Educational Policy Studies Dissertations   Department of Educational Policy Studies

Spring 5-12-2023

An Exploration of Teachers' and Instructional Coaches' Perceptions of Self-Efficacy in the Areas of Instructional Strategies, Student Engagement, and Classroom Management

John M. Hruby
Georgia State University

Follow this and additional works at: https://scholarworks.gsu.edu/eps_diss

This Dissertation is brought to you for free and open access by the Department of Educational Policy Studies at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Educational Policy Studies Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

ACCEPTANCE

This dissertation, An Exploration of Teachers' and Instructional Coaches' Perceptions of

Self-Efficacy in the Areas of Instructional Strategies, Student Engagement, and Classroom

Management, by John Michael Hruby, was prepared under the direction of the candidate's

Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment

of the requirements for the degree, Doctor of Education, in the College of Education & Human

Development, Georgia State University. The Dissertation Advisory Committee and the student's

Department Chairperson, as representatives of the faculty, certify that this dissertation has met

all standards of excellence and scholarship as determined by the faculty.

_____
Sheryl Cowart Moss, Ph.D.
Committee Chair

_____
Robert Clayton Hendrick, Ph.D.
Committee Member

_____
Yinying Wang, Ed.D.
Committee Member

_____
Date

_____
Jennifer Esposito Norris, Ph.D.
Chairperson, Department of Educational
Policy Studies

_____
Paul A. Alberto, Ph.D.
Dean, College of Education &
Human Development

AUTHOR'S STATEMENT

By presenting this dissertation as a partial fulfillment of the requirements for the advanced

degree from Georgia State University, I agree that the library of Georgia State University shall

make it available for inspection and circulation in accordance with its regulations governing

materials of this type. I agree that permission to quote, to copy from, or to publish this

dissertation may be granted by the professor under whose direction it was written, by the College

of Education & Human Development's Director of Graduate Studies, or by me. Such quoting,

copying, or publishing must be solely for scholarly purposes and will not involve potential

financial gain. It is understood that any copying from or publication of this dissertation which

involves potential financial gain will not be allowed without my written permission.

_____

John Michael Hruby

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance

with the stipulations prescribed by the author in the preceding statement. The author of this

dissertation is:

John Michael Hruby
Educational Policy Studies
College of Education & Human Development
Georgia State University

The director of this dissertation is:

Sheryl Cowart Moss, Ph.D.
Department of Educational Policy Studies
College of Education & Human Development
Georgia State University
Atlanta, GA 30303

CURRICULUM VITAE

John Hruby

ADDRESS: 797 Corduroy Ln
                            Atlanta, GA 30312

EDUCATION:

Ed.D.	2023	Georgia State University Educational Policy Studies	
Ed.S.	2018	Georgia State University Educational Policy Studies	
M.A.Ed.	2009	University of Phoenix Elementary Education	
B.A.	2000	Ohio University Communications	

PROFESSIONAL EXPERIENCE:

2017 – Present	Coordinator III Office of Federal Programs DeKalb County School District
2014 – 2017	Professional Learning Facilitator DeKalb County School District
2010 – 2014	Teacher DeKalb County School District

AN EXPLORATION OF TEACHERS' AND INSTRUCTIONAL COACHES' PERCEPTIONS

OF SELF-EFFICACY IN THE AREAS OF INSTRUCTIONAL STRATEGIES, STUDENT

ENGAGEMENT, AND CLASSROOM MANAGEMENT

by

John Michael Hruby

Under the Direction of Sheryl Cowart Moss, Ph.D.

ABSTRACT

Schools may choose to employ staff members dedicated to helping teachers increase their sense of self-efficacy. The addition of these individuals contributes to an effective professional learning model; increasingly, it is instructional coaches who are serving as facilitators of professional learning (Knight, 2019). Teachers acknowledge the value in working with instructional coaches (Rush & Young, 2011), bringing credence to the federal legislation designed to promote the practice. Utilizing modified versions of the Ohio State teacher efficacy survey (OSTES) this dissertation research examined teachers' and instructional coaches' perceptions of self-efficacy and the possible implications of those perceptions in the field of educational leadership. Through purposive sampling of 361 teachers and 55 instructional coaches from elementary, middle, and high schools, descriptive statistics were used to explore the relationship between instructional coaches' and teachers' perceptions of self-efficacy in three specific domains: (1) instructional strategies, (2) classroom management, and (3) student engagement. The Statistical Package for the Social Sciences (SPSS) was used to split data into two groups (teachers and coaches). Three One-Way ANOVA tests (one for each domain) were run to determine if there were any differences between efficacy ratings based on gender, grade-level, and years of teaching experience and coaching experience—Group 1: 0-2 years, Group 2: 3-10 years, and Group 3: 10 or more years. Dunnet's T3 post hoc tests were used to compare pair-wise groups to locate any significant differences. Only one pair-wise comparison between Group 1 and Group 3 yielded a significant difference: the Classroom Management domain.

INDEX WORDS: Instructional coaching, self-efficacy, perception, instructional strategies, student engagement, classroom management

AN EXPLORATION OF TEACHERS' AND INSTRUCTIONAL COACHES' PERCEPTIONS

OF SELF-EFFICACY IN THE AREAS OF INSTRUCTIONAL STRATEGIES, STUDENT

ENGAGEMENT, AND CLASSROOM MANAGEMENT

by

JOHN MICHAEL HRUBY

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Education

in

Educational Leadership

in

Department of Educational Policy Studies

in

the College of Education & Human Development

Georgia State University

Atlanta, GA
2023

DEDICATION

To my wife, my son, and my family (immediate and extended), I dedicate this work to you. I would have never accomplished this task without your unwavering encouragement and support. I love you all so much. Thank you.

ACKNOWLEDGEMENTS

This dissertation represents the culmination of almost seven years of work at Georgia State University (Ed.S and Ed.D). I would be remiss if I did not first thank my Chair, Dr. Sheryl Cowart Moss. I cannot overstate the patience and encouragement she provided me throughout this entire process. Next, I would like to acknowledge Dr. Robert Hendrick. Your calm and peaceful demeanor combined with your quantitative expertise was critical to my success. I would like to acknowledge my family. I want to thank my mother and father, my in-laws, and my son. Each of those individuals had a hand in the completion of this dissertation. Finally, I want to personally thank my wife—you sacrificed so much in order for me to accomplish this feat. I will never be able to repay you for your support, but I will make it my mission to do so for the rest of my days.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 THE PROBLEM

The demands placed upon educational leaders have been increasing in both number and complexity for decades (Wise & Cavazos, 2017; Zepeda, Parylo, & Bengtson, 2014). These demands are contributing to burnout and high rates of principal turnover (DeMatthews, Carrola, Reyes, & Knight, 2021; Ozer, 2013). Some principals have attempted to address certain demands by employing tenets of leadership frameworks such as Instructional Leadership and Transformational Leadership (Heck & Hallinger, 2014; Leithwood & Sun, 2012; Rigby, 2016). Other principals have elected to embrace a Distributed Leadership model (Ismail Hussein, Prima Gusti, & Suswandari, 2022; J. P. Spillane, 2006), through which they can share the instructional load with other capable leaders on their staff.

One of these groups of capable leaders is instructional coaches. Principals are continually enabling instructional coaches to help relieve the daily stresses associated with running a schoolhouse (Reid, 2019). Regrettably, some of these assigned tasks are still unrelated to duties customarily associated with instructional coaching (Kane & Rosenquist, 2019). However, principals are acknowledging the importance of respecting instructional coaches' time (Neumerski, 2012; Wolpert-Gawron, 2016), and this acknowledgment is helping to solidify instructional coaching as a form of high-quality professional development (Desimone & Pak, 2017).

An integral part of the professional development provided by instructional coaches involves increasing teachers' self-efficacy in a variety of instructional areas (Hong, 2018; Walsh, Ginger, & Akhavan, 2020). Beyond just acknowledging the need to let the coach actually *coach*, it may benefit educational leaders to question how they can ensure the instructional coaching in their schoolhouse is representative of high-quality professional development. One way to

accomplish this feat could be for principals to examine the perceptions of self-efficacy for instructional coaches and teachers in specific instructional areas and determine how those data can be utilized to develop their leadership skills.

Research Questions

1. When considering years of experience, gender, and grade-level, how do teachers who have experienced instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

2. When considering years of experience, gender, and grade-level, how do instructional coaches perceive their self-efficacy to coach teachers in the areas of instructional strategies, student engagement, and classroom management?

3. When considering years of experience, gender, and grade-level, what can educational leaders learn from teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, student engagement, and classroom management? (Exploratory)

Purpose

The purpose of this study was: (1) to explore teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, classroom management, and student engagement and (2) to contemplate the implications of those perceptions for educational leaders. There is a noticeable gap in the literature for published studies analyzing teachers' perceptions of self-efficacy along with the perceptions of those who actually coach them. Are there any significant relationships in specific domains? Do factors such as gender, years of experience, and grade-level play a factor in the results? What role should these results play in a leader's decision-making? Why is it important for leaders to consider teachers' as well as

instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, classroom management, and student engagement?

In his seminal work, <u>Visible Learning</u>, Hattie (2015) identified collective teacher efficacy as the number one factor influencing student achievement (effect size = 1.57). Instructional coaches may not have a direct impact on student achievement, but they do have a direct impact on teacher practice. The number of teacher interactions and the amount of time spent with teachers in the classroom is different for an instructional coach, a principal, and district supervisors. With each layer of authority, the distance from the classroom grows and interactions decrease. With district supervisors and principals often left to address more complex school-related issues (Ozer, 2013), the need for more frequent interactions can fall on the coach. However, instructional leaders must stay vigilant and ensure coach-teacher interactions remain plentiful. "Coaches accountable to district leaders [spend] more time working with teachers on instruction than their school-hired counterparts" (Kane & Rosenquist, 2019, p. 17). Furthermore, leaders must determine if an instructional coach's perception of his or her ability to coach a teacher is consistent with that teacher's self-perception. Considering these implications in the field of educational leadership, this study explored the extent to which teachers who have received instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement, and classroom management. Additionally, this study examined instructional coaches' perceptions of their ability to coach teachers in those same areas.

Significance of the Study

Research has shown that teachers who demonstrate greater excitement for the profession tend to have a higher sense of self-efficacy (Guskey, 1984; Tschannen-Moran & Hoy, 2001). An effective professional development program can increase teacher efficacy (Yoo, 2016), which

has a significant effect on student achievement (Hattie, 2015). High-quality professional development is a critical component when attempting to improve teacher practice and positively impact student outcomes (Collin & Smith, 2021).

Fostering effective professional development requires strong leadership presence (Parsons, Ankrum, & Morewood, 2016), and a key step in this process is identifying individuals who can initiate changes in teacher practice. Instructional coaches are often called upon by building leaders to assist with enacting this change. Instructional coaching promotes a change in habits, and coaching programs encourage teachers to constantly implement new and innovative instructional practices in the classroom (Sims & Fletcher-Wood, 2021).

Some studies that focus on the impact of instructional coaching contend there is "little empirical evidence coaching improves teacher practice" (Desimone & Pak, 2017, p. 4). However, teachers continue to perceive instructional coaching has a positive impact on their self-efficacy—believing that coaching changes their teaching practices for the better (Rush & Young, 2011; Walsh et al., 2020). This study is significant because it explores the perception of change, not only from the teacher's perspective but from the coach's perspective as well. The noticeable gap in the literature is not the lack of research regarding the perceptions of teachers. The gap exists with coaches; particularly, the gap is apparent when examining self-perceptions of their ability to coach teachers. An exploration of the variety of perceptions of teachers and the coaches who assist them is greatly needed to add to the growing body of literature on instructional coaching.

Moreover, the leadership style a principal adopts can contribute to the success of professional development within a schoolhouse; specifically, a commitment to a distributed leadership style can create "an environment where teacher leadership and professional

development can be nurtured and fostered" (Ismail Hussein et al., 2022, p. 4). This study adds further significance to the field of educational leadership by addressing instructional coaching from the lens of distributed leadership—providing leaders with the implications that arise when comparing the perceptions of both teachers and coaches.

Assumptions and Limitations

Quantitative research prevents examining the quality of instructional coaching. However, examining quality is not the focus of this dissertation, as it would be difficult to account for variance in coaching philosophy/practices for all instructional coaches included in the study. Reflective questioning is another possible limitation. The surveys for this study were administered at the beginning of the school year, so teachers' recollections of events may have impacted the results.

The author of this dissertation concedes this study is contained to only one large school district. Surveys for this study were sent to every teacher in that school district; however, principals were excluded from the participant pool. The author was not looking to gain perspectives of building leaders. With the chosen study design, there would be no value-add from gaining principal perspectives—the goal of this study was to inform principal practice.

A quantitative method was more appropriate for this study, as the focus was not to capture the experiences of coaches and teachers but, rather, explore their perceptions. The framework of self-efficacy is utilized within this study, and participants completed a modified survey that allowed them to construct their own perceptions of self-efficacy. In this study (for teachers), the measurement of self-efficacy was not an indicator of teacher self-efficacy; rather, it was a measurement of teachers' perceived efficacy of coaches. Moreover, since these measures focus on belief and not competency, the author of this dissertation considers this a delimitation.

When exploring perceptions, measures of empirical effectiveness are inappropriate. Therefore, the author did not consider a positivist approach. Had the author chosen an experiential route, qualitative research may have been more appropriate. Qualitative research is more popular with doctoral candidates attempting to capture the experience of adult learners (Fejes & Nylander, 2015). In the end, a quantitative approach was selected due to multiple factors, which included the use of a predetermined instrument (Creswell & Creswell, 2018) and the prospective benefits for future quantitative longitudinal studies—due to a potentially large sample size (Boeren, 2018).

Overview of the Study

Instructional coaching is rooted in the practices of partnership and reflection (Frieire, 1970; Schon, 1987). The popularity of instructional coaching as a strategy for professional development increased substantially with the enactment of the No Child Left Behind Act of 2001 (Shidler, 2009), and the momentum continues with the strategy's inclusion in recent federal legislation such as the Every Student Succeeds Act (2015) (Desimone & Pak, 2017). Although the specific roles of instructional coaches can vary greatly depending on the school system or even the school in which they serve, their primary goal is "working with teachers to help them incorporate research-based strategies" (Knight, 2007, p. 12).

In recent years, professional development has moved toward a more collaborative and inclusive model, as opposed to a more rigid and imposing model in which teachers are subjected to training that is not differentiated to their specific needs. The practice of instructional coaching, at its core, attempts to break away from traditional models of professional development and hopes to promote a forum for group participation and partnership (Sims & Fletcher-Wood, 2021). Instructional coaches foster teachers' strengths and push them to share their educational

philosophy and contribute to a sense of collective teacher efficacy. Instructional coaching includes certain tenets of adult learning theory and elements of transformative learning related to self-perception (Illeris, 2014; Merriam & Bierema, 2014; Mezirow, 1978). The coach serves as a vehicle for helping teachers reach moments of genuine self-reflection and autonomy. The goal of teacher effectiveness is a journey that involves an intimate relationship between instructional coaches and teachers. Instructional coaches are not supervisors—they are peers. Often, these lines become blurred. The job of the instructional coach is not to evaluate but to build trust (Wolpert-Gawron, 2016).

Changes in education have forced educational leaders to examine their roles in teacher development. How can leaders ensure their teachers are effective? How can they ensure their teachers are positively impacting student achievement? Gone are the days of a strictly supervisory role for principals—the landscape has shifted to one requiring leaders to embody a targeted instructional approach, in addition to their traditional managerial approach, which can lead to burnout and job-related stress (DeMatthews et al., 2021). Principals attempt to alleviate this stress by providing opportunities for teacher professional development—promoting growth in student learning, coordinating staff development, and encouraging a collegial environment centered around collaboration and creativity (Khanyi & Naidoo, 2020). Teachers thrive in positive learning environments, which allows more time for them to partake in professional development training that is meaningful to their work (Garet, Porter, Desimone, Birman, & Yoon, 2001; McCaw, Watkins, & Borgia, 2004). With leaders forced to constantly balance a myriad of instructional and operational challenges, the role of instructional coach has materialized over the past few decades as a personification of distributed leadership—an expert in a particular educational domain who can relieve many of the instructional challenges

principals may face (Desimone & Pak, 2017). "Compared to centering on position, individual expertise is the central concept in distributed leadership" (Goksoy, 2016, p. 298).

This study explored how coaches perceive their expertise in the areas of instructional strategies, classroom management, and student engagement. These perceptions were compared with the perceptions of teachers for whom they provide instructional coaching. The results of this study can provide principals with valuable data, which will hopefully help promote instructional discourse with the shared leaders in their building (i.e., instructional coaches). When leadership within a school is shared, that school has healthier academic outcomes (Heck & Hallinger, 2009). Furthermore, when that sharing includes constant communication and interaction between the leader and his or her followers—instead of a delegation of menial tasks in an individualistic manner—teacher development and student achievement emerge as the central focus (Goksoy, 2016; J. P. Spillane, 2006). In the following chapter, a review of the literature highlights the practice of instructional coaching and its tie to educational leadership, distributed leadership, and self-efficacy.

2 REVIEW OF THE LITERATURE

The concept of instructional coaching is still developing; however, despite the lack of a coherent model, advocates for instructional coaching (in the modern sense) generally believe that instructional coaches should not supervise or evaluate teacher performance or perform duties incongruous with traditional coaching actions such as observations, modeling, or co-teaching (Knight, 2007). Inappropriate coaching actions directly undermine the instructional coaches' goal of cementing their role as a peer among teachers in their buildings; unfortunately, the literature suggests principals fall victim to perpetuating behavior that precipitates coaching actions that do not support the promotion of instructional leadership or teacher efficacy (Bean, Draper, Hall, Vandermolen, & Zigmond, 2010; Kane & Rosenquist, 2019; Shewell, 2014). Evaluative non-coaching actions, coupled with an excessive amount of additional and inevitable schoolhouse demands, which fall outside the scope of traditional coaching actions (e.g., testing coordinator, excessive hall duty), are noteworthy obstacles for instructional coaches attempting to implement an instructional coaching program with fidelity. Instructional coaches "have heavy workloads, and most teachers may only be receiving minimum benefit from working with instructional facilitators in both one-on-one and group settings" (Rush & Young, 2011, p. 20).

When reviewing the literature, it is evident that many educational leaders acknowledge the importance of minimizing duties that traditionally reside outside the purview of instructional coaches—such as a pseudo administrator or a lunch monitor (Neumerski, 2012; Reid, 2019; Wolpert-Gawron, 2016). The transfer of knowledge and skills from an instructional coach to a teacher is a complex process draped in nuance; furthermore, simply providing an instructional coach with an adequate amount of time to impact teacher practice (time that is free from duties

unrelated to coaching) is not the only obstacle for principals (Kane & Rosenquist, 2019; Ozer, 2013).

If educational leaders can avoid the trappings of micromanagement, they may open up possibilities of examining time management from a more granular level. One way to accomplish this feat may be to leverage the tenets of the distributed leadership model through a lens of self-efficacy. Instructional coaches are building leaders, and the distributed leadership model forces principals to examine and scrutinize the work of school employees whom J. P. Spillane (2006) describes as formal and informal leaders. Moreover, efficacy is tied to perception—individuals with a higher sense of self-efficacy tend to have a more positive perception of events, while those with a lower sense of self-efficacy perceive events in a more negative manner (Bandura, 1986, 1999; Hong, 2018). So, it can be posited that educational leaders may benefit from examining and scrutinizing the perceptions of their intentional and unintentional leaders.

Considering these points, perhaps leaders should be asking more specific questions. Aside from tasks unrelated to coaching, what is preventing their coaches from spending quality time with teachers? Is it possible that their coaches have inflated confidence in their abilities to support teachers in high-impact instructional areas? Understanding the relationship between perceptions of self-efficacy for teachers and instructional coaches in high-impact instructional areas may provide an opportunity for educational leaders to start deconstructing these quandaries.

This literature review first addresses the relationship between instructional coaching and educational leadership. After exploring this relationship, the author of this dissertation outlines the framework of distributed leadership and its tie to instructional coaching. The next section focuses on what researchers consider *effective* professional development, which includes a

specific examination of instructional coaching as a form of professional development. The common elements of instructional coaching are highlighted in this section as well. Finally, the literature review concludes with a section discussing instructional coaching and teacher efficacy, followed up with a closer look at self-efficacy as a theoretical framework.

Instructional Coaches and Educational Leadership

An effective instructional leader must prioritize the coach/administrator relationship—just as coaches must do with teachers in their building. A coach working in a building with an effective instructional leader can be a predictor of success for a coaching program (Knight, 2007). The term coaching is often synonymous with the term mentorship; however, in the schoolhouse, leaders may benefit from clearly defining mentorship and coaching, how each action will be employed, and the individuals responsible for employing each action.

Traditional definitions of mentorship are centered on a hierarchal relationship between the mentor and mentee, where there is a clear and present power differential (Hayes & Mahfouz, 2020). This definition of mentorship follows a functionalist approach, as opposed to a relational approach in which growth is more reciprocal and mutual (Ragins & Kram, 2007). The power differential is an important factor to consider for educational leaders when emboldening instructional coaches. Educational leaders toe the line between the functional and relational approaches by playing the role of mentor *and* coach. "A mentor may begin working with a protégé by providing advice and guidance in the protégé's early career, and then both the mentor and protégé develop a more mutually beneficial and meaningful relationship as they learn and grow through the mentoring process" (Hayes & Mahfouz, 2020, p. 727). While leaders can vacillate between mentorship approaches, an instructional coach's duties and delivery of feedback are more akin to a relational or dialogical approach (Killion & Harrison, 2017; Knight,

2007). Leaders might have a better chance of teachers responding positively to feedback if that feedback was delivered by individuals unassociated with evaluating those teachers' performance or writing those teachers' paychecks (e.g., an instructional coach) (Keiler, Diotti, Hudon, & Ransom, 2020). Furthermore, effective mentoring has been shown to increase the length of time a novice teacher remains in the field of education (Cross, Hubbard, Beverly, Gravatt, & Aul, 2020). A combination of effective mentoring and professional development, which is centered on collaborative reflection and joint effort, can lead to measurable achievement gains for teachers (Hassel, 1999; Heck & Hallinger, 2014). Traditionally, educator preparation programs are tasked with providing mentorship and professional development for teachers. Unfortunately, a problem of practice remains concerning the disconnect between the knowledge teachers acquire from preparation and their real-world application (Landon Hays, B. Peterson Ahmad, & Frazier, 2020).

Everyone needs a coach—this sentiment is shared not only in the field of education but in a variety of professions around the world (Gawande, 2022). One study "found that 56 [percent] of instructional coaches reported they did not have a mentor, yet 90 [percent] of respondents thought mentoring was important for beginning instructional coaches, and 58 [percent] thought mentoring was important even for experienced instructional coaches" (Stock & Duncan, 2010, p. 57). Furthermore, instructional coaches transitioning from a classroom role may suffer from feelings of inadequacy due to a lack of training (Stoetzel & Shedrow, 2020). One solution may be the practice of instructional rounds, which continues to gain momentum in teacher preparation programs (Roegman & Riehl, 2015). An integration of instructional rounds into the instructional coaching scene may be an interesting progression to monitor in the future. Rounds are unique

because "the learning of the observers is central, not just the learning of the one being observed" (Roegman & Riehl, 2015, p. 90).

Shewell (2014) cited the lack of administrative support by the building principal as a prominent issue. Instructional coaches in Shewell's study were spending considerable time on duties and responsibilities that did not resemble coaching. Aside from resistant teachers, some of the biggest obstacles for instructional coaches are when principals minimize their role or assign them to marginal tasks such as substituting for teachers (Bean et al., 2010). Furthermore, the problem is exacerbated when coaches are given a variety of administrative tasks in addition to their teacher caseloads (Kane & Rosenquist, 2019). What is perhaps more interesting, is these documented struggles with time in the instructional coaching field are similar to struggles in the field of instructional leadership. Studies conducted over the past two decades uncovered that "principals [spend] on average less than 10 [percent] to about 20 [percent] of their time on instructional leadership activities" (Sheng, Wolff, Kilmer, & Yager, 2017).

Although instructional coaches are often a fountainhead for professional development, this should not exclude them from receiving professional development as well. Just like teachers, instructional coaches require mentoring to constantly refine and improve their practices. In an article by Madeline Will (2017), Lynn Kepp, the senior vice president for strategic partnerships at the New Teacher Center—which works with school districts across the country to increase the effectiveness of teachers—stated, "[it's] amazing how many people are appointed as a coach and told, go forth and coach, with no professional development or support" (p. 1). It was difficult to find literature dedicated to mentoring instructional coaches—or coaching the coaches. There are researchers who reference the importance of professional development for instructional coaches; however there is limited evidence of studies focusing on the subject (Stoetzel & Shedrow, 2020).

Administrators, like instructional coaches, are required to perform a multitude of tasks, ranging from purely managerial duties to duties that are instructionally driven. The current belief in the field of educational leadership is that instructionally driven duties should dominate an administrator's schedule. Educational policy actually changed in the 1980's due to the increasing belief that instructional leadership was a hallmark of principals working in instructionally effective schools (Hallinger, 2005). Researchers have since acknowledged instructional leadership as an effective means of improving school climate and student achievement (Gurley, Anast-May, O'Neal, & Dozier, 2016). The instructional coach/principal relationship (particularly novice coaches/principals) can be mutually beneficial in an instructional leadership framework, as studies show both parties build their confidence in instructional leadership and improve school culture and climate (Hayes & Mahfouz, 2020).

Subsequently, there is literature highlighting the implications of integrating transformational leadership within the instructional leadership model (Day, Gu, & Sammons, 2016; Hallinger, 2003; Leithwood & Sun, 2012; Marks & Printy, 2003). This literature includes "empirical evidence of how successful principals directly and indirectly achieve and sustain improvement over time through combining both transformational and instructional leadership strategies" (Day et al., 2016, p. 222). Instructional leadership focuses mainly on the principal as the agent of change within a schoolhouse, while transformational leadership empowers staff to share in the leadership responsibilities (Day et al., 2016). Marks and Printy's (2003) research concluded that a combination of both instructional leadership and transformational leadership presented a clearer path to greater influence on student performance, as "measured by the quality of its pedagogy and the achievement of its students" (p. 370). Leithwood and Sun's (2012) study reaffirmed the findings of Marks and Printy (2003), concluding "both a focus on the internal

states of organizational members that are critical to their performance [transformational] and classroom instruction [instructional]" (Leithwood & Sun, 2012, p. 387) contribute to effective leadership practices.

However, a principal's leadership style is only one factor contributing to a school's sustained improvement. There is also the principal's ability to effectively diagnose the school's needs through "time and context-sensitive strategies that are layered and progressively embedded in the school's work, culture, and achievements" (Day et al., 2016, p. 222). No matter the leadership style, teacher support is necessary for achieving and sustaining school improvement over time. "When teachers receive an appropriate amount of support for professional learning, more than 90 [percent] of them embrace and implement programs that improve student experiences in the classroom" (Knight, 2007, p. 4). So, just providing teacher support is not enough. Administrators and leadership team members must follow the same culture of self-reflection preached by instructional coaches. Principals' leadership styles can affect the utilization of instructional coaches in their buildings. In any of the leadership styles previously mentioned, prioritizing the relationship between the administrator and coach (or the leader and the follower) could prove beneficial; however, the interactions between these two employees may be best viewed through the lens of Distributed Leadership (J. P. Spillane, 2006).

Distributed Leadership

When a principal adopts a distributed leadership style, leadership practice is distributed "among both positional and informal leaders" (J. Spillane, Halverson, & Diamond, 2001, p. 24). The concept of distributed leadership centers around a sense of shared purpose and collaboration between members of an organization (Keppell, O'Dwyer, Lyon, & Childs, 2011). These individuals serve in a range of roles and shoulder a variety of responsibilities. When researching

the term distributed leadership, one may come across a similar term—*distributive* leadership. In the P-12 world, the two terms are often synonymous. For this literature review, I will use the term distributed leadership. The concept of distributed leadership has evolved over the years with the contribution of integral scholars such as J. Spillane et al. (2001) and Gronn (2002). In his 2006 work, Distributed Leadership, J. P. Spillane (2006) outlined a framework for distributed leadership that stretched beyond just the concept of shared leadership (see Figure 1).

Figure 1

Distributed Leadership Model
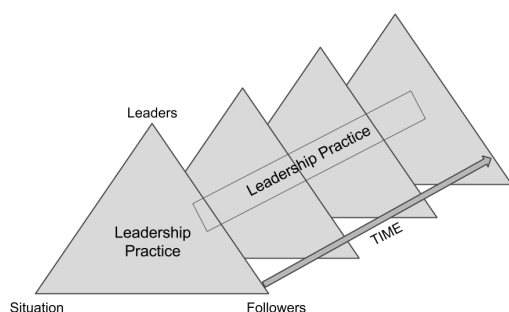
J. P. Spillane (2006) views distributed leadership through a lens of "collective interactions among leaders, followers, and their situation" (p. 4). He believes this practice is paramount to simply applying a leader-*plus* mentality—where the principal is the *hero*, whose job it is to save the day single-handedly.

Distributed leadership is unique compared to similar leadership frameworks such as shared leadership. However, the structure of distributed leadership: (1) focuses more on student achievement and progress toward teacher development, (2) stresses the importance of all stakeholders (e.g., building leaders, teachers, students, and parents) taking part in the decision-making process, and (3) respects and accepts individuals with different areas of expertise—whose interactions can lead to new and innovative ways of thinking (Goksoy, 2016).

Baloglu (2011) found there to be a positive relationship between distribution of leadership and capacity development. The phrase capacity building is utilized in a variety of work settings, including the P-12 realm. Capacity building of a teacher by a principal or instructional coach is an example of the distributed leadership process (Goksoy, 2016). Principals attempt to build the capacity of their staff for numerous reasons, including the goal of improving a school's collective teacher efficacy (Hattie, 2015). "Leadership capacity building is essential for sustainable quality education; it is about empowering teachers with leadership knowledge and skills that are required for the improvement of the entire school" (Khanyi & Naidoo, 2020, p. 170).

Building the capacity of instructional coaches should be a priority of principals and district leaders, as the number of coaching interactions between an instructional coach and teacher may outnumber those interactions between a principal and those teachers. Instructional coaches play a role in a distributed leadership framework. Building trust with teachers and contributing to the creation of school culture are foundational elements of instructional coaching (Killion & Harrison, 2017; Knight, 2007). These two elements are also important characteristics of the distributed leadership framework (Keppell et al., 2011). In Jim Knight's (2007) Big Four framework for instructional coaches, community building is one of the four core tenets. Community building is the idea that coaches should contribute to creating a positive and productive learning environment (Knight, 2007). Ultimately, principals benefit from distributing leadership tasks to other leaders in their building (Lewis, 2019). When selected as those leaders, instructional coaches empower and embolden teachers to thrive within the distributed leadership framework; moreover, when instructional coaches are utilized properly within the distributed

leadership framework, the process of instructional coaching has a chance to become a highly effective form of professional development.

Effective Professional Development

Effective professional development is structured professional learning, which should positively impact teacher practice and student learning outcomes (Darling-Hammond, Hyler, & Gardner, 2017). Desimone and Pak (2017) outlined a framework for effective professional development, in which the authors believe effective professional development consists of five empirically predictive elements—content focus, active learning, duration, collective participation, and coherence. Content focus can center on the content itself and/or how students learn the content; furthermore, active learning allows teachers multiple opportunities to practice what they learned, apply their learning, and receive timely feedback; moreover, book studies can prove to be a valuable tool in this process as well (Blanton, Broemmel, & Rigell, 2020). Desimone and Pak (2017) believe that duration is the idea that teachers require a substantial amount of professional development hours or sustainability of the effects of professional development is unlikely; moreover, collective participation is an effective way to foster teacher interaction and discourse, and the element of coherence "provides teachers with clearer directions, rather than leaving it up to the teacher to integrate new ideas and strategies into their teaching" (p. 8).

These elements of effective professional development address school needs, based on an analysis of student data and student achievement. Standardized test scores, common assessments, and other types of formative and summative student data sources can help with guiding the selection of professional development activities by highlighting areas of improvement for instructional practices. Additional data sources may include surveys from students, parents,

teachers and other stakeholders, observations, peer reviews, and portfolios. Parsons et al. (2016) shared a similar perspective on the elements of effective professional development. The authors believe effective elements "[include] ongoing and sustained opportunities, alignment with students' learning goals, strong leadership presence, implementation of practices supporting student learning, focus on teachers' learning needs, collaborative environment, and student assessment data to inform instruction" (p. 251). Of these effective elements, strong leadership presence is a theme that continues to emerge throughout the literature (Cherkowski, 2016; Garet et al., 2001). A major impediment to leaders implementing effective professional development is the required time and resources; moreover, programs that provide sustained coherent study, collaborative learning, and time for classroom experimentation (including follow-up) appear to have a substantial effect on teachers' instructional practices (Garet et al., 2001; Parsons et al., 2016). Dedicating more time to effective professional development may help address the need for highly qualified teachers outlined in federal legislation such as the No Child Left Behind Act (2002) and the Every Student Succeeds Act (2015). It is recommended that educators devote at least 25 percent of their time to professional learning; additionally, if schools are implementing instructional changes, at least five and preferably ten days of workshops should be scheduled (Darling-Hammond, Chung Wei, Andree, Richardson, & Orphanos, 2009). Teachers need time to acquire new skills, collaborate and plan with others, observe other teachers, and retool their teaching practices.

In those schools where students make measurable gains in achievement, the nature of staff development has shifted from workshops to focused ongoing organizational learning built on collaborative reflection and joint action (Hassel, 1999; Heck & Hallinger, 2014). An effective learning community is evidenced by a culture of learning characterized by respect for learning, a

high level of trust, collaborative processes such as shared decision-making, a mutual understanding of the goal of improved student learning, and collective commitment to the success of all students (Mid-continent Research for Education and Learning [MCREL], 2005). This is a culture built on respect, trust, personal connections with staff, and the creation of teams whose focus is accomplishing specific instructional goals.

Awareness of the principles of adult learning is important for facilitators of professional development (educational leaders). Merriam (2008) expounded upon Knowles (1973) original concept of adult learning theory—asserting andragogy and self-directed learning were two pillars of adult learning. In subsequent research, five major characteristics of adult learning have emerged. "Adult learning is self-directed, motivational for the learner, problem centered, relevancy oriented and goal oriented" (Zepeda et al., 2014, pp. 300-301). However, even if leaders can manage to foster professional development that satisfies all the characteristics of adult learning, duration and sustainability remain challenges. Darling-Hammond et al. (2009) analyzed a number of experimental studies and "found that a set of [professional development] programs that offered substantial contact hours of professional development (ranging from 30 to 100 hours in total) spread over six to 12 months showed a positive and significant effect on student achievement gains" (p. 43). However, their analysis also revealed that despite the need for substantial contact hours, the duration and intensity of professional development opportunities in the United States are falling short of the level necessary to noticeably impact instruction and student achievement (Darling-Hammond et al., 2009).

Additionally, the period after professional development concludes is another critical time period for leaders enacting change within their building/district. There must be a support system in place to provide follow-up, feedback, time for collaboration, and coaching from peers.

Teachers need time and support if they are expected to make adjustments to their teaching repertoire. O'Connell (2005) found that when teachers in Iowa didn't receive follow-up support, they mutated strategies learned in professional learning, did not use them for the correct duration, or never evaluated them to see if the strategies were having an impact on student achievement. This is where the ongoing coaching element of the professional development process, highlighted by Darling-Hammond et al. (2009), comes into play; moreover, this is where instructional coaches can fit into the process.

Instructional Coaching as Professional Development

When viewing professional development from the perspective of having two major facets: functional (outcomes) and structural (procedures), McCaw et al. (2004) believe the structural facet is most responsible for the success or failure of professional development. In other words, however pure and intentional the outcomes of professional development are, the absence of an effective delivery structure for that professional development can severely hinder those outcomes. Educational leaders have a strong influence on this process. Professional development is not sustainable without a supportive structural design. Bolman and Deal (2017) also stressed the importance of the structural facet in their research, as well as other organizational perspectives (or frames), including a human resource frame. Aside from the hiring process (generally associated with human resources), the human resource frame "centers on what organizations and people do to and for one other…[and] how personal and interpersonal dynamics can make or break a group or team" (Bolman & Deal, 2017, p. 113). Educational leaders can hire individuals such as instructional coaches to satisfy both the functional and structural facets of their organizational vision for professional development. However, they may also hire those coaches to assist with the task of managing personal and interpersonal dynamics.

The ability to manage such a task is just one of many elements of effective instructional coaching.

Elements of Effective Instructional Coaching

Identified elements of effective coaching differ substantially throughout the literature. "Although researchers have explored the impact of instructional coaching and named possible elements believed essential to effective coaching, there has yet to emerge from the literature a coherent model of those essential elements (active ingredients)" (White, Howell Smith, Kunz, & Nugent, 2015). Borman and Feger (2006) assert that prerequisite skills and knowledge for instructional coaches fall into three general categories: instructional expertise, interpersonal skills, and communicative ability; however, the authors acknowledge the literature has yet to determine the relative importance of those three categories.

From an educational leadership perspective, clearly defining the roles and responsibilities of an instructional coach is critical for district and building leaders. Eliminating this ambiguity can impact the fidelity with which coaches can perform duties directly related to coaching teachers (Kane & Rosenquist, 2019; Stoetzel & Shedrow, 2020). In their study, White et al. (2015) focused on identifying active ingredients of instructional coaching. Teachers in the study felt it was most important their coach maintain a flexible schedule. White et al. (2015) found teachers valued a partnership approach to coaching, and a coach demonstrating flexibility was instrumental when establishing a positive rapport and mutual respect between coach and teacher. Teachers in the study placed a particularly high value on the classroom experience of the coach. If the coach had a substantial amount of teaching experience, teachers in the study were more likely to find the coach credible when providing feedback. Interestingly, White et al. (2015) found teachers valued teaching experience over their coaches' content knowledge. Knight (2007)

describes four common roles of coaching: Executive Coaching, Coactive Coaching, Cognitive Coaching; and Literacy/Reading Coaching, with instructional coaches representing an amalgam of those forms' roles and responsibilities.

Instructional coaches deliver professional development on a variety of different topics (e.g., research-based practices, literacy strategies, curriculum and instruction, and assessment) in a variety of different methods (e.g., one-on-one trainings or group trainings) (Toll, 2005; Walpole & McKenna, 2004). Although not a primary function of an instructional coach, the development and administration of assessments is a common practice; moreover, coaches are often responsible for assisting administrators with analyzing those data to inform instruction (Walpole & McKenna, 2004). The instructional coach walks a fine line when participating in the assessment process. Teacher perception—regarding viewing coaches as peers—may suffer if coaches assume more of an evaluative role when collecting and interpreting teacher data (Knight, 2007).

The concept of instructional coaching is still developing, and despite the lack of a coherent model, advocates for instructional coaching emphatically believe that for instructional coaches to truly be effective, they cannot be evaluators (Knight et al., 2015). Whenever a coaching cycle contains an evaluative component, a fissure may form in the coach/teacher relationship. Instructional coaches are peers—just another teacher who is there to help.

The process of establishing the coach/teacher relationship is paramount before any coaching takes place. "Through a partnership based on trust and respect, the [coach's] role is to offer support and encouragement to help teachers reach their fullest potential, thus having an impact on student achievement" (Wolpert-Gawron, 2016). A large portion of the instructional coaching philosophy draws upon extant literature highlighting the practices of partnership and

reflection (Frieire, 1970; Schon, 1987). However, the practices of partnership and reflection are not only essential in the coach/teacher relationship; they are equally as important in the coach/administrator relationship.

"To encourage application of ideas from professional development, coaches function as observers and modelers" (Blarney, Meyer, & Walpole, 2008, p. 311). The modeling process generally involves the instructional coaches modeling a high-impact instructional strategy for a teacher while the teacher observes the instructional coach and takes notes (Knight, 2007; Walpole & McKenna, 2004). Instructional coaches work to ensure confidentiality when providing feedback after observing teachers implementing instructional practices (Toll, 2005; Walpole & McKenna, 2004). Confidentiality can bolster a teacher's confidence in the instructional coach; consequently, it may contribute to a working relationship built on trust and respect (Wolpert-Gawron, 2016). Coaches model literacy strategies and research-based practices in the classroom, while the teacher observes (Walpole & McKenna, 2004). Problems can arise when an instructional coach does not have sufficient knowledge in her content area. It is difficult to model instruction for a content area in which you are not an expert—teachers in Knight's (2007) coaching project in Kansas saw their instructional coach as less than effective when they stepped outside the realm of coaching solely in a pedagogical sense. Regardless of the instructional coaching delivery method, the amount of time an instructional coach spends with a teacher can impact the coach/teacher relationship. Too much time spent with a teacher may lead to dilution of the coaching focus—overwhelming and over-stimulating the teacher, while too little time coaching may lead to a bevy of unresolved issues (Shidler, 2009). Instructional coaches may wish to seek mentorship with this dilemma. This is when educational leaders can

step in to assist their coaches with determining what may constitute *too much* and/or *too little* coaching.

The Use of Video in Instructional Coaching

The use of video as a method of reflection is a popular topic of interest found in the current literature on instructional coaching (Knight et al., 2015; Shewell, 2014; Suhrheinrich & Chan, 2017; Tripp & Rich, 2012). One of the big advantages of using video is the objective nature of the process. It is difficult for a teacher to dispute her teaching practices after being presented with an unfiltered documentation of reality. Getting a clear picture of reality is an essential first step in the instructional coaching cycle (Knight et al., 2015).

However, there are several inherent barriers commonly associated with using video. Willingness to appear on video, as well as issues of policy and privacy, are just a few of those potential obstacles. Additionally, if a school—or even the school district—is not willing to support the use of video, the identification phase of the instructional coaching cycle faces immediate challenges. For educational leaders, embedding the concept of video observation within the organizational culture of a school or school district is essential for the practice to effectively encourage teacher reflection (Shewell, 2014). After establishing video observation as an acceptable practice, schools or school districts must address the logistics of the video recording process. Although technological advancements are providing more and more options to streamline video analysis, the comfort level of staff members employing those options is sure to vary. This variance in comfort can stem from the inability to operate the technology, or in many cases the reluctance to recognize the need for change in practice (Tripp & Rich, 2012).

Instructional coaches also help teachers improve their practice by observing video recordings of their peers, in which they may be engaged in high-impact instructional strategies or

pedagogy. This is a vicarious process, as the teacher learns by watching others. These vicarious experiences can impact the self-efficacy of a teacher. However, vicarious experiences are not as powerful as what Bandura (1997) calls mastery experiences, where teachers' self-efficacy is influenced by their success or failure on specific tasks (Margolis, 2005).

Instructional Coaching and Teacher Efficacy

Collective teacher efficacy has a positive effect on student achievement (Goddard, LoGerfo, & Hoy, 2004). Despite the lack of empirical evidence linking instructional coaching to improved teacher practice (Desimone & Pak, 2017), a study by Rush and Young (2011) found that teachers certainly recognize the value in working with instructional coaches—in one-on-one and group settings. The value placed on instructional coaching varies depending on the delivery model and frequency of coaching (Rush & Young, 2011). Furthermore, "[b]uilding efficacy for teacher practitioners can take many shapes. Providing instructional sessions or professional development days have long dominated the model for increasing competence within content areas or teaching deliveries" (Shidler, 2009, p. 454).

For some educators, change is a difficult concept to quantify. What one teacher deems as a substantial change another teacher may view as an incremental change. Teacher attitudes can change based on what they view as success or their perceptions of student outcomes (Rush & Young, 2011). Implementing instructional coaching as a professional development strategy was popularized by such federal legislation as No Child Left Behind—with the intent of positively impacting teacher efficacy (Shidler, 2009). According to Desimone and Pak (2017), this trend continues in modern federal legislation as well:

> The investment in instructional coaches continues today with the most
> recent authorization of the Elementary and Secondary Education Act, now named

the Every Student Succeeds Act of 2015. In 11 instances throughout the bill, state

and local agencies are encouraged to develop, train, and appropriately compensate

coaches to work with teachers in developing assessments, interpreting student

data, designing and differentiating instruction, providing feedback, or evaluating

performance. (p. 4)

Shidler (2009) posited teachers' access to individuals who can assist with increasing

teacher efficacy is an essential component of effective professional learning. When instructional

coaching is the vehicle for professional development, educators can make better instructional

decisions and increase their instructional capacity through practices such as continuous teacher

learning and a culture of reflection.

Self-efficacy is the perception of one's ability to accomplish a task (Bandura, 1977, 1986,

1997; Leithwood & Jantzi, 2008). A review of the literature found no shortage of studies

focused on the self-efficacy of teachers. Zee and Koomen (2016) synthesized forty years of

teacher self-efficacy research and concluded that teacher self-efficacy "shows positive links with

students' academic adjustment, patterns of teacher behavior and practices related to classroom

quality, and factors underlying teachers' psychological well-being" (p. 981). Understanding how

to channel the potential benefits of teacher self-efficacy and the aforementioned positive links is

important for educational leaders, because shouldering the burden of producing those benefits

singlehandedly can lead to burnout (DeMatthews et al., 2021; Ozer, 2013). However, if

principals choose to distribute these leadership duties, they might benefit from understanding

how the perceptions of self-efficacy from other assigned leaders in their building (e.g.,

instructional coaches) compare with the perceptions of self-efficacy of their teachers. These

types of studies are noticeably absent in the current literature.

Theoretical Framework

The educational leadership framework of efficacy is predicated on the work of Albert Bandura (Bandura, 1977, 1986). Bandura was a Professor Emeritus of Social Science in Psychology at Stanford University. He is credited with both the term and concept of self-efficacy. Bandura was interested in how well an individual could perform in challenging situations. He saw factors such as an individual's confidence or belief in his or her ability contributing to the outcomes. "Bandura developed the social cognitive theoretical underpinnings that guide most efficacy belief research today" (Goddard & Skrla, 2006, p. 220). Experts in the field of social cognitive theory universally recognize four sources of self-efficacy, pioneered by Bandura, which coaches/mentors can utilize to impact individuals' self-efficacy: (1) mastery experiences, (2) vicarious experiences, (3) verbal persuasion, and (4) physiological arousal (Margolis, 2005). Maddux (1995) contributed a fifth source of self-efficacy—imaginal experiences—where individuals impact their self-efficacy by visualizing their success.

Leithwood and Jantzi (2008) view "[s]ense of efficacy [as] a belief about one's own ability (self-efficacy), or the ability of one's colleagues collectively (collective efficacy), to perform a task or achieve a goal…[it] is a belief about ability, not actual ability" (p.497); consequently, from an educational leadership standpoint, "[almost] all of the available evidence about collective efficacy concerns groups of teachers or other employees not typically considered to be in leadership roles" (p. 503). Self-efficacy is an integral step in producing collective efficacy. Although instructional coaches have a role in contributing to the collective efficacy of a school, they may leave that task to the principal and focus on developing the self-efficacy of teachers—with whom their role requires them to work daily. The relationship between instructional coaching and educational leadership can be complex—the multifaceted interactions

between principals, instructional coaches, and teachers are complicated. Therefore, it is also important to carve a place for instructional coaches in a distributed leadership model (J. P. Spillane, 2006), which considers "interactions among leaders, followers, and their situation…paramount" (p. 4).

Additionally, to support and encompass the theoretical frameworks of efficacy and distributed leadership, Jim Knight's (2007) Big Four framework was used as a conceptual framework to define the attributes of effective instructional coaching. The Big Four framework was chosen due to its utilization by instructional coaches in the school district selected for this study. The Big Four Framework is further explored and outlined in the methodology section of this dissertation.

Ultimately, promoting self-efficacy aids in reaching the larger goal of perceived collective efficacy. When perceived collective efficacy increases in any organization, individuals work with a greater sense of purpose—driving them to see past obstacles and strive toward realizing goals (Goddard & Skrla, 2006). The author of this dissertation examined teachers' and instructional coaches' self-efficacy from the lens of three dimensions of efficacy—instructional strategies, student engagement, and classroom management. Tschannen-Moran and Hoy (2001), creators of the Ohio State Teacher Efficacy Scale (OSTES), identified these three dimensions as representing "the richness of teachers' work lives and the requirements of good teaching" (p. 801). Therefore, the theoretical framework of self-efficacy and the use of the OSTES seemed most appropriate for this study.

Conclusions

This review of the literature explored the concept of instructional coaching—examining topics such as the relationship between instructional coaching and educational leadership, the

distributed leadership framework and its tie to instructional coaching, effective professional development, instructional coaching as a form of professional development, and the concept of self-efficacy. Based on the information collected for this literature review, the author draws the following conclusions.

The relationship between instructional coaching and educational leadership is complex. Administrators can serve as a type of instructional coach, but the evaluative nature of their positions presents roadblocks when considering essential components of instructional coaching, such as the importance of trust and confidentiality. Instructional coaches frequently deliver professional development but may be subsequently excluded from receiving professional development. Instructional coaches desire effective mentors; however, too often they are left without one. Prioritizing the coach/administrator relationship is a necessary step in the context of any leadership style—including distributed leadership. Ultimately, administrators must determine what teacher support looks like in their building, and who will provide that support. If the instructional coach is genuinely involved in the support process (in a leadership capacity), applying a distributed leadership framework allows for an examination of the relationships between principals, instructional coaches, and teachers. Spillane (2006) describes these components as "leaders, followers, and their situation" (p. 4).

Effective professional development should positively impact teacher practice and student learning outcomes. Principals create the vision of professional development for their buildings by determining which topics to tackle. The selection of professional development topics is based on student data, along with additional data sources. These additional data sources may include surveys (from students, parents, teachers, and additional stakeholders), observations, peer reviews, and portfolios. Furthermore, systematic evaluation of professional development is a best

practice. The first step in that process may include analyzing participants' reactions to the professional development as well as what the participants learned as a result of the training. The next part of the process is considering the organizational variables directly tied to the professional development. After allowing time for participants to implement what they have learned, evaluators should collect data to determine if teacher practice is consistent with the expectations outlined in the training. The final step in the process is collecting data on student outcomes to determine the overall effectiveness of the professional development. Principals will often utilize instructional coaches when implementing professional development plans designed to impact teacher practice.

Although evidence linking instructional coaching to change in teacher practice is limited, researchers still see value in instructional coaching as an effective form of professional development. Essential components of instructional coaching vary throughout the literature, and a coherent model outlining those essential components has yet to emerge. However, non-evaluative coaching actions that promote a collective partnership and a mutual trust between the coach and the teacher are common themes. Additionally, using technology to assist with the coaching cycle is an increasingly utilized method in the field of instructional coaching.

Although teacher efficacy has a positive effect on student achievement, the effect of instructional coaching on teacher efficacy is undetermined. Despite this fact, teachers still perceive there is value in the practice of instructional coaching. However, the value they place on instructional coaching can vary based on the frequency of coaching sessions, the quality of the coaching sessions, and the delivery model of the coaching sessions.

There is an opportunity for future researchers to examine the perceptions of teachers, as well as the perceptions of those who mentor/coach them. We know little about how coaches

perceive their ability to coach teachers in specific instructional areas compared to the perceptions of the teachers they coach. Comparisons of instructional coaches' perceptions of self-efficacy and teachers' perceptions of self-efficacy are conspicuously lacking. An exploration of these comparisons could reveal valuable insights for principals hoping to improve their leadership practices. The following chapter will outline this study's research design to build on these conclusions and answer each research question.

3 METHODOLOGY

Using quantitative research, this study explored the frameworks of self-efficacy (Bandura, 1977, 1986, 1997, 1999) and distributed leadership (J. P. Spillane, 2006) through a constructivist lens. This study is best situated at an intersection of self-efficacy and distributed leadership. If a principal chooses the path of distributed leadership, that path requires principals to instill a sense of confidence in their staff, so those individuals begin to take ownership of the learning that happens within the school (Kelley & Dikkers, 2016). Self-efficacy is the "belief about one's own ability" (Leithwood & Jantzi, 2008, p. 497). Equipping teachers with a sense of belief is part of the distributive process. Individual staff members with a strong sense of self-efficacy can band together with other colleagues to create a strong sense of collective efficacy, which translates to a significant positive outcomes regarding student achievement (Hattie, 2015).

Responses to modified versions of the Ohio State Teacher Efficacy Scale (OSTES) were collected to allow participants to construct their own ideas of self-efficacy. This methodology precluded a positivist approach, as empirical effectiveness measures are not appropriate when examining perceptions (Ryan, 2018). The author of this dissertation was not interested in a deep dive into lived experience; therefore, he felt this story of self-efficacy was best told through numbers (a quantitative approach). Utilizing modified versions of an established self-efficacy survey (OSTES), with a defined five-point Likert scale, the author of this dissertation examined the extent to which participants perceived their self-efficacy—exploring the *what* as opposed to the *why*. Additionally, with such a large sample size, a quantitative approach felt appropriate, as the goal of this study was to gain an overall perspective of self-efficacy and not just the perspectives of a few individuals (e.g., case studies). It is my hope that this quantitative study will pave the way for more qualitative/phenomenological studies.

The Ohio State Teacher Efficacy Scale (OSTES)

The surveys utilized in this study were modified versions of the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001) (see Appendix A). The survey design and modification process included the utilization of the Tailored Designed Method (Dillman, Smyth, & Christian, 2014) to "reduce total survey error to acceptable levels and motivate all types of sample members to respond within resource and time constraints" (p. 16). The original Ohio State Teacher Efficacy Scale (OSTES) includes three dimensions of efficacy: (1) instructional strategies, (2) student engagement, and (3) classroom management, which the OSTES authors felt "represent[ed] the richness of teachers' work lives and the requirements of good teaching" (Tschannen-Moran & Hoy, 2001, p. 801). The original OSTES showed "[p]ositive correlations with other measures of personal teaching efficacy [providing] evidence for construct validity" (Tschannen-Moran & Hoy, 2001, p. 801). Factorial validity of the OSTES was supported by confirmatory factor analysis in the areas of student engagement and instructional strategies; furthermore, there was high evidence of a correlation between those two factors (Roberts & Henson, 2001).

Since the questions from the OSTES focus exclusively on teacher efficacy—and the purpose of this study is to explore teachers' and instructional coaches' perceptions of self-efficacy—the teacher survey questions were modified to include mention of instructional coaches. An additional modified version of the OSTES was created for instructional coaches. The questions contained in the coaches' modified version mirrored the three dimensions of efficacy outlined in the modified teachers' survey. Justification for the syntax included in both modified surveys is outlined in the following paragraphs.

The goal of the modified survey questions (for teachers) was to determine the extent to which teachers perceived a change in their self-efficacy in the dimensions of efficacy defined within the OSTES (instructional strategies, student engagement, and classroom management) as a result of their instructional coach. For example, the original OSTES question: "How much can you do to control disruptive behavior in your classroom?" was modified to read: "To what extent do you believe your instructional coach helped you with controlling disruptive behavior in your classroom?".

The goal of the modified survey questions (for coaches) was to determine the extent to which coaches felt confident coaching teachers within the dimensions of efficacy defined within the OSTES (instructional strategies, student engagement, and classroom management). For example, the original OSTES question: "How much can you do to control disruptive behavior in your classroom?" was modified to read: "To what extent do you feel confident coaching your teachers to help them with controlling disruptive behavior in their classroom?". Four additional survey questions were added to both modified OSTES surveys (teacher and coach). The first question for teachers asked how frequently the teachers interacted with their instructional coaches. The first question for coaches asked how frequently the coaches interacted with their teachers. If a teacher or coach had less than five interactions with their counterpart, that participant was exited from the survey—as a minimum of five interactions is necessary to complete a full coaching cycle. The second question (on both modified surveys) asked the participants to identify their gender. The third question (on both modified surveys) asked participants to identify their years of teaching/coaching experience. Finally, teachers/coaches were asked to identify their grade level: elementary or secondary.

Research Questions

My research questions and subsequent hypotheses (included at the end of this chapter) were developed to explore teachers' and coaches' perceptions of self-efficacy in the three dimensions outlined in the Ohio State Teacher Efficacy Scale: (1) instructional strategies, (2) student engagement, and (3) classroom management. The research questions also reference the demographic data collected in the modified versions of the OSTES administered to teachers and coaches: (1) years of experience, (2) gender, and (3) grade level.

1. When considering years of experience, gender, and grade-level, how do teachers who have experienced instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

2. When considering years of experience, gender, and grade-level, how do instructional coaches perceive their self-efficacy to coach teachers in the areas of instructional strategies, student engagement, and classroom management?

3. When considering years of experience, gender, and grade-level, what can educational leaders learn from teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, student engagement, and classroom management? (Exploratory)

Conceptual Framework

For principals and educational leaders employing instructional coaches, the theoretical framework of self-efficacy and distributed leadership is best illustrated through Jim Knight's (2007) Big Four framework. The Big Four framework also aligns with the dimensions of the Ohio State Teacher Efficacy Scale. In this dissertation, the Big Four served as a conceptual framework for effective instructional coaching. One of the main reasons for the selection of the

Big Four as a conceptual framework was its implementation within the selected school district for this study. In the following sections and subsections, the author of this dissertation crosswalks the components of the Big Four with the OSTES, self-efficacy, and distributed leadership.

The Big Four

The coaching program for the school district in this study was designed using The Big Four framework. The Big Four is a framework developed by researchers and instructional coaches from the University of Kansas Center for Research on Learning (Knight, 2007). The group developed the framework to assist instructional coaches with "organizing interventions and providing focus to coaching practices" (p. 139). A primary function of instructional coaches is to provide teachers with strategies and practices in a variety of different formats depending on the circumstance. Knight (2007) states these responsibilities, and the inherent selection of these strategies and practices can be daunting; therefore, the Big Four can serve as a framework to mediate the process. Knight (2007) believes effective instructional coaches "have a deep knowledge of whatever practices they are sharing with teachers" (p. 141). The Big Four framework consists of four categories in which teacher challenges may arise: (1) community building, (2) content, (3) instruction, and (4) formative assessment.

The Big Four and the OSTES.

The four categories of the Big Four complement the three dimensions/factors of efficacy of the OSTES (2001), around which my research questions and hypotheses were designed. For this study: (1) Factor 1 of the OSTES (instructional strategies) was aligned with content planning, instruction, and formative assessment, (2) Factor 2 (classroom management) was

aligned with community building, and (3) Factor 3 (student engagement) was aligned with instruction and community building.

These determinations were made based on the alignment with suggested strategies within the Big Four framework. An example of such an alignment would be the strategy of effective corrective comments, which falls under the community building component of the Big Four. Effective corrective comments can assist teachers with their classroom management, which is Factor 2 of the OSTES.

With the instructional coaches in this study already trained on the Big Four framework, it was logical to acknowledge the implementation of the framework when examining the coaches' and teachers' perceptions of self-efficacy for instructional strategies, student engagement, and classroom management as measured by the modified OSTES surveys.

Bandura's Four Sources and the Big Four.

Bandura's (1977,1986, 1997) four sources that contribute to self-efficacy are: (1) mastery experiences, (2) vicarious experiences, (3) verbal persuasion, and (4) physiological arousal. Of those four sources, the author of this dissertation believes mastery experiences, vicarious experiences, and verbal persuasion are most prevalent during mentoring or coaching cycles for principals, assistant principals, and coaches utilizing the Big Four. For the purposes of this study, the author of this dissertation chose not to explore the relationship between the Big Four and physiological arousal due to its association with anxiety and discomfort, which might include rapid heart rate or sweating. The author of this dissertation acknowledges physical arousal may have an impact on the development of self-efficacy; however, the origin of physical arousal may be difficult to identify and its influence on self-efficacy could fade over time (Franziska, 2016).

Mastery experiences are very important factors to contributing to a teacher's self-efficacy; in fact, Bandura (1986) considers mastery experiences to be the most powerful source contributing to a teacher's self-efficacy. However, instructional coaches as opposed to principals or assistant principals generally provide mastery experiences. This is because mastery experiences consist of hands-on opportunities where teachers are allowed to practice their craft (Clark & Newberry, 2019). The act of practicing a teaching skill usually occurs near the end of a coaching cycle, after teachers have had the opportunity to set goals with their instructional coach, and they have watched their coach model the teaching skill (Knight, 2018).

From an instructional standpoint, vicarious experiences can include the act of watching a colleague model a particular teaching skill (Bandura, 1977). Modeling is an active ingredient in most instructional coaching models (White et al., 2015), and principals and assistant principals often may have opportunities to model expectations for teachers in professional development settings.

"Verbal persuasion in the form of encouragement, mentoring, and feedback plays an important role in building…teacher self-efficacy" (Clark & Newberry, 2019, p. 35). For principals, verbal persuasion comes more in the form of encouragement and *mentorship* (Hayes & Mahfouz, 2020), while for instructional coaches, verbal persuasion might take the form of encouragement and *feedback* (Killion & Harrison, 2017).

In one way or another, mastery experiences, vicarious experiences, and verbal persuasion can be utilized as tools to explore self-efficacy in any area of the Big Four (community building, content planning, instruction, and formative assessment).

Distributed Leadership and the Big Four.

From a distributed leadership lens, when it comes to managing the tenets of the Big Four

in the schoolhouse, the role of principals and assistant principals leans toward a generalist

approach; conversely, instructional coaches function more as instructional specialists when

facilitating components such as community building, content planning, instruction, and

formative assessment (Knight, 2007; J. P. Spillane, 2006).

The figure below crosswalks the Big Four's components with distributed leadership,

along with the OSTES and Bandura's Four Sources (see Figure 2):

Figure 2

Theoretical Framework and Conceptual Framework Crosswalk

OSTES (2001) Factors	Self-Efficacy (SLT/SCT) Bandura (1977, 1986, 1997)	Distributed Leadership Spillane (2006)	The Big Four Knight (2007)
Factor 1: Efficacy for Instructional Strategies	**Principals and Assistant Principals** Vicarious Experiences Verbal Persuasion **Instructional Coaches** Mastery Experiences Vicarious Experiences Verbal Persuasion	**Principals and Assistant Principals** Tend to be generalists **Instructional Coaches** Tend to be instructional specialists	Content Planning Instruction Formative Assessment
Factor 2: Efficacy for Classroom Management	**Principals and Assistant Principals** Vicarious Experiences Verbal Persuasion **Instructional Coaches** Mastery Experiences Vicarious Experiences Verbal Persuasion	**Principals and Assistant Principals** Tend to be generalists **Instructional Coaches** Tend to be instructional specialists	Community Building
Factor 3: Efficacy for Student Engagement	**Principals and Assistant Principals** Vicarious Experiences Verbal Persuasion **Instructional Coaches** Mastery Experiences Vicarious Experiences Verbal Persuasion	**Principals and Assistant Principals** Tend to be generalists **Instructional Coaches** Tend to be instructional specialists	Instruction Community Building

Setting

Survey research was conducted in a large suburban school district in the Southeastern United States, which perennially serves around 100,000 students. The school district utilizes a coaching program originally designed around Jim Knight's Big Four framework. Instructional coaches are employed by the district in Title I schools only. In this district, instructional coaches are referred to as Academic Coaches. In the following paragraphs, the author of this dissertation may refer to instructional coaches as Academic Coaches. The title of Academic Coach is specific to the instructional coaches employed by the district in this study. However, for this dissertation, the titles of instructional coach and Academic Coach can be considered synonymous.

In addition to conducting traditional coaching cycles, the Academic Coaches are required to fulfill a variety of other duties. The complete list of duties and expectations is outlined below in Figure 3 (Author, 2017).

Figure 3

Academic Coaches Duties and Responsibilities

Academic Coaching Cycle – Goal Alignment (Enroll, Identify), Plan of Support (Learn), Progress Monitoring (Improve)

Professional Learning – planning/facilitating/attending PL, PLC, AC Academies, and Collaborative Learning Sessions

Collaborative Planning – attending/facilitating/participating in grade-level/team planning

Data – collecting, analyzing, and interpreting data

Resources – researching and providing resources for teachers

Teacher Support – co-teaching, observations, conferencing, and walkthroughs

Instructional Support – staff/leadership/team meetings, Learning/Focus Walks, Title I duties, and AC planning

Accountability and Documentation – professional communication and completing Instructional Coaching Tool

Other – additional duties (e.g., morning duty, lunch duty, dismissal duty, TSS/TSC)

The potential for a large sample size, coupled with the implementation of the Big Four framework, made this school district an attractive candidate for a quantitative study—a study that could compare teachers' perceptions of how their self-efficacy (in specific instructional areas) improved as a result of instructional coaching with the perceptions of those who actually coach them. The following details about the school district and its coaching program are a synthesis of information obtained from a major project/thesis focusing exclusively on the district's coaching program—its origins and current status. The author's name is omitted from citations to ensure the anonymity of the school district.

In the years leading up to this study, factors such as shifting duties and expectations, the absence of a defined instructional coaching cycle, and a revised job description lead to the creation of a new job position—Lead Academic Coach. Prior to the creation of the Lead Academic Coach position, the district in this study did not have a defined coaching cycle, and coaches were not being monitored at the district level. The district hired four Lead Academic Coaches with the purpose of creating and monitoring the district coaching program and its Academic Coaches. The Lead Academic Coaches were also tasked with designing and facilitating professional development for the Academic Coaches in the district. On average, the school district in this study employs around 140 Academic Coaches.

The Lead Academic Coaches' began the 2016 – 2017 school year by developing a vision statement: to cultivate highly effective instructional coaches who will improve the overall quality of teaching and learning and increase student achievement in the district (Author, 2017). During their first year of employment, the Lead Academic Coaches started with a comprehensive needs assessment—analyzing how the district's Academic Coaches were spending their time in the schoolhouse. After analyzing the data from monthly instructional coaching logs (required for

Academic Coaches), it was glaringly apparent that data collected from the logs was pointing to

an exorbitant amount of time being spent on duties that did not resemble actual *coaching*. Select

examples (from three schools) of the Lead Academic Coaches' findings (Author, 2017) can be

found below in Figure 4.

Figure 4

Recorded Coaching Duties and Non-Coaching Duties

Coaching Data Collected from September 2016 – October 2016					
	Total Number of Duties	Number of Documented Non-Coaching Duties	Number of Documented Coaching Duties	Percentage of Time Spent on Non-Coaching Duties	Percentage of Time Spent on Coaching Duties
AC School 1	296	147	149	49.7%	50.3%
AC School 2	435	208	227	47.8%	52.2%
AC School 3	371	240	131	64.7 %	35.3%

Although the results above reflect data from three schools, there was generally a 50/50

split (for most schools) between what the Lead Academic Coaches classified as coaching duties

and non-coaching duties. Additionally, the data revealed that recorded coaching duties were

often fragmented and inconsistent. There was no evidence of the Academic Coaches adhering to

a logical and sequential coaching cycle. In the next two years, the Lead Academic Coaches

effectively implemented a coaching program and coaching cycle that helped mitigate the

coaching discrepancies—eventually resolving the imbalance. Now, with a clearly defined

district-adopted coaching cycle, the struggle to maintain a consistent and meaningful partnership

with their teachers had been reduced.

Prior to the 2016 – 2017 school year, Academic Coaches did not report to district

coordinators. Subsequently, there was limited supervision of Title I documentation. The

instructional coaching logs were monitored, but very little feedback was provided from the

district concerning the appropriateness of the content documented. The Lead Academic Coaches are now required to review the coaching logs weekly and provide feedback to instructional coaches. This extra layer of monitoring contributed to more accurate, consistent, and uniform documentation. Additionally, just the fact that the instructional coaches knew they were being monitored seemed to boost productivity and compliance as well (Author, 2017).

One of the major problems prior to the start of the 2016 – 2017 school year was the lack of definition in terms of the roles and responsibilities of Academic Coaches. Academic Coaches were often lumped into a category with other district personnel such as Instructional Support Specialists (ISS) and Student Support Specialists (SSS). ISS and SSS dealt primarily with Multi-Tiered-Systems of Support and Response to Intervention and served as administrators. However, many principals were still assigning their Academic Coaches administrative duties during the 2016 – 2017 school year, similar to those expected from the ISS and SSS. The Lead Academic Coaches and the Title I department identified this issue after an audit of the 2016 – 2017 instructional coaching logs. As a result, a re-categorization of non-coaching duties and coaching duties was instituted. The new set of non-coaching duties consists primarily of administrative duties. The Revised Coaching Duties and Non-Coaching Duties (Author, 2017) can be found below in Figure 5.

Figure 5

Revised Coaching Duties and Non-Coaching Duties

Non-Coaching and Coaching Duties for the 2017-2018 School Year	
Non-Coaching Duties	Coaching Duties
Testing Coordinator Substituting for Teachers In-School Suspension Monitor School Improvement Plans Reviewing/Processing Field Trip Forms Administrative Duties Clerical/Secretary Duties Excessive Lunch/Bus Duty TKES Walkthroughs	Impact Cycle Professional Learning Collaborative Planning Data Resources Teacher Support Other

Moreover, the Lead Academic Coaches conducted site visits, during which the district-defined roles and responsibilities of the Academic Coach were communicated to the district's principals. Placing an emphasis on a district-adopted coaching cycle, stating the importance of utilizing that cycle, and decreasing the number of administrative duties for instructional coaches ultimately contributed to an increase in time spent by instructional coaches on duties that reflected actual *coaching* (Author, 2017).

Participants

When the survey was administered, 71 schools employed an Academic Coach. Of those 71 schools, 38 schools agreed to participate in the survey. Based on these data, the response rate was 54%. A total of 397 teachers and 55 instructional coaches responded to the survey. All teachers and coaches included in the final survey results had at least five interactions with their counterparts during the previous school year. Five interactions were necessary to assume at least one coaching cycle had been conducted (Knight, 2018).

Of the 397 teachers that responded, 36 teachers had five or fewer interactions with an Academic Coach and were exited from the survey. A total number of 55 Academic Coaches

responded to the survey, and all 55 instructional coaches had at least five coaching interactions with at least one teacher (Table 1).

Table 1

Survey Participants with Five or More Coaching Interactions

Role	Responses	5 or more Interactions	Less than 5 Interactions
Teachers	397	361	36
Coaches	55	55	0

Through purposive sampling, 361 teachers and 55 Academic Coaches from the 38 participating Title I schools (24 elementary schools, 7 middle schools, and 7 high schools) were surveyed to compare perceptions of self-efficacy in the dimensions of instructional strategies, student engagement, and classroom management.

Other sample demographics included gender, grade level, and years of experience. Males comprised 16.6% (n=60) of the final teacher sample, while 83.4 % were female (n=301), and no teachers reported their gender as Other. The final sample of Academic Coaches was comprised of 16.4% (n=9) males and 83.6% (n=46) females. No instructional coaches identified as Other for their gender (Table 2).

Table 2

Participant Breakdown by Gender

Role	Male	Female	Other
Teachers	60	301	0
Coaches	9	46	0

Additionally, 59.6% (n=215) of teachers reported teaching at the elementary level, while 40.4% (n=146) of teachers reported teaching at the secondary level. Fifty-six percent (n=31) of Academic Coaches reported working at the elementary level, and 44% (n=24) of Academic Coaches reported working at the secondary level (Table 3).

Table 3

Participant Breakdown by Grade Level

Role	Elementary	Secondary
Teachers	215	146
Coaches	31	24

Finally, 8% (n=29) of the final teacher sample had between zero and two years of teaching experience, 39.8% (n=144) of teachers had between two and ten years of teaching experience, and 53.2% (n=192) of teachers had ten or more years of teaching experience. For the final Academic Coaches, 27.3% (n=15) of Academic Coaches had between zero and two years of coaching experience, 65.5% (n=36) of coaches had between three and ten years of teaching experience, and 7.2% (n=4) of coaches had more than ten years of coaching experience (Table 4).

Table 4

Participant Breakdown by Years of Teaching Experience/Coaching Experience

Role	0-2 Years	3-10 Years	More than 10 Years
Teachers	29	144	192
Coaches	15	36	4

In the next section, the author of this dissertation will review the procedures utilized in this study.

Procedures

Perceptions of self-efficacy for teachers and Academic Coaches were measured quantitatively using survey research. Survey research is an effective method of evaluating perceptions of professional development (which includes instructional coaching); moreover, when a survey is used to evaluate behavioral constructs (as opposed to evaluative constructs) that survey is more reliable when determining the effectiveness of professional development (Desimone, 2009). The author of this dissertation was interested in a district-wide perspective of instructional coaching. The author was not interested in a deep exploration of the subject, which may include detailed descriptions of lived experiences. Therefore, survey research and statistical analysis provided the most efficient method for collecting and interpreting data reflecting perceptions of self-efficacy.

Quantitative data analysis involved using the Statistical Package for the Social Sciences (SPSS) version 27 to compare coaches' and teachers' perceptions of self-efficacy for instructional strategies, student engagement, and classroom management. This study utilized two modified versions of the OSTES survey instrument. One version elicited the responses of teachers, and the other version elicited the responses of instructional coaches. Of the valid results analyzed, 361 teacher responses and 55 instructional coach responses comprised the dataset. Each version had slightly modified questions that mirrored the original OSTES. The domains for the modified versions of the OSTES (coaches and teachers) and the number of questions in each domain were the same (instructional strategies – eight questions, student engagement – eight questions, and classroom management – eight questions). The item stems were modified to elicit

information from teachers and coaches. For example, for teachers, in the domain of instructional strategies, the original OSTES question "To what extent can you use a variety of assessment strategies" was modified to read "To what extent has your instructional coach helped you to feel more confident using a variety of assessment strategies?". Conversely, for coaches, the same question was modified to read "To what extent do you feel confident coaching your teachers to use a variety of assessment strategies?".

Gender, grade-level, and years of experience were categorical variables, while self-efficacy served as the continuous variable. Although self-efficacy can be considered ordinal, for this study, self-efficacy was treated as the continuous variable. This decision was made because Early Career Educators (with zero to two years of experience) that are not efficacious in the classroom may feel inclined to rate their instructional coaches highly. However, this does not lend itself to an overall rating of self-efficacy. The rating would be an indication of self-efficacy that was influenced specifically by instructional coaching. This distinction makes Analysis of Variance (ANOVA) valuable. Univariate ANOVAs were run to determine any significant differences in group means pertaining to the perceptions of self-efficacy in the areas of instructional strategies, student engagement, and classroom management across fixed factors. Descriptive statistics were used to correlate constructs between the two study groups (teachers and coaches). Univariate ANOVAs were used to compare the efficacy means of two independent groups (teachers and instructional coaches) in the areas of instructional strategies, classroom management, and student engagement across three fixed factors (gender, grade-level, and years of experience).

To satisfy ANOVA assumptions associated with the descriptive statistics collected in this study, the author of this dissertation first took precautions by ensuring surveys were not

administered in collegial groups. This choice was made to minimize any dependence of the data and satisfy the assumption that the data were independent. To meet the assumption of normal population distribution, the author of this dissertation chose to lean on the seminal review of Glass, Peckham, and Sanders (1972). The review found that although a sample may display evidence of high skew and kurtosis values, this only results in a slight increase in the type I error rate. The ANOVA test is more than adequate when addressing slight to modest deviations for normality (Glass et al., 1972). The final assumption of variance for all three Univariate ANOVAs was tackled by utilizing Levene's test of equality of error variances. "The homogeneity of variance (HOV) assumption, which refers to equal population variances across cells, is a critical premise and recommended to be checked before conducting factorial ANOVA tests" (Yi et al., 2022, p. 505). The Levene's test was necessary for the fixed factors in this dissertation to verify the assumption that the variances were equal across all groups.

The author of this dissertation considered using independent t-tests for all three fixed factors (years of experience, gender, and grade-level); however, Univariate ANOVAs were chosen due to the fixed factor of years of experience having three variables ($0 - 2$ years, $3 - 10$ years, and more than ten years). The other two fixed factors had only two variables: gender (male and female) and grade-level (elementary and secondary). The author of this dissertation was prepared to conduct a Welch Test as an adjustment to any ANOVA if the results of a Levene test were found to be significant. This would account for unequal variance. In the event of a significant result, the author of this dissertation would conduct a Games-Howell Post-Hoc Test to determine if there were any differences between groups (e.g., groups of teachers with $0 - 2$ years experience and teachers with more than ten years of experience).

Ultimately, using correlational analysis, a determination was made as to the relationship between the perceptions of teachers and the perceptions of coaches in the demographics of gender, years of experience, and grade-level. Based on the findings, the author of this dissertation discussed the implications of these relationships in the field of educational leadership, what educational leaders could learn from these perceptions, and provided suggestions for further research.

Hypotheses

Research Question 1

When considering years of experience, gender, and grade-level, how do teachers who have experienced instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

H0: Teachers will have a mean score lower than three on a five-point scale in each domain (instructional strategies, classroom management, and student engagement) indicating their level of self-efficacy attributed to their instructional coach.

H1: Teachers will have a mean score of at least three on a five-point scale in each domain (instructional strategies, classroom management, and student engagement) indicating their level of self-efficacy attributed to their instructional coach.

Research Question 2

When considering years of experience, gender, and grade-level, how do instructional coaches perceive their self-efficacy to coach teachers in the areas of instructional strategies, student engagement, and classroom management?

H0: Instructional coaches will have a mean score of less than three on a five-point scale in each domain (instructional strategies, classroom management, and student engagement) indicating their level of self-efficacy coaching teachers.

H1: Instructional coaches will have a mean score of at least three on a five-point scale in each domain (instructional strategies, classroom management, and student engagement) indicating their level of self-efficacy coaching teachers.

Research Question 3

When considering years of experience, gender, and grade-level, what can educational leaders learn from teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

There are no hypotheses for the third research question because principals were not included in the survey research.

4 RESULTS

The following sections outline the data analysis (completed using the Statistical Package for the Social Sciences (SPSS) version 27) utilized to compare coaches' and teachers' perceptions of self-efficacy for instructional strategies, student engagement, and classroom management.

Descriptive statistics were used to examine the ANOVA assumptions:

1. The data are comprised of independent observations.

2. The dependent variable is normally distributed in the population.

3. The variance of the dependent variable must be equal in each subpopulation.

For this study, the term "significant" refers to relationships that are statistically significant at the .05 alpha level.

The table below outlines the descriptive statistics for the means of the three domains found in the Ohio State Teacher Efficacy Scale: (1) instructional strategies, (2) classroom management, and (3) student engagement. For each mean, there were 361 teacher responses and 55 coach responses (Table 5).

Table 5

Descriptive Statistics for Domain Means (Instructional Strategies, Classroom Management, and Student Engagement)

Role	N	Mean Statistic	Std. Deviation	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
Teacher IS Mean	361	3.301	1.348	-.390	.128	-1.135	.256
Teacher CM Mean	361	2.810	1.468	.089	.128	-1.468	.256
Teacher SE Mean	361	3.022	1.385	-.108	.128	-1.335	.256
Coach IS Mean	55	3.932	3.932	-.061	.322	.369	.634
Coach CM Mean	55	4.127	4.128	-.257	.322	-.852	.634
Coach SE Mean	55	3.816	3.816	.004	.322	-.298	.634

Both modified OSTES surveys were administered in 38 schools (24 elementary and 14 secondary). Though the data were recorded independently from the teachers and instructional coaches, the influence of teachers or instructional coaches that may share positions at the same schools or grades could slightly compromise the independence of the data. The author of this dissertation acknowledges these data may be influenced by school-level factors (e.g., participants from the same school characterizing their perceptions similarly due to shared experiences within their building).

Precautions were taken not to administer these surveys in collegial groups to minimize any dependence of the data. There is no indication that the data are dependent and the influence of the school and grade groupings is negligible. Therefore, the first assumption of data comprised of independent observations is assumed. The ANOVA test is robust to slight to moderate deviations for normality as cited in the seminal study of Glass et al. (1972). The review found

that only a slight increase in the type I error rate may be experienced even if the sample shows signs of being high in skew and kurtosis. Therefore, the second assumption of ANOVA is considered met. The third assumption is addressed by employing Levene's test of equality of error variances for each of the three univariate ANOVAs considered. The third assumption will be addressed for each univariate ANOVA conducted.

Each domain included in this study (instructional strategies, classroom management, and student engagement), contained a set of eight questions measuring the efficacy/confidence of teachers and instructional coaches in those domains. In each of those domains, a composite mean score for the domain was calculated based on responses to each question within the domain. Participants scored their responses to the questions based on a five-point Likert scale. For teachers, ratings indicated the extent to which they perceived their instructional coach helped them to feel more confident with a particular task within a domain. For example, within the instructional strategies domain, one of the questions asked a teacher the extent to which his/her instructional coach helped that teacher to feel more confident using a variety of assessment strategies. Conversely, coaches were asked to rate themselves on the extent to which they felt confident coaching teachers in the corresponding task/domain (e.g., to what extent do you feel confident coaching your teachers to use a variety of assessment strategies?). For both modified OSTES surveys, the Likert scores were the same. A score of one on the Likert scale indicated a small extent, a score of two on the Likert scale indicated to some extent, a score of three on the Likert scale indicated to a moderate extent, a score of four on the Likert scale indicated to a great extent, and a score of five on the Likert scale indicated to a very great extent. Therefore, the five-point scale bound the mean score for each domain, with a higher score indicating a greater perception of confidence in a particular task/domain and a lower score indicating a lower

perception of confidence in a particular task/domain. Univariate ANOVAs were run for each of the three domains. These tests examined different demographic combinations within both roles (teachers and coaches). These combinations included experience (0 – 2 years, 3 – 10 years, and more than ten years), grade level (elementary and secondary), and gender (male, female, or other).

Univariate ANOVAs were run to compare every combination of roles and demographics within each domain. Years of experience was the only demographic data set/fixed factor with three variables (0 – 2 years, 3 – 10 years, and more than 10 years). The gender data set contained three variables (Male, Female, and Other); however, data were condensed to two variables (male and female) with the category of Other being underpowered (Other was not selected by any participants included in the surveys). The grade-level data set only had two variables (elementary and secondary). Univariate ANOVAs were chosen over independent t-tests (for all three fixed factors) due to the fixed factor of experience having three variables. This decision was made for consistency when reporting results—F values were used to report results for all comparisons. In the next three sections, I will examine years of experience across each of the three domains: (1) instructional strategies, (2) classroom management, and (3) student engagement.

Experience by Instructional Strategies

Table 6

Descriptive Statistics for Years of Experience in the Instructional Strategies Domain

Role	Experience	Mean	Std. Deviation	N
Teacher	0 – 2 years	3.642	1.218	29
	3 – 10 years	3.437	1.343	143
	More than 10 years	3.162	1.358	189
	Total	3.301	1.348	361
Coach	0 – 2 years	3.642	1.218	15
	3 – 10 years	3.437	1.343	36
	More than 10 years	3.162	1.358	4
	Total	3.301	1.348	55

Note. Dependent variable = Instructional Strategies Mean. Design = Intercept + Experience

For instructional strategies, there was one cell count that was very low for the instructional coaches (Table 6). Group 3 (coaches with more than ten years of experience) had only four instruction coaches. The other cells had an adequate number of participants; however, the number of group participants was unequal in both comparisons.

Ultimately, for teachers, the instructional strategies composite mean steadily decreased as the years of experience increased. Teachers with 0 – 2 years of experience had an instructional strategies mean of 3.64, teachers with 2 – 10 years of experience had an instructional strategies mean of 3.44, and teachers with more than ten years had an instructional strategies mean of 3.16. For coaches, the instructional strategies mean steadily increased. Coaches with 0 – 2 years of

experience had a mean score of 3.71, coaches with 2 – 10 of experience had a mean score of

4.01, and coaches with more than ten years of experience had the highest mean score (4.06).

Table 7

Levene's Test of Equality of Error Variances for the Instructional Strategies Domain

Role	Levene Statistic	df1	df2	Sig.
Teacher	1.187	2	358	.306
Coach	.477	2	52	.623

Note. Dependent variable = Instructional Strategies Mean.

Levene's test was non-significant, which means that the null hypothesis that the variances

are equal is not rejected, thus the third assumption is met for the ANOVA (Table 7). Satisfying

this assumption for homogeneity of variance was necessary before conducting the following

factorial ANOVA tests for each domain.

Table 8

Tests of Between-Subjects Effects for the Instructional Strategies Domain

Role	Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Teacher	Corrected Model	9.648*	2	4.824	2.680	.070	.015	5.361	.530
	Intercept	2242.726	1	2242.726	1246.171	<.001	.777	1246.17	1.000
	Experience	9.648	2	4.824	2.680	.070	.015	5.361	.530
	Error	644.291	358	1.800					
	Total	4608.031	361						
	Corrected Total	653.938	360						
Coach	Corrected Model	.966***	2	.483	1.417	.252	.052	2.835	.290
	Intercept	403.294	1	403.294	1183.751	<.001	.958	1183.75	1.000
	Experience	.966	2	.483	1.417	.252	.052	2.835	.290
	Error	17.716	52	.341					
	Total	868.938	55						
	Corrected Total	18.682	54						

*Note. R Squared = 0.15 (Adjusted R Squared = .009)
**Note. Computed using alpha = .05
***Note. R Squared = .052 (Adjusted R Squared = .015)

Both ANOVAs are not statistically significant when examining the experience groups on their instructional strategies means. Since the instructional strategies means for each group are similar, we can confirm that there is no statistically significant difference for either teachers or instructional coaches (Table 8).

Experience by Classroom Management

Table 9

Descriptive Statistics for Years of Experience in the Classroom Management Domain

Role	Experience	Mean	Std. Deviation	N
Teacher	0 – 2 years	3.315	1.251	29
	3 – 10 years	2.953	1.464	143
	More than 10 years	2.626	1.478	189
	Total	2.811	1.468	361
Coach	0 – 2 years	3.983	.778	15
	3 – 10 years	4.194	.624	36
	More than 10 years	4.063	.389	4
	Total	4.127	.653	55

Note. Dependent variable = Classroom Management Mean.

As was the case with instructional strategies, there was one cell count that was very low for the instructional coaches in the domain of classroom management (Table 9). Group 3 (coaches with more than ten years of experience) had only four instruction coaches. The other cells had an adequate number of participants; however, the number of group participants was unequal in both comparisons.

Overall, for teachers, the classroom management mean steadily decreased as the years of experience increased. Teachers with 0 – 2 years of experience had a classroom management mean of 3.32, teachers with 2 – 10 years of experience had a classroom management mean of 2.98, and teachers with more than ten years had a classroom management mean of 2.61.

Conversely, for coaches, the classroom management mean increased from coaches with 0 – 2 years of experience (3.98) compared to coaches with 2 – 10 years of experience (4.19) but then decreased slightly from coaches with two to ten years of experience (4.19) when compared with coaches with more than ten years of experience (4.06).

Table 10

Levene's Test of Equality of Error Variances for the Classroom Management Domain

Role	Levene Statistic	df1	df2	Sig.
Teacher	3.318	2	358	.037
Coach	1.752	2	52	.184

Note. Dependent variable = Classroom Management Mean.

Levene's test is non-significant for the instructional coaches, but statistically significant (Levene statistic = 3.318(2,358) p = .037) for the teachers, which means that the null hypothesis that the variances are equal is rejected for the teachers only, thus the third assumption is met for the Instructional coaches (Table 10). ANOVA and a Welch test were conducted for experience by classroom management means for teachers. The Welch test was conducted as an adjustment to the ANOVA because the Levene test was significant. This accounts for unequal variance.

The ANOVA for instructional coaches is not statistically significant when examining the experience groups on their classroom management means. Since the classroom management means for each group are similar, we can confirm that there is no statistically significant difference for instructional coaches. Conversely, the Levene test for the teachers is statistically significant, so the ANOVA was conducted. However, the significance testing was reviewed using the Welch test.

Table 11

Tests of Between-Subjects Effects for the Classroom Management Domain

Role	Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Teacher	Corrected Model	16.724*	2	8.362	3.945	.020	.022	7.889	.707
	Intercept		1	1691.104	797.782	<.001	.690	797.782	1.000
	Experience	16.724	2	8.362	3.945	.020	.022	7.889	.707
	Error	758.873	358	2.120					
	Total	3627.297	361						
	Corrected Total	775.596	360						
Coach	Corrected Model	.490***	2	.245	.566	.571	.021	1.131	.139
	Intercept	434.974	1	434.974	1004.142	<.001	.951	1004.142	1.000
	Experience	.490	2	.245	.566	.571	.021	1.131	.139
	Error	22.525	52	.433					
	Total	959.906	55						
	Corrected Total	23.015	54						

*Note. R Squared = 0.22 (Adjusted R Squared = .016)
**Note. Computed using alpha = .05
***Note. R Squared = .021 (Adjusted R Squared = -.016)

Table 12

Welch Test for the Classroom Management Domain

Role	Welch Statistic*	df1	df2	Sig.
Teacher	4.448	2	82.383	.015
Coach	.485	2	9.716	.630

Note. Asymptomatically F distributed.

The Welch test was conducted due to the Levene test's significance (Table 12). For the teachers, the result of the Welch test was statistically significant 4.448 (2,82.383) p = .015. I conducted Games-Howell post hoc tests to determine group differences. Since the variances are assumed unequal, conducting Games Howell is appropriate. When you have unequal variances, Game Howell is advised over Tukey.

Post Hoc Tests

Table 13

Games-Howell Post Hoc Tests for Multiple Comparisons of Teachers in the Classroom Management Domain

Role	Experience A	Experience B	Mean Difference A-B	Std. Error	Sig	Lower Bound*	Upper Bound*
	0 – 2 years	3 – 10 years	.362	.263	.361	-.275	.998
Teacher	0 – 2 years	More than 10 years	.689**	.256	.027	.066	1.312
	3 – 10 years	More than 10 years	.327	.163	.112	-.057	.711

Note. Dependent variable = CM mean
Note. Based on observed means. The error term is Mean Square (Error) = .433.
**Note*. 95% Confidence interval
***Note*. The mean difference is significant at .05 level

As seen above in Table 13, the Games-Howell post-hoc tests indicated that the significant difference was between Group 1 (teachers with zero to two years of experience) and Group 3 (teachers with more than ten years of experience). These two extreme group means show that teachers with lower experience rate these items with a higher mean than teachers in the most experienced group.

Experience by Student Engagement

Table 14

Descriptive Statistics for Years of Experience in the Student Engagement Domain

Role	Experience	Mean	Std. Deviation	N
Teacher	0 – 2 years	3.457	1.358	29
	3 – 10 years	3.190	1.359	143
	More than 10 years	2.828	1.384	189
	Total	3.022	1.385	361
Coach	0 – 2 years	3.567	.707	15
	3 – 10 years	3.906	.628	36
	More than 10 years	3.938	.599	4
	Total	3.816	.655	55

Note. Dependent variable = Student Engagement Mean.

Just like the domains of instructional strategies and classroom management, there was one cell count that was very low for the student engagement domain (Table 14). Group 3 (coaches with more than ten years of experience) had only four instruction coaches. The other cells had an adequate number of participants; however, the number of group participants was unequal in both comparisons.

The student engagement domain followed the same pattern as the instructional strategies domain. For teachers, the mean steadily decreased as the years of experience increased. Teachers with 0 – 2 years of experience had a student engagement mean of 3.45, teachers with 2 – 10 years of experience had a student engagement mean of 3.19, and teachers with more than ten years had a student engagement mean of 2.81. Again, for coaches, the student engagement mean steadily increased with years of experience. Coaches with 0 – 2 of experience had a mean score of 3.57, coaches with 2 – 10 years of experience had a mean score of 3.91, and coaches with more than ten years of experience had the highest mean score (3.94).

Table 15

Levene's Test of Equality of Error Variances for the Student Engagement Domain

Role	Levene Statistic	df1	df2	Sig.
Teacher	.437	2	358	.647
Coach	.081	2	52	.923

Note. Dependent variable = Student Engagement Mean.

Levene's test is non-significant which means that the null hypothesis that the variances are equal is not rejected, thus the third assumption is met for the ANOVA (Table 15).

Table 16

Tests of Between-Subjects Effects for the Student Engagement Domain

Role	Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Teacher	Corrected Model	16.616*	2	8.308	4.415	.013	.024	8.830	.759
	Intercept	1919.493	1	1919.493	1020.012	<.001	.740	1020.012	1.000
	Experience	16.616	2	8.308	4.415	.013	.024	8.830	.759
	Error	673.697	358	1.882					
	Total	3986.734	361						
	Corrected Total	690.313	360						
Coach	Corrected Model	1.285***	2	.642	1.525	.227	.055	3.051	.310
	Intercept	377.993	1	377.993	897.592	<.001	.945	897.592	1.000
	Experience	1.285	2	.642	1.525	.227	.055	3.051	.310
	Error	21.898	52	.421					
	Total	824.047	55						
	Corrected Total	23.183	54						

*Note. R Squared = 0.24 (Adjusted R Squared = .019)
**Note. Computed using alpha = .05
***Note. R Squared = .055 (Adjusted R Squared = .019)

The instructional coaches ANOVA was not statistically significant when examining the experience groups on their student engagement means. However, the teacher ANOVA did indicate a statistically significant difference among the experience groups. A Games-Howell post hoc test was run to indicate where the difference occurred. Since the students engagement means

for the instructional coaches group are similar, we can confirm that there is no statistically

significant difference for instructional coaches.

Post Hoc Tests

Table 17

Games-Howell Post Hoc Tests for Pairwise Comparisons of Teachers in the Student Engagement

Domain

Role	Experience A	Experience B	Mean Difference A-B	Std. Error	Sig*	Lower Bound*	Upper Bound*
	0 – 2 years	3 – 10 years	.267	.279	.339	-.282	.817
Teacher	0 – 2 years	More than 10 years	.629**	.274	.022	.091	1.167
	3 – 10 years	More than 10 years	.362**	.152	.018	.063	.661

Note. Dependent variable = SE mean
Note. Based on estimated marginal means.
**Note*. 95% Confidence Interval for Difference.
***Note.* The mean difference is significant at the .05 level.

From the Games-Howell post-hoc test the difference was between experience groups 1

and 3, and groups 2 and 3 (Table 17). There was not a statistically significant difference between

groups 1 and 2.

In the surveys, respondents also indicated gender (male or female) and grade level

(elementary or secondary). These results comprise categorical data that can modify the univariate

ANOVA results.

A 3x2x2 factorial ANOVA can examine the influence of experience when gender and

grade level are controlled. Therefore each role (teachers and instructional coaches) will have

factorial ANOVAs: experience (3) x gender (2) x level (2) to determine if gender and/or grade

level influence the effect of experience on instructional strategies, classroom management, and student engagement means.

The following section examines the instructional strategy means across the experience levels controlling for gender and grade level.

Gender and Grade Level by Instructional Strategies

Table 18

Descriptive Statistics for Gender and Grade Level in the Instructional Strategies Domain for Teachers and Instructional Coaches with 0 – 2 Years of Experience

Role	Experience A	Experience B	Mean Difference A-B	Std. Error	Sig*	Lower Bound*	Upper Bound*
	0 – 2 years	3 – 10 years	.267	.279	.339	-.282	.817
Teacher	0 – 2 years	More than 10 years	.629**	.274	.022	.091	1.167
	3 – 10 years	More than 10 years	.362**	.152	.018	.063	.661

Note. Dependent variable = SE mean
Note. Based on estimated marginal means.
*Note. 95% Confidence Interval for Difference.
**Note. The mean difference is significant at the .05 level.

Table 19

Descriptive Statistics for Gender and Grade Level in the Instructional Strategies Domain for

Teachers and Instructional Coaches with 3 – 10 Years of Experience

Teachers 3-10 Years of Experience					Instructional Coaches 3-10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	4.466	.525	11		ELE	4.500	.707	2
Male	SEC	3.648	1.266	11	Male	SEC	3.688	.083	2
	Total	4.057	1.034	22		Total	4.094	.624	4
	ELE	3.157	1.323	75		ELE	3.956	.619	20
Female	SEC	3.598	1.405	46	Female	SEC	4.063	.568	12
	Total	3.324	1.366	121		Total	4.000	.594	32
	ELE	3.324	1.323	86		ELE	4.006	.630	22
Total	SEC	3.607	1.368	57	Total	SEC	4.009	.540	14
	Total	3.437	1.343	143		Total	4.007	.589	36

Table 20

Descriptive Statistics for Gender and Grade Level in the Instructional Strategies Domain for

Teachers and Instructional Coaches with More than 10 Years of Experience

Teachers with More than 10 Years of Experience					Instructional Coaches with More than 10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	3.150	1.328	15		ELE	N/A	N/A	0
Male	SEC	3.118	1.125	17	Male	SEC	4.125	N/A	1
	Total	3.133	1.204	32		Total	4.125	N/A	1
	ELE	3.223	1.361	97		ELE	4.042	.402	3
Female	SEC	3.081	1.444	60	Female	SEC	N/A	N/A	0
	Total	3.168	1.390	157		Total	4.042	.402	3
	ELE	3.212	1.351	112		ELE	4.042	.402	3
Total	SEC	3.089	1.373	77	Total	SEC	4.125	N/A	1
	Total	3.162	1.358	189		Total	4.063	.331	4

Table 20 reveals an extremely low cell count for instructional coaches with more than ten years of experience. This low cell count removed the need for conducting statistical analysis of the instructional coaches group with more than ten years of experience.

Table 21

Descriptive Statistics for Gender and Grade Level in the Instructional Strategies Domain for All Teachers and Instructional Coaches Regardless of Years of Experience

	All Teachers					All Instructional Coaches			
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	3.763	1.219	28		ELE	4.500	.707	2
Male	SEC	3.371	1.122	32	Male	SEC	3.732	.405	7
	Total	3.554	1.175	60		Total	3.903	.548	9
	ELE	3.240	1.346	187		ELE	3.918	.571	29
Female	SEC	3.295	1.430	114	Female	SEC	3.971	.667	17
	Total	3.261	1.376	301		Total	3.938	.601	46
	ELE	3.308	1.339	215		ELE	3.956	.585	31
Total	SEC	3.312	1.365	146	Total	SEC	3.901	.603	25
	Total	3.310	1.348	361		Total	3.932	.588	55

Table 22

Levene's Test of Equality of Error Variances for the Instructional Strategies Domain for Gender and Grade Level

Role	Levene Statistic	df1	df2	Sig.
Teacher	2.459	11	349	.006
Coach	.527	7	46	.810

Note. Dependent variable = Instructional Strategies Mean.

As seen above in Table 22, With the gender and level variables considered, the Levene test is significant for the teachers; however, it is not significant for the instructional coaches. Therefore, the F value and the indicated p value in the Tables below are not valid since the Levene's test was significant.

Table 23

Tests of Between-Subjects Effects for Teachers in the Instructional Strategies Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	33.271*	11	3.025	1.701	.072	.051	18.708	.838
Intercept	1381.466	1	1381.466	776.795	<.001	.690	776.795	1.000
Experience	16.774	2	8.837	4.716	.010	.026	9.432	.787
Gender	5.078	1	5.078	2.855	.092	.008	2.855	.392
Level	2.993	1	2.993	1.683	.195	.005	1.683	.253
Experience/ Gender	5.761	2	2.881	1.620	.199	.009	3.239	.342
Experience/ Level	1.450	2	.725	.408	.666	.002	.815	.116
Gender/ Level	1.380	1	1.380	.776	.379	.002	.776	.142
Experience/ Gender/ Level	5.129	2	2.565	1.442	.238	.008	2.884	.308
Error	620.668	349	1.778					
Total	4608.031	361						
Corrected Total	653.938	360						

*Note. R Squared = 0.51 (Adjusted R Squared = .021)
**Note. Computed using alpha = .05

Table 24

Tests of Between-Subjects Effects for Instructional Coaches in the Instructional Strategies

Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	1.771*	8	.221	.602	.771	.095	4.817	.244
Intercept	289.463	1	289.463	787.378	<.001	.945	787.378	1.000
Experience	.459	2	.229	.624	.540	.026	1.248	.148
Gender	.060	1	.060	.164	.688	.004	.164	.068
Level	.390	1	.390	1.060	.309	.023	1.060	.172
Experience/ Gender	.077	1	.077	.208	.650	.005	.208	.073
Experience/ Level	.015	1	.015	.040	.843	.001	.040	.054
Gender/ Level	.745	1	.745	2.026	.161	.042	2.026	.286
Experience/ Gender/ Level	.000	0	N/A	N/A	N/A	.000	.000	N/A
Error	16.911	46	.368					
Total	868.938	55						
Corrected Total	18.682	54						

Reverting to the Welch ANOVA results for the instructional strategies mean in the Table below (Table 25), the value is non-significant.

Table 25

Welch Test for the Instructional Strategies Domain for Gender and Grade Level

Role	Welch Statistic*	df1	df2	Sig.
Teacher	2.813	2	80.847	.066
Coach	1.394	2	10.243	.292

Note. Asymptomatically F distributed.

Therefore, instructional strategies means examined by experience groups are not significantly influenced by the variables of gender or level.

The following section examines the classroom management means across the experience levels controlling for gender and level.

Gender and Grade Level by Classroom Management

Table 26

Descriptive Statistics for Gender and Grade Level in the Classroom Management Domain for

Teachers and Instructional Coaches with 0 – 2 Years of Experience

	Teachers 0-2 Years of Experience					Instructional Coaches 0-2 Years of Experience				
Gender	Level	Mean	Std. Deviation	N		Gender	Level	Mean	Std. Deviation	N
	ELE	4.500	.707	2			ELE	N/A	N/A	0
Male	SEC	3.281	.438	4		Male	SEC	3.969	.832	4
	Total	3.689	.782	6			Total	3.969	.832	4
	ELE	3.459	1.396	15			ELE	3.750	.586	6
Female	SEC	2.766	1.190	8		Female	SEC	4.275	.990	5
	Total	3.217	1.344	23			Total	3.989	.799	11
	ELE	3.581	1.363	17			ELE	3.750	.586	6
Total	SEC	2.934	1.009	12		Total	SEC	4.139	.880	9
	Total	3.315	1.251	29			Total	3.983	.778	15

Table 27

Descriptive Statistics for Gender and Grade Level in the Classroom Management Domain for

Teachers and Instructional Coaches with 3 – 10 Years of Experience

Teachers 3-10 Years of Experience					Instructional Coaches 3-10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	4.205	.938	11		ELE	4.375	.530	2
Male	SEC	3.545	1.408	11	Male	SEC	4.750	.354	2
	Total	3.875	1.215	22		Total	4.563	.427	4
	ELE	2.617	1.389	75		ELE	4.031	.625	20
Female	SEC	3.060	1.511	46	Female	SEC	4.344	.624	12
	Total	2.785	1.446	121		Total	4.148	.634	32
	ELE	2.820	1.438	86		ELE	4.063	.614	22
Total	SEC	3.154	1.492	57	Total	SEC	4.402	.601	14
	Total	2.953	1.464	143		Total	4.194	.624	36

Table 28

Descriptive Statistics for Gender and Grade Level in the Classroom Management Domain for

Teachers and Instructional Coaches with More than 10 Years of Experience

Teachers with More than 10 Years of Experience					Instructional Coaches with More than 10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
Male	ELE	2.975	1.421	15	Male	ELE	N/A	N/A	0
	SEC	2.338	1.330	17		SEC	3.750	N/A	1
	Total	2.637	1.389	32		Total	3.750	N/A	1
Female	ELE	2.762	1.520	97	Female	ELE	4.167	.402	3
	SEC	2.400	1.453	60		SEC	N/A	N/A	0
	Total	2.623	1.500	157		Total	4.167	.402	3
Total	ELE	2.790	1.502	112	Total	ELE	4.167	.402	3
	SEC	2.386	1.418	77		SEC	3.750	N/A	1
	Total	2.626	1.478	189		Total	4.063	.389	4

Table 29

Descriptive Statistics for Gender and Grade Level in the Classroom Management Domain for All

Teachers and Instructional Coaches Regardless of Years of Experience

All Teachers					All Instructional Coaches				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	3.567	1.348	28		ELE	4.375	.530	2
Male	SEC	2.871	1.382	32	Male	SEC	4.161	.731	7
	Total	3.196	1.399	60		Total	4.208	.667	9
	ELE	2.759	1.468	187		ELE	3.987	.596	29
Female	SEC	2.692	1.483	114	Female	SEC	4.324	.717	17
	Total	2.734	1,471	301		Total	4.111	.656	46
	ELE	2.865	1.475	215		ELE	4.012	.592	31
Total	SEC	2.731	1.459	146	Total	SEC	4.276	.709	25
	Total	2.811	1.468	361		Total	4.127	.653	55

Table 30

Levene's Test of Equality of Error Variances for the Classroom Management Domain for

Gender and Grade Level

Role	Levene Statistic	df1	df2	Sig.
Teacher	2.272	11	349	.011
Coach	.712	7	46	.662

Note. Dependent variable = Classroom Management Mean.

With the gender and level variables considered, the Levene test is significant for the teachers; however, it is not significant for the instructional coaches. Therefore, the F value below and the indicated p values for teachers are not valid since the Levene's test was significant.

Table 31

Tests of Between-Subjects Effects for Teachers in the Classroom Management Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	60.442*	11	5.495	2.681	.003	.078	29.496	.974
Intercept	1096.016	1	1096.016	534.863	<.001	.605	534.863	1.000
Experience	28.771	2	14.385	7.020	.001	.039	14.040	.927
Gender	10.913	1	10.913	5.326	.022	.015	5.326	.634
Level	7.453	1	7.453	3.637	.057	.010	3.637	.477
Experience/ Gender	10.364	2	5.182	2.529	.081	.014	5.058	.505
Experience/ Level	3.139	2	1.569	.766	.466	.004	1.532	.180
Gender/ Level	2.763	1	2.763	1.349	.246	.004	1.349	.212
Experience/ Gender/ Level	1.860	2	.930	.454	.636	.003	.908	.124
Error	715.15	349	2.049					
Total	3627.297	361						
Corrected Total	775.596	360						

Note. R Squared = .078 (Adjusted R Squared = .049)
***Note.* Computed using alpha = .05
-*Subjects Effects for Teachers in the Classroom Management Domain*

In the Table above (Table 31), the observed power is strong for the corrected model. The power is sufficient for teachers. However, the N size for instructional coaches was too small to consider multiple interactions such as gender and grade level.

Table 32

Tests of Between-Subjects Effects for Instructional Coaches in the Classroom Management

Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	2.856*	8	.357	.815	.594	.124	6.516	.330
Intercept	304.054	1	304.054	693.787	<.001	.938	693.787	1.000
Experience	1.204	2	.602	1.373	.263	.056	2.746	.281
Gender	.051	1	.051	.115	.736	.003	.115	.063
Level	.797	1	.797	1.818	.184	.038	1.818	.262
Experience/ Gender	.491	1	.491	1.121	.295	.024	1.121	.179
Experience/ Level	.090	1	.090	.206	.652	.004	.206	.073
Gender/ Level	.003	1	.003	.008	.930	.000	.008	.051
Experience/ Gender/ Level	.000	0	N/A	N/A	N/A	.000	.000	N/A
Error	20.160	46	.438					
Total	959.906	55						
Corrected Total	23.015	54						

*Note. R Squared = .095 (Adjusted R Squared = -.063)
**Note. Computed using alpha = .05

The observed power for instructional coaches is overtly underpowered. Therefore, any

significant findings must be questioned. Again, there are too many zero counts in multiple

interactions. However, reverting to the Welch ANOVA results for the classroom management

mean in the table below (Table 33), the value is statistically significant for teachers in experience

when gender is controlled [F = 4.448(2,82.383) and p = .015].

Table 33

Welch Test for the Classroom Management Domain for Gender and Grade Level

Role	Welch Statistic*	df1	df2	Sig.
Teacher	4.448	2	82.383	.015
Coach	.485	2	9.716	.630

Note. Asymptomatically F distributed.

Post Hoc Tests

Due to the statistical significance, the author of this dissertation conducted Games-Howell post hoc tests to determine group differences (Table 34).

Table 34

Games-Howell Post Hoc Tests for Multiple Comparisons of Teachers in the Classroom Management Domain

Role	Experience A	Experience B	Mean Difference A-B	Std. Error	Sig	Lower Bound*	Upper Bound*
	0 – 2 years	3 – 10 years	.362	.263	.361	-.275	.998
Teacher	0 – 2 years	More than 10 years	.689**	.256	.027	.066	1.312
	3 – 10 years	More than 10 years	.327	.163	.112	-.057	.711

Note. Dependent variable = CM mean
Note. Based on observed means. The error term is Mean Square (Error) = .433.
Note. 95% Confidence interval
**Note.* The mean difference is significant at .05 level

The differences are still between the groups of teachers with 0 – 2 of experience and those teachers with more than ten years of experience.

After examining gender when experience is controlled, there is a statistically significant difference between male teachers (60) and female teachers (301) on the CM mean (Table 35).

Table 35

Welch Test for the Classroom Management Domain for Gender When Experience is Controlled

Role	Welch Statistic*	df1	df2	Sig.
Teacher	5.362	1	87.051	.023
Coach	.160	1	11.243	.697

*Note. Asymptomatically F distributed.

      Males have a higher mean (3.19583) than females (2.73380). However, this statistical significance may not be practical significance when considering the five-point scale where both responses are near three on the scale, and the difference in the subgroups (male and female) are large—there are nearly five times as many females as males. These data are displayed below in Table 36.

Table 36

Descriptive Statistics for Gender in the Classroom Management Domain

Role	Gender	N	Mean	Std. Deviation	Std. Error	Lower Bound*	Upper Bound*	Minimum	Maximum
	Male	60	3.196	1.399	.181	2.834	3.557	1.000	5.000
Teacher	Female	301	2.734	1.471	.085	2.567	2.901	1.000	5.000
	Total	361	2.817	1.468	.077	2.659	2.962	1.000	5.000
	Male	9	4.208	.667	.222	3.695	4.721	3.000	5.000
Coach	Female	46	4.111	.656	.097	3.917	4.306	2.625	5.000
	Total	55	4.127	.653	.088	3.951	4.304	2.625	5.000

Note. 95% Confidence Interval

The following section examines the student engagement means across the experience levels controlling for gender and level.

Gender and Grade Level by Student Engagement

Table 37

Descriptive Statistics for Gender and Grade Level in the Student Engagement Domain for

Teachers and Instructional Coaches with 0 – 2 Years of Experience

Teachers 0-2 Years of Experience					Instructional Coaches 0-2 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	4.500	.707	2		ELE	N/A	N/A	0
Male	SEC	3.313	.718	4	Male	SEC	3.500	.354	4
	Total	3.708	.886	6		Total	3.500	.354	4
	ELE	3.575	1.482	15		ELE	3.583	.660	6
Female	SEC	3.047	1.464	8	Female	SEC	3.600	1.051	5
	Total	3.391	1.465	23		Total	3.591	.812	11
	ELE	3.684	1.431	17		ELE	3.583	.660	6
Total	SEC	3.135	1.233	12	Total	SEC	3.556	.776	9
	Total	3.457	1.358	29		Total	3.567	.707	15

Table 38

Descriptive Statistics for Gender and Grade Level in the Student Engagement Domain for

Teachers and Instructional Coaches with 3 – 10 Years of Experience

Teachers 3-10 Years of Experience					Instructional Coaches 3-10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	4.216	.942	11		ELE	4.438	.619	2
Male	SEC	3.637	1.308	11	Male	SEC	3.750	.354	2
	Total	3.926	1.151	22		Total	4.094	.571	4
	ELE	2.905	1.334	75		ELE	3.857	.570	20
Female	SEC	3.302	1.367	46	Female	SEC	3.927	.768	12
	Total	3.056	1.355	121		Total	3.883	.640	32
	ELE	3.072	1.359	86		ELE	3.909	.584	22
Total	SEC	3.366	1.351	57	Total	SEC	3.902	.716	14
	Total	3.190	1.359	143		Total	3.906	.628	36

Table 39

Descriptive Statistics for Gender and Grade Level in the Student Engagement Domain for

Teachers and Instructional Coaches with More than 10 Years of Experience

Teachers with More than 10 Years of Experience					Instructional Coaches with More than 10 Years of Experience				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
Male	ELE	3.150	1.300	15	Male	ELE	N/A	N/A	0
	SEC	2.632	1.292	17		SEC	3.125	N/A	1
	Total	2.875	1.301	32		Total	3.125	N/A	1
Female	ELE	2.900	1.441	97	Female	ELE	4.208	.315	3
	SEC	2.688	1.344	60		SEC	N/A	N/A	0
	Total	2.818	1.404	157		Total	4.208	.315	3
Total	ELE	2.933	1.419	112	Total	ELE	4.208	.315	3
	SEC	2.675	1.324	77		SEC	3.125	N/A	1
	Total	2.828	1.384	189		Total	3.938	N/A	4

Table 40

Descriptive Statistics for Gender and Grade Level in the Student Engagement Domain for All

Teachers and Instructional Coaches Regardless of Years of Experience

All Teachers					All Instructional Coaches				
Gender	Level	Mean	Std. Deviation	N	Gender	Level	Mean	Std. Deviation	N
	ELE	3.665	1.243	28		ELE	4.438	.619	2
Male	SEC	3.063	1.300	32	Male	SEC	3.518	.357	7
	Total	3.344	1.299	60		Total	3.722	.555	9
	ELE	2.956	1.406	187		ELE	3.836	.577	29
Female	SEC	2.961	1.381	114	Female	SEC	3.831	.840	17
	Total	2.958	1.394	301		Total	3.834	.677	46
	ELE	3.048	1.404	215		ELE	3.875	.589	31
Total	SEC	2.983	1.360	146	Total	SEC	3.740	.738	24
	Total	3.022	1.385	361		Total	3.816	.655	55

Table 41

Levene's Test of Equality of Error Variances for the Student Engagement Domain for Gender

and Grade Level

Role	Levene Statistic	df1	df2	Sig.
Teacher	1.323	11	349	.210
Coach	1.289	7	46	.277

Note. Dependent variable = Student Engagement Mean.

With the gender and level variables considered, the Levene test is not significant for the teachers or instructional coaches.

Table 42

Tests of Between-Subjects Effects for Teachers in the Student Engagement Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	44.750*	11	4.068	2.199	.014	.065	24.192	.933
Intercept	1212.052	1	1212.052	655.252	<.001	.652	655.252	1.000
Experience	23.290	2	11.645	6.296	.002	.035	12.591	.896
Gender	7.010	1	7.010	3.790	.052	.011	3.790	.493
Level	5.269	1	5.269	2.848	.092	.008	2.848	.391
Experience/ Gender	5.847	2	2.924	1.580	.207	.009	3.161	.334
Experience/ Level	2.233	2	1.116	.604	.547	.003	1.207	.150
Gender/ Level	2.874	1	2.874	1.554	.213	.004	1.554	.237
Experience/ Gender/ Level	1.223	2	.611	.331	.719	.002	.661	.103
Error	645.563	349	1.850					
Total	3986.734	361						
Corrected Total	690.313	360						

*Note. R Squared = .065 (Adjusted R Squared = .035)
**Note. Computed using alpha = .05

Table 43

Tests of Between-Subjects Effects for Instructional Coaches in the Student Engagement Domain

Source	Type III Sum of Squares	df	Mean Square	F	Sig	Partial Eta Squared	Noncent Parameter	Observed Power**
Corrected Model	2.858*	8	.357	.809	.598	.123	6.470	.328
Intercept	260.433	1	260.433	589.432	<.001	.928	589.432	1.000
Experience	.455	2	.227	.515	.601	.022	1.030	.130
Gender	.135	1	.135	.305	.584	.007	.305	.084
Level	.288	1	.288	.653	.423	.014	.653	.124
Experience/ Gender	.006	1	.006	.013	.910	.000	.013	.051
Experience/ Level	.006	1	.006	.013	.909	.000	.013	.051
Gender/ Level	.507	1	.507	1.148	.289	.024	1.148	.183
Experience/ Gender/ Level	.000	0	N/A	N/A	N/A	.000	.000	N/A
Error	20.324	46	.442					
Total	824.047	55						
Corrected Total	23.183	54						

*Note. R Squared = .095 (Adjusted R Squared = -.063)
**Note. R Squared = Computed using alpha = .05

Table 44

Games-Howell Post Hoc Tests for Multiple Comparisons of Teachers in the Student Engagement

Domain

Role	Experience A	Experience B	Mean Difference A-B	Std. Error	Sig*	Lower Bound*	Upper Bound*
	0 – 2 years	3 – 10 years	.094	.366	1.000	-.787	.974
Teacher	0 – 2 years	More than 10 years	.766	.356	1.000	-.089	1.622
	3 – 10 years	More than 10 years	.672**	.207	.004	.175	1.169

Note. Dependent variable = CM mean
Note. Based on estimated marginal means.
*Note. 95% Confidence Interval. Adjustment for multiple comparisons: Bonferroni
***Note.* The mean difference is significant at .05 level

As was the case with the instructional strategies means, student engagement means

examined by experience groups are not significantly influenced by the variables of gender or

level. The next chapter will summarize these results and discuss the implications of those results

for educational leaders.

5 DISCUSSION

The purpose of this quantitative study was to explore perceptions of self-efficacy for teachers and instructional coaches in the domains of instructional strategies, classroom management, and student engagement. The author of this dissertation hopes that the implications of those perceptions might inform instructional decisions made by educational leaders.

In this chapter, the author of this dissertation will discuss any relationships that were discovered in the aforementioned domains between teachers and coaches—specifically, how factors such as gender, years of experience, and grade-level may have influenced the findings. From those findings, the author of this dissertation will discuss the impact those findings may have in a leader's decision-making. Highlighted in the discussion is the importance of leadership considerations dedicated toward teachers' as well as instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, classroom management, and student engagement. These considerations were highlighted in the discussion due to the noticeable gap discovered during the literature review for published studies analyzing teachers' perceptions of self-efficacy along with the perceptions of those who actually coach them. After discussing these considerations, the author of this dissertation concludes his paper by outlining suggestions for future research.

Summary of Results

Survey Means

This study utilized two modified versions of the original Ohio State Teacher Efficacy Scale (OSTES). One survey was administered to teachers, and one survey was administered to instructional coaches. The original OSTES explores the efficacy of educators in three factors/domains: (1) instructional strategies, (2) student engagement, and (3) classroom

management. Each domain included a set of eight questions designed around teacher actions synonymous with those domains (see Appendix A). For example, in the domain of instructional strategies, one question asks educators, "To what extent can you gauge student comprehension of what you have taught?" (Tschannen-Moran & Hoy, 2001). For the teacher, this question was modified to read, "To what extent has your instructional coach helped you feel more confident gauging student comprehension of what you have taught?" (see Appendix B). For the coaches, this question was modified to read "To what extent do you feel confident coaching your teachers to gauge student comprehension of what you have taught?" (see Appendix C).

The purpose of this dissertation was not to explore teachers' and coaches' mean scores for each question but, rather, to explore teachers' and coaches' composite mean scores for each domain to determine any significant differences when taking into account gender, years of experience, and grade-level. Additionally, it was not the intention of this study to compare teachers' responses with the responses of instructional coaches. There are simply too many variables for which the author of this dissertation could not account—making a comparison between groups moot. However, the author of this dissertation does speculate on these comparisons in the implications section, which comes later in this chapter.

Significant Findings

Significant findings were based on the author of this dissertation's first two research questions:

1. When considering years of experience, gender, and grade-level, how do teachers who have experienced instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement, and classroom management?

2. When considering years of experience, gender, and grade-level, how do instructional coaches perceive their self-efficacy to coach teachers in the areas of instructional strategies, student engagement, and classroom management?

In the end, after comparing all survey responses from teachers and instructional coaches, in all three domains, an examination of individuals' years of experience revealed the only significant findings in this study. These significant findings were for teachers in the classroom management domain. After conducting Games-Howell post-hoc tests, it was confirmed that the significant difference was between Group 1 (teachers with 0 – 2 years of experience) and Group 3 (teachers with more than ten years of experience). The extreme means revealed that teachers with the least teaching experience rated items in the classroom management domain with a higher mean than teachers with the most teaching experience.

After examining whether years of experience were influenced by the variables of gender or grade level, only the domain of classroom management revealed a statistical significance between males and females, with males having a higher mean (3.19583) than females (2.73380). However, when taking into account the large discrepancy in N size between males and females (there were almost fives times as many females) and the five-point scale where the means from both groups were fairly close to three on the Likert scale, a logical determination was made that this was not practical significance.

Implications for Educational Leaders

Classroom Management Efficacy

Research Question One for this dissertation posed the question: When considering years of experience, gender, and grade-level, how do teachers who have experienced instructional coaching perceive their self-efficacy in the areas of instructional strategies, student engagement,

and classroom management? Research Question Two for this dissertation posed the question: When considering years of experience, gender, and grade-level, how do instructional coaches perceive their self-efficacy to coach teachers in the areas of instructional strategies, student engagement, and classroom management?

Removing all demographic factors, classroom management had the lowest mean score among teachers. This indicates that teachers felt classroom management was the domain in which their coach helped them the least when building self-efficacy in the area. The definition of classroom management is "a collection of non-instructional classroom procedures implemented by teachers in classroom settings with all students for the purposes of teaching pro-social behavior and preventing and reducing inappropriate behavior" (Regina, Joseph, & Daniel, 2011, pp. 7-8). Based on classroom management research uncovered during the literature review, this finding is interesting for a variety of reasons. A review of the literature revealed many teachers view classroom management as perhaps the most challenging component of the teaching profession, due to their lack of training on the topic (Herman, Reinke, Dong, & Bradshaw, 2022). Although the purpose of this dissertation was not to compare the perceptions of teachers and coaches, it is interesting to see that while the teacher classroom management mean was the lowest among the other two domains (2.810), it was actually the highest-rated domain by instructional coaches (4.127). The coaches' rating reflects an extremely strong feeling of self-efficacy/confidence in their ability to coach their teachers in the domain of classroom management.

Breaking down the teacher composite mean for classroom management (demographically) provided a deeper insight into the low score. As stated in the previous section, classroom management was the only domain that revealed significant results in the area of years

of experience. The findings revealed teachers in their first two years of employment perceived their instructional coach to have a much greater effect on their self-efficacy in the domain of classroom management (mean score of 3.315) than those teachers who had been teaching for ten or more years (mean score of 2.626).

Therefore, there are a few wonderings to address when answering Research Question Three: When considering years of experience, gender, and grade-level, what can educational leaders learn from teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, student engagement, and classroom management? It is important to again acknowledge the difference of observed power between the instructional coaches and the teachers. The N size for teachers (361) was appropriate when comparing multiple interactions (gender, grade level, and experience). However a 3x2x2 breakdown is strapped with power when the N size is below 200, which is the case with the instructional coaches (only 55 participants). Taking that caveat into account, the wonderings are addressed in the following sections.

Classroom Management and Community Building

Defined by Knight (2007), community building is one of four core tenets of instructional coaching. Community building emphasizes the need for coaches to contribute to the creation of a learning environment that is positive and productive. In chapters two and three, the author of this dissertation equated community building to classroom management. Questions defined in Factor Two of the modified OSTES surveys were designed to address the efficacy for classroom management.

The school district in this study modeled its coaching program around the Big Four framework. Therefore, the educational leaders employed in the district chosen for this study share the same implications as educational leaders in other districts that may have designed their

coaching programs around the Big Four. When approaching the implications from a distributed leadership lens, the literature revealed principals' and assistant principals' roles lean more toward a generalist approach (J. Spillane et al., 2001; J. P. Spillane, 2006). From a distributed leadership perspective, the instructional coach is likely the one to serve as a specialist when addressing professional development centered on classroom management/community building. It may behoove educational leaders associated with this study to examine the discrepancies of the perceptions of self-efficacy between teachers and instructional coaches in the area of classroom management. Questions for *any* educational leaders utilizing a version of the Big Four for their coaching program might include: (1) Do these discrepancies reveal a need for further professional development for instructional coaches in the area of classroom management? (2) Are the tenets of community building aligned with the district's expectations for classroom management?

Efficacy and Teacher Preparation

Analysis of teachers' perceptions of self-efficacy (once they had completed at least one instructional coaching cycle) revealed years of experience to be a significant factor. These findings are consistent with much of the research uncovered during the literature review. One might expect that teachers in their first couple years of service would view their self-efficacy (in a variety of educational areas) as lacking. Subsequently, one could logically posit these novice teachers would require a greater amount of professional development and mentoring in those areas. However, when considering implications for educational leaders, one might ponder separating the act of providing professional development from the concept of mentoring. Specifically, what do these "collective interactions among leaders followers, and their situation" (J. P. Spillane, 2006, p. 4) look like if they are compartmentalized?

A review of the literature revealed that the act of mentoring has a substantial effect on a novice teacher's decision to remain in the field of education (Cross et al., 2020). Furthermore, the literature supports the idea that professional development, when built on collaborative reflection and joint effort, leads to measurable gain in achievement for teachers (Hassel, 1999; Heck & Hallinger, 2014). These two statements punctuate the impact that mentorship and professional development can have on a teacher's success. Additionally, it may behoove educational leaders to review how mentorship and professional development are delivered to staff members using a distributed leadership framework.

Educator preparation programs provide forms of mentorship and professional development for aspiring teachers; however, the reality of stepping out of a theoretical setting (college) and into practical setting (the schoolhouse) can be daunting due to coursework and field experience existing in separate silos (Landon Hays et al., 2020). This study focused specifically on the perceptions of self-efficacy in the areas of instructional strategies, classroom management, and student engagement. There are certainly opportunities for further research in other areas as well. This discussion is continued in the following sections.

Conclusions

In Chapter One, the author of this dissertation started this paper by pointing out the increasing demands being placed on educational leaders during the last few decades (Wise & Cavazos, 2017; Zepeda et al., 2014). One theoretical framework employed by leaders to alleviate these demands is Distributed Leadership (J. P. Spillane, 2006). Instructional coaches are one specific group of educators whose work aligns with the tenets of distributed leadership. Coaches are instructed to follow the vision of their leaders; furthermore, when that vision filters down to

other staff members, via the coach, teacher development and student achievement become a central focus (Goksoy, 2016; J. P. Spillane, 2006).

A considerable amount of an instructional coach's workload consists of increasing teacher efficacy (Hong, 2018; Walsh et al., 2020). The author of this dissertation posed the question: *how can self-efficacy data be utilized to sharpen an educational leader's skills*? Chapter Two explored the concept of self-efficacy in more detail, and a review of the literature revealed a gap in published studies analyzing teachers' perceptions of self-efficacy along side the perceptions of the coaches who actually coach those teachers. Educational leaders can read about these perceptions in isolation, but this study intended to provide a substantial data set (from a large school district) from which leaders could examine perceptions of individuals who worked in conjunction with each other. In the literature review, the author of this dissertation crosswalked the framework of self-efficacy (Bandura, 1977, 1986) with the frameworks of distributed leadership (J. P. Spillane, 2006), and Jim Knight's Big Four (Knight, 2007) with the three factors of the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001). The crosswalk included the roles of principals, assistant principals, and instructional coaches. Teachers were excluded from the crosswalk because their role requires mentoring and coaching from building leaders. Instructional coaches are considered building leaders as their roles and responsibilities differ from those of a teacher. Coaches are instructional specialists that provide individual expertise, which is a central tenet of the distributed leadership framework (Goksoy, 2016).

There are four sources that contribute to self-efficacy: (1) mastery experiences, (2) vicarious experiences, (3) verbal persuasion, and (4) physiological arousal (Bandura, 1977, 1986, 1997). For teachers in this study, the measurement of efficacy was not an indicator of teacher

self-efficacy. It was a measurement of teachers' perceived efficacy of coaches. For coaches in

this study, the measurement of efficacy was not an indicator of a coach's self-efficacy. It was a

measurement of coaches' perceived efficacy of their ability to coach teachers. Of Bandura's four

sources, the author of this dissertation felt mastery experiences, vicarious experiences, and verbal

persuasion were the predominant sources of self-efficacy during coaching cycles designed

around the Big Four. Physiological arousal was excluded because the author believed the origins

of those arousals (e.g., heaving breathing, sweating, etc.) would be more difficult to identify. The

author of this dissertation acknowledged the potential impacts of physical arousal on the

development of self-efficacy in Chapter 3; however, he felt the exploration of physical arousal

might be better suited for a different type of study design. Furthermore, the previous section

highlighted the importance of mentoring and coaching to curtail a novice teacher's desire to quit

the field of education. Burnout is a real thing, which is suffered by teachers and building leaders

alike. Moreover, burnout could be an indicator of physical arousal. However, "it is questionable

to what degree burnout can be considered an indicator of physiological and affective states that is

consistent with Bandura's description" (Franziska, 2016, p. 4).

     After a review of the literature in Chapter Two, it is safe to say that some tasks assigned

by principals to instructional coaches are unrelated to duties synonymous with instructional

coaching (Kane & Rosenquist, 2019). In recent years, principals have acknowledged these

shortcomings, and they continue working to remedy the situation by reexamining how to best

utilize an instructional coach's time (Neumerski, 2012; Wolpert-Gawron, 2016).

     However, even with building leaders attempting to remove these barriers, the struggle to

effectively and appropriately utilize instructional coaches may be illuminating a more systemic

issue, which extends into the realm of policymaking. There are spaces between what we *say*,

what we *do*, and what we *do for coaches* that can impact the effectiveness of a school district. In Chapter Two, the author of this dissertation established the importance of instructional coaches within a distributed leadership framework. In this framework, principals and assistant principals are generalists. Instructional coaches function as instructional specialists—addressing areas such as instructional strategies, student engagement, and classroom management. It is this specialized role that merits *leadership* status within a school building. However, in many school districts (including the district in this study), instructional coaches are not (formally) bestowed the title of *leader*. This title is reserved for individuals in roles such as directors, coordinators, principals, assistant principals, counselors, etc. This creates a problem for instructional coaches (who may not hold leadership status) seeking leadership certification. This is a policy issue. If the educational community at large can agree that instructional coaches perform leadership functions, why are districts not bestowing that title upon them? This can impact a variety circumstances beyond just certification—including compensation, job security, and opportunities for career advancement. Perhaps we should be pushing our educational leaders to address these concerns structurally and socially within their districts and school buildings, so they can be voices for change within the policy realm.

Suggestions for Further Research

This dissertation accentuated the need for principals and district leaders to utilize instructional coaches within a distributed leadership framework. However, further research focusing on the differences in perceptions of coaches and teachers could provide a great benefit.

In a distributed leadership framework, principals seek to alleviate the stresses of building demands by delegating certain tasks to instructional coaches. Unfortunately, there is still limited research centered on how coaches perceive their ability to coach teachers in specific instructional

areas. These studies might assist educational leaders to make informed decisions for their buildings.

A review of the literature revealed the need for a coach to have a coach. Coaches are not always fully prepared to enter the role of coaching due to a lack of training (Roegman & Riehl, 2015). Further investigation into the preparation/training of instructional coaches could benefit instructional leaders in contemplating how equipped their coaches are to enter a school's distributed leadership framework.

Instructional rounds are becoming more and more common in teacher preparation programs (Roegman & Riehl, 2015). It would be interesting to research how/if instructional rounds are being utilized in educator preparation programs. Instructional rounds are a method of using "low-inference observations to hypothesize about…larger pedagogical or philosophical questions" (Roegman & Riehl, 2015, p. 97). The observational nature of this practice lends itself to the duties an educational leader would bestow upon an instructional coach.

This study shed some light on differences of opinion between coaches and teachers regarding self-efficacy. Future studies could examine why those differences are prevalent. In this study, perceptions of classroom management efficacy for teachers were the significant difference; however, any of the OSTES domains could warrant investigation. Further investigation into how teachers interpret the questions in each domain of the OSTES may reveal some interesting findings. When analyzing the questions associated with Factor Two of the OSTES (classroom management), exploration might include determining if the questions are too focused on behavior/discipline (e.g., disruptive behavior and defiant students). Perhaps future qualitative or mixed methods studies incorporating the OSTES might explore if such questions exclude social-emotional factors. Along those same lines, further examination of the Big Four

Framework's impact on instructional coaching programs could benefit educational leaders. Jim Knight's research has clearly influenced the practice of instructional coaching during the past few decades. The Big Four is being implemented in school districts across the nation. Future studies could measure the impact the framework is having in those districts, as well as determine if there is any dissonance between the Big Four and other frameworks of instructional coaching in the extant literature.

As previously stated, the purpose of this dissertation was not to explore teachers' and coaches' mean scores for each question in each OSTES domain. The focus was to explore teachers' and coaches' composite mean scores for each domain to determine any significant differences when taking into account gender, years of experience, and grade-level. Therefore, examining why specific questions within certain domains contributed to discrepancies in perception could be valuable for educational leaders.

Finally, future studies could take a deeper dive into comparisons between coaches and teachers using a qualitative or mixed-method approach. This study was able to collect quantitative data from a large sample size (teachers and coaches). However, an extension of this study involving open-ended questions might add to the context of the quantitative data. The addition of a qualitative approach could reveal the reasons behind the skews in perception between teachers and coaches.

The author of this dissertation set out to explore teachers' and instructional coaches' perceptions of self-efficacy in the areas of instructional strategies, classroom management, and student engagement, while considering variables such as gender, grade-level, and years of experience. With this dissertation falling under the umbrella of the Department of Educational

Policy, it was important for this study to discuss the implications of those perceptions for educational leaders.

When educational leaders clearly define the role of academic coaches, the fidelity with which coaches can perform their assigned duties increases (Kane & Rosenquist, 2019; Stoetzel & Shedrow, 2020). Collective teacher efficacy positively impacts student achievement (Goddard et al., 2004) and, quite often, leaders trust instructional coaches to help improve the self-efficacy/confidence of their teachers. This study revealed that sometimes teachers' perceptions of their coaches' abilities to improve their self-efficacy can vary depending on the domain and their years of experience—in this study, that just so happened to be in the area of classroom management. The data revealed coaches' perceptions of their ability to coach in the area of classroom management were significantly inflated when compared to the teachers.

Ultimately, the importance for educational leaders to identify those areas where perceptions are vastly different is paramount when working in a distributed leadership framework. If the goal for leaders is to continue striving for an increase in collective teacher efficacy within their district/building, truly understanding the complexities of these differences may be a great first step.

References

Author. (2017). *The effect of Jim Knight's Impact Cycle on academic coaching duties*. College of Education and Human Development. Georgia State University.

Baloglu, N. (2011). Distributed leadership: A leadership approach that should be taken Into account in the schools. *Journal of Kirsehir Education Faculty, 12*(3), 127-148.

Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, N.J.: Prentice Hall.

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

Bandura, A. (1997). *Self-efficacy: The exercise of control*: W.H. Freeman and Company.

Bandura, A. (1999). *A social cognitive theory of personality. In L. Pervin & O. John (Ed.), Handbook of personality (2nd ed., pp. 154-196).* New York: Guilford Publications.

Bean, R. M., Draper, J. A., Hall, V., Vandermolen, J., & Zigmond, N. (2010). Coaches and coaching in Reading First schools: A reality check. *The Elementary School Journal, 111*(1), 87-114. doi:10.1086/653471

Blanton, B. S., Broemmel, A. D., & Rigell, A. (2020). Speaking volumes: Professional development through book studies. *American Educational Research Journal, 57*(3), 1014-1044.

Blarney, K. L., Meyer, C. K., & Walpole, S. (2008). Middle and high school literacy coaches: A national survey. *Journal of Adolescent & Adult Literacy*(4), 310.

Boeren, E. (2018). The methodological underdog: A review of quantitative research in the key adult education journals. *Adult Education Quarterly, 68*(1), 63-79. doi:10.1177/0741713617739347

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership* (Vol. 6th edition). Hoboken, New Jersey: Jossey-Bass.

Borman, J., & Feger, S. (2006). *Instructional coaching: Key themes from the literature*. The Education Alliance at Brown University.

Cherkowski, S. (2016). Exploring the Role of the School Principal in Cultivating a Professional Learning Climate. *Journal of School Leadership, 26*(3), 523-543.

Clark, S., & Newberry, M. (2019). Are we building preservice teacher self-efficacy? A large-scale study examining teacher education experiences. *Asia-Pacific Journal of Teacher Education, 47*(1), 32-47. doi:10.1080/1359866X.2018.1497772

Collin, J., & Smith, E. (2021). *Effective professional development. guidance report*. Retrieved from

https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eric&AN=ED615913&site=eds-live&scope=site&custid=gsu1

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (Fifth edition. ed.): SAGE Publications, Inc.

Cross, C., Hubbard, K., Beverly, L., Gravatt, D., & Aul, A. (2020). The continuation of a mentoring network for pre-service teachers into early in-service years. *Issues in Educational Research, 30*(4), 1286-1309.

Darling-Hammond, L., Chung Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective Teacher Professional Development*. Retrieved from

https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=eric&AN=
ED606743&site=eds-live&scope=site&custid=gsu1

Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly, 52*(2), 221-258.

DeMatthews, D., Carrola, P., Reyes, P., & Knight, D. (2021). School leadership burnout and job-related stress: Recommendations for district administrators and principals. *Clearing House, 94*(4), 159-167. doi:10.1080/00098655.2021.1894083

Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher, 38*(3), 181-199.

Desimone, L. M., & Pak, K. (2017). Instructional coaching as high-quality professional development. *Theory Into Practice, 56*(1), 3-12.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). *Internet, phone, mail, and mixed-mode surveys: The tailored design method* (Fourth edition. ed.): Wiley.

Fejes, A., & Nylander, E. (2015). How pluralistic is the research field on adult education? Dominating bibliometrical trends, 2005-2012. *European Journal for Research on the Education and Learning of Adults, 6*(2), 103-123. doi:10.3384/rela.2000-7426.rela9063

Franziska, P.-E. (2016). Why do I feel more confident? Bandura's sources predict preservice teachers' latent changes in teacher self-efficacy. *Frontiers in Psychology, 7*. doi:10.3389/fpsyg.2016.01486

Frieire, P. (1970). *Pedagogy of the oppressed*. New York: Continuum.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*(4), 915-945.

Gawande, A. (2022). I say. *Learning Professional, 43*(2), 3-3.

Glass, G. V., Peckham, P. D., & Sanders, J. R. (1972). Consequences of failure to meet assumptions underlying the fixed effects analyses of variance and covariance. *Review of Educational Research, 42*(3), 237-288.

Goddard, R. D., LoGerfo, L., & Hoy, W. K. (2004). High school accountability: The role of perceived collective efficacy. *Educational Policy, 18*(3), 403-425.

Goddard, R. D., & Skrla, L. (2006). The influence of school social composition on teachers' collective efficacy beliefs. *Educational Administration Quarterly, 42*(2), 216-235.

Goksoy, S. (2016). Analysis of the relationship between shared leadership and distributed leadership. *Paylaşılan Liderlik ile Dağıtımcı Liderlik Arasındaki İlişkinin Analizi.*(65), 295-312. doi:10.14689/ejer.2016.65.17

Gronn, P. (2002). Distributed leadership as a unit of analysis. *Leadership Quarterly, 13*(4), 423. doi:10.1016/S1048-9843(02)00120-0

Gurley, D. K., Anast-May, L., O'Neal, M., & Dozier, R. (2016). Principal instructional leadership behaviors: Teacher vs. self-perceptions. *International Journal of Educational Leadership Preparation, 11*(1).

Guskey, T. R. (1984). The influence of change in instructional effectiveness upon the affective characteristics of teachers. *American Educational Research Journal, 21*(2), 245-259.

Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education, 33*(3), 329-352.

Hassel, E. (1999). *Professional development: Learning from the best: A toolkit for schools and districts based on the National Awards Program for Model Professional Development* Oak Brook, Ill. : North Central Regional Educational Laboratory ; [Washington, DC] : U.S. Dept. of Education, Office of Educational Research and Improvement, Educational Resources Information Center, [1999].

Hattie, J. (2015). The applicability of Visible Learning to higher education. *Scholarship of Teaching and Learning in Psychology, 1*(1), 79-91. doi:10.1037/stl0000021

Hayes, S. D., & Mahfouz, J. (2020). Principalship and mentoring: A review of perspectives, evidence, and literature 1999-2019. *Research in Educational Administration & Leadership, 5*(3), 722-751.

Heck, R. H., & Hallinger, P. (2009). Assessing the contribution of distributed leadership to school improvement and growth in math achievement. *American Educational Research Journal, 46*(3), 659-689.

Heck, R. H., & Hallinger, P. (2014). Modeling the longitudinal effects of school leadership on teaching and learning. *Journal of Educational Administration, 52*(5), 653-681. doi:10.1108/JEA-08-2013-0097

Herman, K. C., Reinke, W. M., Dong, N., & Bradshaw, C. P. (2022). Can effective classroom behavior management increase student achievement in middle school? Findings from a group randomized trial. *Journal of Educational Psychology, 114*(1), 144-160. doi:10.1037/edu0000641

Hong, S. (2018). Self-efficacy beliefs and effective instructional strategies: U.S. university english learners' perspective. *International Journal of Teaching & Learning in Higher Education, 30*(3), 477-496.

Illeris, K. (2014). Transformative learning and identity. *Journal of Transformative Education, 12*(2), 148-163.

Ismail Hussein, A., Prima Gusti, Y., & Suswandari, S. (2022). Estimating the effect of principal instructional and distributed leadership on professional development of teachers in Jakarta, Indonesia. *SAGE Open, 12*. doi:10.1177/21582440221109585

Kane, B. D., & Rosenquist, B. (2019). Relationships between instructional coaches' time use and district and school-level policies and expectations. *American Educational Research Journal, 56*(5), 1718-1768.

Keiler, L. S., Diotti, R., Hudon, K., & Ransom, J. C. (2020). The role of feedback in teacher mentoring: How coaches, peers, and students affect teacher change. *Mentoring & Tutoring: Partnership in Learning, 28*(2), 126-155.

Kelley, C., & Dikkers, S. (2016). Framing feedback for school improvement around distributed leadership. *Educational Administration Quarterly, 52*(3), 392-422.

Keppell, M., O'Dwyer, C., Lyon, B., & Childs, M. (2011). Tranforming distance education curricula through distributive leadership *Journal of Asynchronous Learning Networks, 15*(4), 9-21. doi:10.24059/olj.v15i4.202

Khanyi, J. G., & Naidoo, P. (2020). Principals' role in leadership capacity development of post level one teachers for school leadership. *Perspectives in Education, 38*(2), 168-184. doi:10.18820/2519593X/pie.v38.i2.11

Killion, J., & Harrison, C. (2017). *Taking the lead* (2nd ed.). Oxford, OH: Learning Forward.

Knight, J. (2007). *Instructional coaching: A partnership approach to improving instruction*. Thousand Oaks, CA: Corwin.

Knight, J. (2018). *The impact cycle: What instructional coaches should do to foster powerful improvements in teaching*. Thousands Oaks, CA: Corwin.

Knight, J., Elford, M., Hock, M., Dunekack, D., Bradley, B., Deshler, D. D., & Knight, D. (2015). 3 steps to great coaching: A simple but powerful instructional coaching cycle nets results. *Journal of Staff Development, 36*(1), 10-12.

Knowles, M. S. (1973). *The adult learner: A neglected species*: Gulf Pub. Co.

Landon Hays, M., B. Peterson Ahmad, M., & Frazier, A. D. (2020). Learning to teach: How a simulated learning environment can connect theory to practice in general and special education educator preparation programs. *Education Sciences, 10*(184), 184-184. doi:10.3390/educsci10070184

Leithwood, K., & Jantzi, D. (2008). Linking leadership to student learning: The contributions of leader efficacy. *Educational Administration Quarterly, 44*(4), 496-528.

Leithwood, K., & Sun, J. (2012). The nature and effects of transformational school leadership: A meta-analytic review of unpublished research (Vol. 48, pp. 387-423): Educational Administration Quarterly.

Lewis, M. A. (2019). Administrators' instructional leadership perspective of the role of instructional coaches and teacher librarians: A comparative examination. *School Libraries Worldwide, 25*(2), 16.

Maddux, J. E. (1995). *Self-efficacy, adaptation, and adjustment : theory, research, and application*: Plenum Press.

Margolis, H. (2005). Increasing struggling learners' self-efficacy: What tutors can do and say. *Mentoring & Tutoring: Partnership in Learning, 13*(2), 221-238.

Marks, H., & Printy, S. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly, 39*, 370-397.

McCaw, D., Watkins, S., & Borgia, L. (2004). Critical issue: Providing more time for professional development.

http://www.ncrel.org/sdrs/areas/issues/educatrs/profdevl/pd300.htm

Merriam, S. B. (2008). Adult learning theory for the twenty-first century. *New Directions for Adult & Continuing Education, 2008*(119), 93-98. doi:10.1002/ace.309

Merriam, S. B., & Bierema, L. L. (2014). *Adult learning : Linking theory and practice*: San Francisco, CA : Jossey-Bass, a Wiley brand, [2014] First edition.

Mezirow, J. (1978). Perspective transformation. *Adult Education, 28*, 100-110.

Neumerski, C. M. (2012). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where should we go from here? *Educational Administration Quarterly, 49*(2), 310-347. doi:10.1177/0013161X12456700

Ozer, N. (2013). Trust me, principal, or burn out! The relationship between principals' burnout and trust in students and parents. *Alberta Journal of Educational Research, 59*(3), 382-400.

Parsons, A. W., Ankrum, J. W., & Morewood, A. (2016). Professional development to promote teacher adaptability. *Theory Into Practice, 55*(3), 250-258. doi:10.1080/00405841.2016.1173995

Ragins, B. R., & Kram, K. E. (2007). *The handbook of mentoring at work: Theory, research, and practice*: Sage Publications.

Regina, M. O., Joseph, H. W., & Daniel, J. R. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews, 7*(1), 1-55. doi:10.4073/csr.2011.4

Reid, D. B. (2019). How school principals enable instructional coaches: Evidence from New Jersey. *Education Leadership Review, 20*(1), 87-100.

Rigby, J. G. (2016). Principals' Conceptions of Instructional Leadership and Their Informal Social Networks: An Exploration of the Mechanisms of the Mesolevel. *American Journal of Education, 122*(3), 433-464.

Roberts, J. K., & Henson, R. K. (2001). *A confirmatory factor analysis of a new measure of teacher efficacy: Ohio State Teacher Efficacy Scale*. Retrieved from http://ezproxy.gsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED453254&site=eds-live&scope=site

Roegman, R., & Riehl, C. (2015). Playing doctor with teacher preparation: An examination of rounds as a socializing practice for preservice teachers. *International Journal of Educational Research, 73*, 89-99. doi:10.1016/j.ijer.2015.05.001

Rush, L. S., & Young, S. (2011). Wyoming's instructional facilitator program: Teachers' beliefs about the impact of coaching on practice. *Rural Educator, 32*(2), 13-22.

Ryan, G. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher, 25*(4), 14-20. doi:10.7748/nr.2018.e1466

Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Sheng, Z., Wolff, L., Kilmer, L., & Yager, S. (2017). School administration manager: Redefining the principal's role as an instructional leader. *Journal of School Leadership, 27*(1), 119-145.

Shewell, J. (2014). Collecting video-based evidence in teacher evaluation via the DataCapture mobile application. *Journal of Applied Learning Technology, 4*(2), 6-14.

Shidler, L. (2009). The impact of time spent coaching for teacher efficacy on student achievement. *Early Childhood Education Journal, 36*(5), 453-460. doi:10.1007/s10643-008-0298-4

Sims, S., & Fletcher-Wood, H. (2021). Identifying the characteristics of effective teacher professional development: A critical review. *School Effectiveness and School Improvement, 32*(1), 47-63. doi:10.1080/09243453.2020.1772841

Spillane, J., Halverson, R., & Diamond, J. (2001). Investigating school leadership practice: A distributed perspective. *Educational Researcher, 30*(3), 23-28. doi:10.3102/0013189X030003023

Spillane, J. P. (2006). *Distributed leadership*. San Francisco, CA: Jossey-Bass.

Stock, M. J., & Duncan, H. E. (2010). Mentoring as a professional development strategy for instructional coaches: Who mentors the mentors? *Planning & Changing, 41*(1/2), 57-69.

Stoetzel, L., & Shedrow, S. (2020). Coaching our coaches: How online learning can address the gap in preparing K-12 instructional coaches. *Teaching and Teacher Education, 88*. doi:10.1016/j.tate.2019.102959

Suhrheinrich, J., & Chan, J. (2017). Exploring the effect of immediate video feedback on coaching. *Journal of Special Education Technology, 32*(1), 47-53. doi:10.1177/0162643416681163

Toll, C. A. (2005). *The literacy coach's survival guide: Essential questions and practical answers*. Newark, DE: International Reading Association.

Tripp, T. R., & Rich, P. J. (2012). The influence of video analysis on the process of teacher

      change. *Teaching and Teacher Education, 28*, 728-739. doi:10.1016/j.tate.2012.01.011

Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct.

      Teaching and Teacher Education, 17, 783-805. doi:10.1016/S0742-051X(01)00036-1

Walpole, S., & McKenna, M. C. (2004). *The literacy coach's handbook: A guide to research-*

      based practice: New York: Guilford Press.

Walsh, N. R., Ginger, K., & Akhavan, N. (2020). Benefits of instructional coaching for teacher

      efficacy: A mixed methods study with PreK-6 teachers in California. *Issues in*

      Educational Research, 30(3), 1143-1161.

White, A. S., Howell Smith, M., Kunz, G. M., & Nugent, G. C. (2015). *Active ingredients of*

      instructional coaching: Developing a conceptual framework. Retrieved from

      http://ezproxy.gsu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db

      =eric&AN=ED571818&site=eds-live

Wise, D., & Cavazos, B. (2017). Leadership coaching for principals: A national study.

      Mentoring & Tutoring: Partnership in Learning, 25(2), 223-245.

      doi:10.1080/13611267.2017.1327690

Wolpert-Gawron, H. (2016). The many roles of an instructional coach. *Educational Leadership,*

      73(9), 56-60.

Yi, Z., Chen, Y.-H., Yin, Y., Cheng, K., Wang, Y., Nguyen, D., . . . Kim, E. (2022). Brief

      research report: A comparison of robust tests for homogeneity of variance in factorial

      ANOVA. *Journal of Experimental Education, 90*(2), 505-520.

      doi:10.1080/00220973.2020.1789833

Yoo, J. H. (2016). The effect of professional development on teacher efficacy and teachers' self-analysis of their efficacy change. *Journal of Teacher Education for Sustainability, 18*(1), 84-94. doi:10.1515/jtes-2016-0007

Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and Its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 Years of research. *Review of Educational Research, 86*(4), 981-1015.

Zepeda, S. J., Parylo, O., & Bengtson, E. (2014). Analyzing principal professional development practices through the lens of adult learning theory. *Professional Development in Education, 40*(2), 295-315.

APPENDICES

Appendix A: Ohio State teacher efficacy scale (OSTES)

Ohio State teacher efficacy scale (OSTES)

Factor 1: *Efficacy for instructional strategies*
  1. To what extent can you use a variety of assessment strategies?
  2. To what extent can you provide an alternative explanation or example when students are confused?
  3. To what extent can you craft good questions for your students?
  4. How well can you implement alternative strategies in your classroom?
  5. How well can you respond to difficult questions from your students?
  6. How much can you do to adjust your lessons to the proper level for individual students?
  7. To what extent can you gauge student comprehension of what you have taught?
  8. How well can you provide appropriate challenges for very capable students?

Factor 2: *Efficacy for classroom management*
  9. How much can you do to control disruptive behavior in the classroom?
10. How much can you do to get children to follow classroom rules?
11. How much can you do to calm a student who is disruptive or noisy?
12. How well can you establish a classroom management system with each group of students?
13. How well can you keep a few problem students from ruining an entire lesson?
14. How well can you respond to defiant students?
15. To what extent can you make your expectation clear about student behavior?
16. How well can you establish routines to keep activities running smoothly?

Factor 3: *Efficacy for student engagement*
17. How much can you do to get students to believe they can do well in schoolwork?
18. How much can you do to help your students value learning?
19. How much can you do to motivate students who show low interest in schoolwork?
20. How much can you assist families in helping their children do well in school?
21. How much can you do to improve the understanding of a student who is failing?
22. How much can you do to help your students think critically?
23. How much can you do to foster student creativity?
24. How much can you do to get through to the most difficult students?

Appendix B: Modified Ohio State Teacher Efficacy Scale Teacher Survey

<div align="center">

Modified Ohio State Teacher Efficacy Scale

Teacher Survey Questions

</div>

1. Did you have at least 5 interactions with an instructional coach during the 2019 – 2020 school year?
   a. Yes
   b. No

   Participants will be exited from the survey with an answer of No to question 1

Demographic Questions

2. Please indicate your gender.
   a. Male
   b. Female
   c. Other (specify)
3. Please indicate your grade level.
   a. Elementary
   b. Secondary
4. Please indicate your years of teaching experience.
   a. 0 – 2 years
   b. 2 – 10 years
   c. More than 10 years

5-Point Likert Scale (1 – 5)*

(1) To a small extent, (2) To some extent, (3) To a moderate extent, (4) To a great extent, (5) To a very great extent
* N/A option available

Factor *1*: *Efficacy for Instructional Strategies*

1. To what extent has your instructional coach helped you to feel more confident using a variety of assessment strategies?
2. To what extent has your instructional coach helped you to feel more confident providing an alternate explanation or example when students are confused?
3. To what extent has your instructional coach helped you to feel more confident crafting good questions for your students?
4. To what extent has your instructional coach helped you to feel more confident implementing alternative strategies in your classroom?
5. To what extent has your instructional coach helped you to feel more confident responding to difficult questions from your students?
6. To what extent has your instructional coach helped you to feel more confident adjusting your lessons to the proper level for individual students?
7. To what extent has your instructional coach helped you to feel more confident gauging student comprehension of what you have taught?
8. To what extent has your instructional coach helped you to feel more confident providing appropriate challenges for very capable students?

Factor *2*: *Efficacy for Classroom Management*

9. To what extent has your instructional coach helped you to feel more confident controlling disruptive behavior in the classroom?
10. To what extent has your instructional coach helped you to feel more confident getting children to follow classroom rules?
11. To what extent has your instructional coach helped you to feel more confident calming a student who is disruptive or noisy?

12. To what extent has your instructional coach helped you to feel more confident establishing a classroom management system with each group of students?
13. To what extent has your instructional coach helped you to feel more confident keeping a few problem students from ruining an entire lesson?
14. To what extent has your instructional coach helped you to feel more confident responding to defiant students?
15. To what extent has your instructional coach helped you to feel more confident making your expectations clear about student behavior?
16. To what extent has your instructional coach helped you to feel more confident establishing routines to keep activities running smoothly?

Factor *3*: *Efficacy for Student Engagement*

17. To what extent has your instructional coach helped you to feel more confident getting students to believe they can do well in schoolwork?
18. To what extent has your instructional coach helped you to feel more confident helping your students value learning?
19. To what extent has your instructional coach helped you to feel more confident motivating students who show low interest in schoolwork?
20. To what extent has your instructional coach helped you to feel more confident assisting families in helping their children do well in school?
21. To what extent has your instructional coach helped you to feel more confident improving the understanding of a student who is failing?
22. To what extent has your instructional coach helped you to feel more confident helping your students think critically?
23. To what extent has your instructional coach helped you to feel more confident fostering student creativity?
24. To what extent has your instructional coach helped you to feel more confident getting through to the most difficult students?

Appendix C: Modified Ohio State Teacher Efficacy Scale Coaches Survey

Modified Ohio State Teacher Efficacy Scale

Instructional Coaches Survey Questions

1. Did you have at least 5 interactions with one teacher during the 2019 – 2020 school year?
    a. Yes
    b. No

    Participants will be exited from the survey with an answer of No to question 1

Demographic Questions

2. Please indicate your gender.
    a. Male
    b. Female
    c. Other (specify)
3. Please indicate your grade level.
    a. Elementary
    b. Secondary
4. Please indicate your years of coaching experience.
    a. 0 – 2 years
    b. 2 – 10 years
    c. More than 10 years

5-Point Likert Scale (1 – 5)*

(1) To a small extent, (2) To some extent, (3) To a moderate extent, (4) To a great extent, (5) To a very great extent
* N/A option available

Factor *1*: *Efficacy for Instructional Strategies*

1. To what extent do you feel confident coaching your teachers to use a variety of assessment strategies?
2. To what extent do you feel confident coaching your teachers to provide an alternate explanation or example when students are confused?
3. To what extent do you feel confident coaching your teachers to craft good questions for their students?
4. To what extent do you feel confident coaching your teachers to implement alternative strategies in their classroom?
5. To what extent do you feel confident coaching your teachers to respond to difficult questions from their students?
6. To what extent do you feel confident coaching your teachers to adjust lessons to the proper level for individual students?
7. To what extent do you feel confident coaching your teachers to gauge student comprehension of what they have taught?
8. To what extent do you feel confident coaching your teachers to provide appropriate challenges for very capable students?

Factor *2*: *Efficacy for Classroom Management*

9. To what extent do you feel confident coaching your teachers to control disruptive behavior in the classroom?
10. To what extent do you feel confident coaching your teachers to get children to follow classroom rules?
11. To what extent do you feel confident coaching your teachers to calm a student who is disruptive or noisy?
12. To what extent do you feel confident coaching your teachers to establish a classroom management system with each group of students?
13. To what extent do you feel confident coaching your teachers to keep a few problem students from ruining an entire lesson?
14. To what extent do you feel confident coaching your teachers to respond to defiant students?

15. To what extent do you feel confident coaching your teachers to make their expectations clear about student behavior?
16. To what extent do you feel confident coaching your teachers to establish routines to keep activities running smoothly?

Factor *3*: *Efficacy for Student Engagement*

17. To what extent do you feel confident coaching your teachers to get students to believe they can do well in schoolwork?
18. To what extent do you feel confident coaching your teachers to help their students value learning?
19. To what extent do you feel confident coaching your teachers to motivate students who show low interest in schoolwork?
20. To what extent do you feel confident coaching your teachers to assist families in helping their children do well in school?
21. To what extent do you feel confident coaching your teachers to improve the understanding of a student who is failing?
22. To what extent do you feel confident coaching your teachers to help their students think critically?
23. To what extent do you feel confident coaching your teachers to foster student creativity?
24. To what extent do you feel confident coaching your teachers to get through to the most difficult students?