coaching has been identified as one of the components of professional development that produces long term results (Desimone & Pak, 2017;

Karimi, 2011; Knight et al., 2015; Suarez, 2017). The coach works with teachers to focus on practical strategies for engaging students and improving their learning. School districts utilize coaches as a high quality professional development that is job-embedded and address issues teacher face daily in their classrooms. Although there is little research available documenting the effectiveness of instructional coaching, recent research shows evidence of success (Desimone & Pak, 2017; Gibbons & Cobb, 2017; Lane, Robbins, & Price, 2013; Knight et al., 2015). The education profession is adopting coaching as a promising strategy for building teacher expertise, raising student achievement, and advancing school reform (Knight et al., 2015; Neuman & Wright, 2010; Neumerski, 2012; Thomas et al., 2015). Even if much of teachers' efficacy can be linked to their past levels of success or failure in teaching children, principals have the opportunity to build efficacy through the professional development experiences provided to teachers (Goddard et al., 2000; Swackhamer et al., 2009; Tschannen-Moran & Barr, 2004). Lane, Robbins, and Price (2013) raise the question of whether or not having an appropriate evaluation tool for coaching would result in increased student achievement. In order to use professional development as a vehicle for improvement, districts need to know how teachers learn new skills. Struggling readers account for about a third of our student population. One in six children who are not reading proficiently in third grade do not graduate from high school on time (Desimone et al., 2013; Hammond, 2018; Hernandez, 2011; Krashen, 2016).

Theoretical Framework

The data collected in this study will be analyzed through the lens of constructivedevelopmental theory (Kegan, 1982). Kegan (1980, 1982, 1994) first suggested the term constructive-developmental to refer to a stream of work in psychology that focuses on the development of meaning and meaning-making (McCauley, Drath, Palus, O'Connor, & Baker, 2006). The theory is constructive in the sense that it deals with the meaning a person makes of an experience. Additionally, the theory is developmental in the sense that it is concerned with how these experiences grow more complex over time. Constructive-developmental theory is built on the work of Jean Piaget. As a constructivist, Piaget believed that categories of thought are actively constructed by the individual response to the need to understand the world (Piaget, 1954). As people develop and experience the world, this influences what they notice and become aware of, and therefore, what they can describe, reflect on, and change (Cook-Greuter, 2004). In addition, the Teacher Efficacy Scale (TES) will be used to measure teachers' personal beliefs regarding their effectiveness (Hoy & Woolfork, 1993).

Conclusion

This chapter presented a review of relevant literature relating to the purpose of this study, which will be to examine the impact of instructional coaching on teacher efficacy and student achievement. In Chapter III, methodological aspects of this dissertation will be detailed to include the operationalization of theoretical constructs, research purpose and questions, research design, population and sampling selection, data collection procedures, data analysis techniques, privacy and ethical considerations, and the research design limitations for this study.
CHAPTER III: METHODOLOGY

The purpose of this mixed methods study was to examine the influence instructional coaching has on teacher efficacy and student reading achievement. The researcher collected survey and interview data from a purposeful sample of general education third grade elementary teachers and instructional coaches within a large suburban school district located in southeast Texas. Data from the survey responses were analyzed using frequencies and percentages, and qualitative data were analyzed using an inductive coding process. This chapter presents an overview of the research problem, operationalization of theoretical constructs, research purpose, questions, hypothesis, research design, population and sampling selection, instrumentation, data collection procedures, data analysis, privacy and ethical considerations, and the research design limitations for this study.

Overview of the Research Problem

The field of literacy education has long been concerned with the issue of how to help classroom teachers improve their practices so that students will improve as readers (Reeves, 2010; Stephens et al., 2011; Thomas et al., 2015; Zee & Koomen, 2016). Teachers often begin their careers with high levels of self-efficacy, a belief in their ability to impact student learning through instructional, management, and collaboration skills (Epstein, 2015; Protheroe, 2008; Zee & Koomen, 2016. As teachers progress through their curriculum and gain a greater understanding of the complexity of teaching, levels of self-efficacy frequently decline (Black, 2007; Dilekli & Tezci, 2016; Neumerski, 2012; Protheroe, 2008). Highly qualified teachers are leaving the field each year due to emotional exhaustion, lack of autonomy, and a sense of inefficacy (Aud et al., 2011). As a result of this trend, our students' achievement is being impacted (Khezerlou, 2013; Zee & Koomen, 2016). This study considered the influence of instructional coaching on teacher efficacy and student achievement in reading.

Operationalization of Theoretical Constructs

This study consisted of the following constructs: (a) teacher efficacy and (b) student reading achievement. Teacher efficacy is defined as a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated (Tschannen-Moran & Hoy, 2001). This construct was measured employing the *Teachers' Sense of Efficacy Scale* (TSES). Student reading achievement was measured by the Developmental Reading Assessment (DRA), a standardized reading test used to determine a student's reading level.

Research Purpose, Questions, and Hypotheses

The purpose of this study was to examine the influence of instructional coaching on teacher efficacy and student reading achievement. The following research questions guided this study:

- Does instructional support influence teacher self-efficacy?
 H_a: Instructional support does influence teacher self-efficacy.
- Does instructional coaching influence student reading achievement?
 H_a: Instructional coaching does influence student reading achievement.
- 3. What relationship, if any, is there between teacher efficacy and student reading achievement among teachers participating in instructional coaching?
- 4. H_a: There is a relationship between teacher efficacy and student reading achievement among teachers participating in instructional coaching?
- 5. How does instructional coaching influence teacher self-efficacy?

6. What kinds of support can be provided to teachers so their self-efficacy is strengthened within an educational setting?

Research Design

The researcher used a mixed-methods research design to examine the influence of instructional coaching on teacher self-efficacy and student achievement in reading. The design included two phases: a quantitative phase and a qualitative phase. A mixed methods study was appropriate for this study as it allowed the researcher to thoroughly examine the problem by adding a narrative context to the quantitative data. In addition, the mixed method design allowed for a more thorough investigation by following up the quantitative portion of the study with a qualitative phase that looked for emergent themes that may otherwise be overlooked or not captured in quantitative data. A purposeful sample of third and fourth grade reading teachers and instructional coaches participating in the district instructional coaching program employed in a large suburban school district in southeast Texas were solicited to provide responses to the *Teachers' Sense of Efficacy Scale* (TSES) and participated in semi-structured interviews used to gather additional information about instructional coaching as professional development. The teachers' and instructional coaches' demographic and reading achievement data (i.e. Developmental Reading Assessment) were obtained through the schools' information data system. Quantitative data were analyzed using frequencies, percentages, two-tailed independent ttests, and Pearson's r, while the qualitative data were analyzed using an inductive coding process.

Population and Sample

For this study, the population included all general education elementary teachers within a single, large suburban school district in southeast Texas. In the 2017-2018 school year, the district enrolled 21,559 students and employed 1,323 teachers (Texas

Education Agency, 2018). Currently, the district has 24 campuses, of which 11 are elementary schools with 1,608 third grade students and 1,672 fourth grade students. The district was chosen because of the relatively diverse student population (African American 15%, Asian 11.1%, Hispanic 33.5%, American Indian 0.4%, Pacific Islander 0.1%, Two or More Races 3.3%, and White 36.5%). Table 3.1 displays the student population of the school district and provides the demographic information for the 2017-2018 school year. The campuses for this study were elementary schools with third and fourth grade reading teachers. Table 3.2 displays the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the teacher population of the school district and provides the demographic information for the 2017-2018 school year (TEA, 2018).

From the selected campuses, a purposeful sample of third and fourth grade general education teachers were asked to participate in the study. An individually matched sample technique was used to compare teachers who participated instructional coaching to those that did not participate in instructional coaching. Teachers initially responding to the request were reviewed and a total of 26 teachers receiving instructional coaching were selected and then individually matched to 26 teachers who had not received coaching based on gender, number of students, years of experience, performance level, ethnicity, and race. The participating district required instructional coaching for all teachers who were in their first year of the teaching profession or teachers reassigned to a new grade level. The district employed four instructional coaches to provide curriculum development and professional development for reading. Requirements to be an instructional coach included experience in developing reading/language arts curriculum and experience with campus and/or district leadership roles. Table 3.3 show the instructional coach demographics of gender, race/ethnicity, and years of teaching experience.

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Table 3.1

Participating Schoo	l District	Student	Population	and Demogr	aphics
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	Students (n)	Percentage (%)
Total Students	21,559	100.0
African American	3,230	15.0
Hispanic	7,233	33.5
White	7,873	36.5
Asian	2,400	11.1
American Indian/Alaska Native	85	0.4
Native Hawaiian/Pacific Islander	24	0.1
Two or More Races	714	3.3

Table 3.2

Participating School District Teacher Population and Demographics

	Teachers (n)	Percentage (%)
Total Teachers	1,323	100.0
African American	132	10.0
Hispanic	202	15.3
White	936	70.7
Asian	23	1.8
American Indian/Alaska Native	4	0.3
Native Hawaiian/Pacific Islander	2	0.2
Two or More Races	23	1.8

Table 3.3

	Instructional Coaching		
	Frequency (n)	Percentage (%)	
1. Gender			
Male	0	0.0	
Female	4	100.0	
2. Race/Ethnicity			
White	4	100.0	
African American	0	0.0	
Hispanic	0	0.0	
4. Years Teaching			
1-9 years	2	50.0	
10-14 years	0	0.0	
15-20 years	2	50.0	

Instructional Coaching Participant Demographics: Gender, Race/Ethnicity, and Years Teaching

Participant Selection

Third and fourth grade teachers from all 11 elementary campuses were invited by e-mail to participate in interviews in addition to the surveys they were asked to complete. Approximately 30 teachers were invited to participate in interviews, with approximately three to four teachers per grade level. The participants for the qualitative portion of the study were selected from participants who completed the *Teachers' Sense of Efficacy Scale* and were identified by the district curriculum and instruction office as receiving instructional coaching. In addition to the teacher interviews, the four reading instructional coaches volunteered to be interviewed.

Instrumentation

Teachers' Sense of Efficacy Scale

The *Teachers' Sense of Efficacy Scale (TSES)* is a survey designed to measure teachers' efficacy in student engagement, instructional practices, and classroom management (Tschannen-Moran & Hoy, 2001). The TSES, based on Bandura's 20 years of research of the theory that those with high self-efficacy expectancies are more effective and successful than those with low self-efficacy expectancies, was used to measure a teacher's perception of his or her ability to be effective in the classroom (Bandura, 1997). The TSES uses a 9-point Likert scale for each item (1 = Nothing, 3 = Very Little, 5 = Some Influence, 7 = Quite A Bit, and 9 = A Great Deal). The survey is designed to identify what areas create the most difficulties for teachers in daily school activities.

A 24-question long form and a 12-question short form survey were derived from the last of three pilot studies conducted by a group of eight graduate students along with the researchers. The questions pertain to three areas within the classroom: (a) engagement, (b) instructional strategies, and (c) management. The 12-question short form survey contains four questions pertaining to each area: student engagement, instructional strategies, and classroom management. Table 3.5 aligns the subscales with their corresponding survey items. Composite scores can range from 12 to 108; the larger the composite the higher the teacher self-efficacy. The Cronbach's alpha reliability coefficients for this study were 0.90 for the entire instrument, 0.81 for student engagement, 0.86 for instructional strategies, and .86 for classroom management (see Table 3.6). Cronbach's alphas for subscales ranged from .81 for Student Engagement to .90 for the Total Scale, both of which are considered good to excellent (Litwin, 1995; Salkind, 2016)

Table 3.4

Subscale TSES Categories and Corresponding Items

Short Form	Items
Efficacy in Student Engagement	2, 4, 7, 11
Efficacy in Instructional Strategies	5, 9, 10, 12
Efficacy in Classroom Management	1, 3, 6, 8

Table 3.5

Short Form Reliabilities and Cronbach's Alpha

	Mean Score	Standard Deviation	Cronbach's Alpha
TSES	7.1	.98	.90
Efficacy in Student Engagement	7.2	1.2	.81
Efficacy in Instructional Strategies	7.3	1.2	.86
Efficacy in Classroom Management	6.7	1.2	.86

Developmental Reading Assessment

The Developmental Reading Assessment – Second Edition (DRA2), developed by Joetta Beaver and Mark Carter, was published in 2006 as a teacher-administered assessment to identify students' instructional level, along with their strengths and weaknesses in reading. The DRA2 is a formative assessment system that allows teachers to assess, observe, record, and evaluate changes in student reading performance to inform individualized instruction. The development of the DRA2 was based on what educators and the research literature identified as being key characteristics and behaviors of good readers (Beaver & Carter, 2006). The DRA2 has three sections that assess reading engagement, oral reading fluency, and comprehension. The directions and procedures for the DRA2 assessment are scripted, and in order to obtain a complete assessment of a student's instructional level in reading it is essential to administer all three sections.

Four methods were used to examine the reliability of this assessment: internal consistency, parallel equivalency reliability, test-retest reliability, and inter-rater reliability. Results from these methods of reliability analyses show that the DRA2 is a reliable measure in that it produces stable, consistent results over time, different raters, and different samples of work or content (McCarty & Christ, 2010). The assessment developers disaggregated reliability coefficients by reading level with coefficients ranging from .50 to .80, described as moderate to high levels of reliability. While the developers found no significant differences in difficulty between passages, the correlation coefficients for test-retest reliability were all above .90. Overall, the developers reported the coefficients, .57 and .65, demonstrate moderate and substantial interrater reliability, respectively (Salvia, Ysseldyke, & Bolt, 2007).

Data Collection Procedures

Prior to data collection, the researcher gained approval from the University of Houston-Clear Lake's (UHCL) Committee for Protection of Human Subjects (CPHS) and the school district's Institutional Review Board (IRB) in which the study took place (see Appendix B). The researcher contacted the elementary campus principals, the director of the district's Curriculum and Instruction (C&I) Department, and instructional coaches to discuss the purpose of the study and the process for data collection.

Surveys

Following CPHS approval, the researcher emailed the teachers to provide a brief introduction with the researcher's contact information, explain the purpose of the study, and the process for data collection. Once email addresses were obtained from the district's director of C&I, an email was sent to all teachers with an explanation of how to complete the survey, a timeframe for completing the task, assurance that participation was voluntary, and assurance that all identities would remain confidential. The researcher also explained in the email that participants are free to cease participation in the study at any time. Each participating teacher provided consent to participate in a pre-and post- survey by accessing the Office 365 Forms link and completing it. The third and fourth grade reading teachers were asked to complete the *Teachers' Sense of Efficacy Scale* (TSES) to measure their self-efficacy before and after their six session instructional coaching round. Appendix A includes a survey cover letter that was emailed to third and fourth grade reading teachers.

In addition, a purposeful sample of third and fourth grade teachers, not receiving instructional coaching, were asked to volunteer to complete the *Teachers' Sense of Efficacy Scale* (TSES) regarding their self-efficacy. Each teacher who volunteered for the study was sent an individualized email with a cover letter (see Appendix A) that explained the study along with the researcher's contact information should questions arise from the participants.

Interviews

Qualitative data were collected through a series of individual interviews that were conducted in person. The researcher conducted one 45-minute semi-structured interview with each participating teacher (n = 26) and instructional coach (n = 4). An interview script was used in order to gather the information necessary to identify teacher (see

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Appendix D) and instructional coach (see Appendix E) perceptions of the factors that influence teacher self-efficacy and student achievement. Interview data from the one-onone interview protocol was recorded with permission, transcribed by the researcher, color coded, and analyzed to determine emergent themes within participant responses. The researcher conducted interviews with participants at a location of their choosing and at a time that was convenient for them. Pseudonyms were used to protect the participants involved in the study. After each interview, the recording was uploaded to the researcher's personal computer, password protected, and stored on the hard drive and an external hard drive for safe keeping.

Assessment

Historical archives of the DRA2 data were collected from the district's Curriculum and Instruction Department of the fall of 2017's initial September assessment as well as the spring assessment in May 2018. All elementary level students within the district completed the DRA2 assessment as part of their normal school routine. These assessments were given to determine if there is a relationship between instructional coaching support, teacher efficacy, and student achievement by comparing student reading levels before and after instruction coaching was received by a classroom teacher. Student identity was not revealed to the researcher to protect the identity of minors in this study.

All data from notes, digital recordings, and surveys were kept on an external hard drive and the hard drive of the researcher's computer. At all times, data were secured in a password-protected folder on the researcher's computer and in the researcher's office within a locked file cabinet. Following the study's completion, the researcher will maintain the data for five years, the required time set forth by CPHS and district

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guidelines. Once the five-year deadline has passed, the researcher will destroy all data files.

Data Analysis

Quantitative

Following data collection, the data were downloaded into an Excel spreadsheet and transferred into SPSS for statistical analysis. To answer Research Question 1, a twotailed independent t-test was conducted to determine if there was a statistically significant mean difference in teacher self-efficacy among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching. The data were also analyzed using descriptive statistics (percentages of responses) at the individual question level. Frequencies and percentages were calculated to determine teacher perceptions of the teacher self-efficacy pre- and post- instructional coaching.

To answer Research Question 2, regarding the influence of instructional coaching on student reading achievement, data were analyzed using a two-tailed independent t-test to determine student growth from the beginning (August) and end (May) of the academic school year. Each student's individual pre-test reading level was compared to their final reading level in May (post-test) in order to look for growth across the year among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching). To answer Research Question 3, data were analyzed to determine if a relationship existed between self-efficacy and student reading achievement among teachers participating in instructional coaching was measured using Pearson's r. A significance value of .05 was used for this study.

Qualitative

Interview data from the one-on-one interview protocol was recorded with permission, transcribed by the researcher, color coded, and analyzed to determine emergent themes within participant responses with the use of NVivo software. The researcher engaged in a constant comparison approach identifying themes by repeatedly reviewing and comparing the interview transcripts allowing the researcher to explore the experiences of teachers receiving instructional coaching as well as the instructional coaches (Creswell, 2013; Glaser & Strauss, 1967). As themes emerged, they were organized into categories by major and sub themes. The additional data obtained during the interviews allowed the researcher the opportunity to thoroughly examine the constructs of this study.

As part of the analysis process, coding was used through the constant comparison approach. The researcher conducted each interview, then responses were compared to previous ones to look for patterns or themes in the participant responses to determine if there were consistent themes that emerged. Upon the completion of each interview, the researcher would transcribe the interview, upload it into the NVivo software, and immediately code the interview. Quotes from the interview transcripts were used to support the themes and sub themes. In particular, the teacher responses helped validate instructional coaches' descriptions of their perceived influence on teacher self-efficacy and student achievement. The qualitative data, in conjunction with the findings from the quantitative data, provide a greater insight into the influences instructional coaching has on teacher efficacy, student achievement in reading, and the kinds of support that strengthen teachers' self-efficacy.

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Validity

During the qualitative component of the study, the researcher employed several methods to help improve accuracy, credibility, and validity of the study: peer review of interview protocols, member checking, and triangulation of data. The initial interview protocols were revised based on peer review to ensure the interview questions were in line with the research problem and questions and then used for four teacher interviews as part of a pilot study. As a result, several interview questions were revised, and specific follow-up questions were identified and added to the interview protocols. Next, member checking was used to ensure accurate representation of each participant's interview transcript. As a final effort, triangulation of the data were accomplished by comparing the survey responses on the TSES with interview responses and the DRA2 assessment data collected.

Privacy and Ethical Considerations

The researcher gained approval from the UHCL's CPHS and the school district's Institutional Review Board (IRB) in which the study took place before any data were collected. A survey cover letter and link to the survey was emailed to all teachers at the participating campuses. The cover letter stated that participation is voluntary, the approximate timeframe to complete the survey, and that personal identifying information would be kept confidential. Similarly, participants in interviews were provided information about the purpose of the study, approximate timeframe, and that participation is voluntary via a written consent. Confidentiality was maintained through the use of pseudonyms of interview participants and campuses within the reporting of findings. Additionally, outside of content area assignment, identifying information about participants was altered as needed to further protect identities. At all times, data were secured in the researcher's office within a password-protected folder on the researcher's hard drive of the computer and on an external hard drive within a locked file cabinet. Upon completion of the study, the researcher will maintain the data for five years which is the required time set forth by CPHS and district guidelines. Once the deadline has passed, the researcher will destroy all data files.

Research Design Limitations

The intent of this study was to determine the influence of instructional coaching on teacher self-efficacy and student achievement in reading. There were several limitations to this study. First, the researcher was dependent upon the participants' honesty in his or her responses on the self-reporting *Teachers' Self Efficacy Scale* (TSES) and individual interviews. In addition, the data from this study was shared with the school district it was being conducted in as a part of the agreement with the district, this could alter teacher responses in their interviews for fear of repercussion when results are shared with their district. These limitations affect the study in that teachers' answers may not be honest and will not give a true representation of their perception of the influence of instructional coaching on teacher self-efficacy and student achievement in reading. Without a method to ensure validity of their answers, the findings could be skewed. Second, baseline data were solely based upon initial assessments of the DRA2 and TSES, and therefore may not be true baseline data. Each student was compared to his or her own individual baseline as opposed to a population or sample baseline. Third, given that all of these schools for this study were located in one school district in Texas, generalizability of the results could be limited. Fourth, the site provided a small sample size of participants for the study which may prevent the findings from being extrapolated. Finally, instructional coaching can vary widely based on the skill of the individual coaching. Therefore, it is possible that despite the teachers' willingness to learn and grow, the instructional coaches was ineffective given their lack of training and skill set.

Conclusion

The purpose of this mixed methods study was to examine the influence instructional coaching has on teacher efficacy and student achievement in reading This chapter provided an overview of the research problem, operationalization of theoretical constructs, research purpose, questions, hypotheses, research design, population and sampling selection, instrumentation to be used, data collection procedures, data analysis, privacy and ethical considerations, and the research design limitations of the study. The next chapter will provide the results of the study including participant demographics, findings related to each research question, and a summary of findings.

CHAPTER IV:

RESULTS

The purpose of this study was to examine the influence of instructional coaching on teacher efficacy and student reading achievement. This chapter presents the results from the quantitative and qualitative data analysis of the study. Survey, interview, and archived reading assessment data were analyzed comparing the professional development model, teacher self-efficacy, and student reading achievement. This chapter begins with a presentation of the participant demographics, instrument reliability, and data analysis for each of the five research questions, concluding with a summary of the findings of each of the research questions that guided this study.

Participant Demographics

Participants for this study consisted of third and fourth grade reading teachers working in a large suburban school district in southeast Texas. Seventy-one of the 102 general education teachers invited to participate in the study completed the online survey resulting in a 69.6% response rate. Teachers were solicited to complete the online survey and face-to-face interviews, based on their professional development models. Teachers initially responding to the request were reviewed and a total of 26 teachers receiving instructional coaching were selected and then individually matched to 26 teachers who had not received coaching based on gender, number of students, years of experience, performance level, ethnicity, and race. The participating teachers selected from a list provided by the district's Curriculum and Instruction department of teachers participating in instructional coaching. Tables 4.1 displays the teacher participant demographics data regarding gender, race/ethnicity, performance level, and years of experience where applicable for both the quantitative and qualitative portions of the study. The teachers participating in the quantitative portion of this study consisted of 0.0% male (n = 0) and 100.0% female teachers (n = 52). In the instructional coaching participant group 0% were male (n = 0) and 100.0% were female teachers (n = 52). In the participant group that did not receive instructional coaching 0.0% were male (n = 0) and 100.0% were female teachers (n = 52). The ethnic majority of the teachers were White representing 50% (n = 13) of the sample with Hispanic represented as the next largest ethnic group at 34.7% (n = 9).

The teacher participants were distributed between the performance levels with 26.9% (n = 14) at the developing level, 57.7% (n = 30) at the proficient level, and 15.4% (n = 8) at the accomplished level. The teacher participants receiving instructional coaching were distributed between the performance levels with 26.9% (n = 7) at the developing level, 57.7% (n = 15) at the proficient level, and 15.4% (n = 4) at the accomplished level. The teacher participants not receiving instructional coaching were distributed between the performance levels with 26.9% (n = 7) at the first participants not receiving instructional coaching were distributed between the performance levels with 26.9% (n = 7) at the developing level, 57.7% (n = 15) at the proficient level, and 15.4% (n = 4) at the developing level, 57.7% (n = 15) at the proficient level, and 15.4% (n = 4) at the accomplished level.

Teacher experience varied within the total sample population according to survey responses with 36.5% (n = 19) reporting 1-5 years of experience, 30.8% (n = 16) having 6-10 years' experience, and 32.7% (n = 17) with over 10 years' experience. In the instructional coaching teacher participant group 38.5% (n = 10) reporting 1-5 years of experience, 26.9% (n = 7) having 6-10 years' experience, and 34.6% (n = 9) with over 10 years' experience. In the teacher participant group not receiving instructional coaching 34.6% (n = 9) reporting 1-5 years of experience, 34.6% (n = 9) having 6-10 years' experience, and 30.8% (n = 8) with over 10 years' experience.

Table 4.1

Teacher Participant Demog	graphics: Gender	; Race/Ethnicity,	Performance	Level, and
Years Teaching				

	Instructional Coaching		No Instr Coac	ructional ching
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
1. Gender				
Male	0	0.0	0	0.0
Female	26	100.0	26	100.0
2. Race/Ethnicity				
African American	4	15.3	4	15.3
Hispanic	9	34.7	9	34.7
White	13	50.0	13	50.0
3. Performance Level				
Developing	7	26.9	7	26.9
Proficient	15	57.7	15	57.7
Accomplished	4	15.4	4	15.4
4. Years Teaching				
1-5 years	10	38.5	9	34.6
6-10 years	7	26.9	9	34.6
10+ years	9	34.6	8	30.8

The demographics of the students of teachers represented by the district data are shown in Table 4.2. The students of the teachers participating in instructional coaching consisted of a White majority for the student participants with 44.1% (n = 231), and Hispanic as the next largest ethnic group at 31.1% (n = 163). Based on Public Education Information System (PEIMS) data, 27.3% (n = 143) of students were listed as

economically disadvantaged (ED). In the classroom without instructional coaching the students consisted of a White majority with 42.5% (n = 220), and Hispanic as the next largest ethnic group at 32.8% (n = 170). Based on PEIMS data, 26.8% (n = 139) of students were listed as ED.

Table 4.2

	Instructional Coaching		No Instr Coao	ructional ching
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
1. Grade Level				
3 rd	299	57.6	297	53.3
4 th	225	42.9	221	42.6
2. Race/Ethnicity				
African American	90	17.2	82	15.8
Asian	40	7.6	46	8.9
Hispanic	163	31.1	170	32.8
White	231	44.1	220	42.5
3. Socio-Economic Status				
ED*	143	27.3	139	26.8

Student Demographics in Classrooms with Instructional Coaching versus Classrooms without Instructional Coaching: Grade Level, Race/Ethnicity, Socio-Economic Status

*ED represents Economically Disadvantaged status

The instructional coaches interviewed for this study were all female. All four participants acquired a master's degree in reading and obtained teaching certification through traditional four-year educator programs. Two of the coaches reported less than 10 years of experience as a classroom teacher and the remaining coaches have served between 15 and 20 years as a classroom teacher before becoming an instructional coach. Table 4.3 displays the instructional coaches' demographic information including gender, ethnicity, and years of teaching experience.

Table 4.3

Instructional Coaching Participant Demographics: Gender, Race/Ethnicity, and Years Teaching

	Instructional Coaching		
	Frequency (n)	Percentage (%)	
1. Gender			
Male	0	0.0	
Female	4	100.0	
2. Race/Ethnicity			
African American	0	0.0	
Hispanic	4	100.0	
White	4	100.0	
4. Years Teaching			
1-9 years	2	50.0	
10-14 years	0	0.0	
15-20 years	2	50.0	

Tables 4.4 displays the teacher participant demographics data for interviewees regarding gender, race/ethnicity, performance level, and years of experience. The teachers participating in interviews for this study consisted of 0.0% male (n = 0) and 100.0% female teachers (n = 26). The ethnic majority of the teachers were White representing 50% (n = 13) of the sample with Hispanic represented as the next largest

ethnic group at 34.7% (n = 9). The teacher participants receiving instructional coaching were distributed between the performance levels with 26.9% (n = 7) at the developing level, 57.7% (n = 15) at the proficient level, and 15.4% (n = 4) at the accomplished level. Teacher experience varied within the total sample population according to survey responses with 38.5% (n = 10) reporting 1-5 years of experience, 26.9% (n = 7) having 6-10 years' experience, and 34.6% (n = 9) with over 10 years' experience.

Table 4.4

	Instructional Coaching		
	Frequency (n)	Percentage (%)	
1. Gender			
Male	0	0.0	
Female	26	100.0	
2. Race/Ethnicity			
African American	4	15.3	
Hispanic	9	34.7	
White	13	50.0	
3. Performance Level			
Developing	7	26.9	
Proficient	15	57.7	
Accomplished	4	15.4	
4. Years Teaching			
1-5 years	10	38.5	
6-10 years	7	26.9	
10+ years	9	34.6	

Teacher Interview Participant Demographics: Gender, Race/Ethnicity, Performance Level, and Years Teaching

Research Question One

Research question one, *Does instructional coaching influence teacher self-efficacy*?, was answered by conducting a two-tailed independent t-test to determine if there was a statistically significant mean difference in teacher self-efficacy among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching). Table 4.5 displays the mean difference of pre-teacher self-efficacy between the two groups prior to any instructional coaching establishing a baseline equivalence. The findings suggested that instructional coaching did not influence teacher self-efficacy prior to instructional coaching, t(50) = .928, p = .358.

Table 4.5

Pre Self-Efficacy of Teachers	Receiving	Instructional	Coaching v.	s Not Receiving
Instructional Coaching				

Model	N	М	SD	t	df	p-value
Coaching	26	79.69	12.65	.928	50	.358
No Coaching	26	82.85	11.83			

*Statistically significant (p < .05)

Table 4.6 displays mean difference of post-scores of teachers' sense of efficacy receiving instructional coaching and teachers who did not receive instructional coaching. Results indicated there was not a statistically significant mean difference in the teacher self-efficacy of teachers who received instructional coaching as compared to those teachers who did not receive instructional coaching, t(50) = .327, p = .754. However,

teachers who did not receive instructional coaching (M = 91.19) reported slightly higher self-efficacy than those who received instructional coaching (M = 90.35).

Table 4.6

Post Self-Efficacy of Teachers Receiving Instructional Coaching vs Not Receiving Instructional Coaching

Model	N	М	SD	t	df	p-value
Coaching	26	90.35	9.58	.327	50	.754
No Coaching	26	91.19	9.06			

*Statistically significant (p < .05)

The TSES includes a 9-point Likert scale for each item: 1-nothing, 3-very little, 5some influence, 7-quite a bit, and 9-a great deal (Tschannen-Moran & Woolfolk Hoy, 2001). The survey is designed to identify what areas create the most difficulties for teachers in daily school activities. Table 4.7 illustrates the frequency/percentage of individual participant responses from teachers receiving instructional coaching to the pre and post TSES survey instrument. Table 4.8 illustrates the teachers' collapsed responses on the 12 survey items.

The questions pertain to three areas within the classroom: (a) engagement, (b) instructional strategies, and (c) management. The survey contains four questions pertaining to each area: engagement (item# 2, 3, 4, 11), instruction (item# 5, 9, 10, 12), and management (item# 1, 6, 7, 8). As illustrated in Table 4.8, teachers tend to agree that instructional coaching has *Quite A Bit/A Great Deal* of influence regarding engagement (43.3%), instruction (58.6%), and management (55.8%). The three areas that the majority of teachers believe instructional coaching influence *Quite A Bit/A Great Deal*

include controlling disruptive behavior in the classroom (73.1%), crafting good questions for students (69.2%), and calming a student who is disruptive or noisy (61.5%).

Table 4.7

Teacher Beliefs		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal
1. How much can you do to control disruptive	Pre	15.4 (n = 4)	42.3 (n = 11)	34.6 (n = 9)	7.7 (n = 2)	0.0 (n = 0)
behavior in the classroom?	Post	7.7 (n = 2)	11.5 (n = 3)	7.7 (n = 2)	53.8 (n = 14)	19.2 (n = 5)
2. How much can you do	Pre	26.9 (n =7)	19.2 (n = 5)	42.3 (n = 11)	11.5 (n =3)	0.0 (n = 0)
to motivate students who show low interest in school work?	Post	7.7 (n = 2)	11.5 (n = 3)	38.5 (n = 10)	42.3 (n = 11)	0.0 (n = 0)
3. How much can you do to get students to believe	Pre	19.2 (n = 5)	34.6 (n = 9)	26.9 (n = 7)	19.2 (n = 5)	0.0 (n = 0)
they can do well in school work?	Post	0.0 (n = 0)	19.2 (n = 5)	30.8 (n = 8)	30.8 (n = 8)	19.2 (n = 5)
4. How much can you do to help your students value learning?	Pre	23.1 (n = 6)	15.4 (n = 4)	26.9 (n = 7)	34.6 (n = 9)	0.0 (n = 0)
	Post	7.7 (n = 2)	19.2 (n = 5)	15.4 (n = 4)	34.6 (n = 9)	23.1 (n = 6)
5. To what extent can you craft good questions for your students?	Pre	26.9 (n = 7)	34.6 (n = 9)	3.8 (n = 1)	26.9 (n = 7)	7.7 (n = 2)
	Post	0.0 (n = 0)	3.8 (n = 1)	26.9 (n = 7)	34.6 (n = 9)	34.6 (n = 9)

Teachers' Sense of Efficacy Scale by Teachers Receiving Instructional Coaching

Teacher Beliefs		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal
6. How much can you do	Pre	34.6 (n = 9)	7.7 (n = 2)	23.1 (n = 6)	23.1 (n = 6)	11.5 (n = 3)
classroom rules?	Post	0.0 (n = 0)	26.9 (n = 7)	23.1 (n = 6)	38.5 (n = 10)	11.5 (n = 3)
7. How much can you do to calm a student who is disruptive or noisy?	Pre	15.4 (n = 4)	23.1 (n = 6)	26.9 (n = 7)	23.1 (n = 6)	11.5 (n = 3)
	Post	7.7 (n = 2)	11.5 (n = 3)	19.2 (n = 5)	26.9 (n = 7)	34.6 (n = 9)
8. How well can you	Pre	19.2 (n = 5)	19.2 (n = 5)	26.9 (n = 7)	26.9 (n = 7)	7.7 (n = 2)
management system with each group of students?	Post	7.7 (n = 2)	19.2 (n = 5)	15.4 (n = 4)	38.5 (n = 10)	19.2 (n = 5)
9. How much can you use a variety of assessment	Pre	26.9 (n = 7)	30.8 (n = 8)	11.5 (n = 3)	23.1 (n = 6)	7.7 (n = 2)
strategies?	Post	0.0 (n = 0)	15.4 (n = 4)	30.8 (n = 8)	42.3 (n = 11)	11.5 (n = 3)
10. To what extent can you provide an	Pre	26.9 (n = 7)	15.4 (n = 4)	19.2 (n = 5)	30.8 (n = 8)	7.7 (n = 2)
alternative explanation or example when students are confused?	Post	0.0 (n = 0)	19.2 (n = 5)	23.1 (n = 6)	26.9 (n = 7)	30.8 (n = 8)
11. How much can you	Pre	23.1 (n = 6)	19.2 (n = 5)	23.1 (n = 6)	19.2 (n = 5)	15.4 (n = 4)
assist families in helping their children do well in school?	Post	7.7 (n = 2)	19.2 (n = 5)	30.8 (n = 8)	23.1 (n = 6)	19.2 (n = 5)
12. How well can you implement alternative strategies in your classroom?	Pre	30.8 (n = 8)	23.1 (n = 6)	11.5 (n = 3)	15.4 (n = 4)	19.2 (n = 5)
	Post	0.0 (n = 0)	23.1 (n = 6)	23.1 (n = 6)	19.2 (n = 5)	34.6 (n = 9)

Table 4.8

Teacher Beliefs		Nothing/Very Little	Some Influence	Quite A Bit/A Great Deal
	_	57.7	34.6	7.7
1. How much can you do to control	Pre	(n = 15)	(n = 9)	(n = 2)
disruptive behavior in the	Deet	19.2	7.7	73.1
	Post	(n = 5)	(n = 2)	(n = 19)
2. How much can you do to	Dro	46.2	42.3	11.5
motivate students who show low	Fle	(n =12)	(n = 11)	(n = 3)
interest in school work?	Post	19.2	38.5	42.3
	1 051	(n = 5)	(n = 10)	(n = 11)
3 How much can you do to get	Pre	53.8	26.9	19.2
students to believe they can do	110	(n = 14)	(n = 7)	(n = 5)
well in school work?	Post	19.2	30.8	50.0
	1 0.50	(n = 5)	(n = 8)	(n = 13)
	Pre	38.5	26.9	34.6
4. How much can you do to help		(n = 10)	(n = 7)	(n = 9)
your students value learning?	Post	26.9	15.4	57.7
		(n = /)	(n=4)	(n = 15)
	Pre	61.5	3.8	34.6
5. To what extent can you craft		(n = 10)	(n = 1)	(n=9)
good questions for your students?	Post	3.8	26.9	69.2
		(11 - 1)	(II - 7)	(11 - 16)
6 How much can you do to get	Pre	42.3 (n = 11)	23.1 (n = 6)	54.0 (n = 9)
children to follow classroom rules?		(1 - 11) 26 0	(1-0)	(n - j)
emater to follow classicolin fales.	Post	(n = 7)	(n = 6)	(n = 13)
		38.5	26.9	(n 15) 34.6
7 How much can you do to calm a	Pre	(n = 10)	(n = 7)	(n = 9)
student who is disruptive or noisy?	_	19.2	19.2	61.5
	Post	(n = 5)	(n = 5)	(n = 16)
8. How well can you establish a	D	38.5	26.9	34.6
classroom management system	Pre	(n = 10)	(n = 7)	(n = 9)
with each group of students?	Dest	26.9	15.4	57.7
	POSI	(n = 7)	(n = 4)	(n = 15)

Teachers' Collapsed Sense of Efficacy Scale Receiving Instructional Coaching

Teacher Beliefs		Nothing/Very Little	Some Influence	Quite A Bit/A Great Deal
9. How much can you use a variety	Pre	57.7 (n = 15)	11.5 (n = 3)	30.8 (n = 8)
of assessment strategies?	Post	15.4 (n = 4)	30.8 (n = 8)	53.8 (n = 14)
10. To what extent can you provide an alternative explanation or	Pre	42.3 (n = 11)	19.2 (n = 5)	38.5 (n = 10)
example when students are confused?	Post	19.2 (n = 5)	23.1 (n = 6)	57.7 (n = 15)
11. How much can you assist families in helping their children do well in school?	Pre	42.3 $(n = 11)$	23.1 (n = 6)	34.6 (n = 9)
	Post	26.9 (n = 7)	30.8 (n = 8)	42.3 (n = 11)
12. How well can you implement alternative strategies in your classroom?	Pre	53.8 (n = 14)	11.5 (n = 3)	34.6 (n = 9)
	Post	23.1 (n = 6)	23.1 (n = 6)	53.8 (n = 14)

The frequency/percentage of individual participant responses to the post TSES survey instrument are shown in Table 4.9 grouped by model of professional development. For the purposes of this study, four of the indicators on the TSES were collapsed. Table 4.10 displays the combined responses for the *Nothing* and *Very Little* as well as the *Quite A Bit* and *A Great Deal* indicators for both the teachers who received instructional coaching and teachers who did not receive instructional coaching.

Table 4. 10 illustrates a comparison of the teachers collapsed responses to the areas causing the most difficulty in the classroom: (a) engagement, (b) instructional strategies, and (c) management. The participants' responses indicated that both teachers who received instructional coaching and teachers who did not receive instructional

coaching agree on items 3, 4, 5, 7, 10, and 12. Teachers believe that teachers have *Quite A Bit/A Great Deal* of influence on their ability to encourage students to believe they can do well on school work (Coaching 50.0%, No Coaching 53.8%), help students value learning (Coaching 57.7%, No Coaching 53.8%), craft good questions for students (Coaching 69.2%, No Coaching 69.2%), calm a disruptive student (Coaching 61.5%, No Coaching 61.5%), provide an alternative explanation or example when students are confused (Coaching 57.7%, No Coaching 57.7%), and implement alternative strategies in the classroom (Coaching 53.8%, No Coaching 50.0%).

Teachers are also in agreement that they have *Some Influence* on their ability to get children to follow the rules (Coaching 23.1%, No Coaching 19.2%), calm a disruptive student (Coaching 19.2%, No Coaching 23.1%), and establish a classroom management system calm a disruptive student (Coaching 15.4%, No Coaching 11.5%). Additionally, 30.8% of teachers who received instructional coaching and 30.8% of teachers who did not receive instructional coaching believe they have *Some Influence* in the use a variety of assessment strategies in the classroom and implement alternative strategies in the classroom (Coaching 23.1%, No Coaching 19.2%). On the contrary, teachers differ in their perceptions regarding *Quite A Bit/A Great Deal* of influence on their ability to get children to follow classroom rules (Coaching 50.0%, No Coaching 73.1%) and assist families in helping their children do well in school (Coaching 42.3%, No Coaching 65.4%).

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Table 4.9

Teachers' Sense of Efficacy Scale by Teachers Receiving Instructional Coaching and Teachers Not Receiving Instructional Coaching

Teacher Beliefs		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal
1. How much can you do to control disruptive	Coaching	7.7 (n = 2)	11.5 (n = 3)	7.7 (n = 2)	53.8 (n = 14)	19.2 (n = 5)
behavior in the classroom?	No IC	3.8 (n = 1)	19.2 (n = 5)	15.4 (n = 4)	42.3 (n = 11)	19.2 (n = 5)
2. How much can you do to motivate students who show low interest in school work?	Coaching	7.7 (n = 2)	11.5 (n = 3)	38.5 (n = 10)	42.3 (n = 11)	0.0 (n = 0)
	No IC	3.8 (n = 1)	11.5 (n = 3)	30.8 (n = 8)	53.8 (n = 14)	0.0 (n = 0)
3. How much can you do to get students to believe they can do well in school work?	Coaching	0.0 (n = 0)	19.2 (n = 5)	30.8 (n = 8)	30.8 (n = 8)	19.2 (n = 5)
	No IC	7.7 (n = 2)	11.5 (n = 3)	38.5 (n = 10)	38.5 (n = 10)	15.4 (n = 4)
4. How much can you do to help your students value learning?	Coaching	7.7 (n = 2)	19.2 (n = 5)	15.4 (n = 4)	34.6 (n = 9)	23.1 (n = 6)
	No IC	3.8 (n = 1)	7.7 (n = 2)	34.6 (n = 9)	38.5 (n = 10)	15.4 (n = 4)
5. To what extent can you craft good questions	Coaching	0.0 (n = 0)	3.8 (n = 1)	26.9 (n = 7)	34.6 (n = 9)	34.6 (n = 9)
for your students?	No IC	0.0 (n = 0)	11.5 (n = 3)	19.2 (n = 5)	30.8 (n = 8)	38.5 (n = 10)

Teacher Beliefs		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal
6. How much can you do	Coaching	0.0 (n = 0)	26.9 (n = 7)	23.1 (n = 6)	38.5 (n = 10)	11.5 (n = 3)
classroom rules?	No IC	0.0 (n = 0)	7.7 (n = 2)	19.2 (n = 5)	50.0 (n = 13)	23.1 (n = 6)
7. How much can you do to calm a student who is	Coaching	7.7 (n = 2)	11.5 (n = 3)	19.2 (n = 5)	26.9 (n = 7)	34.6 (n = 9)
disruptive or noisy?	No IC	3.8 (n = 1)	11.5 (n = 3)	23.1 (n = 6)	30.8 (n = 8)	30.8 (n = 8)
8. How well can you establish a classroom	Coaching	7.7 (n = 2)	19.2 (n = 5)	15.4 (n = 4)	38.5 (n = 10)	19.2 (n = 5)
with each group of students?	No IC	3.8 (n = 1)	19.2 (n = 5)	11.5 (n = 3)	34.6 (n = 9)	30.8 (n = 8)
9. How much can you use a variety of assessment strategies?	Coaching	0.0 (n = 0)	15.4 (n = 4)	30.8 (n = 8)	42.3 (n = 11)	11.5 (n = 3)
	No IC	0.0 (n = 0)	23.1 (n = 6)	30.8 (n = 8)	23.1 (n = 6)	23.1 (n = 6)
10. To what extent can you provide an	Coaching	0.0 (n = 0)	19.2 (n = 5)	23.1 (n = 6)	26.9 (n = 7)	30.8 (n = 8)
or example when students are confused?	No IC	0.0 (n = 0)	26.9 (n = 7)	15.4 (n = 4)	26.9 (n = 7)	30.8 (n =8)
11. How much can you assist families in helping	Coaching	7.7 (n = 2)	19.2 (n = 5)	30.8 (n = 8)	23.1 (n = 6)	19.2 (n = 5)
their children do well in school?	No IC	3.8 (n = 1)	19.2 (n = 5)	11.5 (n = 3)	61.5 (n = 16)	3.8 (n = 1)
12. How well can you implement alternative strategies in your classroom?	Coaching	0.0 (n = 0)	23.1 (n = 6)	23.1 (n = 6)	19.2 (n = 5)	34.6 (n = 9)
	No IC	0.0 (n = 0)	30.8 (n = 8)	19.2 (n = 5)	30.8 (n = 8)	19.2 (n = 5)

Table 4.10

Teacher Beliefs		Nothing/Very Little	Some Influence	Quite A Bit/A Great Deal
1. How much can you do to	Coaching	19.2 (n = 5)	7.7 (n = 2)	73.1 (n = 19)
classroom?	No IC	23.1 (n = 6)	15.4 (n = 4)	61.5 (n = 16)
2. How much can you do to motivate students who show low interest in school work?	Coaching	19.2 (n = 5)	38.5 (n = 10)	42.3 (n = 11)
	No IC	15.4 (n = 4)	30.8 (n = 8)	53.8 (n = 14)
3. How much can you do to get students to believe they can do well in school work?	Coaching	19.2 (n = 5)	30.8 (n = 8)	50.0 (n = 13)
	No IC	19.2 (n = 5)	38.5 (n = 10)	53.8 (n = 14)
4. How much can you do to help	Coaching	26.9 (n = 7)	15.4 (n = 4)	57.7 (n = 15)
your students value learning?	No IC	11.5 (n = 3)	34.6 (n = 9)	53.8 (n = 14)
5. To what extent can you craft good questions for your students?	Coaching	3.8 (n = 1)	26.9 (n = 7)	69.2 (n = 18)
Seen American for Jean connerter	No IC	11.5 (n = 3)	19.2 (n = 5)	69.2 (n = 18)
6. How much can you do to get	Coaching	26.9 (n = 7)	23.1 (n = 6)	50.0 (n = 13)
rules?	No IC	7.7 (n = 2)	19.2 (n = 5)	73.1 (n = 19)

Teachers' Collapsed Sense of Efficacy Scale by Teachers Receiving Instructional Coaching and Teachers Not Receiving Instructional Coaching

Teacher Beliefs		Nothing/Very Little	Some Influence	Quite A Bit/A Great Deal
7. How much can you do to calm a student who is disruptive or	Coaching	19.2 (n = 5)	19.2 (n = 5)	61.5 (n = 16)
noisy?	No IC	15.4 (n = 4)	23.1 (n = 6)	61.5 (n = 16)
8. How well can you establish a classroom management system with each group of students?	Coaching	26.9 (n = 7)	15.4 (n = 4)	57.7 (n = 15)
	No IC	23.1 (n = 6)	11.5 (n = 3)	65.4 (n = 17)
9. How much can you use a variety of assessment strategies?	Coaching	15.4 (n = 4)	30.8 (n = 8)	53.8 (n = 14)
valiety of assessment strategies?	No IC	23.1 (n = 6)	30.8 (n = 8)	46.2 (n = 12)
10. To what extent can you provide an alternative explanation	Coaching	19.2 (n = 5)	23.1 (n = 6)	57.7 (n = 15)
or example when students are confused?	No IC	26.9 (n = 7)	15.4 (n = 4)	57.7 (n = 15)
11. How much can you assist families in helping their children	Coaching	26.9 (n = 7)	30.8 (n = 8)	42.3 (n = 11)
do well in school?	No IC	23.1 (n = 6)	11.5 (n = 3)	65.4 (n = 17)
12. How well can you implement alternative strategies in your classroom?	Coaching	23.1 (n = 6)	23.1 (n = 6)	53.8 (n = 14)
	No IC	30.8 (n = 8)	19.2 (n = 5)	50.0 (n = 13)

Research Question Two

Research question two, *Does instructional coaching influence student reading achievement?*, was answered by conducting a two-tailed independent t-test to determine

if there was a statistically significant mean difference of student reading achievement among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching). Table 4.11 displays the mean difference of pre-DRA scores per group prior to instructional coaching. The findings suggested that instructional coaching did not influence student reading achievement, t(50) = .351, p = .727, establishing a baseline equivalence.

Table 4.11

Model Ν df Μ SD t p-value Coaching 26 17.88 1.61 .351 50 .727 No Coaching 26 18.04 1.66

Pretest of the Developmental Reading Assessment (DRA) receiving Instructional Coaching vs Not Receiving Instructional Coaching

*Statistically significant (p < .05)

Table 4.12 displays the mean difference of post-DRA scores per group prior to instructional coaching. Results indicated that there was no statistically significant mean difference in the student reading achievement of teachers who received instructional coaching and teachers who did not receive instructional coaching, t(50) = .313, p = .756. However, teachers who did not receive instructional coaching (M = 20.52) reported slightly higher student reading achievement than those who received instructional coaching (M = 20.44).

Table 4.12

Posttest of the Developmental Reading Assessment (DRA) Receiving Instructional Coaching vs Not Receiving Instructional Coaching

Model	N	М	SD	t	df	p-value
Coaching	26	20.44	.87	.313	50	.756
No Coaching	26	20.52	1.05			

*Statistically significant (p < .05)

Research Question Three

Research question three, What relationship, if any, is there between teacher efficacy and student reading achievement among teachers participating in instructional coaching?, was measured using Pearson's r to determine if there was a relationship between teacher efficacy and student reading achievement among teachers receiving instructional coaching. Findings suggested there was not a relationship between teacher efficacy of those receiving instructional coaching and student reading achievement, r =.068, p = .741. These results suggested that regardless of the professional development model, instructional coaching did not have a significant influence on teacher efficacy or student reading achievement.

Research Question Four

Research question four, *How does instructional coaching influence teacher self-efficacy*?, was answered using inductive thematic coding of 26 semi-structured interviews of general education teachers receiving instructional coaching within the same large suburban school district in southeast Texas. The perceptions of teachers and instructional coaches are presented to provide in-depth information and a rich description about their experiences through the instructional coaching process. This study's findings define
specific factors that teachers reported as have a perceived influence on their selfefficacy. From the interviews, responses were assigned into three themes: (a) *experience and knowledge*, (b) *resources*, and (c) *communication*. These major themes and their subsequent themes are explained in depth below.

Experience and Knowledge

The first major theme of *experience and knowledge* was broken down into several subthemes that could all be explained through: depth of understanding of content knowledge, understanding how to adjust and modify curriculum to meet the needs of students, and instructional strategies and practices. In addition, subthemes were evident in this area for instructional coaches feeling like they were not viewed as experts in their content areas. Teachers and instructional coaches made statements, implicitly and explicitly, providing evidence that their varying depth of knowledge influences their selfefficacy. The deficits in content knowledge were identified as what teachers need to know and be able to do to effectively carry out the work of teaching reading. One teacher stated, "In college, everything was an overview of the subjects we would be certified to teach. I certainly don't feel like an expert." While some teachers shared similar thoughts about their preparation programs, the participant went on to explain, "Once you have an assignment and you know what subjects you are teaching, it is up to you to learn the TEKS." All four of the instructional coaches explained how the learning expectations are embedded in their introduction courses required by the district for every new teacher to attend. One coach stated:

...Some teachers take the first job offered to them, rather than a subject that they are knowledgeable and passionate about. Then they depend on the experienced teachers to tell them what to do and say. Unfortunately, it is impossible to have a

script for everything teachers should be teaching to their students. At some point, the teacher is responsible for fully understanding the subject they teach.

The response by this instructional coach may be a reflection of her personal experiences with coaching teachers, rather than representative of all of the coaches.

Concerns with general lack of content knowledge were generally more prevalent with the instructional coaches rather than the teacher participants. Specifically, one instructional coach reported, "I want to help these teachers with new instructional practices and strategies but unfortunately, first I have to spend all my time teaching them about the skills involved with reading." Teachers serving as reading instructors in grade three and four graduate with a general studies degree providing less than eighteen hours of specific content training (Hirsch, 2015). As a result of the education preparation programs, teachers are not being developed as content area experts as captured by an experienced instructional coach with more than 25 years of experience, "It seems like it (content knowledge) is getting worse. Teachers aren't able to articulate how they process information, attack an unknown word...how do they expect to prompt a student correctly to build those processing skills when they don't understand it themselves. Although the expertise in the content areas can be developed through independent study or enrolling in a higher education program, the instructional coaches expressed concern that teachers seem to depend solely on the limited learning opportunities occurring through the literacy course and coaching rounds. One of the coaches explains the challenge of meeting each teacher's individual needs:

Working with teachers who are new to teaching and teachers with experience but are new to the district creates a real challenge when deciding what to cover in our sessions...often times, teachers who are new to the profession just want a script of what they should say in every lesson...but I try to explain that it is impossible to

create a script, however, we do have countless resources available to them which we spend time showing them and sharing but they don't use what's there.

Even the teachers who had more knowledge regarding their content area than others still struggled to identify and communicate their uncertainties about reading and writing. An instructional coach said:

Teachers don't always want to admit that they are uncertain about material they are expected to teach. I see this is reading and writing all the time. They may doubt their skills so they are less confident when presenting the material to the students.

Additionally, all 16 teachers with more than five years of experience reported concerns about how they are informed with the TEKS change in their content area. One teacher explained the frustrations of many when she stated, "...just when I thought I had it all figured out with activities to match, now I find out the TEKS are going to change." Throughout the interview process, professional learning communities (PLC) were discussed as an additional method for teachers to deepen their knowledge of their content area. During the PLC meetings, teachers and instructional coaches work collaboratively to unpack the TEKS allowing teachers to deconstruct and understand the TEKS. Teachers analyze the language, extracting clues and translating it into actual teaching strategies. Although content knowledge is important, teachers blend their knowledge of their students' thinking.

A second subtheme included understanding how to adjust and modify curriculum to meet the needs of students. Out of the 26 teachers interviewed, only two said they understood how to adjust and modify the curriculum to meet the needs of students. The other teachers expressed concerns that they were "watering it down," "making it easier,"

or "lowering their expectations", with many reporting concerns similar to a third-grade teacher with nine years of experience who stated:

The longer I teach, the more I see evidence that students are struggling and the gaps just get bigger. When we provide so much support that the students become dependent on us to be successful, we aren't doing them any favors. At some point we have to have a plan to accelerate their learning to help them catch up. If we don't gradually decrease the support we are providing, students will never be able to tackle these skills on their own.

In addition, instructional coaches stated that teachers seem "fearful," "unsure," and "concerned" about allowing students various supports to help them successfully navigate the curriculum. A third-grade teacher describes a scenario in the classroom when she felt her well-intended actions resulted in a negative impact on her student:

One of my students has an IEP that says he can use supplemental aides in the classroom and during assessments. I got a copy from our instructional coach and started requiring the student to use it with every story we read. The plot structure was labeled with all five elements of the structure of a story. The student used the aide each day, however, he never seemed to remember the components unless it was labeled and I prompted with an explanation. Looking back on it, I wish I would have started with a labeled plot structure and then over time worked to take the labels away. You know, kind of like a gradual release. I think if I would have done that he might have actually learned the components and their purpose rather than just matching the parts.

Another teacher expressed a fear of watering down the curriculum when she admitted not being sure of the difference between an accommodation and modification:

I thought everyone had the same grade level expectations in my class but then I get an IEP for one of my low performing girls and realize that she has totally different expectations than the rest of my class. I know the grading should be different but what if it's too easy...like the spelling test I gave the other day, all the kids have to spell the word I called out but she gets a test with multiple choices of how to spell 10 of the 25 words. I am not sure if that is changing the curriculum or not.

Despite the fact that the literacy courses and instructional coaching is designed for general education classrooms, instructional coaches shared that instructional accommodations and modifications are a part of their covered content. Instructional coaches explained that they provide teachers with a quick reference chart detailing that instructional modifications change what a student is expected to master while accommodations do not. Regardless of a student's disability, students should engage with the same academic content any other student would receive.

An increase in instructional strategies and practices modeled and taught by the instructional coaches during sessions were identified by all 26 participants as a positive impact on their self-efficacy. One fourth grade teacher stated, "I learned half a dozen different ways to engage students in shared reading in the first session."

Instructional coaches embedded best practices into their model lessons. When asked about the instructional practices that have shown to be most effective, the instructional coaches shared how they meet the standards while celebrating students' curiosity and questions. One coach shared the importance of engaging students during a teacher's reading block:

I always have a plan for how the students will interact with the content. I think about things like which partner or group member is going first, how will the

students communicate what they've read, and what are the other kids doing when it's not their turn. Showing teachers how to think through those questions can keep students engaged in the lesson. Like the other day when I was working with an experienced teacher, she wasn't aware of the number of students who were off task during the lesson. I introduced sentence starters that help students be accountable for their involvement in the conversation...this strategy is especially helpful to English language learners and struggling students because it gives them the support they need to be a part of the conversation.

One of the fourth-grade teachers shared another strategy the instructional coach modeled for keeping students engaged in the reading process:

The text the class was going to read was displayed using the document camera so all the students could see...she called on different groups to read various sentences and phrases...sometimes she would read aloud and have the students chorally read the next word or phrase...the kids never knew when she might call on them individually or as a group so they were all reading along. It was amazing...they never pay that close of attention with me. She also gave them a task while the class read...they (students) were supposed to listen for any words or phrases that told the reader how the character was feeling...I could actually see students' wheels spinning while she read and then their hand shoot up like a rocket when they heard it and wanted to share.

Unfamiliar vocabulary can disrupt a reader's ability to comprehend. A strategy shared by all four instructional coaches included pre-teaching vocabulary before reading the passage. A third-grade teacher described the benefits of frontloading vocabulary when she shared, "It really saves time. By teaching the students about words they will

encounter during reading that are unknown, it helps prevent reader frustration and helps them learn the meaning of new words."

After teacher observations, instructional coaches provided specific feedback about the instructional strategies observed. One literacy coach stated, "After observing the teacher with students, I was able to identify specific strategies she could implement that would increase student attention and participation." By fostering teacher collaboration through debriefing sessions, teachers have the opportunity to identify strategies to implement in the classroom to improve student performance, thus improving teacher selfefficacy. One fourth grade teacher with three years of teaching experience explained how the implementation of additional instructional strategies were based on the disaggregation of data with the instructional coach: "She (instructional coach) helped me analyze and understand my students' performance on the benchmark. She showed me how to modify the lesson for my students with reading disabilities while still covering the required skills." The debriefing sessions proved to be an opportunity for instructional coaches to build relationships with the teachers while also demonstrating their knowledge of content and effective instructional practices.

A third-grade teacher expressed concerns about initially meeting with the instructional coach she had been a teacher alongside for several years. The teacher clarified the difficulty this posed:

At first, I was like I know she is a coach now, but we taught first grade in the same hall for five years. Now I am in a different grade level and she's going to come tell me how to do things. We all shared our lessons and ideas for years...I can't imagine she suddenly has all this new stuff to teach me.

Despite the initial reaction described above, later in the interview the third-grade teacher described how her feelings about being coached by a former colleague evolved over the six sessions:

After the first couple of times she was in my room, I realized that she had a real knack for classroom management and asking good questions. She would address behaviors without saying a word...just walk over and prompt a student to get back on task with a tap on their desk or a hand gesture. I guess I always knew she had good ideas to share during planning, but I had never seen her in action in the classroom because I was always in my room teaching my own students. I think it ended up helping that I knew her in the classroom because I already trusted her...after the initial fear of her judging me, it was like we were just team mates again.

Although more than half of the teachers participating in instructional coaching had more than five years of teaching experience, when principals reassign teachers to a new grade level, an artificial new teacher situation is created. The youngest member of the instructional coaching staff explains the impact of these reassignments:

The coaching staff is burdened by teachers who are moved to a new grade level. Our primary focus is to build the skill set and support teachers who are new to the profession, but unfortunately more than half of our case load are experienced teachers who were moved to a new grade level. It seems like every time a building gets a new principal, they want to make it their own by moving a bunch of people around...then we end up coaching all of these teachers who are not too thrilled with the idea of a new grade level much less having to go through coaching again. And to make things worse for me, most of them have been teaching way longer than me. Even though the teachers are experienced, the

skills don't always transfer because they are looking through the lens of a new grade level.

Despite the fact that teachers did not question the abilities of the instructional coaches regarding content knowledge and general instructional strategies, teachers did mention the limitations of their experience with working with students with special needs including but not limited to behavior difficulties, autism spectrum disorder, and anxiety. The teachers noted the coaches' tendency to present instructional strategies for average students rather than developing differentiation strategies to meet the unique needs of some students.

Resources

The third and fourth grade teachers were asked a variety of questions regarding the resources available to them in order to provide reading instruction. The majority of teachers hinted at the fact that they feel hindered by not having the appropriate resources or time to locate the resources to adequately serve their students. Throughout the interviews, participants consistently reported two areas of resource needs: (a) training and (b) materials. In addition, the issue of not having adequate time to collaboratively plan with colleagues was identified as a need in all 26 teacher interviews.

Training

When teachers were asked if they believe they have been adequately trained to provide reading instruction to their students, only two teachers answered affirmatively. The teachers explained their answers in a similar manner stating that they felt competent in their skills based on training in previous roles within the district such as teaching a lower grade level and serving as a dyslexia teacher. Despite the years of experience of each teacher, all participants reported they believed they would benefit from additional training in reading instruction so they could address the needs of all students. The

instructional coaching model includes a multi-day literacy course as well as in the classroom observations, debriefing, and model teaching. Seventy-five percent of the participants specified that the additional training should be in the classroom with model teaching, observations, and debriefing rather than additional course work. One third grade teacher stated, "I learned the most when I could see her (instructional coach) in action with my students since they are at different levels than my neighbor." Another third-grade teacher explained the powerful impact the debriefing sessions coupled with model teaching session made on her:

It's one thing to see someone teach, but it's a whole other ball of wax when you get to talk with them afterwards...I mean, I had so many questions about the lesson that I could barely write them all down. The students were participating more with the text than they ever have before. When we talked after the lesson, she explained that she planned a job for each student in advance so she could work with each of them one on one while the others were completing their task...she also read their interest surveys in advance of the lesson and selected a book that she knew they would like the topic and I hate to admit it, but I don't always think of those things.

Training sessions were reported to be provided by the instructional coaches in the district curriculum and instruction department. One instructional coach explained that each session is scheduled in alignment with when the teacher should begin implementing the component in the classroom. A third-grade teacher with zero years of experience described the literacy courses she participated in:

We (teachers new to the grade level and instructional coaches) meet every other month or there abouts. Each time we come to training, we learn about a different component of the balanced literacy program. The only problem with that is that

my principal wants everything up and running now because our kids are so behind...I can't get her to understand that it doesn't do any good for me to try and do it (reading instruction) if I am not sure what it is supposed to look like...I have been pairing up with my teacher down the hall since my instructional coach won't start in my classroom for two more weeks.

A fourth grade teacher with zero years of experience echoed the teacher mentioned above saying, "It's great to learn in theory but I need to see someone teach." Another fourth grade teacher who had recently completed her first model teach with the instructional coach explained, "I wish I could see her model the introduction to every skill." These quotes demonstrate the willingness of the teachers to learn and the frustration with the limited access to the instructional coach. Additional coaches to support the newly hired teachers, as well as the teachers who have been reassigned to a new grade level would be a welcome initiative by all.

Communication

Finally, the last and most frequently cited theme from all of the interviews was a universal frustration with communication throughout the instructional coaching experience. This theme revolved around all stakeholders: campus principals, teachers, and instructional coaches. When teachers were asked what they felt was lacking from their instructional coaching experience, 24 out of 26 teachers reported a concern regarding the communication during the process. Ultimately, the responses from the interviews were assigned to two themes: mandatory versus voluntary and feedback. This theme involved a mixture of positive and negative emotions for teachers participating in instructional coaching. However, all 26 teachers reported a need for improved communication.

Mandatory versus Voluntary

Throughout the interview process, there was a distinct difference in the attitude of the teachers who volunteered to work with an instructional coach as opposed to the teachers who reported the experience as mandated by their principal. The teachers who reported the instructional coaching experience as voluntary universally described more positive, productive sessions. Conversely, teachers describing the instructional coaching experience as mandatory reported negative experiences and interactions.

Three teachers with more than four years of experience reported concerns regarding the purpose of instructional coaching. Despite her teaching experience, one third grade teacher captured the roller coaster of emotions she felt:

I had no idea that I was receiving coaching and we hadn't had a Lit course yet so I was surprised when someone from C&I contacted me when we had only been in school for a month. Once I talked to her (instructional coach), I found out that my principal had recommended me...but then I found out it is mandatory for anyone new to the district and here I was all worked up because I thought I had done something wrong.

Another third grade teacher shared, "With four years of experience, I came into the school feeling pretty good about my skill set as a teacher...then out of nowhere this coach shows up...I haven't even had a walk-through so of course I'm feeling worried." Perhaps a clear understanding of the selection criteria for participating in instructional coaching could have prevented this teacher's self-doubt which may lead to lower selfefficacy. Similarly, direct communication could prevent unnecessary conflict as shared by a fourth grade teacher:

I felt like I was kind of mean to her (instructional coach) when we first started working together but I was mad because I felt like she was there to fix

me...which I did not appreciate. The whole thing was crazy, and we really got off on the wrong foot.

Additionally, the four instructional coaches all expressed frustration in their interviews when teachers are not made aware of how or why they were selected for coaching. One coach stated, "...when teachers understand our purpose and how they were selected the whole experience is more positive." It is important to note that the teachers never mentioned being upset with the communication with the instructional coach, but rather, they were upset with the campus principal for not communicating about the support they would receive in a way that made them feel safe in their job. One fourth grade teacher shared:

Now that I understand that all teachers with no teaching experience and teachers who are new to the district participate in a coaching round, it's no big deal. I think had I known that to begin with, I would have had a much better attitude and open mind about what she (instructional coach) was teaching me...but instead, she had to deal with my insecurities and doubts. A simple conversation with my principal before she contacted me would have been so much better for both of us. Another fourth grade teacher explained:

Based on my previous experience with professional development, the only time someone comes in your room is when they are documenting to get rid of you. I had all kinds of anxiety when I heard about her (instructional coach) coming to the campus to meet with me. I tried not to let it get the better of me but it was hard...but as we started meeting and working together, I loved her (instructional coach) and was so grateful for the opportunity. We set goals for my students...she helped me collect data and then spent hours trying to make sense of it all...I'm

sure she went above and beyond the requirements but she really made me a better teacher.

Upon further investigation and a review of the district practices, all of the third and fourth grade teachers interviewed for this study were mandated to participate in instructional coaching rounds due to their lack of experience in their assigned grade level. This information further supports the notion that communication influences the instructional coaching experience for teachers.

Feedback

To become more effective and fulfilled at work, teachers need a keen understanding of their impact on others and the extent to which they are achieving their goals. Direct feedback is the most efficient way for them to gather this information and learn from it. One instructional coach explained, "To give and receive truly candid feedback, people must feel a sense of safety and trust." In order to build trust, all four of the instructional coaches described the initial interactions as an opportunity to learn as much about the teacher they are supporting as possible. The newest member of the instructional coaching staff explained:

This get to know you phase doesn't require you to learn their whole life story...just try to ask about their weekend and occasionally share stories of your own. The whole goal is to make an effort to understand them (teachers) as individuals. Then you can build on it. When I start working with a new teacher I try and gather some information from their principal about their experience in the classroom and how they like to be acknowledged for a job well done.

Another common concern that the instructional coaches expressed was how to strike a balance between positive and negative feedback. The instructional coaches noted

that some teachers have a difficult time accepting positive feedback and they fear that it will sound insincere. One coach described her approach in striking a balance:

I start with the small stuff. I think sometimes we have this idea that only big achievements warrant praise, but that's just not true! Some of the smallest victories deserve the biggest celebrations...like when a student stops blurting out, now that is big news and should be celebrated. And I think we should remember that positive feedback doesn't only have to be used to cushion the blow of criticism...you know what I mean, they teach you in school like when you are talking to parents to start with a positive, address the weakness, and then end with a positive...I think we somehow are convinced that all feedback has to be sandwiched between two positives.

The instructional coaches reported that teachers struggle to differentiate between an observation that results in an evaluation as opposed to one that is for learning and growth opportunities. One teacher humorously stated, "It used to be that you only got a talking to when you were a struggling teacher. Now everybody wants to have a one-onone conversation with me about my teaching." Teachers described a fear of receiving criticism from the instructional coach because they are unsure of the impact on their annual evaluation. This fear could be relieved with an improved understanding of the purpose of instructional coaching as explained by the most experienced instructional coach:

At its core, our program is designed to help teachers focus on their individual needs in the classroom, find resources to help bring growth in their teaching and learning, and ultimately help teachers get to a place where they are sharing best practices with one another.

Instructional coaches believe that with adequate training, time, and resources, instructional coaching has the ability to positively influence the self-efficacy of all teachers who participate in an instructional coaching program.

Research Question Five

Research question five, *What kinds of support can be provided to teachers so their self-efficacy is strengthened within an educational setting?*, was answered using inductive thematic coding of 26 semi-structured interviews of general education teachers receiving instructional coaching within the same large suburban school district in southeast Texas. From the interviews, responses were assigned into two themes: (a) *classroom management* and (b) *positive reinforcement*. The first theme, *classroom management*, included perspectives of strategies and techniques to maintain student engagement and reduce off-task behaviors. The next major theme was *positive reinforcement*, being the positive praise and reassurance of the teacher's current instructional practices and strategies. To understand the influence instructional coaching on teacher efficacy and student achievement, interplay between the two themes was additionally evaluated.

Classroom Management

The term *classroom management* was chosen because the term incorporates the common views of the elementary teachers toward instructional coaching at the campus level. When asked, "In your opinion, what prevents students from learning?" all 26 teachers believed that student behavior was the number one contributor. One teacher stated, "I think it's the total disregard for others [students] in the classroom...they don't want to learn and they are willing to disrupt to the point that others [students] can't either." Throughout the interview process, a variety of reasons for this type of behavior was shared. One third grade teacher summed up the behavior of one student as a lack of

parenting stating, "...he doesn't get any attention at home except when they are yelling at him, so he comes here and does the same thing thinking he'll get the same reaction." Another third grade teacher explained the students' disregard for others as a result of "being spoiled and not having to compete for anyone else's attention." Ten of the fourth grade teachers all agreed that students' behavior is unmanageable because students have limited opportunity and expectation of interacting with others. A fourth-grade teacher explained, "I see my students out at dinner with their families and no one at the table is talking. No one is paying attention to each other at all." The teacher continued her explanation with a summary of a recent interaction with a parent of a disruptive student:

So we met to talk about the problems their son has been having in class and within minutes I found myself at a loss for words when the parent started ranting about how she doesn't care about what other kids in the class need, she only cares about me (the classroom teacher) paying attention to her son and giving him the help he needs. When I tried to explain that I do offer her child help but he refuses to come to my table and work with me her response was that essentially my fault that he is failing...all I wanted her to do was listen to what I am seeing in the classroom and reinforce at home that he needs to ask for help when he doesn't understand and accept the help when it is offered. What I couldn't get her to understand is that her son just wants you to give him the answer and he's not willing to put in the work to figure it out.

Teachers shared their experience observing an instructional coach teaching a lesson and the value of observing their students in the learning process as a way to identify effective strategies to redirect and engage students. One teacher stated:

I love it when the coaches come in and model teach in my classroom with my kids. It really helps me figure out different ways to ask questions and see what

they know. When they [students] are really into a lesson, I don't see near as many issues and have to give conduct marks.

The teacher went on to explain that she has been teaching for almost ten years and gaining and maintaining student attention is becoming a greater challenge in the classroom. Another teacher provided a similar account of how instructional coaching provides classroom management strategies. As a new teacher, the participant shared the best part of being in a coaching round:

The best part [about being in a coaching round] is observing while she [instructional coach] teaches in your classroom. I really enjoy this opportunity...for one, it gives me a chance to see how to teach the lesson but I also love getting new ideas to use during transitions and breaks. The other day when she was teaching they [students] were getting a little squirrely and she wrapped up her point, did a short brain break with them...it was kind of like some yoga move, and then transitioned them back into the next step of the activity. She didn't miss a beat and most importantly, either did they [students].

In summary, interview participants defined student behavior as the number one concern affecting student learning. The participants described the student behavior as a lack of motivation, disrespectful to peers and adults, and off-task during instructional activities. Although participants expressed consensus of the types of behaviors, significant variance was observed in the perceived reasons for the behavior in each classroom.

Positive Reinforcement

The opportunity to receive positive reinforcement from a content area expert, as illustrated by many of the participants' responses, supported a positive self-efficacy. The theme was echoed in 20 of the 26 teacher responses. Teachers had a positive response to

the immediate feedback available during instructional coaching sessions. One third grade teacher shared, "I love when she sits with me right after she watches me teach and tells me all the stuff that is going right." In addition to the improvement in self-efficacy, some teachers focused on the unintended benefits of impressing an administrator. A fourth grade teacher shared the positive impact working with an instructional coach provided:

It's that immediate feedback...just like we want for the kids! It is helpful for me to watch her and use those same strategies in the next lesson I teach...focusing in on one or two things helps me get really good at that before moving on. Besides, then when my principal comes in she's really impressed!

Throughout the process of instructional coaching, the coaches described the intentionality of praising effort rather than ability. This approach is modeled with teachers as well as students. One instructional coach explained:

Supporting our district initiative of having a growth mindset is not unique to our students. When we work with teachers, we have the opportunity help our teachers react to struggles and setbacks with hard work and persistence rather than anxiety and fear. As coaches, we get to help teachers learn and grow. With every lesson we model, we are giving them tools for their toolbox...whether it's how to redirect a disruptive student or how to prepare questions in advance about a story we are going to read, we are walking the path with them. We are modeling these strategies and helping them find these resources that will improve their lesson and ultimately the kids' performance...and isn't that the point, for us to help students achieve?

Despite the concerns teachers expressed about their instructional coaching experience, all 26 teachers conveyed a belief that their self-efficacy improved by the conclusion of the sessions. The positive reinforcement provided by instructional coaches

included acknowledgements of improved instructional practices, classroom management techniques, and increase in student achievement. A newly hired third grade teacher captured the essence of relief: "I think it is important that it isn't about my evaluation. She's just here to help...I like knowing that she is here to make be better, not tattle tale to my principal." In conclusion, an overwhelming majority of the teachers described, the opportunity to have a content area expert provide specific, immediate feedback was important criteria for support with regard to increasing positive self-efficacy.

Summary of Findings

This chapter provided an analysis of both the quantitative and qualitative data collected during the study to address the five research questions. Surveys were sent to 52 teachers within the school district and each professional development model group consisted of 26 members each. The population was an even distribution by grade level and the demographics are reflected of the district make-up with the majority of participants being Caucasian. All of the participants teach reading in the same southeast school district. An analysis of the quantitative data collected with the TSES revealed no statistically significant influence of instructional coaching on teachers' sense of efficacy from the 26 participants in the study. In similar findings, an analysis of the quantitative data collected with the DRA revealed no statistically significant influence of instructional coaching on teachers' DRA scores from the 26 participants in the study. Given that statistical significance was not found, findings indicate that there are no differences in the influence of instructional coaching across the 11 campuses.

An analysis of qualitative data collected during interviews with the classroom teachers and instructional coaches illustrated the importance of experience and communication skills as necessary to support self-efficacy. In addition, many participants expressed that they felt like the in class model teaching improved their

instructional practices which resulted in increased student achievement. Responses supported the quantitative analysis demonstrating that an instructional coach did not significantly influence a teachers' sense of efficacy and student achievement. Overall, the majority of the participants expressed a need for ongoing professional development in the form of a face-to-face or online literacy course in addition to working with an instructional coach in order to increase self-efficacy and student achievement.

Conclusion

In conclusion, the results of the paired samples t-test indicate there is no statistically significant influence of instructional coaching on teachers' sense of efficacy and student reading achievement. However, the qualitative data indicated that the teachers perceived an increase in self-efficacy and support provided by instructional coaches contributed to the growth in student achievement in their classrooms. The results are discussed in further detail in Chapter V.

CHAPTER V:

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Instructional leaders have the opportunity to build self-efficacy through the professional development experiences provided to teachers (Epstein & Willhite, 2015; Mizell, 2010; Zee & Koomen, 2016). The effects of professional development on classroom instruction, and the effects of classroom instruction on student achievement, the success of the professional development activities positively effecting student achievement rests with the classroom teacher (Abu-Tineh & Sadiq, 2018; McLean et al., 2016; Zakharov, Tsheko, & Carnoy, 2016). It is vital for our instructional leaders to provide effective professional development opportunities to all teachers (Hirsch, 2015; McKeown et al., 2018). One of the important aspects of effective professional development or coach (Abu-Tineh & Sadiq, 2018).

The purpose of this study was to determine the influence of instructional coaching on teacher efficacy and student reading achievement. The study was completed during the spring of 2018. Data were collected for the quantitative portion of the study from a matched sample 52 third and fourth grade teachers participating in this research study. The sample included 26 teachers participating in instructional coaching rounds and 26 teachers who were not participating in instructional coaching rounds. Additionally, during the 2017-2018 school year, semi-structured interviews were conducted with 26 teachers receiving instructional coaching and four instructional coaches. The interviews lasted approximately 45 minutes. The teachers participating in interviews for this study consisted of 100.0% female teachers (n = 26). The racial/ethnic majority of the teachers were White representing 50% (n = 13) of the sample with Hispanic/Latino represented as the next largest racial/ethnic group at 34.7% (n = 9). The teacher participants receiving instructional coaching were distributed between the performance levels with 26.9% (n = 7) at the developing level, 57.7% (n = 15) at the proficient level, and 15.4% (n = 4) at the accomplished level. Teacher experience varied within the total sample population according to survey responses with 38.5% (n = 10) reporting 1-5 years of experience, 26.9% (n = 7) having 6-10 years' experience, and 34.6% (n = 9) with over 10 years' experience. Paired sample t-test, frequencies, percentages, Pearson r, and grounded theory utilizing open and axial coding were used to analyze the data collected. This chapter presents the summary, implications, and recommendations for future research of this topic.

Summary

The first two research questions addressed the influence of instructional coaching on teacher self-efficacy and student achievement in reading. The results of the quantitative data analysis found there was not a statistically significant mean difference in teachers participating in instructional coaching in the first two research questions. Findings for research question number three indicated there was not a relationship between teacher efficacy of those receiving instructional coaching and student achievement in reading. Question numbers four and five utilized semi-structured interviews to develop insight to the perceptions on the influence of instructional coaching and the types of supports that can be provided to strengthen teacher self-efficacy.

Research question one, *Does instructional coaching influence teacher selfefficacy*?, was answered by conducting a two-tailed independent t-test to determine if there was a statistically significant mean difference in teacher self-efficacy among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching). Quantitative analysis demonstrated an increase in teacher self-efficacy from pre- to post-instructional coaching but that there was not a significant difference as a result of instructional coaching. These results contrast other research that demonstrated a positive correlation between teacher self-efficacy and instructional coaching (Connor 2017; Dilekli & Tezci, 2016; Zee & Koomen, 2016).

Although teacher self-efficacy as a whole did not show significant difference after instructional coaching, it was evident through interview responses that teachers felt certain aspects were improved as a result of the coaching experience. Positive feedback from the instructional coaches and campus leaders after classroom observations led to increased teacher self-efficacy. The findings of this study support research by Jacobs, Boardman, Potvin, and Wang (2018) who examined the factors that influence responsiveness to coaching. This research study found that change is well known to be a gradual and often difficult process for teachers. The fundamental changes required for instructional coaching include the acceptance of the need to make instructional shifts, reorganization of a teacher's time, and shifts in instructional practices in response to the coach's feedback can result in a feeling of disequilibrium for the teacher. Interestingly, Anderson, Feldman, and Minstrell (2014) describes the intended purpose of instructional coaching to promote teacher learning yet the process all requires deep reflection and a willingness to take risks.

Research question two, *Does instructional coaching influence student reading achievement*?, was answered by conducting a two-tailed independent t-test to determine if there was a statistically significant mean difference of student reading achievement among the two groups of teachers (receiving instructional coaching vs. not receiving instructional coaching). Quantitative analysis demonstrated an increase in student achievement in reading from pre- to post-instructional coaching but that there was not a significant difference as a result of instructional coaching. These results align with the research of Zakhavrov et al., (2016) identifying a variety of interventions needed for

teachers and students to increase student outcomes. Similar to the first research question, interview responses provide evidence to explain why instructional coaching did not influence reading achievement. Although the teachers were matched based on similar demographics, the students were a mix of low and high academic performers. Some classes were identified by the teachers participating in instructional coaching as having more than 50% of students entering the current school year as at-risk and more than two years below reading level.

As captured in Stipek and Chiatovich's (2017) research study, the findings suggest the importance of high-quality teaching for economically disadvantaged children who have poor academic skills. Additionally, participation in the instructional coaching rounds required up to eight missed instructional days in the classroom limiting student direct instruction in reading for these students with poor academic skills. This would explain the focus of instructional coach discussions leading to changes in the professional development model implemented with new to teaching and new to the district teachers. Research addressing teachers assigned to a literacy coach who administer and discuss student assessments with teachers, observe teachers' instruction and offer supportive feedback, conference with teachers about their instruction and students, and model instruction in classrooms, student achievement in reading increases significantly (Desimone & Pak, 2017). The study found that general education teachers believed the student achievement in reading gained from working with an instructional coach has been worth the investment of time and effort.

Research question three, *What relationship, if any, is there between teacher efficacy and student reading achievement among teachers participating in instructional coaching?*, was measured using Pearson's *r* to determine if there was a relationship between teacher efficacy and student achievement in reading among teachers receiving

instructional coaching. Findings suggested there was not a relationship between teacher efficacy of those receiving instructional coaching and student reading achievement. Teacher with increased levels of self-efficacy should produce improved student outcomes (Connor et al., 2014; Zakharov et al., 2016; Zee & Koomen, 2016). These results suggest that regardless of the professional development model, instructional coaching did not have a significant influence on teacher efficacy or student reading achievement.

In contrast, the teacher interview responses indicated they believed their instructional practices and strategies improved as a result of instructional coaching. In addition, the instructional coaches noted multiple examples of individual student progress despite the fact that the student is still reading below grade level expectations.

Research question four, *How does instructional coaching influence teacher self-efficacy*?, was answered using inductive thematic coding of 26 semi-structured interviews of general education teachers receiving instructional coaching within the same large suburban school district in southeast Texas. Qualitative analysis illustrated that participant responses could be classified into three major themes: (a) *experience and knowledge*, (b) *resources*, and (c) *communication*. The perceptions of teachers and instructional coaches are presented to provide in-depth information and a rich description about their experiences through the instructional coaching process. Teacher responses agreed with the results of prior studies of the influence instructional coaching has on self-efficacy and student achievement (Desimone & Pak, 2017; Gibbons & Cobb, 2017; Neumerski, 2012).

When teachers feel confident in their instructional practices and management skills, self-efficacy increases influencing student achievement. Professional development activities must be meaningful experiences for teachers and provide the strategies needed to successfully implement the knowledge and skills learned (Connor, 2017; Reddy,

Dudek, & Lekwa, 2017). The success of the professional development activities positively effecting student achievement rests with the classroom teacher (Abu-Tineh & Sadiq, 2018; McLean et al., 2016; Zakharov et al., 2016). Within this study, teachers collaborated with literacy coaches who administer and discuss student assessments with teachers, observe teachers' instruction and offer supportive feedback, conference with teachers about their instruction and students, and model instruction in classrooms, student achievement in reading increases significantly (Zee & Koomen, 2016).

Research question five, *What kinds of support can be provided to teachers so their self-efficacy is strengthened within an educational setting?*, was answered using inductive thematic coding of 26 semi-structured interviews of general education teachers receiving instructional coaching within the same large suburban school district in southeast Texas. From the interviews, responses were assigned into two themes: (a) *classroom management* and (b) *positive reinforcement*. Qualitative analysis illustrated classroom management and to a lesser degree positive reinforcement, as the supports an instructional coach provides to strengthen self-efficacy. Interview responses contradict the quantitative analysis demonstrating that instructional coaching does not influence self-efficacy and student achievement. The teachers in this study overwhelmingly credit their instructional coaches for improving their classroom room management skills and increased student engagement.

According to the teachers, they felt empowered when they were given opportunities to share what is working in their classrooms and celebrate individual student progress. This aligns to research from Zee and Koomen (2016) that found that high levels of self-efficacy have a positive effect on classroom processes, student achievement, and overall teacher well-being. Teacher interview data indicated that positive interactions between the instructional coach and the teacher resulted in feelings

of increased confidence and ability of their teaching abilities. These results are supported by research indicating the significance quality instructional practices in increasing student achievement. Dilekli and Tezci (2016) found that self-efficacy was a meaningful variable on teachers' instructional practices and teaching styles. Teachers also credit the on-going, job embedded professional development with the instructional coaches for helping them increase their positive reinforcement of students through the learning process. This statement is supported by research from McLean, Sparapani, Toste, and Connor (2016) that highlights the importance of overall classroom quality to how students navigate the classroom.

Implications

As a result of this study's exploration of the influence of instructional coaching on teacher self-efficacy and student achievement in reading, implications for all stakeholders involved with an instructional coaching initiative emerged. Discrepancies between previous research and the findings of this study are where the implications for instructional leaders and teachers are found yielding recommendations for policy makers, district administrators coordinating the initiative, for campus administrators charged with implementing an instructional coaching program, and the instructional coaches who work alongside teachers.

Policy Makers

As this study has found, identifying specific responsibilities and models of instructional coaches may play a critical role when trying to increase teacher self-efficacy and student reading achievement. Policy makers, such as TEA, may want to consider an in-depth analysis of the specific criteria for hiring instructional coaches and considerations for required trainings to provide guidance to school districts. Within these guidelines, it is important to highlight a positive correlation between teacher self-efficacy

and instructional coaching while also noting that the change is well known to be a gradual and often difficult process for teachers (Jacobs et al., 2018).

District Administrators

A significant investment of time and energy should be invested by district administrators to fund and provide professional development on all levels regarding the instructional coaching initiative. Research has shown that instructional coaching is a more effective model for professional development than course work, however this was not seen in this study because the district do not have required criteria of experience and training when hiring instructional coaches (Knight et al., 2015; Kurz et al., 2017; Thomas et al., 2015). Specifically, with instructional coaching, research has shown these instructional leaders should have knowledge of high impact instructional practices, content knowledge, and effective communication skills (MacCrindle & Duginske, 2018; Range et al., 2014). Therefore, if districts are going to mandate a specific professional development model for their new teachers and new to grade level or district teachers, then they should identify and require specific skills, training, and experience to the extent that they can effectively facilitate it.

District administrators and campus leaders should be held accountable for their use of instructional coaches. Although a clear job description outlines the responsibilities associated with the position, coaches often find themselves being assigned tasks and duties not found in an instructional coach's job description. An investment of resources to ensure all stakeholders understand the purpose of the instructional coaching initiative could facilitate a more effective use of the coach's time to work with individual teachers. The financial investment in these positions for a district can be significant, but a clear understanding of responsibilities paired with a manageable accountability system increases the districts return on their investment.

Additionally, there is an opportunity for districts to further develop the skills and build relationships between instructional coaches and teachers by providing training aligned with their job duties and responsibilities. A specific training regime over the course of the orientation process would allow instructional coaches to undergo training and be informed of the district's goals and responsibilities in their position. Teachers who have successfully participated in prior coaching rounds could be included in the training sequence to provide insight and suggested approaches from their perspective.

A final consideration by the district should include an increase or reallocation of funding in order to provide an adequate number of instructional coaches to support the new teaching staff each year. Throughout the study, it became evident that teacher selfefficacy and student achievement was increasing in teachers receiving instructional coaching but earlier access and additional time was needed to demonstrate a significant difference in findings.

Campus Administrators

Campus administrators should introduce the purpose for instructional coaching as well as reinforce the role of the instructional coach with teachers and other staff members. This could alleviate the initial resistance and uncertainty reported by multiple teachers in this study. Administrators should take every opportunity to acknowledge the professional growth of teachers and student achievement resulting from the collaborative work between the instructional coaches and teachers.

Campus administrators should give careful consideration of participants teaching experience and areas of weakness when assigning instructional coaches to assist them. Aligning instructional coaches with areas of their expertise and experience would be an effective approach to ensuring coach and new teacher pairings could expand the possibilities of growth in teacher self-efficacy and student achievement (Palacios, 2017). Through the semi-structured interviews, this study found a direct relationship between the communication styles of those who influenced teachers' self-efficacy and the instructional practices adopted in their work with teachers.

Clear boundaries between the evaluative role of a campus administrator and the supportive role of an instructional coach should be established prior to coaching round implementation. Campus administrators must protect those boundaries to avoid undermining the trust relationship between teachers and instructional coaches (Range et al., 2014). Instructional coaches should never be placed in a position to breach the confidential teacher-coach relationship or be involved in monitoring teacher practice for punitive action.

Campus Administrators should initiate frequent communication and support in order to establish a positive, productive relationship between the campus instructional staff and instructional coaches. A clear instructional vision provided by the campus administrator can bring focus and purpose to an instructional coach's efforts. Instructional coaches can provide the campus administrator with resources to support and insight regarding instructional trends across a grade level team. The information provided by an instructional coach guides campus administrators in identifying priority needs and planning next steps in pursuit of the campus mission and goals (Neumerski, 2012).

Instructional Coaches

Instructional coaches would benefit from the knowledge and understanding of the role of influence they may adopt as an instructional leader, the positive and negative outcomes associated with each role, and the most appropriate context (Goddard et al., 2015). While there are times that instructional coaches make a conscious choice to work from a particular role, other times instructional coaches are thrust into a less effective role

such as the role of a victim. With the awareness of the role of their influence, instructional coaches can make wise decisions to develop trust and build relationships with teachers they support to influence their instructional practices and teacher selfefficacy in a positive manner.

Instructional coaches should carefully consider the nuances of their communication style. By reflecting on the instructional leaders who have most significantly influenced their practices and achievement, instructional coaches may find elements to develop and cultivate in their style when working with teachers. Selfawareness enables instructional coaches to capitalize on benefits and to seek means for reducing negative aspects of their style reducing occasions of teacher resistance during the coaching process (Jacobs et al., 2018).

The relationship between the instructional coach and campus administration should be nurtured and cultivated through frequent communication. Instructional coaches often spend more time observing in teacher's classrooms than the campus administrators. As a result of this, instructional coaches have the advantage in knowing the systemic strengths and weaknesses of a grade level team as well as individual teachers. Every effort must be made by the instructional coach to maintain and protect the confidential relationship with individual teachers. Instead, of being associated with implementing non-negotiable instructional practices or initiatives that are not research based, instructional coaches should welcome the opportunity to introduce resources and instructional strategies to address instructional trends within a campus.

Despite the limitations of this study, the findings have important implications and can inform professional development practices for school districts. Teachers begin their careers with high levels of self-efficacy, however as teachers progress through their curriculum and gain a greater understanding of the complexity of teaching, levels of selfefficacy frequently decline (Stipek & Chiatovich, 2017; Zee & Koomen, 2016). Instructional leaders should select professional development that meets the needs of individual teachers. Educators need more knowledge, skills, practice, and support after they enter the teaching profession to meet the diverse academic and behavioral needs of student. Improving professional learning for educators is a crucial step in transforming schools and improving academic achievement (Hirsch, 2015). With the increase in rigor of student learning expectations, it is imperative that teachers have the instructional practices and resources to instruct and assess to the depth of the curriculum.

Recommendations for Future Research

Despite the limited sample size included in this study, the results yield insights into the influence instructional coaching may have on teacher self-efficacy and student achievement in reading. One future research opportunity would be to consider a study similar to this one in terms of teacher self-efficacy, instructional coaching, and student achievement in reading but add a second grouping of teachers from another district. Replicating this study in more diverse districts would provide additional data to further develop the contributions of this work. A study of greater magnitude would provide a larger sample size to increase the potential for finding significant impact on teacher selfefficacy. Adding this component could provide great insight regarding the connection between student achievement and the lack of instructional support. In addition, a deeper understanding of the importance of instructional coaching to an efficacious system could be provided.

A second recommendation for how this data could be used in future studies would be to continue monitoring teacher self-efficacy and student achievement through a longitudinal study measuring the influence of instructional coaching over multiple years. A longitudinal study would allow the researcher to establish an identifiable pattern that

further demonstrates the influence of instructional coaching on teacher self-efficacy and student achievement in reading. The findings of this type of study could lead to overhauling the current instructional coaching model to ensure teacher and student growth.

A third recommendation to further the research on this topic would be to study the effects of different types of coaching in elementary reading classrooms. There are a variety of coaching models a district could implement and comparing the effectiveness of these different models could be assist instructional leaders in selecting and implementing the most effective model for their student group. Additional research studies could include instructional coaching as an intervention piece to adequately see the effects instructional coaching has on student achievement.

A final recommendation would be to explore the perceptions of the role and responsibilities of instructional coaches among campus administrators. Research in this area of school leadership can provide insight into their levels of understanding of teacher efficacy, roles of instructional coaches, and strategies to improve student outcomes. Campus administrators are often expected to be in the instructional leader on their campus, but too often lack the time and ability to understand the depth and influence effective professional development has on student achievement. Gaining insight into campus administrators' levels of understanding and perceptions could guide instructional leaders to assess modifications needed within their professional development program with regard to structure, accountability, and effectiveness.

Conclusion

Instructional coaching practices vary widely across school districts. While best coaching practices are well established (Knight et al., 2015; Saroyan & Trigwell, 2015; Scott, 2015), the ability to adapt those practices to individual districts is dependent upon

human and financial factors. Additionally, McLean et al. (2016) identify classroom quality as the greatest predictor of student outcomes and achievement. This study looked at the influence of instructional coaching on teacher self-efficacy and student achievement in reading. Five hundred twenty-four third and fourth grade students from eleven campuses in a large suburban school district in southeast Texas were assessed using the Developmental Reading Assessment 2. In addition, their reading teachers completed the Teachers' Sense of Efficacy Scale (TSES) survey to measure their selfefficacy in student engagement, instructional practices, and classroom management. Finally, of these third and fourth grade teachers participating in instructional coaching, 26 volunteered to be interviewed regarding their perceptions of the influence of instructional coaching and the kinds of supports that can increase teacher self-efficacy. Results were analyzed using percentages and paired samples t tests, and then interviews were analyzed for common emergent themes. Result of the surveys revealed that instructional coaching did not affect self-efficacy or student achievement in reading. Through an analysis of the interviews, results indicated coaches had varying levels of experience, knowledge, and expertise. Despite these lack of significant statistical differences in the results, teachers reported increased self-efficacy from the pre to post instructional coaching experience as well as an increase in student achievement in reading from the pre to post instructional coaching experience.

With varying expectations of the role and responsibilities of instructional coaches at the district level, this results in opportunity for individual interpretation by instructional leaders at each campus. By identifying the individual needs of the campus or teacher, an instructional coach's skills and talents can be put to use in achieving their specific needs and goals for optimal performance of students and teachers. More specifically, relationship building with campus administrators and teachers is widely

considered best practice for effective professional development models (Gallucci et al., 2010; Knight, 2015; Range et al., 2014). Despite the common belief, the actual practice of developing and nurturing these relationships for increasing student achievement in reading and improving teacher self-efficacy may look different from one school or district to the next. This phenomenon of differing cultures and expectations explains part of the difficulty for instructional coaches working at more than one elementary school.

Teachers often begin their careers with high levels of self-efficacy, a belief in their ability to impact student learning through instructional, management, and collaboration skills (Epstein, 2015; Zee & Koomen, 2016; Zeggelaar et al., 2018). Highly qualified teachers are leaving the field each year due to emotional exhaustion, lack of autonomy, and a sense of inefficacy (Aud et al., 2011). As a result of this trend, our students' achievement is being impacted (Sailors & Price, 2015). The planning, implementation, engagement, and support of teachers who are not meeting academic progress measures is an important process for instructional leaders to undertake. Instructional leaders are the agents of change to help teachers improve their instructional practices, classroom management skills, and academic achievement of students.
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APPENDIX A:

SURVEY COVER LETTER



Dear 3rd Grade Teacher:

Greetings! You are being solicited to complete the *Teachers' Sense of Efficacy Scale* survey. The purpose of this survey is to assess a teacher's belief in their capability concerning instructional strategies, student engagement, and classroom management. The data obtained from this study will not only allow UHCL's Educational Leadership Department to gain a better understanding of the kinds of things that create challenges for teachers, but also to provide feedback on the impact of an instructional coach on teachers' sense of efficacy.

Please try to answer all the questions. Filling out the attached survey is entirely voluntary, but answering each response will make the survey most useful. This survey will take approximately 5-10 minutes to complete and all of your responses will be kept completely confidential. No obvious undue risks will be endured and you may stop your participation at any time. In addition, you will also not benefit directly from your participation in the study.

Your cooperation is greatly appreciated and your willingness to participate in this study is implied if you proceed with completing the survey. Your completion of the *Teachers' Sense of Efficacy Scale* survey is not only greatly appreciated, but invaluable. If you have any further questions, please feel free to contact me (<u>StonehamH5148@uhcl.edu</u>). Thank you!

Sincerely,

Heather Block (713) 594-3560 Stonehamh5148@uhcl.edu

APPENDIX B:

INFORMED CONSENT

Informed Consent to Participate in Research

You are being asked to participate in the research project described below. Your participation in this study is entirely voluntary and you may refuse to participate, or you may decide to stop your participation at any time. Should you refuse to participate in the study or should you withdraw your consent and stop participation in the study, your decision will involve no penalty or loss of benefits to which you may be otherwise entitled. You are being asked to read the information below carefully, and ask questions about anything you don't understand before deciding whether or not to participate.

Title: Influence of Instructional Coaching on Teacher Efficacy and Student Achievement in Reading Student Investigator(s): Heather Block Faculty Sponsor: Michelle L. Peters, Ph.D.

PURPOSE OF THE STUDY

The purpose of this research is to examine the effect of instructional coaching on teacher efficacy and student achievement

PROCEDURES

The research procedures are as follows: The study will begin by inviting teachers to complete the *Teachers' Sense of Efficacy Scale* as a pre-assessment. A portion of the group of teachers will receive six weeks of instructional coaching with a literacy coach. At the conclusion of the study, the teachers will complete the *Teachers' Sense of Efficacy Scale* as a post-assessment. Additionally, the students Development Reading Assessment will be administered to the classroom students as a pre- and post- assessment to measure reading achievement.

EXPECTED DURATION

The total anticipated time commitment will be approximately one semester. The semester is approximately 5 months.

RISKS OF PARTICIPATION

There are no anticipated risks associated with participation in this project.

BENEFITS TO THE SUBJECT

There is no direct benefit received from your participation in this study, but your participation will help the investigator(s) better understand the impact of instructional coaching on teacher self-efficacy and student reading achievement.

CONFIDENTIALITY OF RECORDS

Every effort will be made to maintain the confidentiality of your study records. The data collected from the study will be used for educational and publication purposes, however, you will not be identified by name. For federal audit purposes, the participant's documentation for this research project will be maintained and safeguarded by the student researcher, Heather Block, for a minimum of three years after completion of the study. After that time, the participant's documentation may be destroyed.

FINANCIAL COMPENSATION

There is no financial compensation to be offered for participation in the study.

INVESTIGATOR'S RIGHT TO WITHDRAW PARTICIPANT

The investigator has the right to withdraw you from this study at any time.

CONTACT INFORMATION FOR QUESTIONS OR PROBLEMS

If you have additional questions during the course of this study about the research or any related problem, you may contact the Student Researcher, Heather Block, at phone number 713-594-3560 or by email at StonehamH5148@UHCL.edu. The Faculty Sponsor Michelle L. Peters, Ph.D., may be contacted at phone number 281-283-3565 or by email at petersm@uhcl.edu.

SIGNATURES:

Your signature below acknowledges your voluntary participation in this research project. Such participation does not release the investigator(s), institution(s), sponsor(s) or granting agency(ies) from their professional and ethical responsibility to you. By signing the form, you are not waiving any of your legal rights.

The purpose of this study, procedures to be followed, and explanation of risks or benefits have been explained to you. You have been allowed to ask questions and your questions have been answered to your satisfaction. You have been told who to contact if you have additional questions. You have read this consent form and voluntarily agree to participate as a subject in this study. You are free to withdraw your consent at any time by contacting the Principal Investigator or Student Researcher/Faculty Sponsor. You will be given a copy of the consent form you have signed. Subject's printed name:

Signature of Subject:_____

Date:

Using language that is understandable and appropriate, I have discussed this project and the items listed above with the subject.

Printed name and title:

Signature of Person Obtaining Consent:______ Date: _____

THE UNIVERSITY OF HOUSTON-CLEAR LAKE (UHCL) COMMITTEE FOR PROTECTION OF HUMAN SUBJECTS HAS REVIEWED AND APPROVED THIS PROJECT. ANY QUESTIONS REGARDING YOUR RIGHTS AS A RESEARCH SUBJECT MAY BE ADDRESSED TO THE UHCL COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS (281-283-3015). ALL RESEARCH PROJECTS THAT ARE CARRIED OUT BY INVESTIGATORS AT UHCL ARE GOVERNED BY REQUIREMENTS OF THE UNIVERSITY AND THE FEDERAL GOVERNMENT. (FEDERALWIDE ASSURANCE # FWA00004068)

APPENDIX C:

TEACHER SELF-EFFICACY SCALE

Teacher Beliefs This questionnaire is designed to help us gain understanding of the kinds of things that create for teachers. Your answers are confidential.									in a bett ate chal	ter lenges			
D ar at Pl ct pl	<u>irections:</u> Please indicate your ny one of the nine responses in all to (9) "A Great Deal" as ea lease respond to each of the urrent ability, resources, and resent position.	opinion about ex the columns on ch represents a questions by c opportunity to	ach of the questions below b the right side, ranging from degree on the continuum. onsidering the combinatio do each of the following in	oy marki (1) "Nor on of yo n your	ing ne ur tr Nov		Very Little		Some Degree		Quite A Bit		A Great Deal
1.	How much can you do to c	ontrol disruptiv	ve behavior in the classro	om?	(1	2	3	٩	6	(6)	0	(8)	۲
2.	How much can you do to motivate students who show low interest in school work?				(1)	2	3	٩	6	6	0	(8)	۲
3.	How much can you do to calm a student who is disruptive or noisy?				(1)	2	3	٩	6	(6)	0	(8)	۲
4.	How much can you do to help your students value learning?				0	2	3	٩	6	(6)	0	(8)	۲
5.	To what extent can you cra	aft good questi	ons for your students?		(1)	2	3	٩	6	(6)	0	(8)	۲
6.	How much can you do to g	et children to f	follow classroom rules?		()	2	3	٩	6	۲	0	(8)	۲
7.	How much can you do to get students to believe they can do well in school work?				nol (1)	2	3	٩	6	(6)	0	(8)	۲
8.	How well can you establish group of students?	n a classroom	management system with	n each	1	2	3	4	6	(8)	0	(8)	۲
9.	To what extent can you use a variety of assessment strategies?				()	2	3	4	6	۲	0	(8)	۲
10.	To what extent can you provide an alternative explanation or example when students are confused?					2	3	٩	6	6	0	(8)	۲
11.	How much can you assist families in helping their children do well in school?				(1)	٢	3	٩	6	(6)	0	(8)	۲
12.	?. How well can you implement alternative teaching strategies in your classroom?					2	3	٩	6	(8)	0	(8)	۲
13.	What is your gender?	0 0	Male Female	16.	What level do you teach? O Elementary O Middle O High								
14.	What is your racial identit	y? 0 0 0	African American White, Non-Hispanic Other	17.	What is the context of your school? O Urban O Suburban O Rural								
15.	What subject matter do yo teach? (as many as apply	0	All (Elementary/ Self-contained)	18.	What propo	What is the approximate proportion of students who receive free and reduced						0-209	6
		0) Science		lunches at your school? U 21-4 O 41-8							21-40	196 196
		õ	Language Arts								õ	61-80%	
		0	Social Studies								0	81-10	0%
19.	What grade level(s) do you teach?	K (1 2 (3 4 6 8 7 8 9)	For office	or office use only. (0) (1) (2) (3) (4) (5) (6) (7) (6)							
20.	How many years have you taught?		3 4 5 6 7 8 9 3 4 5 6 7 8 9)				0 0 0 0) (2)) (2)	30	• •) (i) (i) (i) (i) (i) (i) (i) (i) (i) (i	7) 7) 7) 8)

APPENDIX D:

INTERVIEW PROTOCOL TEACHERS

- 1. Please tell me about your educational background and experiences that led you to the role of general education teacher.
- 2. What is your greatest challenge in the classroom?
- 3. What are your top priorities in working with students this year?
- 4. How did you determine this year's goals?
- 5. Describe the ways you assess and evaluate students?
- 6. How do you motivate students to become involved and participate in the classroom?
- 7. If you are struggling with an instructional objective, what do you do?
- 8. What types of professional development do you participate in?
- 9. Describe a professional development experience that impacted your classroom.
- 10. Please share specifics about receiving coaching support in your role as a teacher.
- 11. Please tell me about the coaching experience, your impressions, and what made it particularly positive or not a positive experience for you.
- 12. Is there anything else you would like to share about what you need to feel successful in the classroom?

APPENDIX E:

INTERVIEW PROTOCOL INSTRUCTIONAL COACHES

- 1. Please tell me about your educational background and the experiences that led you to the role of instructional coach.
- 2. How are the teachers selected for coaching?
- 3. Please tell me about your personal experience working with an instructional coach.
- 4. In a perfect world, if you could create your own model, what would be the key pieces that you would have in your coaching model?
- 5. In your current role as a coach, what types of training have you received?
- 6. Were there specific requirements (i.e. you have to teach X amount of years) in your current position?
- 7. Please share a positive coaching experience and explain why it stands out as such.
- 8. Please share a negative coaching experience and explain why it stand out as such.
- 9. In the difficult situations, do you have a process or set protocol that you follow?
- 10. When you think about working as an instructional coach, what are the top priorities for you?
- 11. Please tell me about an experience where you had a significant difference of opinion or conflict based on philosophy with the colleague and how you handle that.
- 12. How are the goals for the coaching sessions set? Who is involved in the process?
- 13. Are there specific techniques that you use to help build a teacher's craft (i.e. videoing themselves, classroom observations, etc.)?
- 14. How do you build teacher's content knowledge during the coaching process?
- 15. Please share any additional thoughts you have about the coaching role and/or your experiences.