UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

INSTRUCTIONAL COACHING IN EDUCATION: THE METACOGNITIVE

PROCESS OF REFINING PAST, PRESENT, AND FUTURE TEACHING

PRACTICES

A DISSERTATION

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

Degree of

DOCTOR OF PHILOSOPHY

By

JENNIFER B STEPP
Norman, Oklahoma
2014

INSTRUCTIONAL COACHING IN EDUCATION: THE METACOGNITIVE
PROCESS OF REFINING PAST, PRESENT, AND FUTURE TEACHING
PRACTICES

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF INSTRUCTIONAL LEADERSHIP AND ACADEMIC
CURRICULUM

BY

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Dedication

I dedicate this to my wonderful family - to my husband, Aaron, who gave me unconditional support to never give up and encouragement to follow my dreams, and to my children, Raigan, Addison, and Palmer, who were patient with me and always encouraged me to keep writing. To my mom, Jana, who always pushed me forward when I was barley holding on, and to my grandparents, Doris and Kenneth, for being great role models. I could not have completed this without them. Thank you.

Acknowledgements

First, I want to thank Dr. Priscilla Griffith for recognizing my potential in pursing this degree. She encouraged me and challenged me continuously to think outside the box. She provided guidance and support in every step taken. She was always ready to lend a helping hand by responding to questions through e-mail and in person, and gave constructive feedback that helped me continue to the end.

I want to acknowledge and thank Dr. Susan Kimmel. She recognized what I was capable of doing long before I did. Without her guidance and encouragement, I would have never pursued any degree beyond my undergraduate.

I want to thank each of my committee members for the support given during the research and writing. Each member provided resources and questions that guided me through this process. I want to acknowledge my colleagues at the University of Oklahoma over the past 12 years. Jennifer Quillian, for always being willing to bounce ideas around and support me in research. Donna Willis, for the endless hours of proofreading and editing it took to complete this process.

Last, but not least, I want to thank all five instructional coaching relationships who participated in this study. Each coach allowed me into their personal setting, which provided me with rich resources for my research.

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Abstract

Providing high quality on-site professional development opportunities for teachers to rethink teaching practices is growing through instructional coaching. However, little is known as to what components of instructional coaching trigger change in teacher practice. This study looked at the professional development model, instructional coaching, to determine specific techniques coaches use to ignite a metacognitive process in teachers, and challenges coaches face when implementing this model of professional development. It is through a metacognitive process that teachers refine past, present and future teaching strategies.

Research was conducted with five coaching relationships (one instructional coach and one teacher or multiple teachers) during a spring semester using qualitative multi-case methodology. Data sources included interviews, observation of coaching cycles, reflection journals, and teacher surveys. The data was analyzed using pattern matching and explanation building, and then the researcher conducted a cross-case synthesis between all the cases involved in the study.

The findings of this study identified six techniques (1) collaboration, (2) relationship building, (3) instructional rounds, (4) active coaching cycles, (5) digital technologies, and (6) reflective questioning that instructional coaches use to ignite a metacognitive process in teachers. It is through these techniques that coaches can provide high quality on-site professional development to change teacher practice and cultivate reflective teachers.

Chapter 1: Introduction

"You can not teacher-proof a curriculum any more than you can parent proof a family…… but we can bring teachers into debate of change. For they are the ultimate change agent." - Bruner (1996)

Background and Problem

Cultivating successful classrooms is a constant concern and priority in school districts across the United States. What and how teachers teach makes the difference in what children learn (The National Commission Teaching and America's Future, 1996), and one way that schools can cultivate high performing classrooms is by supporting their teachers with high quality professional development. High quality professional development is intended to provide opportunities of intensive learning. However, it is relatively rare and few teachers in the US have access to high quality professional development (Darling-Hammond, Wei, Richardson, & Orphanos, 2009). For nearly two decades researchers have explored the need to reform professional development in education.

According to researchers (Darling-Hammond & McLaughlin, 1995; Guskey & Huberman, 1995; Hawley & Valli, 1999; Joyce & Showers, 2002) who have discussed the need for reform in educational professional development models, there is a need for professional development in education to move away from brief workshops to more specific in-service professional development models. Professional development opportunities for teachers tend to lend themselves to one-day workshops on various topics that do not specifically relate to the teachers' classroom contexts or curriculum (Griffith, Ruan, Stepp, & Kimmel, 2014). The current research suggests that teacher professional development should be job-

embedded, ongoing, and directly related to the challenges teachers face in daily classroom instruction (Deussen, Coskie, Robinson, & Autio, 2007).

Professional development models, either one-shot or ongoing, have a very similar goal to increase teachers' content knowledge and encourage best practices in the classroom. Joyce & Showers (1996) identify five kinds of professional development experiences: (1) theory, (2) demonstration, (3) practice, (4) feedback, and (5) in-class coaching that have contributed to the foundation of professional development models in education. Desimone's (2009) model has five core features of effective professional development echoing that of Joyce and Showers. Desimone's five features include content focus, collective participation, active learning, duration, and coherence. *Content focus* refers to subject matter content, as well as understanding how students learn that content. *Collective participation* of teachers, frequently from the same school, allows for interaction and discourse around the content of the professional development. *Active learning* involves hands-on and minds-on activities that involve teachers in working with the content through vicarious and direct experiences. Vicarious experiences might include watching videos of expert teachers. Direct experiences incorporate discussion, classroom coaching, and reviewing student work embedded within and drawn from the classroom experience. Professional development that incorporates active learning is context specific and related to classroom instruction. *Duration* refers to time spent in professional development activities and includes both the way in which the span of time is structured and the number of hours of professional development. The concept of duration is in direct contrast to a one-shot workshop model with content

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that is fragmented and not directly related to teachers' classroom contexts or curriculums. Although a critical amount of time is required for professional development to reach duration (at least 20 hours of contact time), according to Desimone (2009), the manner in which the time is allocated might vary. For example, professional development might be provided across a semester or in an intense summer institute with follow-up. *Coherence* is teachers' understandings that the content of the professional development is consistent with their own knowledge and beliefs, and with school, district, and state reforms and policies. (Desimone, 2009; Griffith et al., 2014).

Creating high quality professional development models based on Desimones' (2009) five core features of effective professional development and the five key professional development experiences identified by Joyce and Showers (1996) suggest that the models have direct experiences to incorporate discussion, classroom coaching, and reviewing of student work (Griffith et al., 2014). In order to create an environment of high quality professional development, one must understand that teaching is a cognitive process. McVee, Dunsmore, and Gavelek (2005) explain that schema and other cognitive processes build on the knowledge one gains through social interactions to become embodied actions. For example, when an instructional coach works with a teacher it is a form of social interaction, and the new knowledge that is developed is manifested in the form of higher-level instruction. McVee et al. (2005) also suggest that knowledge is situated in the transaction between world and individual, and that the transactions are mediated by culturally and socially enacted practices. Therefore, professional development

models that promote high preforming classrooms highlight the importance of cognitive process.

Vygotsky's general law of cultural development explains that schemas emerge from the social interactions between an individual and his or her environment (Vygotsky, 1979), employing that we funcation on two levels first at the social level and then at the individual level. Harré (Callucci, DeVoogt Van Lare, Yoon, & Boatright, 2010) drawing on Vygotsky's theory developed a conceptual framework for how individuals develop through a social process. This process has been elaborated on and identified as Vygotsky Space through the works of various researchers (Callucci, et.al , 2010, McVee, Dunsmore & Gavelek, 2005). Vygotsky Space is a non-linear process of learning that may occur in any of the four quadrants identified by Callucci et al. (2010) and McVee et al. (2005). The four quadrants of Vygotsky Space are conventionalization (setting), appropriation (actions), transformation (private), and publication (new learning) (Callucci et al., 2010). The quadrants represent the space where individuals construct knowledge through social and internal experiences. Therefore, high quality professional development models need to allow for scaffolding between the four quadrants in order for individuals to cultivate growth.

Instructional Coaching: A High Quality Professional Development Model

Over the past decade, an abundance of professional development models have emerged in the United States, particularly with the push for teacher accountability. In recent years the United States public education system (federal, state, local) has employed "coaches" as an active ingredient to encourage change in

teacher pedagogy through models of professional development. Joyce and Showers (1981 & 1996) define coaches as master educators who provide teachers with individualized guidance repeatedly over a period of several weeks, months, or even years. In recent years, federally funded grants and initiatives such as No Child Left Behind: Reading First and Early Reading First identified the position of a literacy coach in many professional development models.

With the federally funded grants initiating instructional coaches in educational settings, professional organizations with the likes of International Reading Association (IRA) redefined the role of a reading specialist by including coaching (a leader of professional development) in an already established role of a reading specialist. IRA's position statement *The Role and Qualifications of the Reading Coach in the United States* (International Reading Association, 2004) defines coaching as a means of providing professional development for teachers in schools. Nowak (2003) states that coaching provides the additional support needed for teachers to implement various programs or practices. Nowak's idea of coaching is complemented by Poglinco, Bach, Hovde, Rosenblum, Saunders, and Supovitz (2003) who provide a good summary of coaching. Poglinco et al. (2003, pg 38) summarize coaching in the following way: "Coaching provides ongoing consistent support for the implementation of instruction components. It is nonthreatening and supportive-not evaluative." Callucci et al. (2010) describe instructional coaching by stating that coaches do not work from a position of supervisory power and must use expertise and relationships to exert influence. Callucci et al. (2010) continue to state that instructional coaching is an embedded professional development that is content

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based and includes observations of classroom teaching, demonstrations of best practices, and coaching cycles (pre and post conference).

Because of the phenomena of literacy coaching over the last decade, math coaches have been added to the demand of coaches in the field of education. Therefore, the term "instructional" coach has been coined to encompass all forms of coaching in educational professional development models. However, those who are involved in researching this form of professional development debate the role of a coach, and the active ingredients that link coaching with teacher and student growth. Without clear job descriptions or defined roles, coaching consequently becomes confusing and an inconsistent form of professional development (Callucci et al., 2010). Because of the diversity of professional development models that utilize coaching as a way to enhance teacher pedagogy and student outcomes, researchers began to investigate coaching and its "active" ingredients (Callucci et al., 2010).

Instructional coaches are placed in schools to construct leadership roles and to provide on-site, collaborative professional development addressing teachers' math, science, reading/writing knowledge, pedagogy, and curriculum in an effort to enhance instruction and improve student achievement (Campbell & Melkus, 2011). However, what is missing in the literature is the understanding of the process it takes to carry out the tasks of a coach. The primary focus of a coach should be the teacher and his or her ability to adapt current teaching pedagogy with the students at hand. Therefore, initiating a metacognitive process for teachers is necessary to determine how curriculum and teaching strategies fit into their teaching styles. Also, teachers have to determine what is best practice for the current students they have in

their classroom. Coaches have three important roles in order to carry out their work: (1) build a relationship, (2) have an adequate knowledge of content, and (3) act as a catalyst to initiate the metacognitive process of refining past, present, and future teaching strategies in teachers (Fisher, Frey, Nelson, 2012; & Elish-Piper, L'Allier, 2010).

With these three identified roles come many challenges for the coach that have not been addressed by literature (Callucci et al., 2010). As instructional coaches are placed in schools to guide reform of teaching strategies and increase student outcomes, coaches often face several challenges (Callucci et al, 2010; Nowak, 2003; Poglinco et al., 2003). According to researchers (Bean, 2004; Callucci, 2010; Nowak, 2003 Pipes, 2004; Sturtevant, 2003; & Vogt & Shearer 2003), challenges can be, but are not limited to, educational setting based, lack of guidelines for job duties, resistant teachers, lack of support from administration, and deficiency of professional development for instructional coaches.

Many contributors in coaching may influence the final outcome of coaching and its correlation to a teacher's ability to implement new teaching strategies and increase student outcomes. As students construct knowledge, so do teachers. Therefore, coaches have to be aware of the construction of knowledge in order to provide the rich coaching experience for teachers to transform their teaching practices. Various professional development models are used to implement instructional coaching at both early childhood and secondary levels.

Changes can occur when coaching is used with teachers and schools, but the lack of investigation on specific coaching techniques and guidelines makes it

difficult to pin point the link between coaching professional development models and teacher/student outcomes (Callucci et al., 2010). Marsh et al. (2010) did find a small significant relationship between a coach's routine and duration and teacher/student growth in their study of coaches.

If educators are to sustain a process of refining past, present, and future teaching strategies through a professional development model of instructional coaching three main targets are to be identified as the focus of the coaching. These include the support of leadership, focus on teacher knowledge, and implementation of new teaching strategies in the classroom. The coach reinforces this focus by applying technique, duration, and expertise of content. However, in order for instructional coaching to continue successfully in schools, there must be more research done that investigates several components limited in the findings of current coaching studies.

Current research identifies the need to control for specific design of the coaching technique and/or training the coaches received. Neuman et al. (2010) indicated that little is known as to what procedures coaches use in the classroom. Therefore, current research should evaluate the intensity of coaching, content knowledge of the coaches, and actual procedures that influence change in teacher practice. In order to move forward with coaching as a professional development model, the education field needs to be informed as to the "active" ingredient(s) that triggers teachers to refine past, present, and future teaching strategies; and increase student outcomes. As more research demonstrates the influence coaching has on teacher knowledge and pedagogy, coaching will be considered an active agent in

refining our educational system and an avenue for reform of current professional development models (Callucci et al., 2010).

Purpose of Study

Instructional coaching professional development models are used widely in the school environments, but little research has focused on the coach's active process of coaching. Therefore, the purpose of this study is to examine coaching strategies used in instructional coaching professional development models and identify their link to metacognitive teaching practices. This multi-case study looks at the intensity of coaching, content knowledge of the coach, and techniques the coach uses that influence teachers' metacognitive process and initiate change in pedagogy. The five coaches involved in this study are currently working with early childhood teachers birth through grade 3. With this study a clearer picture should emerge as to what components of coaching trigger the refining of teacher pedagogy and initiate a metacognitive process in teachers.

Research Questions

Three questions guided the research for this multi-case study. The three questions for this case study are:

1. What coaching techniques do coaches use in various educational settings and why?

2.a What challenges do coaches face?

2.b How do coaches address the identified challenges?

3.a What opportunities do coaches give teachers in order to rethink their teaching experience?

3.b How does rethinking impact future teaching experiences?

Contributions of this Study

High quality professional development models are a necessity in order to cultivate change in our classrooms. One way to initiate the change in teacher pedagogy is through a high quality professional development model: instructional coaching. Instructional coaching is a professional development tool that can be used to transform our educational system. Those in the field of education are aware of the opportunities coaching brings to the classroom (teacher and student growth) and the opportunities it provides to collectively change teacher perspective on pedagogy. However, little is known as to what specific coaching techniques are used in order to initiate the metacognition process of teachers and increase student outcomes. This multi-case study provides educators with a foundation of coaching techniques that are necessary in order for coaches to be successful in the educational environment in which they work, and initiate a metacognitive process in educators.

Not only does this research provide a foundation for coaching techniques, but it also addresses challenges coaches have in guiding teachers through a metacognitive process and acts as a reference for future coaches. Coaching techniques and challenges are two of the puzzle pieces in identifying the link between instructional coaching and classroom success (teaching pedagogy, teacher perspective, and student outcomes). The other pieces include the reactions to coaching from teachers and the interaction between both the teacher and coach in refining past, present, and future teaching pedagogy. Therefore, this case study will be a catalyst in providing the field of education with specific coaching techniques

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needed in order to cultivate successful classrooms through high quality professional development.

Defining of Terms

An *Instructional coach* is an academic leader in an educational setting. She/he is able to use content area expertise and ability to build relationships with teachers to encourage educational reform within an identified setting. The purpose of the instructional coach is to provide support to teachers on content-based instruction through various coaching techniques.

Instructional coaching is a non-supervisory role in the field of education. It is an embedded professional development model that focuses on content-based instruction through coaching cycles. The coaching cycles consist of pre and post conferences along with identified interaction with the teacher, and this can be structured or designed through demonstration or a co-teaching session in the classroom.

Coaching techniques are the identified tools coaches use when working with teachers. The techniques include, but are not limited to the following:

- Pre conference - the way the coach approaches the teacher who is going to be coached. This also includes the way the coach sets up the coaching session.

- Classroom Interaction - the way coach and teacher approach the teaching strategies in the classroom.

  - Observation - simply watching an identified lesson.

  - Demonstration - presenting a specific teaching strategy.

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- o Co-teaching - teaching a specific teaching strategy with the teacher at the same time. A form of co-teaching is shadow, which the teacher and coach teach a portion of the same lesson.
  - o Side-by-Side - sitting or standing near the teacher and providing guidance when needed as the teacher conducts the lesson.
- Post conference - the portion of the coaching cycle that allows for reflective thinking on what has happened during the classroom interaction.

Schema is the way one interprets the world. It serves as the reciprocity between culture and memory and is necessary to explain the constitutive role of culturally organized experience in the individual sense making (Bartlett, 1932/1961). According to Kant (1929), schema mediates the external world and internal mental structures; it is a lens that shapes and is shaped by experience. For instance, a teacher develops a schema for best teaching practices that include the characteristics of the practices and a mental image of the regulation processes for implementing the practices.

Metacognition is defined by John Flavell (1976, p. 232) "as one's knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data." Flavell (1976, p.232) continues to define metacognition as the active monitoring and consequent regulation and orchestration of process in relation to the cognitive

objects or units they bear, usually in the service of some concrete goal or objective. Therefore, metacognition is using self-regulatory monitoring during the cognitive state of constructing knowledge. As knowledge is constructed, we (if given the skills/strategies) self-regulate to problem solve, comprehend, and to communicate with one another.

Metacognitive teaching practices are the reflective patterns identified individually by the teacher and coach to refine current teaching pedagogy. Metacognitive teaching practices can be identified through specific questioning by the coach and the response from the teacher.

Chapter 2: Literature Review

For many years, educators have reviewed and studied the implications of professional development on teacher knowledge and practice. In recent years, many of these studies have reflected that literacy coaching used as a form of professional development has increased teacher knowledge in specific content areas and practice. Coaching, in which master educators provide teachers with individualized guidance repeatedly over a period of several weeks, months, or even years began to receive widespread attention in the 1980s (Joyce & Showers, 1981; 1996). In more recent years, federally funded grants and initiatives such as No Child Left Behind: Reading First and Early Reading First identified the position of a literacy coach in many professional development models.

This emphasis led professional organizations such as the International Reading Association (IRA) to redefine the roles of a reading specialist by including coaching (a leader of professional development) to the already established role of the reading specialist. IRA's position statement *The Role and Qualifications of the Reading Coach in the United States* (International Reading Association, 2004) defines coaching as a means of providing professional development for teachers in schools. Nowak (2003) states that coaching provides the additional support needed for teachers to implement various programs or practices. This idea is complemented by Poglinco and colleagues (2003) who provide a good summary of how coaching is an active ingredient in a professional development model. Their summary is as follows: "Coaching provides ongoing consistent support for the implementation and instruction components. It is nonthreatening and supportive-not evaluative (pg 38)."

Because of the phenomena of literacy coaching over the last decade, math coaches have been added to the demand of coaches in the field of education. Therefore, the term "instructional" coach has been coined to encompass all forms of coaching in educational professional development models. However, those who are involved in researching this form of professional development debate the roles of coaching and active ingredients of coaching associated with teacher and student outcomes and/or growth. Often times, because of the newness of coaching in education, the role and job descriptions are not clearly defined; thus, creating much chaos in the field of coaching. Based on the diversity of professional development models that utilize coaching as a way to enhance best teaching practice and student outcomes, researchers have begun to investigate coaching and its "active" ingredients. Therefore, this research synthesis has been conducted to identify the key elements of effective instructional coaching where student outcomes and teacher knowledge have increased due to professional development models.

This synthesis follows methods outlined by Shanahan (2002). According to Shanahan, research synthesis "refers to those methods of inquiry used to derive generalizations from the collective findings of a body of existing findings" (p.133). The collection process for this synthesis was performed in three ways: key word searches in databases, library services from the University of Oklahoma, and footnote chasing. This collection of findings will be discussed in detail throughout this synthesis.

The key word search was performed in the databases of Academic Search Premier, ERIC, and PsychINFO using the key terms literacy coach* or instructional

coach* and teacher professional development. The University of Oklahoma library

provides automatic weekly, bi-weekly, and semi-weekly Academic Search Premier

services. For this service, the key terms literacy coach* or instructional coach* and

teacher professional development once again identified targeted books and articles

in various publications. This process through the library has been done bi-weekly

since 2010, providing a great abundance of literature. The third step in the collection

process came from footnote chasing. Shanahan (2002) defines footnote chasing as

combing references in studies to identify additional sources. In the collection

processes for this synthesis, the search results have resulted in reappearance of

numerous articles by the criterion defined, creating a saturation of literature.

The yield from the initial search provided 267 articles within the area

defined. This general body of articles discussed various aspects of professional

development models in education and the influence professional development has

on the classroom and/or teacher practice. The articles lacked information that called

upon instructional coaching as the professional development model, thus leading to

vague discussion or referencing in regards to the power of instructional coaching.

However, the general body of literature included research-based discussions of

coaching along with practical application for instructional coaching. Based on the

outcomes of the initial search, the general body of literature was further reduced by

refining the search to fit specific criteria for this synthesis. The criteria used to

reduce the initial findings are represented below.

- Description of Professional Development
- Role of the Coach

- Presence/Absence of Progress Monitoring

- Research Design

- Teacher Outcomes

- Student Outcomes

- Notes

The criteria listed above was chosen to identify literature where instructional coaching was the target application of professional development, thus leading to teacher and student outcomes in relation to the role of the coach. Research Design criterion provided detailed inquiry as to how the study identified themes and correlation to the instructional coach and its impact on the teacher, classroom and student. The criteria listed above, the yield of this search produced an even smaller amount of literature to be synthesized. This yield produced 15 articles that qualified for inclusion for this synthesis. The inclusion of the articles was limited to containing both teacher and student outcomes. Seven articles contained detailed teacher and student outcomes, four discussed teacher outcomes with detailed student outcomes, and four articles only referenced student outcomes with detailed teacher outcomes. Considering the criteria for inclusion, this synthesis examined the themes across the qualified literature. The themes identified in the articles include foundation of theory, research methods, professional development model(s), role of the coach (background of coach), growth of teacher practice, student outcomes, and overall outcomes of instructional coaching.

Foundation of Theory

Research in instructional coaching is limited and even more limited is the foundation of theory that supports instructional coaching as a professional development model. Since the 1970's and 1980's, Joyce and Showers have been at the forefront of the evolution of coaching. In their early publications, Joyce and Showers (1981) coined the term "peer coaching" and described the potential of coaching as a vehicle to transfer knowledge and skills learned by the teachers in professional development into classroom practice. Research during this time indicated that attending weekly seminars, or "coaching sessions," increased the implementation of new instructional approaches by teachers. The early work in 1996 of Joyce and Showers identified five kinds of professional development experiences: (1) theory, (2) demonstration, (3) practice, (4) feedback, and (5) in-class coaching. It is the work of Joyce and Showers that the body of research synthesized uses to form boundaries to the professional development interventions described in each study. Therefore, the information provided in articles outside of Joyce and Showers work, no other theory is referenced as a theoretical perspective of coaching.

Research Methods

The second theme that appeared in the articles identifies the type of research methods used to advocate for instructional coaching in our educational institutions. Out of the 15 studies, only one study used mixed methods as a research design. This study was conducted by Neuman and Wright in 2010 and used prior data to advocate the importance of coaching. Not only did they advocate for the importance

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of coaching by using a mixed method research design, but also their findings indicate the need for further investigation of the "active ingredient" in coaching. Seventy-five percent of the articles were quantitative studies, with 30 percent of those being longitudinal randomized studies. The longitudinal randomized studies examined the effect of a professional development model that included coaching on reading comprehension instruction and student's reading achievement in urban districts. A majority of the quantitative studies used ANOVA and exploratory analysis to analyze their results. The remaining articles meeting the inclusion criteria used qualitative research design with a heavy emphasis on observation and interviews.

The foundation for the research in the articles was attributed to the work done prior in Reading First and Early Reading First grants that were components of the *No Child Left Behind Act of 2001*. This act employed the position of "literacy coaches" that in turn led to the phenomena of "instructional coaching." While 20 percent of the articles examined instructional coaching in upper elementary (Reading First schools) and secondary classrooms, 80 percent of the articles focused on the impacts of literacy coaching in early childhood classrooms (Early Reading First grants). Until recent years, the only research available for professional development models was contained in upper elementary and secondary education, however, the Early Reading First grants paved the way for recent research to explore the role of professional development in early childhood classrooms, thus leading to more early childhood research studies than upper or secondary studies that include coaching. The articles demonstrate a mixed range of research design,

which benefits the limited research available in regards to professional development models that include coaching as a component.

Professional Development Models

Professional development models are called to change teacher pedagogy and increase teacher knowledge with the hopes of increasing student outcomes. This was evident in the literature included in this synthesis. Professional development models may have the same general understanding of their existence, but they come in an array of forms, which was demonstrated in the included articles. There was no real consistency from study to study as to the form or framework for professional development, however they all included coaching. The articles outlined the following frameworks for the professional development models used in the studies: content focused coaching (CFC), student focused, site-based professional development, comprehensive professional development, cognitive coaching professional development, practice-based professional development, and ExCELL coaching models.

Content focused coaching (CFC) and student focused. Content focused coaching (CFC) professional development uses coaching to focus on the content addressed in the intervention. For the majority of studies using CFC as a type of professional development, the focus of the coaches was limited to reading and writing instructional strategies that addressed comprehension and vocabulary. The remaining studies that used CFC focused on math or science. However, with student focused professional development models, the focus is on student outcomes in the lowest achieving content areas. In most cases addressed in the literature,

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reading comprehension was a primary focus of coaches regardless of CFC or student focus. The literature indicated that in student focused models coaches were not limited to one content area, but had flexibility due to student outcomes.

Site-based professional development. Site based professional development models were designed to develop theory and use demonstration, observation, and feedback to improve classroom practice (Walpole, McKenna, Uribe-Zarain, & Lamitina, 2010). Site-based professional development has also been called a basic instructional model for coaching. In the basic model, coaches demonstrate effective instruction for teachers to increase teacher knowledge of content. Under site-based professional development models, the studies indicated that a goal was to develop professional development communities within the school to encourage and support teacher learning. The communities ideally were designed by the coach to promote best practices and encourage learning through peers throughout the site.

Comprehensive professional development. Comprehensive professional development contains both content and pedagogical knowledge that supports a teacher's ability to apply literacy knowledge into practice. This model of professional development takes a look at the whole environment and the teacher's ability to incorporate what has been learned in interactive professional development sessions or classes into the classroom. Many of the studies used Early Reading First (ERF) data as a form of professional development model to articulate the overall growth of the teacher and students.

Cognitive coaching professional development. Cognitive coaching supports the professional development of teachers through a process of reflection.

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Instructional coaching, in this form, intends to create the types of sustained, instructionally focused collaborative interactions in schools that research and theory suggest are most effective for improving instructional quality (Matsumura, Srtoris, Bickel, & Garnier, 2009). The reflective process of coaching is the target of this professional development model. Coaches may have used instructional strategies to demonstrate with the teachers, but the main focus was the reflective process after each strategy was modeled.

Practice based professional development. The practice-based professional development model is a form of coaching that involves ongoing classroom modeling, supportive critiques of practice, and specific observations (different than teacher mentoring). Mraz, Alogzzine, and Watson (2008) describe this as an interactive model where content (math, reading, ect.) class takes place over a duration of time and then the coach becomes the link between the content class and implementation by the teacher in the classroom.

Exceptional coaching for language and literacy (ExCELL) professional development model. The ExCell professional development model used by Hindman and Wasik (2012) explored the duration of coaching (1 year vs. 2 year), and how the more time a teacher spends with a coach the stronger the outcomes for teacher and students. This particular model outlines very specific roles of the coach along with the clear expectations of the coach. This model of professional development also includes content focus. For Hindman and Wasik, the content focused around early childhood literacy skills (alphabet knowledge, vocabulary, comprehension, phonological awareness, and concepts about print).

Based on this set of literature there are several professional development models used to examine the benefits of coaching, how coaching is used as professional development, and the functions of coaching in education. However, the overarching goal of the professional development models where coaching is the primary component of professional development was to increase teacher knowledge and best practices in the classroom. Even though the process of the professional development models seems to vary, they all indicate the same goal for teachers and students, which is a deeper understanding of the content area. This leads to the next theme in the literature, which explains the role of the coach.

Role of the Coach

The role of the coach and the background of coach(es) were widely described throughout the literature. The professional development model outlined by the studies reviewed above dictated the role of the coach in the intervention. However, the goal of the coach from study to study contained similarities and differences, but the descriptions of the role are vague. Based on the research, the coach should be one who is classified as a master of education who, on average, has 12 years of elementary teaching experience and at least 2 years of prior coaching experience.

According to Neuman and Wright (2009), the role of the coach is to be balanced and should sustain and facilitate a reflective teaching process. Many of the articles indicated that coaching should be highly interactive, give corrective feedback, and prioritize each teacher based on needs of the teacher and student outcomes. Not only do teachers need to be prioritized, but the duration needs to be

varied as well. Once again indicated by the research, the coaching role is often debated among those professional development models and institutions that employ them.

For many of the professional development models, the actual coaching has some boundaries, but they also indicated differences in the amount of flexibility and lack of consistency across the research. The components that seemed to be consistent across the research emphasized:

- Planning and reflecting on instruction

- Providing help during lesson enactment

- Understanding of the theory underlying effective reading comprehension instruction or content area

- Differentiating instruction.

The research showed that regardless of content area, grade being taught by the teacher, or professional development, coaching was used as an active agent in the classroom to transform teacher and student outcomes. The active agent was discussed and described through teacher reflections. Ruan & Griffith (2011), state that reflection is an experienced-based process for exploring issues of concern and can lead to changes in understandings, conceptual perspectives, and future actions. Through the teacher reflections teachers are guided to change teaching practice and gain new knowledge by engaging in active conversations with the instructional coach.

The background of the coach contributes to the role of the coach. A few studies were very specific as to how their coaches were trained, while the majority

of the studies were less descriptive. In the study done by Matsumura, Garnier, Correnti, Junker and DiPrima Bickel (2010) who used the CFC professional development model, the description was the most detailed. CFC coaches engaged in three days of professional development a month led by fellows from the University of Pittsburgh's Institute for Learning (IFL) to build pedagogical expertise and skill of coaching. In this model, coaching skills were identified by the ability to work with teachers productively in their classrooms and in school-based professional learning communities. For this particular study, coaches were observed working with teachers for six months before coaching took place to validate this specific training for coaches.

Another framework for coaching is described by Neuman and Cunningham (2009). They used the America Choice School's description of a coach, which identifies three major functions of the coach to facilitate the coaching component of their study. The three major functions for America Choice School are as follows

(1) In-class modeling of instruction

(2) Facilitating study groups

(3) Leading teacher meetings

This illustrates how, regardless of the professional development model, coaches are viewed as instructional leaders who have the opportunity to impact teacher knowledge and student growth by being an active agent in the classroom and school. However, there seems to be little research that clearly defines the parameters of the role, describes and contextualizes the work of instructional coaching, and explains

how individuals learn to be coaches and are supported to refine their practice over time.

Growth of Teacher Pedagogy

The initial and underlying goal of coaching is to change teacher pedagogy to sustain best teaching practices and deepen teacher content knowledge. Based on the studies included, it is evident that teachers who participate in coaching tend to have a better understanding of what is being taught and will try new instructional approaches. Matsumura et al. (2010) reported that teachers actively involved in coaching tried new instructional practices learned in traditional workshops more often than teachers who did not participate in coaching, indicating the importance and power of instructional coaching inside the classroom.

CFC schools exhibited higher-quality reading instruction in their classrooms based on the coaching they received in the project. Sailors and Price (2010) found that teachers who received coaching in addition to participating in a two-day workshop scored higher on all measures of instruction with an increase of teacher knowledge on reading instruction or content area. Denton and Hasbrouck (2009), along with Neuman and Wright (2010), found growth in teacher practice but not teacher knowledge or pedagogy. Teachers who participated in cognitive coaching were more aware of student growth and adjusted teaching strategies to meet the needs of the students.

Teacher pedagogy is a quality outlined by Dickinson, Freiberg and Barnes (2011). Dickinson et al. suggest that coaching and professional development models need to address teachers' core conceptions of what it means "to teach". Thus, based

on the results from this body of research, coaching is beginning to hit the core of teachers' understanding of what it means to teach and use varied practices to meet the needs of the students. Therefore, teacher pedagogy is changing and impacting the classroom by practice and knowledge through coaching models.

Student Outcomes

The ideal expectation of coaching is that when teachers are involved in interactive coaching instructional changes influence teacher practice and increase student outcomes. In the research that did elaborate on student outcomes, the results of the effectiveness of coaching for improving student achievement were mixed. Mixed results indicated that some showed no increase, while others showed a positive impact of effective coaching. Marsh et al. (2010) showed coaching resulted in a small but positive effect on reading achievement in two of four cohorts within their study. This is also reflected in the results discussed by Biancarosa, Bryk, and Dexter (2010) who report that coaching had a positive effect on student outcomes. Neuman et al. (2010) also found that student outcomes did increase, however were unable to link the coaching to this increase by students.

Outcomes of Instructional Coaching

From the inclusion of articles in this synthesis, it is obvious that coaching as a professional development model comes in various forms. However, regardless of how it is used with teachers, coaching does impact how teachers teach and perceive new teaching strategies. Through the findings of the articles, it is evident that instructional coaching is a very valuable tool that should be used as a professional development model to increase teacher knowledge and student achievement. All

articles found some positive effect of coaching, whether in relation to the student or the teacher. Instructional coaching is a positive form of professional development that can influence the educational system.

Discussion and Limitations Found in Current Research

Instructional coaching is the root of new professional development models that are exploding in our schools across the United States. This form of professional development has been around for a long time when you consider how athletic programs use coaching to polish athletes' skills. At the current time, disciplines such as the medical field are employing this idea to work with surgeons to refine their techniques to perfection. The idea of having high quality teachers who teach with a deep understanding of theory, practice, and their students is a way to transform our education system, however we still have several areas to explore before we can meet the goals of coaching.

The current research provides a foundation as to how coaching is influencing the educational field at the current time. We know that changes can occur when coaching is used with teachers and schools. It is apparent that how those changes come about may vary and lead to the need for further investigation of coaching. Because of the lack of investigation on specific coaching techniques and guidelines, it is difficult to pinpoint the link between coaching professional development models and teacher/student outcomes. Marsh et al. (2010) did find a small significant relationship between a coach's routine and duration and teacher/student growth.

This body of research suggests that if as educators we are to sustain this process of professional development three main targets are to be identified as the focus of the coaching professional development. These include the support of leadership, focus on teacher knowledge, and implementation of new teaching strategies in the classroom. The coach reinforces this by technique, duration, and expertise of content. However, for sustainability to exist in schools where coaching is used, there must be more research done that investigates several components limited in the findings of this synthesis.

For instance, the research did not control for specific design of the coaching technique and/or training the coaches received. The biggest discrepancy from study to study was the role of the coach. Neuman et al. (2010) state that little is known as to what procedures coaches use in the classroom. Therefore, current research should evaluate the intensity of coaching, content knowledge of the coaches, and actual procedures that influence change in teacher practice. In order to move forward with coaching as a professional development model, the education field needs to be informed as to the "active" ingredient(s) that triggers teacher change and increases student outcomes. There also needs to be a framework for coaches. The *Literacy Collaborative* out of Ohio University is working very hard to form a foundation to insure coaches are ready to coach before the professional development ever takes place through their professional development model. More studies need to control for specific coaching techniques that trigger the positive outcomes from the teacher and the student. Possible areas to control may include the reflective process, duration of coaching, expertise of the coach, techniques used by coaches, training of

coaches, and the focus of the coach. As more research reflects coaching as its own professional development model and demonstrates the influence it makes in the classroom, coaching will be considered an active agent in refining our educational system.

Researcher Perspective

Reflecting on the outcomes and limitations of my findings it is clear that sustaining a model of professional development that works in the field of education is a challenge. Over the past decade, an abundance of professional development models have been used in efforts to keep teachers accountable. However, the consistency of the professional development models seems to be an area of weakness in sustaining best practices in the classroom, which is described in the themes of the qualified articles for this synthesis. Through a coaching model, teachers should be coached in a process that allows for refining of past, present, and future teaching strategies, which influences the success in the classroom with teachers and students throughout the school year. This builds on the work of Joyce and Showers (1981 & 1996) to support and examine the "coach's role" in professional development.

From my experience and knowledge of coaching, the opportunity for success in the classroom comes from the ability to coach teachers through a framework that allows for collaboration between both the teacher and the coach. The coach's goal should be to provide the teacher(s) with support to accelerate their student outcomes by coaching actively in the classroom. Several active ingredients of the coaching framework achieve this goal, which include a metacognitive process, active

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coaching strategies, reflective dialogue, and implementation of new teaching

strategies. In an effort to gain a deeper understanding of the process of teacher

implementation of new instructional strategies, I believe the influence of

metacognition in a professional development model where instructional coaching

bridges teacher self-efficacy and the sustainability of refining teaching practices is

the foundation to instructional coaching and is displayed in figure 1 below.
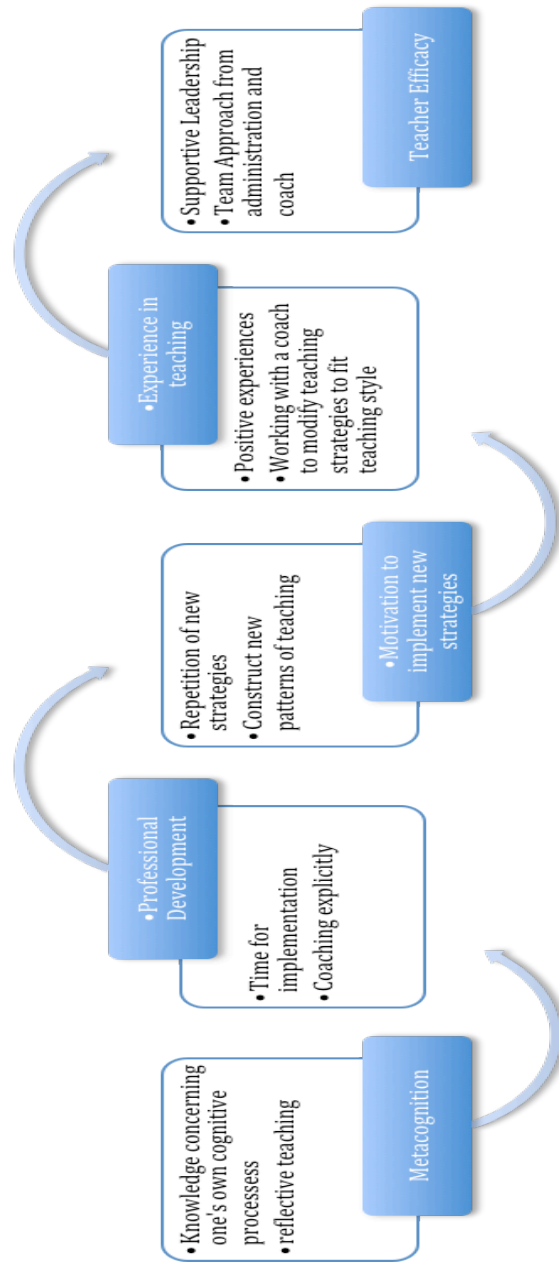
Figure 1. *Influence of Metacognition Through Professional Development on*

Teaching Strategies

In figure 1 you will find the proposed link between metacognition and instructional coaching. Instructional coaching is the link between all the outlined components that I propose sustains reflective teaching and the implementation of new teaching strategies that meet the needs of students. Two theories of education, which include metacognitive theory and constructivist theory, outline the theoretical approach to this perspective of coaching. Tschannen-Moran and McMaster (2009) define teacher self-efficacy as a teacher's perceived capability to impart knowledge and to influence student behavior, even that of unmotivated or challenging students. According to Bandura's (1977) theory, teachers' self-efficacy beliefs are related to the effort they invest in teaching, the goals they set, their persistence when things do not go smoothly, and their resilience in the face of setbacks. This is supported by John Flavell's (1979) definition of metacognition. Flavell defines metacognition as one's knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data.

   Metacognitive theory. Metacognitive theory is a very complex theory that has influenced education for over 40 years. In order to grasp the meaning of the metacognitive theory, one must first understand the meaning of metacognition. Flavell (1976) continues to define metacognition as the active monitoring and consequent regulation and orchestration of process in relation to the cognitive objects or units they bear, usually in the service of some concrete goal or objective. Therefore, metacognition is using self-regulatory monitoring during the cognitive state of constructing knowledge. As knowledge is constructed, we (if given the

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skills/strategies) self-regulate to problem solve, comprehend, and to communicate with one another.

Flavell (1999) suggests that when one is problem solving we are using executive skills to monitor and regulate one's cognitive activities. Borkowski (2001) states that the heart of metacognition is self-regulating, meaning the main function of self-regulation is to analyze and "size up" tasks in order to select an approach to problem solve. In other words, we use motivational beliefs associated with strategies to self-regulate tasks that are presented to us in learning new content. In understanding this metacognition process we have to note that we self-regulate during any active cognitive process.

Theorist Ann L. Brown, along with L. Baker (1984), looked at and built upon what Flavell stated in his 1979 publication. A. L. Brown in 1978) initiated a second framework of metacognitive theory that suggests two components: knowledge of cognition and regulation of cognition. Sperling, Walls, and Hill (2000) state that Brown's knowledge component includes declarative, procedural, and conditional knowledge of cognition. The regulation component of Brown's framework includes constructs such as planning, monitoring, and evaluation (Sperling et al., 2000). Brown (1978) says the principle is to develop certain metacognitive skills, which are indicative of efficient problem solving in a variety of situations, such as experimental, educational or naturally occurring. Brown (1978) also states the distinction between knowledge and the understanding of that knowledge to be a valid and important distinction with great heuristic power for those interested in cognitive development.

Borkowski (2001) states that the focus of the instruction should be on each student's learning process, therefore the teacher becomes adept at hypothesizing about how a student is processing information at any moment and modifies the teaching strategy to alter not only the course of learning, but also the cognitive development itself. This encompasses all aspects of the educational field by having teachers "reflect" on the actions and processes of the classroom and each individual student. Therefore, the impacts of metacognitive theory in professional development models of coaching are limitless, because we are presented daily with new ideas of this metacognitive process. It is through this metacognitive process that coaches have the opportunity to enhance teacher's awareness of this process when implementing new strategies.

Constructivist theory. Constructivist theory, the second major theory, has evolved through several influential theorists in education. These theorists include Jean Piaget, Lev Vygotsky, John Dewey, and Jerome Bruner, and each have defined constructivist theory to some extent as knowledge that is constructed from the learner's previous knowledge and experience, regardless of how one is taught. Jean Piaget developed constructivist theories of learning. For Piaget, learning occurs primarily through self-regulation, and involves a series of active constructions and adjustments on the part of the learner in response to external perturbances (Dimitriadis & Kamberelis, 2006). Piaget also suggests that one learns by refining ideas and theories that are related to the real world. In connection to this idea of constructing knowledge, Lev Vygotsky developed the theory of social constructivism. Dimitriadis and Kamberelis (2006) state that Vygotsky argued his

theory by saying it is through others that we develop into ourselves, and development does not proceed toward socialization but toward the conversion of social relations into mental functions.

Piaget and Vygotsky display how a learner constructs knowledge, and the notion that we cognitively construct and implement new knowledge. This is also evident in John Dewey's (1938) theory of knowledge. Dewey expresses that knowledge is developed through an adaptive response to the environment (Dewey, 1910). Dewey defines environment as "whatever conditions interact with personal needs, desires, purposes, and capacities to create the experience which is had" (Dewey, 1938, p. 44). It is through this "active" experience that we are able to develop knowledge that would help to solve problems that we may encounter in our everyday life. This experience that we encounter is the foundation to Dewey's theory of how we learn and teach, along with the purpose of education. Jerome Bruner (1996) continues to express the idea of a constructivist view when he describes teaching the present, past and possible. Bruner suggest that educators should consider four ideas (agency, reflection, collaboration, and culture) as connections between people and shared experiences. As we construct knowledge, we internalize knowledge, which leads to higher thinking skills, and may lead to sustainability of teaching practices.

Again, Figure 1 shows how metacognition, professional development, motivation to implement new strategies, experiences in teaching, and teacher self-efficacy may be linked in affecting the classroom through effective teaching. Theory supports the idea that as a learner receives new knowledge, it has to be processed.

The process the learner goes through when constructing new knowledge is both

active and reflective on what has been done before and what is to be done in the

future. However, what is missing from this body of research is the idea that the

active and reflective pieces may sustain if the learner becomes aware of the

cognitive construction of knowledge and implementation of that knowledge.

Therefore, the statement by Brokowski should be considered as researchers identify

the "active ingredient" in coaching:

…the focus of the instruction should be on each student's learning process.
Therefore, the teacher becomes adept at hypothesizing about how a student is
processing information at any moment and modifies the teaching strategy to alter
not only the course of learning, but also the cognitive development…" Borkowski
(2001)

Conclusion

Evidence clearly points to the critical importance of coaching for growth in

teacher knowledge and best practices. Unfortunately, many of the synthesized

studies lack the appropriate findings to support the "active" ingredient in coaching

professional development models. Instructional coaching professional development

models should be designed to ensure that teachers are prepared to deliver research-

based instruction, which should, in turn, lead to growth in student achievement. In

order to cultivate a change agent in our school classrooms through professional

development, interventions must be designed with explicit coaching techniques and

detailed coaching roles as we seek to sustain teacher growth and increased student

outcomes.

Chapter 3: Methodology

The purpose of this research is to identify coaching techniques that link a teacher's metacognitive process to the refining of past, present, and future teaching strategies. This research specifically addressed the following questions:

1. What coaching techniques do coaches use in various educational settings and why?

2.a What challenges do coaches face?

2.b How do coaches address the identified challenges?

3.a What opportunities do coaches give teachers in order to rethink their teaching experience?

3.b How does rethinking impact future teaching experiences?

By exploring coaching techniques and challenges of coaches, this research provided an insight into the phenomena of instructional coaching in the education field. Through the implementation of this multi-case study, educators are provided with a foundation of coaching techniques that were necessary for coaches to be successful in educational environments. Not only does this research provide a foundation for coaching techniques, but it also addresses challenges coaches may have in guiding teachers through a metacognitive process.

Research Design

Maxwell (2005) identifies design as an underlying scheme that governs functioning, developing, or unfolding details in a product of work. Creswell (1994) defines two forms of research design. Quantitative research design as an inquiry into a social or human problem based on testing a theory composed of variables,

measured with numbers, and analyzed with statistical procedures in order to

determine whether the predictive generalizations of the theory hold true. Creswell

(1994) also defines qualitative research design as an inquiry approach in which the

inquirer explores a central phenomenon (one key concept), asks participants broad,

general questions, and collects detailed views of participants in the form of words or

images. Qualitative research was chosen for this study in order to explore a central

phenomenon, instructional coaching, and the interactive approach needed to gain

detailed information from participants.

      The researcher chose case study over grounded theory or phenomenological

design. Grounded theory does not refer to any particular level of theory, but to

theory that is inductively developed during a study and in constant interaction with

the data for that study (Maxwell, 2005). Phenomenological design emphasizes the

importance of personal experience and interpretation subjectively.

Phenomenological design also seeks to describe rather then explain the phenomena.

Case study was chosen by the researcher to investigate a phenomena, instructional

coaching, in-depth through real world experiences.

Yin (2014) stated,

Case study is an empirical inquiry that investigates a contemporary phenomenon
(the "case") in-depth and within its real-world context, especially when the
boundaries between phenomenon and context may not be clearly evident. A
researcher would want to do case study because they want to understand a real-
world case and assume that such an understanding is likely to involve important
contextual conditions pertinent to the case (p. 16-17).

      Case studies can cover a single case or multiple cases. Creswell (2007)

described three types of case studies: (1) the single instrumental case study, (2)

collective or multiple-case studies, and (3) the intrinsic case study. The collective

or multiple-case design is the study of one common phenomenon with multiple subjects. This research is a multiple-case design, the study of one common phenomenon (instructional coaching), with multiple subjects (instructional coaches and teachers). Multiple-case design was chosen to describe coaching relationships of five instructional coaches who implemented coaching techniques to initiate a metacognitive process in teachers. When a metacognitive process is initiated one begins to rethink and refine his or her current actions (Flavell, 1976).

According to Yin (2014), the need for case study arises out of the desire to understand complex social phenomena.

Yin (2014) states,

"…. a case study allows investigators to focus on a "case" and retain a holistic and real-world perspective-such as in studying individual life cycles, small group behavior, organizational and managerial processes, neighborhood change, school performance, international relations, and the maturation of industries" (p. 4). Case studies answer "how" or "why" questions that have substance in exploring the phenomena. This study sought to explain how instructional coaching, through specific coaching techniques, could ignite the metacognitive process a teacher goes through when working with a coach. This study also desired to identify the challenges coaches face when working with teachers to refine teaching practices. In this multiple-case design, the researcher observed five coaches (two early childhood and three elementary) each working with one teacher or more teachers during a coaching session to understand the techniques used by the coach.

Semi-structured interviews were conducted with each coach through probing questions that explored how the coach initiated the metacognitive process in each teacher, which allowed the researcher to gain an individual perspective of each

coach. A survey was used with teachers to identify techniques used by the coach to trigger a reflective process of their teaching pedagogy.

Method

This study was conducted over the course of the spring 2014 semester. Three of the five coaches came from public school districts that had established instructional coaching, and two coaches came from an early childhood facility that was in the beginning stages of coaching implementation. Figure 2 gives the timeline of conducted research.

• January- February, 2014   o   Begin Recruitment of participants
• March, 2014   o   Finalized recruitment of participants (received approval for study from OU IRB, disbursed and collected consent forms)

• March, 2014- Data collection began
  o   Conducted initial interviews with coaches (approximately 30 minutes)
  o   Disbursed coaching reflection journals

• April, 2014-
  o   Observed coaching cycles with a coach and teacher(s)
  o   Sent survey out to teachers
  o   Sent out weekly journal prompts (began April 1-May 5)

• May, 2014-
 	
  o   Sent out final journal prompt (May 5)
 	
  o   Collected coaching reflection journals (May 12)

Figure 2. *Research Timeline*

Participants

The participants for this study constituted of five coaching relationships. Each relationship had an instructional coach and a teacher or teachers. The relationships was recruited through various ways: (1) recommendations were made by a district Title 1 director, a district professional development coordinator, and a Head Start program director, (2) a presentation was done by the researcher at team meetings and through on-site (school site classroom or meeting room) professional development meetings, and (3) e-mail invitations were sent to all coaches and teachers recommended for each coaching relationship. The five coaches consisted of two early childhood coaches at a Head Start facility in a metropolitan city of a central state, and three elementary coaches who coach in a suburban city of a central state. All five coaches hold the bachelor's degree in education. Two out the five coaches have a master's degrees (one reading education and one administration in education), and two coaches are currently in graduate school working on masters' degrees in reading education. Two coaches had no background experience of coaching prior to the 2013-2014 school year. One coach was previously a reading specialist with four years of coaching experience, one coach had experience coaching in multiple states, and one coach had six years of coaching experience three years as a coach and three years a teacher being coached

Each coach suggested a teacher or teachers to participate in the coaching cycle, which made up the coaching relationship. Once the researcher received the suggestions from the coach, she recruited the teacher to participate in the study. Two teachers came from Head Start and eight teachers came from public schools.

One Head Start teacher had taught for five years in Head Start and was working on her master's degree in reading education. The second Head Start teacher is an assistant teacher who has been teaching for four years, and holds a certificate of mastery. Eight elementary public school teachers participated in this study. The years of experience range from one year to 30 plus years of teaching. Chapter four, Contextual Information for Individual Participants, describes each coaching relationship in detail along with a description of the population for each school/Head Start.

Each coaching relationship was compensated with a Chick-Fil-A gift card (coaches $15 and teacher $5) at the end of the study. All participants were given a copy of the findings for review in case of discrepancies during the analysis (Maxwell, 2005). The researcher was granted permission (see Appendix A) for the research to be conducted by the university IRB (internal review board), the district IRB, and/or program/curriculum director before the data were collected.

Data Sources

Data came from multiple sources. Yin (2014) states there are six sources of evidence in case studies, and four principles of data collection. The six sources of evidence for case studies include documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. Documentation is an explicit process of data collection, and is relevant to each case study topic. Archival records are sources of data that come in the form of computer files (service records, organizational records, maps, charts, and survey data) and U.S. census information (public records). The importance of this type of evidence varies from case to case.

The interview is one of the most important sources of case study evidence. Interviews are used to have embedded, guided conversations. Yin (2014) identifies three types of interviews: prolonged interviews, shorter interviews, and survey interviews. Prolonged interviews are interviews that can last over a period of two hours, in a single setting or multiple settings. This type of interview can lead to a deeper inquiry of topic and other sources of evidence. Shorter case study interviews are more focused and generally take one hour. The interview questions may still remain open ended and create room for further conversation. Survey interviews are typically structured questionnaires. Survey interviews are used as another source of evidence.

The next three data sources Yin (2014) identifies include direct observations, participant observations, and physical artifacts. Direct observations can be either formal or non-formal. Formal direct observations may consist of meetings, sidewalk activities, factory work, classroom lessons, and so forth. Non-formal observations may be made during the interview process and/or when other evidence is being collected. Yin identifies participant observations as a special mode of observation. In this type of observation, the observer is not a passive observer, but an active observer. The observer may assume a variety of roles within the phenomena being observed. In fact, Yin states that the observer may actually participate in the actions being studied. This type of observation provides certain unusual opportunities for collecting data, but also creates major challenges for the researcher. The last data source Yin identifies are physical artifacts**.** Physical artifacts may include technological devices, a tool or instrument, or some other physical evidence. This

type of data source tends to have less potential relevance in the most typical kinds of case study.

Based on the six types of case study data sources identified by Yin (2014), this study targeted the following: documentation, interviews (shorter case study and survey interviews), and direct observations. The four sources for data in this study were collected over the Spring 2014 semester. The sources include audio-recorded coaching interviews, coaching cycle observations both in person and video taped, teacher surveys, and coach reflection journals.

Interview: Coaching interviews. The coach's interview consisted of open-ended questions that were developed from themes (e.g. role as a coach, needs of teachers, coaching process, coaching techniques, and reflective thinking), ideas that support a metacognitive process, and identification of coaching techniques and challenges. The short case study interviews, which Yin describes as more focused, resembled a guided conversation, i.e., fluid unbiased conversation asking "how" questions (Yin, 2014 p.110). rather than structured queries (Yin, 2014). The interviews lasted on average about 45 minutes, and consisted of guided open-ended questions. Although the interviews were guided with open-ended questions, they still followed a consistent line of inquiry in relation to the research questions of the study. Each interview consisted of 20 questions (see Appendix B), which allowed the researcher to not only ask unbiased questions, but to ask "why" and "how" questions in a nonthreatening way. During the interview process, the interviews were audio recorded using Audacity. Audacity is a multi-track audio editor and recorder software used to record live audio. The researcher chose to audio record

each interview in order to have a more accurate rendition of the interview. The interview was audio recorded with the permission of each coach, and then transcribed for coding purposes.

     Direct observation: Coaching cycle observations. Each coaching relationship participated in a coaching cycle. The coaching cycle was dependent on the coach and the coaching technique used by the coach. Coaching cycles for four of the coaching relationships, or dyads, which include the coach and one teacher) consisted of a pre-conference (determination of coaching topic), active role in the classroom with the teacher, and a reflection time. One coaching relationship coaching cycle consisted of a dyad coaching cycle and an instructional round. Both the dyad and instructional round consisted of a pre-conference (determination of coaching topic), active role in the classroom, and reflection time. For this particular coach, an instructional round is time where three or four teachers observe a peer teacher teaching a lesson they are interested in knowing more about. The observing teachers voluntarily sign up for a round. The coach asks a teacher who she feels would be able to demonstrate the strategies and/or lesson to be the observed teacher. Each instructional round takes about two hours broken down into four segments. The first 30-minute segment is used to establish personal objectives for the observing teachers to use while observing the lesson being taught by the peer teacher. The second 30-minute segment is used to observe the lesson in the classroom not taking any notes, and then the observing teachers take the next 30-minute segment to write down notes and questions for the already established objectives. During the last 30-minute segment, the observing teachers give positive

feedback to the peer teacher, while the coach guides the conversation. At the end of the instructional round, the coach allows individual teachers to sign up for one-on-one coaching. For her one-on-one coaching, the coach has a pre-conference (determination of coaching topic), active role in the classroom with the teacher, and a reflection time.

The researcher observed each coaching cycle in person, and also video taped each cycle. Videotaping was chosen by the researcher in order to provide an accurate rendition of each coaching cycle. Because of confidential issues of students in classrooms, the researcher was unable to video in the classroom. However, the researcher did videotape the reflection portion of each coaching cycle. The videotaping was done with permission of each study participant. The observation of coaching cycles provided rich data as a foundation for the type of techniques used with teachers in order to ignite a metacognitive process.

Documentation: Coach's reflection journal and teacher survey.

Coaching reflection journals were distributed and collected within a six week data collection window during the 2014 spring semester to examine the way coaches felt about coaching as a high quality professional development model and how coaching changed teacher practice. Each week, the coaches were emailed a writing prompt and asked to journal over the week on that specific topic. The six weekly coaching prompts can be found in the Appendix C. Subsequently, at the conclusion of the data collection process the coaches expressed they enjoyed the opportunity to reflect in the journal. This sentiment was spontaneous and unsolicited by the researcher.

The researcher asked each coach to provide an email address for the teachers they worked with in their building in order to recruit teachers for the survey. Once the researcher received the email address, an email was sent out to128 teachers asking them to participate in a 10-15 minute survey (Appendix D). The survey was given through Survey Monkey to provide an idea of how coaching is affecting the implementation of teaching strategies, and igniting a metacognitive process in regards to the professional development model of coaching. The varied sources of data will allow for a rich foundation of data to be analyzed.

Data Analysis

Case study analysis is very difficult because there are no defined parameters for the analysis of data. Yin (2014) states that there are four general strategies to analyzing case study evidence, which include theoretical propositions, working with the data from "ground up", developing case study description, and examining rival explanations. Yin goes on to state that any of the four general strategies can be used with five specific techniques, which include pattern matching, explanation building, time series analysis, logic models, and cross-case synthesis. For this study, the researcher used the general strategy of theoretical propositions based on professional development models and the metacognitive process (Darling-Hammond et.al., 2009, Desimone, 2009, & McVee et.al. 2005). The theoretical proposition strategy was used alongside the following specific practices: pattern matching, explanation building, and cross-case synthesis to analyze the study evidence. Figure 3 is an overview of the initial "road map" for analyzing the content in the data.

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Research Question	How do coaches address the identified challenges?	What challenges do coaches face and why?	What coaching techniques do coaches use in various educational settings and why?
Classroom Observations	• Identified specific techniques used to address challenges	• Identified challenges coaches face • Identified the procedures coaches use to address challenges with coachee	• Understanding how coaches coach • Identified techniques coaches use
Coach Interview	• Identified how the coach and administration support and identify the challenges	• Identified the specific challenges of the coach • Identified the coaching model used by the coach to address challenges and how to move forward with coachee	• Training • Process/Protocol • Why identified techniques are used
Teacher Survey			Identified the techniques teachers like best and why
Teacher Survey	Coach identified how they felt they addressed the issue and succeeded with the challenge	• Coach described feelings toward challenges • Coach described how they specifically address challenges	• Coach described feelings toward certain techniques in specific coaching situations

Research Question	How does rethinking impact future teaching experiences?	What opportunities do coaches give teachers in order to rethink their teaching experience and does this impact future teaching experiences?
Classroom Observations	• Identified responses that support Vygotsky Space • Identified responses that show a metacognitive thought process according to Flavall's definition of metacognition	• Identified coaches process for supporting teachers in a reflective manner • Identified the reflective process of the teacher based on coaching session
Coach Interview	• Identified specific experiences or techniques that impact future teaching experiences	• Detailed descriptions of teacher rethinking opportunities • Descriptions on how teacher rethinking changes future teaching • Described how coaching process allows for refining of teaching processes
Teacher Survey		• Identified opportunities to rethink and refine their teaching Addressed the ways coaching impacts teaching experiences
Coach Reflection Journal	• Detailed specific areas where teachers changed • Described how teachers changed and began thinking about their own teaching	• Coach described how their coaching session allowed for the teacher to rethink their teaching

Figure 3. *Overview of Data Analysis Continued*

The data were analyzed based on the framework discussed in Chapter 2 (refer to Figure 1) in an ongoing manner during the data collection process. The coaching cycle observations were coded to identify themes across coaches, and to connect coaching cycles with observable behavior of the coach and teacher using a rubric (Appendix E). The coaching interviews were coded using the professional development models, theory, and the metacognitive process used when implementing instructional coaching (Neuman et. al., 2009, Griffith et.al. 2013). The teacher surveys were coded on theories and themes that surfaced in the survey in regards to the metacognition process of teaching new and old strategies. As it turns out, the teacher survey provided the researcher with limited response. The final data component to be collected and analyzed was the coach's reflection journals. The journals were analyzed based on the connection to the metacognitive process used in coaching techniques and the teacher implementation of new and/or refined teaching strategies. After each set of data was analyzed using pattern matching and explanation building, the researcher then did a cross-case synthesis between all the cases involved in the study. Figure 4 is an example of how pattern matching and explanation building were applied to analyze the data in this study.

Data Analysis Technique	Data
Pattern Matching- comparing an empirical based pattern (based on the findings of the study) with a predicted one made before data are collected. (Yin, 2014 p.143)	• **Predicted pattern- coaches use specific techniques to initiate a metacognitive process in teachers.** • **Empirical pattern- coaches used active coaching cycles and reflective questioning to initiate a metacognitive process in teachers.**
Explanation Building- to "explain" a phenomenon with a presumed set of links about it, or "how" and "why" something happened. (Yin, 2014 p.147)	• **Teachers go through a metacognitive process when refining teaching practices, which is ignited by specific instructional coaching techniques (open-ended questions, active teaching lessons, follow-up).**

Figure 4. *Pattern Matching and Explanation Building*

Validity

Validity is an important component of the research design because it addresses the question, "How will we know that the conclusions are valid?". Maxwell (2005) states that explicitly addressing the validity threat is a way to expose how the researcher might be wrong and what they may be wrong about in qualitative study. Based on the criteria Maxwell (2005) describes, the validity threats to this study were researcher bias and reactivity. Awareness of researcher bias was addressed through bracketing (Creswell, 2007 & Moustakas, 2004). The researcher was attentive to the knowledge of personal perception about coaches' and teachers' attitudes on instructional coaching, ability to implement new teaching strategies, and a reflective teaching process. The researcher had to constantly

address how the bias influenced the analysis of data and the outcomes of the study by bracketing what were her perceptions of and inferences about what was occurring from what the data indicated were actually occurring. For example, as the researcher observed coaching cycles she had to make sure she did not infere the technique being used based on the training the coach received through the University of Oklahoma coaching model.

In addition, the researcher used a triangulation method of collecting diverse sets of data, which allowed for a better understanding of each component in each case studied. The purpose of triangulation for the research in this study was to get a better understanding of how instructional coaches use various techniques and coaching methods to guide teachers through a metacognitive process.

To attend to "reactivity", the researcher was aware of how she may be influencing the coaches' behavior in the data collection and analysis of coaches' interviews and observations. The researcher had to be aware of any inferences that might have possibly been drawn upon from coaches' reflection journals as the data analysis was occurring. As the study progressed, the researcher had to be conscious of additional validity issues, (e.g., maintaining a researcher role with participants) which may have influenced any data collection, coding, or analysis.

Chapter 4: Contextual Information

According to Yin (2014), the qualitative researcher needs to be a composer who can provide rich contextual information that describes important elements of the conducted research. This chapter focuses on the details of each of the five research sites (district and/or educational agency), coaching relationships (instructional coach and teacher(s)), and the comparison of each coaching style.

Site Description

The focus of this study was to determine the techniques instructional coaches use in order to ignite a metacognitive process when teachers try new teaching strategies. The researcher conducted a multi-case study made up of five coaching relationships. Each coaching relationship consisted of one instructional coach and a teacher or group of teachers. The researcher chose five educational sites that provide professional development through the means of an instructional coach. Three of the five sites were public elementary schools located in the same district, and two of the sites were Head Starts belonging to the same community action agency. The three elementary schools were located in a suburban city in a Mid-western state. One of the Head Start facilities was located in the heart of a metropolitan city of the Mid-western state, while the other Head Start facility was a suburban site.

School district. The public school district used in this study is the 10th largest in the state, serving over 15,000 students, employing 1,000 teachers (32% of those teachers have advanced degrees) and 14 instructional coaches. The average teaching experience of a teacher in this district is 12 years. The district covers 128

square miles with an average of 116.4 students per square mile. The district has 17

elementary schools, four middle schools, two high schools, one alternative high

school, and one online high school. Eighty-one different languages are spoken, 27%

of the students are minority (Black, Asian, Hispanic, and Native American), and

17% are considered economically disadvantaged. The district is committed to

leading and succeeding by ensuring all students receive a strong curriculum that

supports academic and life skills.

   Elementary sites. The first elementary school chosen for this study was

located in the middle of a neighborhood at the center of the city. The school served

548 students, pre-k through the fifth grade, during the 2013-2014 school year with

30 certified teachers (34% of the teachers held advanced degrees), two special

education teachers, one counselor, seven other certified staff, and one administrator.

The average teaching experience was 10.8 years. According to the State Department

of Education A-F scoring system, this school received a D+ with a score of 69 for

the 2012-2013 school year. Figure 5 shows a breakdown of the D+. Based on the

2013 school report card from the State Department of Education, Figures 6 and 7

show the overview of the student body and ethnic categories.

Overall 2013 student performance grade (50% of the overall grade)	D
Overall 2013 student growth grade (25% of the overall grade)	C
Overall bottom quartile growth grade (25% of the overall grade)	F

Figure 5. *Overview of State A-F Report Card (based on information provided by the State Department of Education, 2013)*

2013-2014 Enrollment	533 students
Students qualifying for free/reduced lunch	69%
Students kdg-5th receiving reading remediation	70%
Students classified as special needs	9.2%

Figure 6. *Overview of Student Body (based on information provided by the State Department of Education, 2013)*

Caucasian	62%
Black	6%
Asian	1%
Hispanic	26%
Native American	5%

Figure 7. *Ethnic Categories (based on information provided by the State Department of Education, 2013)*

The second elementary school chosen for this study was located in the rural part of the district and served 219 students, pre-k through the fifth grade, during the 2013-2014 school year. The school had 16 certified teachers (12.9% of the teachers held advanced degrees), one special education teacher, one counselor, three other certified staff, and one administrator. The average teaching experience was 12.8

years. According to the State Department of Education A-F scoring system, this school received a D+ with a score of 69 for the 2012-2013 school year. Figure 8 shows a breakdown of the D+. Based on the 2013 school report card from the State Department of Education, Figures 9 and 10 show the overview of the student body and ethnic categories.

Overall 2013 student performance grade (50% of the overall grade)	**D**
Overall 2013 student growth grade (25% of the overall grade)	**C**
Overall bottom quartile growth grade (25% of the overall grade)	**F**

Figure 8. *Overview of State A-F Report Card (based on information provided by the State Department of Education, 2013)*

2013-2014 Enrollment	**219 students**
Students qualifying for free/reduced lunch	**59%**
Students kdg-5th receiving reading remediation	**15%**
Students classified as special needs	**16%**

Figure 9. *Overview of Student Body (based on information provided by the State Department of Education, 2013)*

Caucasian	**83%**
Black	**0%**
Asian	**1%**
Hispanic	**10%**
Native American	**6%**

Figure 10. *Ethnic Categories (based on information provided by the State Department of Education, 2013)*

The third elementary school chosen by the researcher for this study was located on the east side of town within a neighborhood. The school served 601 students, pre-k through the fifth grade, during the 2013-2014 school year. The school had 33 certified teachers (23.5% of the teachers held advanced degrees), three special education teachers, one counselor, and two administrators. The average teaching experience was 3.5 years. According to the State Department of Education A-F scoring system, this school received a C+ with a score of 78 for the 2012-2013 school year. Figure 11 shows a breakdown of the C+. Based on the 2013 school report card from the State Department of Education, Figures 12 and 13 show the overview of the student body and ethnic categories.

Overall 2013 student performance grade (50% of the overall grade)	C
Overall 2013 student growth grade (25% of the overall grade)	C
Overall bottom quartile growth grade (25% of the overall grade)	F

Figure 11. *Overview of State A-F Report Card (based on information provided by the State Department of Education, 2013)*

2013-2014 Enrollment	601 students
Students qualifying for free/reduced lunch	50%
Students kdg-5th receiving reading remediation	22%
Students classified as special needs	10.5%

Figure 12. *Overview of Student Body (based on information provided by the State Department of Education, 2013)*

Caucasian	77%
Black	5%
Asian	3%
Hispanic	10%
Native American	5%

Figure 13. *Ethnic Categories (based on information provided by the State Department of Education, 2013)*

All three schools in this district strive to meet all needs of students through interactive learning experiences. The district ensures that all faculty and students have access to technology (interactive whiteboards, classroom audio systems, document cameras, computers, tablets, and wireless slates). The school district not only supports students' success through strong curriculum, but also encourages their faculty to be leaders at the school site and in the community by attending local, regional and national professional development trainings.

Head start sites. The National Office of Head Start states that Head Start is a federal program that promotes the school readiness of children ages birth to five from low-income families by enhancing their cognitive, social and emotional development. The two chosen Head Start sites are overseen by a community action agency. This agency is located in the second largest city of the Mid-western state. The population of this city is 398,121. There are over 1,000 community action agencies nationwide that provide a variety of targeted, community-oriented services and solutions for low-income Americans. As of 2000, this agency became a formal member of the United Way. The mission of the agency is to "Help Families Succeed". They believe that every family and every child deserve the same

opportunity for success. Therefore, this agency invests in the children of this

community. They have 13 early childhood sites with 100 certified teachers in the

three and four year-old classrooms, and at least one instructional coach per site.

According to the agency's website, their early childhood education programs build a

solid foundation for success for children and their families. The service is free to

eligible children ages birth through 4-years-old. The services offered are designed to

prepare children for kindergarten with reading, writing, math, and problem-solving

skills. In order to meet the needs of all families, they support children's

development of the home language and English language skills as a link towards

skill readiness. Figures 14 and 15 give an overview of the first site, which is an

inner-city site. The figures include information for enrollment, languages spoken,

national accreditations, certified teachers, instructional coaches, and ethnic

background. Figures 16 and 17 describe the second site, which is located in a small

town with a population of 19,101. All demographic information was provided by

agency administration.

2013-2014 Enrollment	271 students
Languages Spoken	3
National Early Childhood Accreditations	4
Certified Teachers	9
Instructional Coaches	2

Figure14. *Overview of Head Start Site One*

Caucasian	38
Black	123
Asian	12
Hispanic	66
Native American	7
Multi/Bi-Racial	21
Other	4

Figure 15. *Overview of Ethnic Categories at Head Start Site One*

2013-2014 Enrollment	192 students
Languages Spoken	2
National Early Childhood Accreditations	4
Certified Teachers	7
Instructional Coaches	1

Figure 16. *Overview of Head Start Site Two*

Caucasian	116
Black	27
Asian	0
Hispanic	9
Native American	19
Multi/Bi-Racial	20
Other	0

Figure 17. *Overview of Ethnic Categories at Head Start Site Two*

Description of On-Site Professional Development Models

Researchers (Darling-Hammond & McLaughlin, 1995; Guskey & Huberman, 1995; Hawley & Valli, 1999; Joyce & Showers, 2002) have discussed the need for reform in educational professional development models; and expressed the need for professional development in education to move away from brief workshops to more specific on-site professional development models. A shift in

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professional development design has ignited the two educational sites in this study (elementary schools and Head Start) to embrace a more specific on-site professional development model through instructional coaching. As with the present literature regarding instructional coaching, these two sites are fairly new at implementing instructional coaching.

District Progression of In-Service Professional Development Model

The district that was chosen for this study was fairly new in implementing a full on-site professional development model of instructional coaching across the district. The district first began implementing this type of professional development about five years ago, and has continued to grow their initiative of instructional coaching to the present date. The district first began by placing instructional coaches in a few of their lower performing schools. The district also had partnerships with programs such as Literacy First and Balanced Literacy, which had literacy coaches embedded within their programs to support teachers working with their programs. As the embedded coaches began to phase out, the district decided to start implementing instructional coaches.

When the district took on this model of professional development, the structure and guidelines were developed and implemented by site administration. Depending on the needs of the school site, the role of the coach employed in this district varied to some degree. The range of instructional coaches' roles included assistant principal, data interpreter, and content expert, which in turn allowed for an inconsistent model of professional development. At the sites where programs such as Literacy First and Balance Literacy existed, the school included some aspects of

the literacy coach into the role of the instructional coach. This allowed some school sites to embrace this new model of professional development as the district addressed the needs of the lower performing schools.

Instructional coaching has progressed fairly quickly as an effective professional development model, and this district sees the value in the continued implementation of this type of professional development. Within the past two years, the district has spread this initiative to include more school sites with a district-employed instructional coach. All four middle schools and nine out of the 17 elementary schools had onsite district instructional coaches at the time of this study. For the school year 2014-2015, this district will be adding four more instructional coaches. Since implementing instructional coaches, this district has and continues to strive to build a consistent professional development model across all school sites. The district has brought in outside coaching experts to train the coaches and have one-on-one coaching sessions with the district coaches at their coaching sites. The district looks forward to designing a more consistent instructional coaching model with the collaboration of all district administration as they continue to embrace on-site professional development.

Head Starts' Progression of In-Service Professional Development Model

The Head Start agency began their model of in-service professional development through a master teacher. Every early childhood site in this agency had a master teacher who was used as a resource by the teachers in the building. As a resource, the master teacher not only gave suggestions to teachers on teaching content and skills, but they ordered supplies and often took on a role that resembled

that of an administer. In this unique position, master teachers often were viewed as evaluators instead of support personal. Master teachers often wore multiple hats in order for sites to function at the highest level.

In 2007, the agency had the opportunity to partner with a state agency that had received the federal education grant Early Reading First (ERF). The on-site professional development portion of the grant consisted of on-site literacy coaches. The literacy coaches were assigned to the participating grant classrooms. The literacy coach worked with the teacher and also the master teachers at each site. Subsequently, the community action agency adopted a coaching model from the experience they had with ERF literacy coaches. The ERF grant was present at two sites from 2007-2010. At the completion of the grant, Head Start master teachers shifted into the roll of the instructional coach.

Since 2010, this particular community action agency has been transforming and refining its professional development model of instructional coaching. The agency now employs 22 instructional coaches across the 13 early childhood sites. The agency has had an outside source come and work one-on-one with their instructional coaches to make this a successful professional development model. The mission of the agency is to "Help all Families Succeed," and one way they accomplish this goal is by having highly effective teachers. In this new model, the instructional coach's' main focus is to support and guide teachers. The Head Start coaches in this agency spend on average 30 hours a week working directly with the teachers both in and out of the classroom. Over the past eight years, a shift has occurred within the Head Start agency's on-site professional development model.

The agency has fully invested in instructional coaches, because of the growth in teachers and student achievement. The Head Start agency intends to continue refining this model to support successful teacher growth.

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Participants

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In order to protect the confidentiality of the participants, each participant received a pseudonym. This pseudonym will be used to describe each participant in this chapter and in the discussion of findings in Chapter Five. Table 1 provides information for each participant regarding coaching experience, teaching experience, instructional coaching training, and the portion of the study in which they participated.

Table 1

Participant Demographics

Participant and Role	Number of Years as a Coach	Teaching Certification and Experience	Prior Experience with Coaching	Study Participation
Jami-Instructional Coach	**4 years**	**BS-Elementary Ed,M.Ed.; 30 years**	**Yes- Balanced Literacy, Instructional Coaching Institute-OU**	**Coach interview, coaching cycle, and reflection journal**
Paula-Instructional Coach	**1 year**	**BS-Elementary Ed.; 8 years**	**Yes-Instructional Coaching Institute-OU**	**Coach interview, coaching cycle, and reflection journal**
Jessica-Instructional Coach	**3 years**	**BS-Elementary Ed, M.Ed.; 21 years**	**Yes- KU coaching model, and Instructional**	**Coach interview, coaching cycle, and**

			Coaching Institute-OU	reflection journal
Tim-Instructional Coach	2 years	BS- Early Childhood; 8 years	Yes-Instructional Coaching Institute-OU	Coach interview, coaching cycle, and reflection journal
Kasey-Instructional Coach	3 years	BS- Early Childhood Ed.; 14 years	Instructional Coaching Institute-OU	Coach interview, coaching cycle, and reflection journal
Allison-Teacher	N/A	BS- Early Childhood Ed.; 1 year	N/A	Coaching cycle and Survey
Jill-Teacher	N/A	BS- Early Childhood Ed.; 3 years	N/A	Coaching cycle and Survey
Lori-Teacher	N/A	BS- Elementary Ed.; 30 years	N/A	Coaching cycle and Survey
Kim-Teacher	N/A	BS- Elementary Ed.; 1 year	N/A	Coaching cycle and Survey
Pat-Teacher/ Administrator	N/A	BS- Elementary Ed, M.Ed.; 19 years	N/A	Coaching cycle and Survey
Gail-Teacher	N/A	BS- Elementary Ed.; 20 years	N/A	Coaching cycle and Survey
Sarah-Teacher	N/A	BS- Elementary Ed.; 3 years	N/A	Coaching cycle and Survey

Judy-Teacher	N/A	BS-Elementary Ed.; 26 years	N/A	Coaching cycle and Survey
Linda-Teacher	N/A	CDA; 4 years	N/A	Coaching cycle and Survey
Robyn-Teacher	N/A	BS- Early Childhood Ed.; 5 years	N/A	Coaching cycle and Survey

All of the coaches who participated in this study attended the University of Oklahoma Instructional Coaching Institute (OU model). The Instructional Coaching Institute provides high quality, comprehensive professional development to instructional coaches–novice to expert. The Institute's sessions are specifically designed for coaches of all grade levels (birth through grade 12) and include topics that enhance and refine coaching skills and techniques that equip and empower coaches. The coaching strategies presented prepare coaches to fully support and engage teachers in improving their instructional practices, thus resulting in increased teacher effectiveness and improved child outcomes.(CECPD website, 2014)

In addition to experience with the OU model, one of the coaches had prior coaching experience through work with the Instructional Coaching Model: Kansas Coaching Project. The Instructional Coaching Model: Kansas Coaching Project directed by Jim Knight states that instructional coaches are on-site professional developers who teach educators how to use proven instructional methods. To be

successful in this role, coaches must be skilled in a variety of roles, including public relations guru, communicator extraordinaire, master organizer and, of course, expert educator. (http://instructionalcoach.org/about/about-coaching, 2014)

Coaching relationship one: Jami (instructional coach) and Allison (teacher). *Jami* is a seasoned educator who has been in education for 30 years. As an educator, Jami has been a classroom teacher, reading specialist, and currently, an instructional coach. Prior to becoming the instructional coach at her school site, she worked with the Balanced Literacy coach as the reading specialist to inform instruction for the school.

Balanced Literacy is a comprehensive program of language arts acquisition, with areas of emphasis on reading, writing, speaking, listening and viewing. At the time of this study, Jami was in her fourth year as the instructional coach at her elementary school. Jami works with all 28 teachers in her building. The 2013-2014 school year was a unique school year for her as she worked with eight first year teachers. Jami was asked why she was an instructional coach and her response was, "….it is an important part of our school and I love the collaboration I see across grade levels…" [add data source]

Jami's dyad consists of a first year teacher, *Allison*. Allison is a first grade teacher who relies on Jami for guidance and support with her teaching practices. Allison taught a whole group writing lesson during the coaching session, and Jami guided her throughout the lesson.

Coaching relationship two: Paula (instructional coach) and Jill, Lori, Kim, Pat, Gail and Sarah (teachers). *Paula* has been in the education field for over

eight years. She was a fifth grade teacher until she had the opportunity to become an instructional coach for the 2013-2014 school year. This opportunity as an instructional coach was at a school where she had never taught before, and she was excited to take on this leadership role. Paula had no prior coaching experience or training, but at the beginning of the school year every instructional coach in the district had the opportunity to attend an Instructional Coaching Institute developed by the University of Oklahoma. This training gave Paula the framework she needed to go back to her school and implement instructional coaching. When asked why she chose to accept this role as an instructional coach she responded, "It is the challenge… and it is intellectually stimulating to me because if I can help teachers then I can help students…" (interview).

In order to meet the needs of her school, Paula coached in two different ways. One was to coach on an individual basis through a dyad (a coach and teacher) and the other was to coach through instructional rounds. In order to fully understand her coaching techniques and role as an instructional coach, the researcher observed both types of coaching cycles. The researcher observed both Paula's coaching relationship (the dyad consisting of Paula and Jill), and the instructional rounds (Paula, Lori, Pat, Gail, and Sarah). Paula uses both types of coaching with the 16 certified teachers in her building.

Coaching relationship with teacher. *Jill,* a third year kindergarten teacher, participated in the one-on-one coaching cycle. The kindergarten team at this school consists of two teachers. Because Jill has more experience teaching, she is the mentor teacher for the kindergarten team. Jill strives to use the best strategies for her

students so that she helps guide the other kindergarten teacher. During this coaching session, Jill had Paula observe her small group instruction time.

 Instructional rounds teachers. The researcher observed one full instructional round. During the instructional round, teachers Sarah, Kim, and Gail observed Lori teach a math skill with a new teaching strategy. Pat, the school principal, also observed and participated in the round.

 Lori is a veteran teacher with 30 years of teaching experience. At the time of the study, Lori was teaching the fourth grade. For the instructional round, Lori taught a math lesson on a specific skill for Kim, Gail, Sarah, Pat, and Paula to observe. After the observation Kim, Gail, Sarah, Pat, and Paula gave Lori positive feedback on math lesson they observed.

 Kim was in her first year of teaching during the time of this study. Kim and Lori are on the same fourth grade team, and Lori is Kim's mentor teacher. Kim is always looking for new ways to teach content and looks to Lori for suggestions and ideas to add to her teaching toolbox. Kim requested to not be directly quoted for this study.

 Gail is in her 20th year as an educator. At the time of the study, she was teaching fifth grade for the first time. For the past 10 years, she has been the special education teacher. She participated in the round to see what strategies fourth grade teachers were using with specific content. Gail requested to not be directly quoted for this study.

 Sarah, a third year teacher teaching third grade also participated in the instructional round. During her first three years of teaching, Sarah has only taught in

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the third grade at this particular school. She joined this instructional round to gain a better understanding of how to teach a specific math skill.

Pat is the principal at the school. She is in her 19th year as an educator. Her role during the instructional round was to observe and give positive feedback. Although the coach guides the discussion during the round, Pat sits in as a support person for Paula.

Coaching relationship three: Jessica (instructional coach) and Judy (teacher). Coaching relationship three consisted of an instructional coach and one teacher. *Jessica,* the instructional coach, has been an educator for 21 years, and holds a master of education in administration. At the time of this study, she worked with all 30 certified teachers in her building. Over the past 21 years, Jessica has taught third through fifth grade, worked in an administrative role (principal and assistant principal) and as an instructional coach. At the time of this study, Jessica was in her third year as an instructional coach. However, it was her first year as an instructional coach for this school and district. Jessica moved to this state from a neighboring state in the middle of the 2012-2013 school year. When she first became employed at this school, she was a fifth grade teacher and took on the role of the coach at the beginning of the 2013-2014 school year. In previous years, Jessica's site had an on-site instructional coach and a Literacy First Coach. Literacy First creates a culture of literacy through a teaching, learning, and leading framework. Jessica stated the following about her coaching experience, "I enjoy coaching, because I love the ability to work outside my classroom and help teachers.

I think coaching is valuable and helps achievement with teachers and students"
[interview].

Judy is a seasoned teacher who has been in the classroom for 26 years.
During those 26 years, she has been primarily in the fifth grade classroom. Judy
described her experience with a coach as very helpful. For the coaching lesson in
this coaching cycle, Judy observed a math demonstration by Jessica. Judy requested
to not be audio or video recorded. She also requested to not be directly quoted for
this study.

Coaching relationship four: Tim (instructional coach) and Linda

(teacher). *Tim*, an early childhood educator, has been in education for eight years.
All eight years have been working in early childhood education. Tim worked in a
public school district for three years before moving to a Head Start facility. Over the
past five years, he has been teaching three- and four-year-olds. Two years ago, he
was given the opportunity to become an instructional coach and took on the
challenge of becoming the first instructional coach at his site. As a coach, he works
with 12 classroom teachers (six lead teachers and six assistant teachers), and four
aftercare teachers. Of the six classrooms he works with, three are three-year-old
classrooms and three are four-year-old classrooms. When Tim was asked why he
chose to become a coach, he responded by stating, "…growth is important to all
educators and as a coach, I get to guide teachers in their growth…" (interview).

Linda, an assistant teacher in a four-year-old classroom, participated in the
fourth coaching relationship. Linda has been in education for four years. Over the
four years, she has been an assistant teacher in both three and four year-old Head

Start classrooms. Two years ago, Linda was Tim's assistant teacher in a three-year-old classroom. Linda has a **Child Development Associate (CDA) Credential**, and has a few early childhood credit hours towards her associate's degree in early childhood education. During the coaching session, Linda asked Tim to observe and give feedback on a small group lesson.

Coaching relationship five: Kasey (instructional coach) and Robyn (teacher). *Kasey*, an early childhood educator for 14 years, is the instructional coach for the fifth coaching relationship observed. She has worked in Head Start for 14 years and as an instructional coach for four years. She is currently in the final stages of obtaining a master's degree in early childhood education. At the time of this research study, Kasey was working with eight teachers (four lead teachers and four assistant teachers). Four years ago, when Kasey became the instructional coach for her current site she was thankful she had been exposed to instructional coaching for over seven years. She stated, "…being exposed to instructional coaching as a teacher shaped the way I coach" (interview). Kasey had the opportunity to experience coaching as a teacher and has been able to use that experience as she coaches her peers. Kasey expressed in the interview she enjoys coaching because of the opportunity she can give teachers to grow.

The teacher who participated in the coaching relationship with Kasey was *Robyn*. Robyn has been an early childhood educator for five years. During the five years, she has taught multiple early childhood age groups. At the time of this study, she was a certified early childhood teacher in a three-year-old classroom. Robyn is currently in the final stages of pursuing her master's degree in early childhood

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education. For her coaching session, she had her coach observe her transition from a large group to lunch.

Summary

The contextual information provided in this chapter identifies the uniqueness of each coaching site, as well as each of the five coaching relationships observed in this study. Each site and coaching relationship is different, because the site administrator impacts the way a coach can carryout coaching, thus indicating that no two coaches coach in exactly the same. Also, the variation between the sites allows each coach to implement coaching based on the unique needs of the building. Each coaching structure is different as well. Two sites primarily work in dyads, were a coach works one-on-one and with a teacher. However, in one site, a coach works one-on-one with a teacher as well as with groups of teachers through instructional rounds. In Chapter Five, the researcher will discuss the findings of the study and address how this uniqueness plays a role in the outcomes of those findings.

Chapter 5: Findings

The participants involved in the five coaching relationships of this multi-case study were instructional coaches and teachers who came from two educational settings implementing coaching as an on-site professional development model. The two educational settings consisted of one public school district and one Head Start agency. The theoretical proposition method was used in data analysis, including specific practices of pattern matching, explanation building, and cross-case synthesis to analyze the study evidence. Upon analysis of the data for each research question, patterns emerged which led to over-arching techniques/themes

Four data sources (interviews, reflection journals, observed coaching cycles, and teacher surveys) were collected. The interviews, journal prompts, observed coaching cycles, and the teacher surveys were triangulated between each research question. Figure 18 provides triangulation between the techniques/themes for each research question and the data sources. This chapter will identify the findings by research question and define each theme mentioned.

Research Question/ Technique- Theme	Interviews	Observations	Reflective Coaching Journal	Teacher Survey
What coaching techniques do coaches use in various educational settings and why?				
• Collaboration	X	X	X	X
• Relationship Building	X	X	X	
• Instructional Rounds	X	X	X	
• Active Coaching Cycles	X	X	X	

	Col 1	Col 2	Col 3	Col 4
• Digital Technologies	X	X	X	
• Reflective Questioning	X		X	X
What challenges do coaches face?				
• Time	X	X	X	
• Distractions	X	X	X	
• Non Responsive Teachers	X		X	
• Inconsistent Role	X		X	
How do coaches address the identified challenges?				
• Support	X		X	
• Critical Conversation	X	X	X	
• Progress Monitoring Data	X	X	X	
What opportunities do coaches give teachers in order to rethink their teaching experience?				
• Reflection Time	X	X	X	X
• Open-Ended Questions	X	X	X	
How does rethinking impact future teaching experiences?				
• Self-Reflective	X	X	X	X
• Life Learner	X		X	
• Educational Conversation	X	X		X

Figure 18. *Triangulation of Research and Data Sources*

Research questions for this study were:

1. What coaching techniques do coaches use in various educational settings and why?

2.a What challenges do coaches face?

   2.b How do coaches address the identified challenges?

3.a What opportunities do coaches give teachers in order to rethink their teaching experience?

   3.b How does rethinking impact future teaching experiences?

Figure 19 identifies the technique/theme for each research question.

Research Question	Techniques/Theme
What coaching techniques do coaches use in various education settings and why?	Collaboration Relationship Building Instructional Rounds Active Coaching Cycles Digital Technologies Reflective Questioning
What challenges do coaches face and why?	Time Distractions Non Responsive Teachers Inconsistent Role
How do coaches address the identified challenges?	Support Critical Conversation Progress Monitoring Data
What opportunities do coaches give teachers in order to rethink their teaching experience?	Reflection Time Open-Ended Questions
How does rethinking impact future teaching experiences?	Self-Reflective Life Learner Educational Conversation

Figure 19. *Identified Techniques and Themes*

Research Question 1

What coaching techniques do coaches use in various educational settings and

why?

Six techniques were identified in answer to Research Question 1: (1)

collaboration, (2) relationship building, (3) instructional rounds, (4) active coaching

cycles, (5) digital technologies, and (6) reflective questioning. Collaboration is the

action of working with someone to produce or create something. The researcher

found that *collaboration* was an active ingredient in igniting change in teacher

pedagogy across the five dyads. *Relationship building* is the way two or more

people are connected. In this multi-case study, building relationships contributes to

the overall success of instructional coaching. *Instructional rounds* occur when a

coach and a group of teachers observe a particular teaching strategy/skill and

discuss how to apply the teaching strategy to their teaching toolbox. *Active coaching*

cycles, implies that the coach and teacher (s) both had an identified part in the

coaching cycle. The researcher found that active coaching sessions were guided by

digital technologies (audio and video). Interactive dialogue allowed the instructional

coach to have vigorous conversations to ignite self-reflection. Self-reflections were

guide by specific *reflection questions* that coaches used during the coaching

conversations. A discussion of each technique supported by data from this study is

given below.

   Collaboration. Instructional coaching is an effective on-site professional

development model when all participants involved collaborate to achieve the same

goal. Professional development practices in which teachers attended workshops or

off-site professional development provide a challenge to take the new knowledge and apply it to the classroom. With on-site instructional coaches, teachers can work together with the coach to implement the new teaching strategy or skill, which makes the transition in pedagogy smoother. Collaboration extends outside the coach/teacher relationship to grade level teams and schools as a whole. *Jami* describes her coaching techniques as collaborative by stating, "…when I go into a classroom to co-teach it is not me teaching a lesson, but a true collaborative effort. I have to work at not always jumping in to solve a problem or tweak something. Rather, I must remember to make the teachers feel that coaching is a partnership" [refection journal].

Collaboration existed not only in one-on-one coaching cycles, but in team meetings as well. Coaches encourage collaboration through discussion at team meetings. *Jessica* describes team meeting collaboration as, "Allowing teams to discuss data gives them the chance to suggest different teaching strategies for one skill that would benefit other learners" [interview]. *Paula*, who uses a coaching method of instructional rounds, has seen a shift in the school as a whole and their conversations regarding instruction. *Paula* stated, " …teams are reflecting together and giving suggestions on how to improve next year and how to make data work to drive classroom lessons" [interview]. Collaboration comes from everyone involved in the coaching process.

Relationship building. Building relationships can be difficult for instructional coaches, but aides in the success of the coach if established. In order to provide on-site professional development, Tim states, "The first thing I try to do

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is establish open communication relationships with all my teachers" [interview]. If a coach has open communication it is easier to work inside classrooms. For coaches, part of building the relationship is gaining credibility with the faculty. All coaches expressed in their journals that relationships are built by being proactive, having presence in all classrooms regularly, showing a willingness to demonstrate or co-teach, and being friendly. *Paula* describes establishing her relationships by, "…being friendly and showing them that I care about them…joking… and setting clear boundaries" [reflection journal].

Building relationships with new teachers is different than building relationships with experienced teachers. Jessica stated, "I approach new teachers by working with them on introductory lesson building, classroom management, curriculum, and systems of education. Experienced teachers can have the same needs, but I tend to coach on a needs base" [interview]. When a coach is working with seasoned teachers it is important to find any opening in order to work with that teacher. *Jami* stated, "…often times the experienced teachers don't feel the need to change their teaching practice so I have used curriculum changes as my foot in the door…"[interview].

Once coaches have built open relationships they can begin to actively coach the faculty. Relationships can determine the success of the coaching model and the change in teacher practice. When relationships are being built coaches have to walk the fine line of building professional relationships but not personal relationship. *Kasey* stated, "One of the hardest parts of building relationships is setting boundaries. As a coach I have to know where to draw the line in professional and

personal relationships"[journal]. Relationship is the link between the coach and transformation in teacher practice.

Instructional rounds. Instructional rounds were done as a group. The instructional round group consisted of an instructional coach, administrator, three to four observing teachers, and one teacher who taught the lesson. Each observer-teacher who participated was observing in order to better understand how a skill could be taught in his/her classroom. *Paula* uses instructional rounds as one way to begin one-on-one coaching cycles. *Paula* describes her instructional rounds by saying,

> Instructional rounds begin with me putting up a sign-up sheet to observe a skill or specific content being taught. Teachers have the opportunity to attend a round, which lasts about 90 minutes. We have subs to cover all the teachers who are going to be out of the room. I usually have about five teachers participating in a round. Four of the five teachers, our principal and myself meet for the first 30 minutes to discuss objectives for the observation of the lesson. They are to write down objectives based on our own teacher growth plans or I suggest objectives. I make it very clear that the observation is not a critical one, but an opportunity to see how others teach the skill or lesson. During the second 30 minutes, we go into a classroom to observe the lesson, which is audio recorded by our principal. During the next 30 minutes, the four teachers, our principal and myself come back and write down our thoughts and then discuss how they meet our objectives. For the last 30 minutes, I bring in the teacher who taught the lesson. We give the teacher positive feedback and ask questions. Usually through these instructional rounds I get teachers to sign up for one-on-one coaching cycles [interview].

Instructional rounds allowed the teachers to see a strategy being taught and think about how he/she could apply the strategy to differentiate instruction in the classroom. Through the observation of an instructional round, the researcher was able to see collaboration across grade levels.

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Active coaching cycles. Coaching is done in a series of cycles. Each cycle has a beginning, middle, and end with every participant (coach and teacher) having an active role. A coaching cycle cannot start without a beginning, and that beginning varies with the coach/teacher/school. Coaches start out coaching through open conversation on an instructional topic, need, or progress monitoring data.

Other starting points come from team meetings, coaches being asked to help, or a coach and teacher discussing a need. The coaches' classified this as a "pre-conference." During the "pre-conference," the coach and teacher discuss the coaching topic scenario, set up the in-classroom lesson, and define the roles of both the coach and the teacher. *Tim* stated "During my pre-conference, I make sure that the teacher understands their role, and that they understand my role" [interview].

Once the "pre-conference" has taken place, the coach and teacher participate in the coaching lesson. A coaching lesson is when either the coach or teacher teaches a lesson while the other watches, or both co-teach a lesson using a specific strategy. *Kasey* stated, "I give my teachers the choice of what they want me to do, either an observation, demonstration, or to co-teach through shadow coaching and side-by-side coaching. Shadow coaching is where I teach a piece of the lesson, and then the teacher repeats teaching the same thing. Side-by-Side coaching is when the teacher teaches the lesson and I give suggestions or guidance during the lesson" [interview].

During the observation of a coaching lesson, *Jami* went into a classroom only planning to observe the lesson, and in instead it turned into a co-teaching lesson on writing. *Jami* stated, "…sometimes you never know what's going to

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happen when you go in to a classroom, and today it felt natural, a true partnership"
[observation].

Each observed coaching cycle ended with a follow-up to the actual coaching
lesson. The follow-up is a "reflection" on the coaching lesson. The reflection is
when both the coach and teacher discuss what happened during the coaching lesson.
Kasey explained that a coaching cycle could not move forward without a reflection
[interview]. The coaches use specific questioning to scaffold (i.e. provide cognitive
support) the teachers during this process. Jessica gave a list of questions she often
used during her follow-up discussions [refection journal].

- Did your lesson go as expected?
- If so, what were you most pleased with, what skill area did you work on?
- If not, what would you do differently to feel more successful about your
  lesson?
- What do you want to remember about this lesson for an upcoming lesson?
- Do you need additional materials or assistance in planning your next lesson?

The active coaching cycle ensures that every participant has a role in the
cycle. The role is determined through a "pre-conference" and carried out through
coaching lessons. Every coaching cycle has a follow-up, which concludes a
coaching cycle. During every step of the coaching cycle, each participant plays a
key role in the success of the cycle. One participant cannot be the only one involved
in the cycle. *Jami* states," It is important that the teacher understand not only my
role, but hers as well. When we are both on the same page it makes coaching cycles
more effective and fun!" [interview].

Digital technologies. One way coaches found coaching cycles to be
effective was to use either audio or video recordings during the coaching lesson.

When coaching lessons were audio recorded it gave the coach and teacher the chance to listen to the conversation and content being taught. *Kasey* described audio recording as "an additional resource" to enrich the coaching [interview]. Audio recordings allowed for non-evaluative conversations between the coach and teacher. This was also true for video recording, however video recording proved to be the most challenging resource to use with teachers. Paula stated, "Most teachers don't mind being audio recorded, but when I first try to video them there is a bit of resistance. Therefore, I feel successful when I actually get to video the coaching lesson" [interview].

Both types of audio and video recordings have changed coaching methods. *Tim* stated, "I have always used the video recorder to coach. It was the way [(sic), that is the way] I was trained and our agency expects us to use it as a tool to effectively coach" [interview]. Digital technologies allowed coaches to have open conversations and a powerful follow-up session at the end of a coaching cycle, because it is a non-evaluative tool. *Jessica* explained, "… by using video, teachers were able to start self-reflecting with little guidance" [interview]. *Kasey* explained that having the video allows for both her and the teacher to re-watch the coaching lesson and identify the objectives being met and address concerns together [observation]. One teacher who took the survey responded by saying, "…I also enjoy watching myself teaching (with video footage) to see how my teaching can improve." The use of digital technologies during the coaching cycle has added another element to the refining of teaching practices.

Reflective questioning. Critical conversations are a unique aspect to the coaching cycle. This type of conversation is not only used to scaffold the teacher, but it is used as a technique to ignite self-reflection. *Kasey* states, "When I begin my reflection, I always start out with specific questions in mind. These questions are like: How do you think that went? What would you do differently? Tell me more about that? I have these questions written down to guide me through the reflection" [refection journal]. The questions are open-ended and allow for interactive dialogue. Reflective questioning is maintained throughout the entire coaching cycle. The pre-conference is set up through reflective questioning. During *Jami's* pre-conference, her reflective questions were as follows [observation]:

- What strategy do you think would work best?
- How can I help you with this skill?
- What are your expectations?

During the coaching lesson, the coach guides through reflective questioning. *Jessica* co-taught a Math lesson with a 5th grade teacher. During this lesson, *Jessica* asked the teacher, "What do you think about that? What would you like to me add [sic] to this lesson? How can we continue to teach the students this skill?" [observation] This ignited self-reflection and was carried over into the follow-up. During the follow-up between *Jessica* and *Judy,* the researcher observed Jessica scaffold Judy through reflective questioning based on what happened during the coaching lesson. Jessica asked the following questions [observation]:

- "What did you think of the lesson?"

- "What would you do differently?"

- "How do you think the students responded? Do you think they understood the content?"

Jessica was able to pinpoint students' needs based on the lesson. She was able to ask Judy what she would do differently and how she thought the lesson went. At this point, Judy indicated what she liked about the lesson, what she learned by watching Jessica teach and how she wanted to add this strategy to current lesson plans, because the students responded so well. Reflective questioning sets up the coaching cycle to be open and critical by asking the open-ended questions.

Summary

What coaching techniques do coaches use in various educational settings and why? In summary, the instructional coaches used specific techniques during their coaching cycles. The five techniques show that coaching methods vary, but all contain active participation from both the coach and teacher. The collaboration between the coach and teacher(s) indicates that coaching is not one-sided or evaluative. The active coaching cycles ensure that everyone plays a role in obtaining the goal set by the coach and teacher. The use of digital technologies and reflective questioning helps to ignite a self-reflective (metacognitive) process with the teacher. Because of the active participation between the coach and the teacher, the coaches felt successful during coaching cycles.

Research Question 2a

What challenges do coaches face?

Four themes representing challenges to coaches were identified: (1) time, (2) distraction, (3) non-responsive teachers, and (4) inconsistent role. Coaches

discussed through the interview and in their journaling that coaching, in general, can be a challenge. The six coaching relationships of this multi-case study were fully supported in their role as a coach by the building and district administration, however this support did not prevent the challenge of *time* and scheduling between coaches and teachers. Coaches reported that a coaching objective would be assigned to a coaching cycle, but during the coaching lesson or follow-up the objective was replaced with a *distraction* or other concern. Each coach described the challenge of non-responsive teachers to instructional coaching. *Non-responsive* teaches were identified as teachers who do not actively participate in coaching cycles and were resistant to try new strategies. Although the public school district and Head Start agency had identified the importance of the professional development model of coaching, each site had some guidance as to how the coach should spend his or her time, which caused *inconsistency* across the district and Head Start agency. A discussion of each theme supported by data from this study is given below.

   Time.   Time is always an issue in education, and it proved to be a challenge for coaches. The challenge of time in coaching cycles is present from the beginning to the end, and has several contributors. *Jessica* stated, "You know, when we are in the middle of our team meetings, I try to set something up and a general teacher response is …. I would love for you to come into my classroom, but there is just not enough time. So, as a coach, we are constantly fighting the battle of time" [interview]. The identified contributors of time for coaches include the length or time of a coaching lesson, when a pre-conference or follow-up can take place, and

the experience of the teacher. Each contributor impacted each coaching relationship and the ability to carry out their role as a coach.

The length of the coaching lesson is established during the pre-conference, however following through with the coaching lesson becomes the obstacle. *Tim* wrote,"…today I had a coaching lesson scheduled, but due to unexpected agency requirements the lesson had to be rescheduled" [reflection journal]. Due to the nature of education and the demands placed on both the teacher and coach, everyone has to be willing to have some flexibility in scheduling. Time presents itself once again as a challenge when coaches try to schedule a pre-conference or follow-up. *Jami* stated, "I have found that in order to have the follow-up, I have to be willing to have it when the teacher has a free moment. This may be in the classroom right after the coaching lesson or as we walk to specials" [interview].

Kasey explained that her coaching cycles change based on the experience of the teacher. She stated, "The biggest challenge for me is when we have teacher turnover, because of the length of time it takes to get the new teacher caught up to where we are in the curriculum and assessments" [reflection journal]. *Paula* echoed this by saying,"…sometimes it takes a lot of time to work with less experienced teachers, because of the amount of time I spend in their classroom to support them and build the relationship. This can also be the case with experienced teachers who think they don't need the help" [interview]. Time truly presents itself as a challenge in different capacities for each coach, and pushes coaches to think outside the box in order to fulfill their role.

Distractions. Coaching lessons are set up based on a need, suggestions, or

want between the coach and teacher. However, as the coaching cycle progresses, it

is hard to stick with the discussed coaching objective. During an [observation] by

Paula and *Jill's* reflection, it was evident that they started out their conversation

geared toward the set objective, but as the post observation discussion progressed

and the more they watched the video recording of the lesson, the conversation began

to change. This change was neither negative nor positive, but the teacher began to

notice other activities and learning milestones happening in the video that she

wanted to discuss with the coach. As a coach, *Tim* explained, "…sometimes when

we are in the middle of our reflections, the conversation goes a different direction

than I had anticipated and I have to really redirect the conversation back to our

objective" [reflection journal].

> It is a matter of feeling accomplished, *Jami* described in her [journal].
>
> As a coach, we want the teacher to engage in change, and sometimes
> allowing them to not stay focused on the lesson objective is what we have to
> do in order for the teacher to realize what is happening or address the need.
> Allowing the teacher to move away from the objective is what I have to do
> in order to feel accomplished and it is really hard sometimes.

Coaching objectives are used as a guiding tool in order for the coach to scaffold the

teacher, however, staying focused on the objective is often challenging and prompts

the coach to be aware of the conversation in order to facilitate change.

Non-responsive teacher. Non-responsive teachers resist the chance to build

workable relationships with their coach. This is a challenge for the coach, because

in order to be able to work with teachers on changing teaching practices and

implementing new teaching strategies, the coach has to be able to work with the

teacher. Coaches described the non-responsive teacher as the most difficult

teacher(s) that they have to work with and classified them in two groups: (1)

unwilling to address needs, and (2) above learning/implementing new strategies.

Paula stated, "One of my biggest challenges is working with resistant

teachers. They are often the ones that need the coaching the most" [interview].

Paula has to find any way she can in order to work with non-responsive teachers.

After one of *Paula's* instructional rounds, she began to self-reflect on the discussion

she had with the teachers. One particular teacher stood out in her mind

[observation]. This teacher does not usually have time for one-on-one coaching

cycles, but usually signs up for instructional rounds. For this particular round, this

teacher chose to focus on her classroom seating arrangement instead of instructional

strategies. Although this was not where *Paula* wanted to focus her time, she took

this time as an opportunity to work with her.

Non-responsive teachers push coaches to be very alert to the teacher,

because the coach is waiting for any sign of a breakthrough. *Jessica* states,

> I am thinking of one specific teacher who always says she doesn't need my help, but she really does. Anytime I pass her in the hall I always ask her how it is going and if she needs any help…. I had to be ready for the day she actually asked for my help, which happened a couple of weeks ago…. she responded to my questions by asking for help on math testing strategies… we set up the coaching lesson right there in the hallway… all I could think was FINALLY… [reflection journal]

Non-responsive teachers are resistant and make the coach earn their respect.

Coaches have to go above and beyond in order to gain the respect of resistant

teaches. *Tim* wrote, "…I have found that once I put myself out there by doing a

demonstration, the teacher begins to have some respect for me…this does not mean

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that they automatically want to have a coaching relationship, but it is a start"
[reflection journal]. The challenge of working with non-responsive teachers is the
attitude of the teacher, and the time and effort the coach must put into the situation.

   Inconsistent roles. The over-arching administration had a common goal in
mind when they set up the instructional coaching models for their school or Head
Start. However, as coaches were disbursed into the field, some of the expectations
changed. The public school coaches experienced inconsistency in roles, because
their principals were huge contributors to the way the coaches were used in the
building. *Jessica* stated, "…sometimes I am the assistant principal, because we
don't have one…" [interview]. In contrast, cross town at a different elementary *Jami*
is seen as strictly the instructional coach. She does preform other duties, if the
principal assigns them to her, but the majority of her time is spent in the classroom,
coaching teachers. *Paula*, the other public school coach, is encouraged to fully focus
on her role as an instructional coach, but like *Jami*, she is often assigned other
duties. For example, she has been pulled to fill in for teachers, or meet other
requirements her principal has asked her to do. *Jami* stated, " …one of the
challenges we have as coaches in the district is that many of us have different
coaching expectations set by our building administration..." [interview]. According
to the analysis across sites it was evident that the role of the coach was inconsistent.

Summary

   Public school and Head Start coaches were similar in that all coaches faced
the same type of challenges. Each coach in the Head Start has overarching
guidelines that guide the instructional coaching model, but as in the case with the

public school coaches, the building administration makes a difference. For example, *Tim* not only works with his classroom teachers, but also works with parents. He stated, "the over [sic] goal of my job is for me to be in the classroom working with teacher, but my time often gets interrupted because the director will ask me to sit in on a parenting/site meeting…" [interview]. *Kasey*, on the other hand, describes her role a lot like *Jami's*. She usually spends the majority of her time working in the classroom with teachers, and occasionally performs other assigned duties. The inconsistency of the actual role of each instructional coach creates a challenge when coaches try to collaborate because no two coaches or coaching situations are the same.

Research Question 2.b

How do coaches address the identified challenges?

Three themes related to addressing challenges were identified: (1) support, (2) critical conversations, and (3) progress monitoring data. Challenges emerge in the daily routine of coaching, and some of the challenges are preventable, but others are uncontrollable. *Support* implies that the coach receives backing by the building administration, and district/agency professional development director to fulfill the coaching requirements set by the educational site. *Critical conversations* expose the strategy that coaches use as they interact with challenges. The critical conversation is the vehicle to addressing specific concerns in teacher practice. Needs and concerns can be addressed through disconfirming data identified through *progress monitoring* results. A discussion of each theme supported by data from this study is given below.

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Support. Support comes from building and district administration along with the team of instructional coaches within the educational settings. When coaches face a challenge with a teacher, it is important for the teacher to see a united front. *Paula* stated, "During our instructional rounds, our principal sits in not as an evaluator, but as a part of our team. This helps to show the teacher that she and I are on the same page" [interview]. Teachers need to see that the principal/director fully supports the coach in his/her role as a coach. *Jessica* stated, "Anytime I am faced with a challenge of a resistant teacher I know that I can go to my principal and discuss the situation and receive guidance in moving forward. We meet 2-3 times a week to address areas of concern" [reflection journal].

Support also comes from the professional development directors for each educational site. *Tim* stated, "I know that if I have an issue I can always pick up the phone and call our instructional coaching supervisor and ask for help or suggestions" [interview]. Having support from administration outside the building allows the coach to discuss a situation and hear a different perspective on the situation. *Paula* states, "…knowing that I have support from administration allows me to address challenges that are out of my control" [interview].

Another avenue for support comes from the collaboration of instructional coaches in each educational setting. During monthly team meetings, coaches are given the chance to discuss challenges they are facing, and get guidance for addressing those challenges from their peers. *Kasey* stated, "Going to monthly meetings with all the other instructional coaches gives me the chance to see if I am the only one dealing with this challenge or if it is an agency-wide issue" [interview].

The time to collaborate together makes a difference in how the coaches are able to address present challenges and work through them.

  Critical conversation. Addressing challenges presents an obstacle that coaches have to learn to overcome. One way they address challenges is by having critical conversations. The critical conversation is a direct conversation between the coach and the teacher(s). *Jessica* explains coaching is sometimes more than demonstrating a strategy through a coaching cycle; it is also having direct conversations with teachers to address the area of need [interview]. Coaches are often put into situations where the only choice in addressing challenges is by having difficult conversations. The conversations address the outcome of assessments, classroom management, grade-level team issues, and overall instruction. *Jessica* stated, "…during one of my team meetings, we spent a long time discussing an issue and as a team we had to decide if this was really a student issue or adult issue…it was an adult issue and we all had to agree to disagree unfortunately" [interview].

  Through critical conversations, *Jami* explains, "I can give my teachers the chance to address the issue without being told how to address the issue" [reflection journal]. Using critical conversations opens the door for open communication and the chance for coaches to set boundaries or "non-negotiables" (i.e., not open for bargaining or give and take) for their coaching cycles. The conversation does not have to be negative, but needs to be very direct in order to address the needs of the current challenge. *Tim* stated, "By having direct conversations, I gain the opportunity to start guiding the teachers through dialogue" [interview]. Having

these critical conversations is not always the easiest way to address challenges, but have proved to be a vehicle of growth for both the teacher and coach.

Progress monitoring data. All five coaches involved in this study identified some type of an assessment tool that they use to engage in non-threating conversations. Non-responsive teachers were identified earlier as a coaching challenge in this analysis. One way that coaches were able to address this challenge was by using data during team meetings to discuss overarching issues concerning the students. *Jessica* explained that one of her roles is to discuss data with each teacher and team. She stated, "By discussing data as a whole grade level, I am able to address issues without calling out any one in particular" [interview]. Data results are used to discuss various topics with teachers, such as growth in student outcomes, learning objects, and needs for differentiated instruction. *Kasey* stated, "Every time new data is available, I like to use the outcomes to address improvements made by the teacher and address needs that impact student achievement" [interview]. Data are used as a non-threatening vehicle by coaches to address the identified challenges (time, non-responsive teachers, and distraction) and to discuss best teaching practices for all learners.

Summary

Challenges present themselves in various forms and at different times for instructional coaches. The challenges identified in this study (i.e., time, coaching objectives, non-responsive teachers, and inconsistent roles) are often addressed by the coach through support, critical conversation, and progress monitoring data.

The coaches indicated that support by the building, district, and agency administration creates a united front for engaging in this type of professional development model. The support allows coaches to address challenges through critical conversation that otherwise may not be addressed because of non-buy-in from the administration for this type of professional development.

Coaches create opportunities to address challenges by using progress monitoring data as disconfirming data to begin changing teacher pedagogy. Teachers are presented data through team meetings to address student outcomes. Coaches take this opportunity to address some issues of time, teaching objectives, and participation in the coaching cycle. The only challenge that is not addressed is the inconsistency of roles between coaches within their district or Head Start.

Research Question 3a

What opportunities do coaches give teachers in order to rethink their teaching experience?

Two themes were identified in the data related to this question: (1) reflection time and (2) open-ended questioning. Reflection time identifies the unrestricted time coaches allow teachers to think about their teaching strategy. During this *reflection time*, coaches use specific techniques to scaffold teachers' thinking. *Open-ended questions* are used throughout the coaching process as an opportunity to think about teaching strategies and how to embrace change in teaching practice. A discussion of each theme supported by data from this study is given below.

Reflection time. Reflections contribute to the growth and change that teachers experience by working with their coach. The follow-up time in a coaching cycle opens up time for self-reflection on the lesson that was taught during the coaching cycle. The coaches indicated that several techniques are used in order to allow teachers the opportunity to think about their teaching. These techniques include building healthy relationships, not responding too soon to the question asked by the coach, and using assessment data to confirm what is happening in the classroom. Every coach had reflection time established in his or her coaching cycle. This allowed teachers the time to discuss the coaching lesson, data, or their feelings toward specific teaching requirements. *Paula* stated, "Often times I have to tell the teacher to just tell me how they thought that went and remind them that I am not looking for a specific answer" [interview]. *Tim* stated, "Reflection is the most important time of my coaching cycle, because it is about the teacher growing and not my opinions" [interview].

The goals for coaching are to encourage best practice in the classroom and provide opportunities for growth. This growth is often accomplished in reflections. *Jami* and *Kasey* both described their reflection time with teachers as the pivotal time in the coaching cycle for growth. By scaffolding teachers through interactive dialogue, coaches were able to cultivate growth and encourage self-reflection with little effort. A teacher response from the survey was "…I am constantly thinking of what we discussed in the pre-conference, and how to incorporate those tips into the lesson seamlessly." Coaches embrace this time by providing the teachers a safe place to discuss and expose their weakness and strengths. Jessica wrote,

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"...reflections give you a glimpse into what the teacher is thinking and you get to see her start self-correcting…you can't be quick to answer your own question because the teacher wouldn't have the time to respond" [reflection journal]. Reflection occurs when teachers are made aware of their teaching practices and begin to refine those practices to benefit their students. Coaches use this as an opportunity to scaffold teachers into a deeper thought process.

    Open-ended questions. Open-ended questions were embedded throughout each coaching cycle. By using open-ended questions, the coach gives the teacher opportunities to rethink his/her teaching. *Kasey* explained, "Asking open-ended questions are a lot like asking questions to the kiddos in our classrooms, they allow a deeper thought process" [interview]. This type of questioning allows the coach to guide the teacher through a reflective process. Below is a portion of an observed reflection between *Tim* and *Linda* as they viewed and discussed a videotape of Linda's lesson. During the conversation, *Tim* asked specific open-ended questions to scaffold *Linda* to address the objective of the lesson.

    Tim: *"We are going to watch the video like we always do. If you see something you want to stop and talk about just let me know. I will stop it along the way so we can talk about things."*

    Linda: *"Ok"*

    Tim: *"Ok so for this coaching cycle we were focusing on quality of feedback from our CLASS assessment. So tell what was your objective during the activity?"*

Linda: "*Well my objective was to get them to do measurements and talk about the insects. I wanted them to talk about if they belonged in the same group or not.*"

Tim: "*Ok, so how do you feel that went?*"

Linda: "*It went in a totally different direction then I had planned. They went in a different direction then I had I originally wanted them to go. So they went there and I went there with them.*"

Tim: "*Ok, so by saying that it went in a different direction are you meaning that it got obscured from your objective?*"

Linda: "*Yes*"

Tim: "*Ok, talk to me about that.*"

Linda: "*Well they were more interested in the insects themselves. Not if they belonged to one group or how they were measured. They just wanted to talk about the insects. So I just went with that.*"

Tim: "*Ok, well being a flexible teacher is trait of an awesome teacher and sometimes you have to go off the lead of the students. If they don't want to count or measure you have to go with what they want to do. Talk to me about how you altered the situation off of what the children gave you.*"

Linda: "*I think they were more interested in just looking at the insects, playing with insects and looking at what insects they each had instead of doing any math or any of the other things we had discussed earlier.*"

Tim: "*Well if you are measuring and you want to keep the math minded skills--can you think of anything that would keep them along those lines… Umm you have the ants and you have the ladybugs…*"

Linda: "*umm…ya lets see…I could have used comparison of the ladybug and snail or any of the insects.*"

Tim: "*Comparison is a good one… lets watch the video and see if you notice anything else.*" [observation]

Tim demonstrates that by using open-ended questions he never stops scaffolding *Linda* in her thought process about how this activity went. Open-ended questions give the teachers the chance to think about what is being taught.

Jami stated, "Questioning is a key tool that I use during my entire coaching session. I start with open-ended questions during my pre-conference and use them throughout the entire coaching cycle" [interview]. Questions the coaches asked are based on the conversation and objective of the coaching cycle. For instance, the following open-ended questions were demonstrated across all five coaching relationships throughout the coaching cycle [observation].

- Tell me what your expectations are for this coaching lesson?
- How would you like me to participate during the lesson? Do you want me to demonstrate this strategy, observe you, or co-teach?
- How do you feel/think the lesson went?
- What would you do differently?
- How can you apply this to your teaching?
- How are you feeling about the assessment data?

- What would you like help with as we move forward?

When open-ended questions are not used during the coaching cycle the reflections tend to be short and non-interactive. *Paula* explains, "As a coach I have to be aware of what type of questions I am asking so that if we get off track or if I am getting short answers, I know to start asking more direct questions that push the teacher to think about the situation" [interview]. Open-ended questions allow the teacher to take the time and think about what is being taught, how it is impacting student achievement, and what the teacher would change in his/her teaching.

Summary

Coaches gave teachers opportunity to rethink their teaching experience by making time to reflect and asking open-ended questions. Reflection time was uninterrupted time where the teacher and coach could discuss his/her teaching practice, and how it could be changed to meet the needs of the students. In all five coaching relationships, coaches expressed the importance of following through with the reflection as it contributes to the overall success of teaching practices. The second opportunity coaches give teachers to rethink their teaching practice is through open-ended questions. The open-ended questions the coach asks guide the teacher in self-reflecting and correcting his/her own teaching practices. Both opportunities contribute to teachers automatically refining their teaching practices through self-reflection.

Research Question 3b

How does rethinking impact future teaching experiences?

Three themes were identified related to this question: (1) self-reflective, (2) life learner, and (3) educational conversations. *Self-reflective* implies that the teacher begins self-reflecting before the coach guides the teacher through that process. *Life learner* allows the teacher to accept new changes and ask for feedback and support with teaching practices. *Educational conversation* identifies the type of conversation happening through out the school when teachers are not involved in a coaching cycle. Through education conversation teachers express their own motivation by recognizing their accomplishments, by trying new strategies, and by seeing growth in their students. A discussion of each theme supported by data from this study is given below.

Self-reflective. Being a self-reflective educator implies that the educator is taking the initiative to refine personal teaching practices, and is evidenced when a coach begins to see a difference in how the educator approaches new situations. The new situations include but are not limited to the implementation of a new curriculum, meeting new state standards, approaching unfamiliar territory (teaching a new grade level), and meeting requirements placed by the district or agency. Being self-reflective is not something that comes naturally, but a behavior that is learned. *Paula* stated, "Most of the teachers I work with would reflect back a little on what they were teaching at the beginning of the school year, and now most of them do it regularly…I think this is because we are constantly having conversations

about how to change or improve our instruction to better meet the needs of our students" [interview].

Self-reflection allows the teacher to grow internally and not accept mediocrity. As a result of having reflection in the coaching cycles and asking open-ended question, a teacher will begin to develop this skill rather quickly. During an observation of a coaching cycle between *Jami* and *Allison*, the researcher witnessed automatic self-reflection. *Jami* started the reflection process with an open-ended question, and by the time she got the question out *Allison* was already responding. For example, *Jami* asked, "How did you feel about teaching this whole group writing lesson?" Allison responded quickly by saying, "I thought it went pretty good. I was glad you [Jami] were here to guide me through the writing process, because I had forgotten a few of the things I needed to cover. For instance I forgot what how [sic] to tie in the word wall into the writing until you [Jami] reminded me…" [observation]. Once *Allison* responded, she quickly began addressing areas she was concerned with and asking for clarification for the next time she taught a whole group-writing lesson. At this point, it was evident that *Allison* was cognitively thinking about her next whole group lesson and how she would change based on her conversation with *Jami*.

Jessica stated, "I have noticed teachers being self-reflective at our team meetings. We will be discussing the week or data and you will hear…You know, in the past I have taught that skill this way, but now I think I might try teaching it this way…to me, this shows me that they internalizing what they are doing to better meet the needs of their students" [reflection journal]. Self-reflection is an acquired

skill, and when teachers become self-reflective they approach teaching differently. Teachers embrace change differently, and they do not as resistive to new ideas. *Kasey* stated, "It is hard to work for our agency as a teacher, because there is always something new going on, and we have to be very flexible. But, when you are willing to embrace change it's not as difficult" [interview]. Self-reflection influences the way teachers teach new strategies and how they respond to shifts in curriculum or standards.

    Life learner. Teachers who rethink their teaching patterns go above and beyond what is required as a teacher. They have a sense of urgency in being the best they can be for their school and current students. This does not mean that they are the best, but that they strive to be the best they can be. They are eager to try new strategies; they are not afraid to fail; and if they fail, they get help or try again. They set high expectations for themselves and seek out colleagues for suggestions. *Jami* stated, "The teachers that I work with that reflect on what they taught usually are the first ones to ask me for help. They are motivated to have high student achievement in their classroom and are open to learning new ways of teaching" [reflection journal].

    For seasoned teachers who have had to learn how to implement technology into their classroom there has been a shift in how they teach. One teacher responded on the survey, "…that her coach had helped her grow and learn new ways of teaching by showing her how to use technology." Being a life learner is never accepting what you have done in the past as the only way of teaching, but being open to thinking about how to meet a new generation of students. *Jessica* stated, "I

fell [sic] that teachers who ask me what do you think about this or how would you teach this are trying to find out the best way they could teach a required skill, but in a new way" [reflection journal]. Teachers who rethink their teaching practices impact future teaching opportunities by being learners in a fast paced profession.

    Educational conversations. Rethinking a taught lesson allows teachers to have conversations about instructional approaches. *Paula* described the change in her school atmosphere as motivating. She stated, "I can walk down the halls and hear teachers during planning time talk about what they had used to teach a certain skill and ask what others have used to teach that skill. This wasn't the case at the beginning of the year, but as we get close to the end it has been awesome to experience this buzz around here!" [interview]. Educational conversations show that the educators are engaging in critical discovers to embrace new ways of teaching. They get excited to hear what was taught at a conference, what others learned, or how experienced teachers have approached situations.

    Educational conversations create an atmosphere around the building that motivates other teachers to step out of their comfort zones and embrace new teaching strategies. *Tim* stated, "When I hear teams talking about what they would do differently with a lesson… it allows me to see the growth the teachers are having as individuals and as a team" [interview]. Seeing collaboration across the school through conversations gives the coach a sense of accomplishment. *Jami* stated, "…when we have our PLC meetings I love to hear the faculty talk about anything and everything and learn from one another as we discuss issues…" [reflection journal]. Educational conversations impact future teaching experiences because

colleagues are engaging with one another and discussing new teaching strategies to benefit the students of their school.

Summary

In summary, coaches gave teachers the opportunity to rethink their current teaching strategies by allowing time to reflect and by asking open-ended questions. During the reflections, the coaches scaffold teachers to think about what they taught, how they taught it, and what, if anything, they might need or want to change. Coaches guide them to self-reflect and be honest in hopes that a teacher would not respond with a guarded answer. Through healthy relationships, coaches enable teachers to reflect by giving them enough time to respond. In other words, the coach initiates wait time before asking the next question, clarifying their question, or answering their own question for the teacher. Throughout the coaching cycle coaches ask open-ended questions that initiates the reflection process in teachers. The questions that a coach uses are designed to draw out the reactions and feelings of the teacher and not the opinions of the coach.

The reflection process and asking open-ended questions were opportunities teachers had to rethink their teaching practices, which led to a change in how the teachers approached new ideas or strategies. Rethinking a teaching practice did impact the way teachers moved forward with future teaching practices. Teachers became self-reflectors who motivated the faculty around them to try out new strategies. The teachers who practiced self-reflection were the ones who stood out as life learners. They desired to know how they could get better and change the outcomes of their students. As the teachers where rethinking their own teaching

practices, they were igniting engaging educational conversations among colleagues. Rethinking is a cognitive process that grows as the teacher and coach work side-by-side in a partnership to increase effective teaching.

Summary of Findings

Instructional coaches used specific techniques to meet the objective of this professional development model. The coaches defined their techniques as flexible, but purposeful. They set up their coaching relationships as partnerships, because collaboration between the coach and team are key elements to having successful coaching sessions. Before a coach can begin to initiate a process of change, the coach has to establish a relationship with the faculty. They do this by gaining respect through active coaching cycles in which everyone has a role in the process. The active coaching cycles consist of observations, demonstration, and co-teaching lessons that lead to reflective conversations.

Although the coach's goal is to establish healthy professional relationships, they face challenges in the process. The identified challenges for these coaches were time, coaching objective, non-responsive teachers, and inconsistent roles. Time played a role in how much time the coach got to spend in follow-up conversations, when they would be able to set up a coaching cycle, and how the active coaching cycle would be carried out. Time is valuable to both parties, and coaches had to work to stay focused on coaching objectives. Staying focused on an objective became a challenge for coaches when they had to re-direct conversations or follow the lead of the teacher instead of staying on course. Not only did coaches face challenges with time and coaching objectives, but with non-responsive teachers as

well. Non-responsive teachers were identified as resistant teachers who pushed against the instructional process. These teachers were consistently described as saying they do not need help, or they understood the new strategy they are being asked to use. They may have participated in team meetings, but not in one-on-one coaching cycles, which created a challenge for the coach in order to meet the teacher's goals. Non-responsive teachers are often the ones that need the most help, and the coach has to take any opportunity to build a relationship with the teacher. In conjunction with the other three challenges coaches deal with is the challenge of inconsistent roles between the coaches and the agency or district. Because building administration has some authority over the instructional coaches, it is difficult to always fulfill the obligations set by the agency/district and building administration.

Each challenge faced by the coach was addressed by either support from administration or colleagues, critical conversations, and/or progress monitoring data. The coaches used their resources to address and conquer challenges. They indicated that by having support from their administration and colleagues they were able to have critical conversations to address concerns and issues with teachers. One way the coaches were able to address challenges was through discussion of data. Progress monitoring data were used as confirming and disconfirming information for instruction. Challenges emerged on a regular basis, but with options for addressing them the coaches felt they could face each challenge more effectively.

Through coaching techniques, the coach was able to provide teachers with the opportunity to rethink their teaching practices. The way coaches allowed teachers to do this was through reflection time and open-ended questions. Reflection

time came from coaches allowing teachers to truly self-reflect on what and how teaching was occurring in the classroom. This happened because the coach asked the teacher open-ended questions to scaffold them through the reflection process. This reflection process impacted future instruction by motivating teachers to try new teaching strategies.

The process of rethinking impacted future teaching strategies by creating teachers who self-reflected on their own, establishing life learners, and igniting educational conversations throughout a building. Self-reflection was established through coach and teacher reflective discussion resulting in a personal perspective on teaching. By self-reflecting, teachers long to learn new strategies to form the best teaching practices they can for their students. Besides self-reflecting and being life learners, rethinking increased motivational educational experiences with teachers. The educational conversations changed the language used between the coach and teacher and teams of teachers. Instructional coaching is a process that includes several aspects, but when used effectively can have a significant impact on teaching.

Chapter 6: Discussion

The final chapter of this study provides a brief overview of the study followed by a discussion of the findings. The study explored the following questions:

1. What coaching techniques do coaches use in various educational settings and why?

2.a. What challenges do coaches face?

   2.b. How do coaches address the identified challenges?

3.a. What opportunities do coaches give teachers in order to rethink their teaching experience?

   3.b. How does rethinking impact future teaching experiences?

The researcher chose to use qualitative multi-case study methodology in order to explore a central phenomenon, instructional coaching. This interactive approach enabled the researcher to gain detailed information from participants. Creswell (1994) defines qualitative research design as an inquiry approach in which the researcher explores a central phenomenon (one key concept), asks participants broad, general questions, and collects detailed views of participants in the form of words or images. This method provided insight into what techniques instructional coaches use to initiate a metacognitive process when teachers rethink their teaching practices.

The instructional coaching process enabled coaches to use specific techniques to guide teachers through a cognitive process to implement best teaching practices. The professional development model (instructional coaching) created

challenges that the coaches had to face and address in order to allow teachers the opportunity to think about what and why they used specific instructional strategies. The results of this study identified specific techniques that the coaches used when working with teachers, challenges they faced and how they addressed them, and how coaches gave teachers the opportunity to rethink teaching strategies.

The participants of this multi-case study were represented in five coaching relationships. The five coaching relationships consisted of one instructional coach and a teacher or teachers. Three of the five instructional coaches worked at different elementary schools within the same district. The other two instructional coaches worked for a Head Start agency, but at different locations. The grade level taught by the public school teachers varied in this study. One teacher taught kindergarten, one taught first grade, two taught fifth grade, two taught fourth grade, one taught third grade, and one was an administrator. The Head Start teachers both taught in three-year old classrooms at different sites. One was a lead teacher and one was an assistant teacher.

Data sources for this study consisted of interviews, observation of coaching cycles, reflection journals, and teacher surveys. Face-to-face audio-recorded interviews were conducted with all five instructional coaches individually. Each coaching relationship was either video or audio taped during a coaching cycle. The coaching cycle included a pre-conference, coaching lesson, and follow-up. Over a six-week period coaches made journal entries from weekly journal prompts provided by the researcher. A survey link was sent out to all the teachers who worked with the instructional coaches. Data analysis was performed using the

theoretical proposition strategy with the following specific practices: pattern

matching, explanation building, and cross-case synthesis to analyze the study

evidence.

Discussion of Metacognitive Coaching

Vygotsky space. Vygotsky's general law of cultural development explains

that schemas emerge from the social interactions between an individual and his

environment (Vygotsky, 1979), employing that we function on two levels, first at

the social level and then at the individual level. Drawing on Vygotsky's theory,

Harré (cited in Callucci et.al., 2010) developed a conceptual framework for how

individuals develop through a social process. This process has been elaborated on

and identified as Vygotsky Space through the works of various researchers (Callucci

et.al., 2010, & McVee et.at. 2005). Vygotsky Space is a non-linear process of

learning that may occur in any of the four quadrants of Vygotsky Space (Callucci

et.al. 2010 & McVee et.al.,2005). The four quadrants of Vygotsky Space are

conventionalization (setting), appropriation (actions), transformation (private), and

publication (new learning) (Callucci et al., 2010). The quadrants represent the space

where individuals construct knowledge through social and internal experiences.

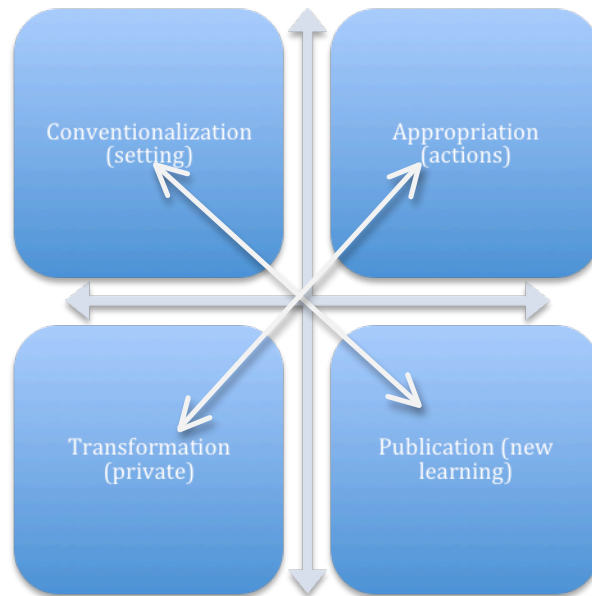Figure 20 is a schemata of Vygotsky's Space.

Figure 20. *Vygotsky Space* **(Note: Adapted from McVee et.al , 2005)**

Coaching and the Vygotsky space. Instructional coaching is a social

interaction that allows individual schemes to emerge through the environment. The

techniques used by the instructional coaches of this study (i.e., collaboration,

relationship building, active coaching cycles, digital technologies, and reflective

questioning) are discussed in relation to Vygotsky's Space. Instructional coaches

use collaboration to create a team learning community. The team learning

community is the foundation for all coaching experiences because coaching is a

partnership between both the coach and the teacher. It is through collaboration that

the coach creates a safe environment (conventionalization) for teachers to develop

and strengthen their individual schemata about teaching. Coaches establish

collaboration by building relationships with the teachers. The relationships set

boundaries and expectations for coaching cycles. This also aids in the establishment

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of safe learning environments. Collaboration and relationships are the foundational blocks for successful coaching sessions.

When the coach has established a safe learning environment he or she can begin the coaching cycles. The coaching cycles are established so that the teacher has an active role in the process. One of the four quadrants of Vygotsky's Space is appropriation (actions). This quadrant is what allows the individual to be actively involved on both the social level and the individual level of schema building. Through coaching cycles the coach and teacher work together to address best teaching practices. An active coaching cycle begins with a "pre-conference". During the pre-conference the coaching lesson is outlined with the roles and responsibilities of both the coach and teacher identified, and what and how the lesson will be taught delineated. The coaching lesson is then taught by either the teacher, coach, or by co-teaching. Regardless of who is teaching, both the teacher and coach have action related responsibilities during the lesson, which are outlined below.

- Observation: coach watches the teacher teach and highlights areas of the lesson to discuss with the teacher.

- Demonstration: coach teaches a lesson using specific teaching strategies and the teacher watches and takes notes for discussion during the follow-up.

- Co-teaching: the coach and teacher both share a role in teaching the lesson.

It is through action that an individual can grow on both social and individual levels (transformation and publication). The active coaching cycles provide this opportunity for teacher growth.

Using digital technologies throughout a coaching cycle provides a mechanism for coaches to discuss teaching pedagogy with teachers. Audio and/or video recordings place the coach and teacher back into the lesson that was taught. By using digital technologies in this capacity both the coach and teacher are able to identify areas of the lesson that they would like to expand on or refine. Reviewing a video or listening to an audio recording takes place during the follow-up conference, the final step in a coaching cycle. During this follow-up, coaches used reflective questioning to generate a thinking process for the teacher that demonstrated both transformational (private) and publication (new learning) quadrants of Vygotsky Space. Ruan et. al. (2011) express the importance of building environments that promote dialogue and conversations among individuals with different perspectives through teacher reflection. The teacher reflection allows one to gain knowledge both publicly and privately through social interaction. Based on the techniques used in the coaching cycles, teachers exposed to high quality coaching models are given the opportunity to learn on both the social and individual levels and among all four quadrants of Vygotsky's Space.

Initiating a Metacognitive Process

As indicated in Chapter 2, professional development models are called to change teacher practice and increase teacher knowledge with the hopes of increasing student outcomes. Joyce and Showers (1981) described the potential of coaching as a vehicle to transfer knowledge and skills learned by teachers in professional development into classroom practice. It is through a metacognitive process that coaches can initiate change in teacher practice through new knowledge.

John Flavell (1976) defines metacognition as knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data. Flavell (1976) continues to define metacognition as the active monitoring and consequent regulation and orchestration of process in relation to the cognitive objects or units they bear, usually in the service of some concrete goal or objective. Therefore, metacognition is using self-regulatory monitoring during the cognitive state of constructing knowledge. As knowledge is constructed we (if given the skills/strategies) self-regulate to problem solve, to comprehend, and to communicate with one another.

The instructional coach provides teachers with opportunities to construct new knowledge by planning for reflection time and asking open-ended questions. Cognitive coaching identified by Matsumura et. al. (2009) supports the professional development of teachers through a process of reflection. Instructional coaching, in this form, intends to create the types of sustained, instructionally focused collaborative interactions in schools that research and theory suggest are most effective for improving instructional quality.

It was through the reflection time that coaches guided teachers in self-regulating to problem solve or refine current teaching practices. During the reflection time, coaches used open-ended questioning to ignite an active monitoring of the teachers' own cognitive process as to why teaching strategies were used and how they impacted student outcomes. The open-ended questions also allowed the teachers to think through their own teaching practice, and how they would refine

that practice to increase student outcomes. Coaches used specific questions to ignite this process. The questions coaches used were

- Tell me what your expectations were for this coaching lesson?

- How do you feel/think the lesson went?

- What would you do differently?

- How can you apply this to your teaching?

- How are you feeling about the assessment data?

- What would you like help with as we move forward?

According to Neuman and Wright (2009), the role of the coach is to be balanced and should sustain and facilitate a reflective teaching process. Reflection time embedded with open-ended questions was the foundation for the refining of teacher practice. It was the reflection process that allowed the teachers to grow on an individual level, because coaching is an active process that creates learning opportunities for the teacher. As the teachers gained new knowledge about new teaching strategies, they expressed the desire to implement the strategies without hesitation. Implementing new teaching strategies impacted the way teachers approached new teaching experiences. Reflection gave the teachers the time to think about how they would use the new strategies to teach content skills and what would be needed to meet the needs of their students. Without reflection time and guided questions from an instructional coach, teachers may miss out on the opportunity to self-regulate teaching strategies used in their classrooms and provide best teaching practices for their students.

The reflection process and open-ended questions allow for metacognition to impact a teacher's motivation to embrace new teaching practices through professional development models where positive coaching relationships are established. Figure 1 in Chapter 2 proposed a link between metacognition and instructional coaching, with instructional coaching being a link to sustain reflective teaching, and the implementation of new teaching strategies that meet the needs of students. Beyond being simply a link, the data in this study identified instructional coaching as <u>the</u> link that ignites metacognition in teacher practice.

In Figure 1, metacognition is represented as the beginning link to professional development models (e.g., instructional coaching), leading to motivation, teaching experiences, and ultimately teacher self-efficacy. As a result of the data from this study the research proposes that instructional coaching is the foundation in which metacognition is ignited in teachers and transferred through motivation to implement new teaching strategies in the classroom. It is still proposed that motivation leads to higher levels of teacher self-efficacy.

The identified coaching techniques in this study describe an action-related process from both the coach and teacher. It is through this process that the coach begins to guide teachers through reflections to refine their teaching practices. When a teacher begins to refine a teaching practice by self-regulating instruction, he/she displays motivation to change current practice. The study data indicated that instructional coaches use progress-monitoring data to promote motivation in continuing with current instruction or refining current instruction. Figure 21

represents the revised model of instructional coaching and metacognition from the
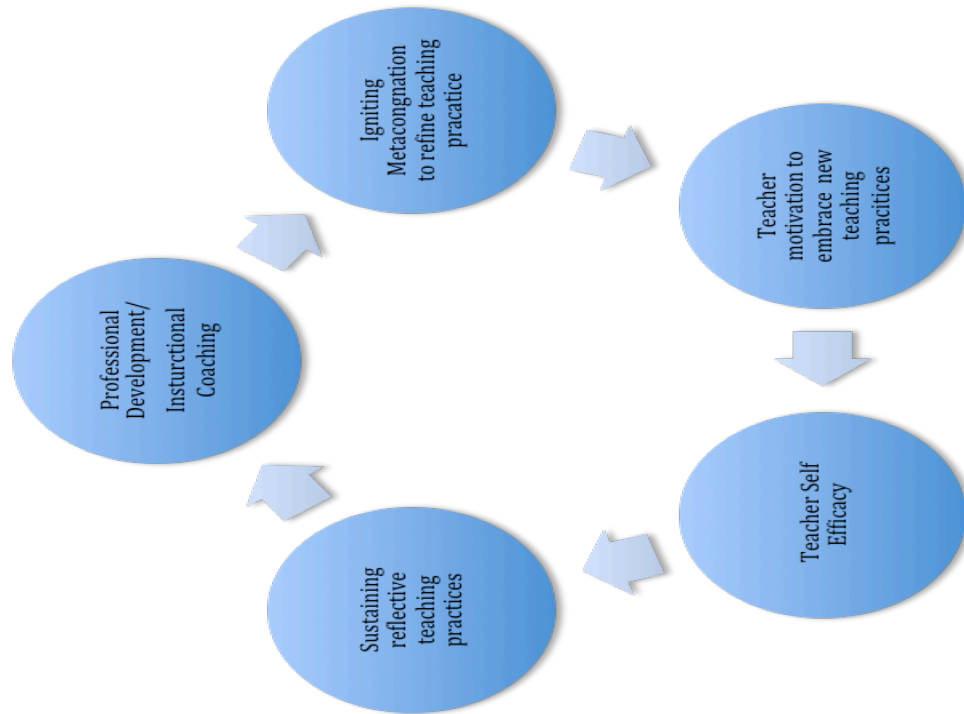
findings of this study.

Figure 21. *Model of Instructional Coaching Igniting a Metacognition Process.*

Initiating Coaching Practices

Igniting a metacognitive process in teachers is possible when coaching practices are initiated. However, as instructional coaches begin the process of coaching teachers, they face obstacles. This study identified several challenges that coaches face in educational settings. The challenges identified were time, distractions, non-responsive teacher, and inconsistent roles. Each challenge impacts the coach's ability to initiate coaching practice, and until the challenges are resolved and/or addressed, a coach cannot move forward with the coaching process.

A challenge of initiating coaching practice is defining the role of the coach. According to Callucci et al. (2010), without clear job descriptions or defined roles, coaching consequently becomes confusing and an inconsistent form of professional development. Instructional coaches need to understand what techniques to use in each coaching relationship and how to ignite reflective thinking. Neuman et al. (2010) indicated that little is known as to what procedures coaches use in the classroom. Therefore, coaching practices and positive outcomes cannot be achieved if instructional coaches do not understand their role in the building.

The coaching process can move forward when coaches receive support from administration to address challenges. The support received empowers the coach to have critical conversations to emphasize the need for coaching, and possible outcomes of coaching cycle with teachers. Continued support for instructional coaching by administration provides assurance that instructional coaching is a priority. This study identified administrative support as a key contributor to successful onsite professional development models. Coaching in educational settings can be very beneficial, however,

instructional coaches need to understand how to coach and address obstacles that prohibit coaching practices from occurring.

Recommendations for Implementing Instructional Coaching

Listed below are recommendations for implementing instructional coaching as an on-site professional development model. The list supports the research done previously by various researchers (Bean, 2004; Callucci, 2010; Nowak, 2003 Pipes, 2004; Sturtevant, 2003; Vogt & Shearer 2003) in implementing instructional coaching.

➢ Instructional coaches need to use consistent coaching strategies when working with teachers to address teaching practices. These techniques include collaborating with teachers, building relationships, active coaching cycles, and providing reflections to discuss the coaching lesson.

➢ Techniques that coaches use should be interactive and defined by the coach as they are building a relationship with the teacher.

➢ The coach and teacher should always participate in the coaching cycle and be prepared to discuss the coaching lesson at the time of the follow-up.

➢ Coaching is a process that can lead to change in teacher pedagogy, but the coach needs the time and support from administration to carry out this process.

➢ The entire administration (district/agency and building) needs to be consistent on the expectations of the instructional coaching role.

➢ Coaches need to be given the time to coach, instead of fulfilling other roles determined by the building administration.

➢ Coaches need to establish reflection time with open-ended questions so that teachers can begin to self-regulate by problem solving, comprehending, and

communicating with others. This allows the teacher to begin using new teaching strategies.

Role of the Researcher and Reflection

The role of reflection is extremely useful in determining areas that need to be refined when practicing research. The investigator in this study learned that research is a delicate process that cannot be rushed or restricted by time constraints. Likewise as a researcher, one must understand that the research process, in addition to being a very time consuming, can also be a messy process. The researcher experienced this when two sites had to be changed due to other obligations assigned to potential participants. Although always upholding the research standard of being systematic both in data collection and analysis, the researcher came to understand the need to be flexible and not rigid with the process. One cannot foresee what the data will expose, and a researcher needs to be patient when analyzing the data.

Particularly in qualitative research, the data analysis process cannot be rushed and must begin as the data are collected. Unforeseen time constraints that the researcher experienced in finishing this study pushed the researcher to work on an accelerated timetable, which created endless hours of work and reflection. The process a researcher goes through to conduct and write research is a taxing process that takes immeasurable amounts of thinking. The lesson learned from this process for this researcher is to allow for an overabundance of time to adequately analyze and write.

As an educator, the research conducted has been invaluable in understanding the techniques instructional coaches use to ignite a metacognitive process in teachers. The metacognitive process is the root of changing teacher pedagogy through an onsite,

classroom embedded professional development model. This researcher has the opportunity to prepare instructional coaches and future teachers with reflective teaching patterns to help shape teaching toolboxes. Teaching is a demanding profession, and future teachers need to be able to self-regulate as they differentiate instruction to meet the needs of their students. Therefore, instructional coaches need to provide rich coaching cycles that initiate reflective thinking. As a researcher, the hope is that all instructional coaches and future teachers will have the opportunity to experience reflective thinking, and the impact it will have on future teaching experiences. The overall lesson learned by reflecting on the role of the researcher is to respect the research process, and continue to work on refining the skills to conduct and write research.

Limitations of the Study

Limitations recognized by the researcher in this multi-case study include limited diversity of instructional coaching settings (i.e., middle school and secondary levels not represented), instructional coaches training, and the role of the teacher. The educational settings in this multi-case study were limited to three elementary schools within the same district and one Head Start agency. This limits the knowledge of instructional coaching techniques, cycles, and challenges that may occur at the secondary level.

All participants had participated in the same instructional coaching training provided by The *University of Oklahoma*, and had little or no other influence on their coaching practices. However, each individual coach took aspects of the training and created coaching cycles that worked for their own faculty. This could prove to be

helpful in adapting coaching techniques in schools where instructional coaching is already implemented.

The final limitation identified in this study was the role of the teacher in the coaching process. This research uncovered techniques coaches used in igniting a metacognitive process with teachers, but the focus on the coach as compared to the teacher (e.g., teachers did not maintain a reflection journal) limited the researcher's ability to fully explain the teacher's role in the metacognitive process. Understanding the role of the teacher is an important piece in understanding instructional coaching. The low response rate to the teacher survey further impinged on the researcher's ability to fully uncover the role of the teacher in this process.

Recommendations for Further Research

Further research for implementing on-site professional development models should be conducted to gain a deeper understanding of the entire process of instructional coaching. This study examined one full coaching cycle in the middle of a school year, and it would be interesting to observe a full school year of instructional coaching to determine the level of intensity coaches use when working with teachers over a longer time period. Along with observing a full school year of coaching, it would be interesting to compare instructional coaching at the elementary to coaching at the secondary level.

As future research is conducted, one needs to consider the sustainability of this on-site professional development model. As on-site professional development becomes a staple in educational settings, it is important to understand the lingering effects of this professional development model and how it creates lasting learning communities.

Finally, future research needs to consider the role of teacher self-efficacy during the coaching process. A study looking at what motivates teachers to respond to the coaching cycles and how teacher self-efficacy impacts sustained reflective learning behavior may contribute to the strength of instructional coaching.

In summary, this study was designed to identify specific coaching techniques that coaches use when initiating a metacognitive process in teachers, to distinguish challenges coaches face and how such challenges are addressed, and to pinpoint opportunities coaches give teachers to rethink teaching practices. Chapter 1 presented the need for instructional coaching by recognizing high quality professional development models, and the potential outcomes of on-site professional development. In addition, the first chapter discussed the theory of Vygotsky Space and the process of acquiring knowledge on two levels, the individual level and the social level. The literature reviewed in Chapter 2 addressed the limitations of the literature and identified the need for further research in instructional coaching.

The methodology for this study, qualitative multi-case study, described in Chapter 3 identifies each stage of this study, and procedures used for each stage. The researcher described and identified each educational setting and participant in the study through detailed descriptions for each in Chapter 4. The researcher reported the findings by identifying techniques and themes for each research question in Chapter 5.The techniques and themes are supported with data clips from participants. The final chapter is a discussion of the findings in relation to educational theory, and recognizes areas for future research.

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Web Sources

Center for Early Childhood Professional Development www.cecpd.org

Instructional Coaching: Kansas Coaching Project www.instructionalcoach.org

Appendix A: IRB Approval Letter

The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects

Approval of Initial Submission – Expedited Review – AP01

Date: March 10, 2014	**IRB#:** 3973
Principal Investigator: Jennifer B Stepp, MS	**Approval Date:** 03/10/2014
	Expiration Date: 02/28/2015

Study Title: Instructional Coaching in Education: The Metacognitive Process of Refining Past, Present, and Future Teaching Practices

Expedited Category: 6 & 7

Collection/Use of PHI: No

On behalf of the Institutional Review Board (IRB), I have reviewed and granted expedited approval of the above-referenced research study. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:
- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Obtain informed consent and research privacy authorization using the currently approved, stamped forms and retain all original, signed forms, if applicable.
- Request approval from the IRB prior to implementing any/all modifications.
- Promptly report to the IRB any harm experienced by a participant that is both unanticipated and related per IRB policy.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Promptly submit continuing review documents to the IRB upon notification approximately 60 days prior to the expiration date indicated above.
- Submit a final closure report at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

Lara Mayeux, Ph.D.
Chair, Institutional Review Board

Appendix B- Interview Questions

Instructional Coach Interview Questions

1. How did you become an instructional coach? Did your school district use an identified criterion when hiring you for the instructional coaching position?

2. What types of activities do you participate in as ongoing professional development in coaching?

3. Describe your role as a coach? How does the district, building administration, and faculty view the instructional coach?

4. How do you identify the needs of the teachers?

5. What is a typical coaching process for you?

6. During your coaching cycle do you use specific coaching techniques with the teachers?

7. How do your coaching techniques encourage reflective thinking by the teacher?

8. When you observe a teacher do they know your purpose during the observation?

9. When you demonstrate a teaching strategies what is the role of the teacher? How was this established?

10. When do you consider your coaching session complete?

11. How do you address areas of need with a teacher who may not recognize the need?

12. As a coach what is your goal when working with teachers? How do you know if you have met that goal?

13. How would you describe the process that the teacher goes through when being coached?

14. As a coach what opportunities do you give teachers to think about their teaching strategies? How do you move them forward with new teaching strategies?

15. How are you as a coach held accountable for your coaching?

16. What would you identify as your biggest challenges as a coach and why?

17. How are your challenges addressed? Do you receive support from the administration with the identified challenges?

18. Why are you a coach?

19. What areas of coaching to you feel need to be defined by researches to support instructional coaching?

20. Would you like to add anything else about instructional coaching?

Appendix C- Coaching Journal Prompts

Weekly Journal Prompts

Week One:

During coaching sessions this week I have used specific coaching

techniques/strategies to encourage reflective thinking by the teacher or teachers. Please

list and describe coaching strategies or techniques you used to encourage reflective

thinking.

Week Two:

During coaching cycles this week I have felt successful when_____ Why?

Week Three:

Describe your best relationship(s)?

How do you build relationships with new and established teachers? Is there a

difference?

Week Four:

How do you address your challenge(s)?

How do you move forward when you have a teacher who resists being coached?

Week Five:

What have you noticed about teachers who are reflective about their teaching?

(Characteristics, your relationship, ect.)

How does this impact future teaching and/or coaching experiences by the teacher?

Week Six:

Define how the growth that you have seen over this school year has impacted

instruction. (This could be for your whole school, or individual.)

Appendix D: Coaching Cycle Observation Tool

Case Number

Observed coaching techniques used by the Coach:
(check the observed technique)
- Observation
- Demonstration
- Side-by-Side
- Shadow
- Gradual release model
-

Observed role of the Teacher during the coaching technique:
(yes or no)
- Was the teacher engaged during the coaching technique?
- Did the Teacher seem to feel comfortable with the coaching technique?
- The Teacher had a role during the coaching technique.
- The Teacher implemented a teaching strategy with guidance of the teacher during the coaching technique.

Observable behaviors of the Coach during the coaching session:
(yes or no)
- Coach engaged the teacher during the coaching session.
- Coach guided the teacher in implementation of the teaching strategy.
- Coach created a learning environment for the teacher.

Observable behaviors of the Teacher during the coaching session:
(yes or no)
- Teacher engaged the coach in conversation about the teaching strategy.
- The teacher had interaction with the coach during the whole coaching session.

Observable response of the teacher to the coaching session:
(yes or no)
- The teacher demonstrated that the coach was welcome in the classroom.
- The teacher asked the coach for clarification or suggestions in regard to the teaching strategy used at time of observation.
- The teacher implemented suggestions made by the coach to the teaching strategy at the time of the observation.

Additional Notes:

Appendix E- Teacher Survey

Teacher Survey Questions-Survey Monkey –Likert Scale (strongly agree to strongly disagree)

1. Working with an instructional coach allows me to grow professionally.

2. The instructional coach allows me to reflect on current teaching strategies.

3. Watching a coach demonstrate or co-teach a lesson allows me to be reflective of how I teach specific content.

4. As a result of working with an instructional coach I feel as though I am more reflective of what I teach.

5. After rethinking my teaching strategies I incorporate what I have learned with new teaching strategies.

6. Working with an instructional coach has made me more aware of how I present identified content to my students.

7. Instructional coaching has allowed me to be more aware of differentiated instruction

8. Working with an instructional coach as encouraged me to be purposeful in what I teach.

9. Instructional coaching as a form of professional development has made a difference in the way I think about teaching.

10. I would consider instructional coaching is an effective way to support teachers with content strategies.

11. Describe how coaching as effected your teaching practices.