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The Intentionality of Coaching Responses: Connecting Stances to Practices

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THE INTENTIONALITY OF COACHING RESPONSES: CONNECTING STANCES TO PRACTICES

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Curriculum and Instruction

by
Leigh Martin
December 2016

Accepted by:
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Dr. Lisa C. Benson
Dr. Bob Horton
Dr. Cassie F. Quigley
Dr. Phillip M. Wilder
ABSTRACT

Limited research exists that highlights instructional coaching practices associated with teacher learning, practice, and student learning (McGatha, Davis, & Stokes, 2015; Gibbons & Cobb, 2011). This study investigates coaching as a high-leverage strategy for mathematics teacher learning as a way to contribute to this research base. My study examines one coach’s practices with two different teachers in order to respond to questions in the field about the decision-making processes of coaches. More specifically, this study examines how one coach determined which practices to use and the ways in which one coach adapted her practices with teachers. This dissertation seeks to answer the following two research questions: 1) How do instructional coaches interpret and respond to the learning needs of teachers? and 2) In what ways do instructional coaches adapt their practices to the differing learning needs of teachers? A conceptual framework that parallels the Professional Noticing frame set forth by Jacobs, Lamb, and Philipps (2010) served as the lens for this multiple case study. Interview and observational data were collected and explored for the case and discussed in a case analysis. Overall, this study revealed the coach’s practices (ways of responding) were directly related to her noticing; the coach noticed what she perceived to be a teacher need (advice relating to content knowledge, classroom management; an understanding of students’ point of view), assumed a particular stance, and selected practices believed to encourage teacher growth in those areas. Furthermore, empirical evidence revealed the coach’s responses, coaching practices selected, were differentiated between two teachers. In this particular study, the
coach offered direct advice more often to the less experienced teacher and while asking the more experienced teacher open-ended questions.
DEDICATION

My family and friends live “behind the scenes” of this dissertation; when I tell them for the hundredth time that I cannot spend time with them over the weekend because I am dissertating, they understand and support my decision. And throughout it all, they faithfully remained by my side, encouraging me to finish. I especially want to thank my husband, Matt Martin, for pushing me to complete this dissertation. And I would like to give my mom, Pam Carroll, a special “shout out.” To all of my family and friends, I dedicate this work to you.
ACKNOWLEDGMENTS

About twelve years ago, I read for the first time the following quote: “Individually we are smart; collectively we are brilliant” (source unknown). Since then, this quote has struck me in a variety of capacities, especially as I have worked on this dissertation. While the words in this dissertation are mine, they have been shaped and guided by those who have helped me make this work more than it could ever be if I had worked alone.

For challenging what I thought I knew and helping me push on boundaries I did not know existed, I would like to thank my committee chair, Dr. Nicole Bannister. Even though I often became frustrated, it was in this frustration that I grew. Dr. Bob Horton, now “retired and relaxed,” helped me recognize my much needed areas of growth; without his insight, I would not be aware of these ways I could improve. Dr. Phil Wilder served as a sounding board for all things related to coaching. He honored and respected my thinking and helped me synthesize my ideas in ways I could not do alone. Dr. Cassie Quigley supported and stretched my thinking related to my methodological choices and decisions. Dr. Lisa Benson helped me think about and appreciate this study from an alternative perspective.

Without the flexibility and commitment of the participants in this study, this dissertation would not have been written. Eleanor constantly made herself available, shared her coaching world with me, and was willing to be a vulnerable learner throughout this process. Tanner and Belinda opened their classroom doors and let me in without hesitation or question. All three of these participants demonstrated courage and dedication.
Without the constant help and support of my committee and the willingness of the participants, I would not have arrived at this place. You have each played a critical yet distinctive role as I’ve moved through this study. I will be eternally grateful for your undying help, support, and guidance. Thank you.
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CHAPTER ONE
INTRODUCTION

...there can be neither a first nor a last meaning; anything that can be understood always exists among other meanings as a link in the chain of meaning, which in its totality is the only thing that can be real. In historical life this chain continues infinitely, and therefore each individual link in it is renewed again and again, as though it were being reborn.

-Bakhtin, from notes made in 1970-1971

Introduction

Eleanor is nervous as we begin our meeting; she is worried it is taking her too long to build relationships with teachers in the school and this, in turn, will delay her coaching efforts. Eleanor was assigned to be the mathematics instructional coach (hereafter referred to using the vernacular “coach”) at Community Middle School two weeks before the 2015-2016 school year started. Because of the short time frame, she was not formally introduced to the faculty. She appreciates the teachers are cordial and pleasant when talking with her but she is quick to point out the lack of a formal introduction could be contributing to teachers’ lack of trust for her and her position. She is eager to engage teachers in coaching, to help them feel at ease so she can have meaningful conversations with them. She knows coaching conversations can lead to increased teacher efficacy and increased student learning. Specifically, Eleanor knows her questioning techniques “build their efficacy” and helps teachers believe that “[they] can make decisions” to best meet the needs of their students (Interview, September 30, 2016).

When teachers work with instructional coaches like Eleanor, what effect does this have on their work with students? How might Eleanor’s coaching practices be viewed
and interpreted? In what ways do Eleanor’s beliefs about teacher learning affect teachers’ classroom practices and student learning? How does Eleanor make decisions about how to interact with different teachers (e.g., beginning teachers vs. veteran teachers)? These questions, asked by the research community, have guided the work of instructional coaches for decades and have helped shape the research questions for this study.

**Background**

Research of the effectiveness of instructional coaching as a method of professional learning for teachers begun in full when a seminal study by Joyce and Showers was published *Educational Leadership* in 1980. The findings from their work suggested when teachers’ professional learning was coupled with peer coaching, changes in instructional practices were significantly more likely to occur (Joyce & Showers, 1980). Since that publication, however, limited research has investigated the knowledge instructional coaches need to be considered effective (Sutton, Burroughs, & Yopp, 2011) and the coaching practices that are associated with teacher learning, practice, and student learning (McGatha, Davis, & Stokes, 2015; Gibbons & Cobb, 2011). The 2015 National Council of Teachers of Mathematics (NCTM) Research Brief, *The Impact of Mathematics Coaching on Teachers and Students*, points out additional studies are needed to examine the complexity of the effects of instructional coaching: the ways in which instructional coaches work with individual and groups of teachers, the ways in which instructional coaches operate within a school system, the supports and challenges teachers require, the ways in which instructional coaches navigate their leadership role,
and the specific aspects of “coach-teacher interactions that are most productive in
supporting teachers’ growth” (McGatha, Davis, & Stokes, 2015, p. 3). This study
explores the extent to which a mathematics instructional coach intentionally determines
which coaching practices to use and the ways she differentiates her coaching practices as
she works with two different teachers. This research addresses an area has been identified
to be a gap in the literature.

In her coaching role, Eleanor is providing on-site, on-going, in-the-moment,
professional learning for teachers. This type of teacher professional learning, learning
facilitated by an instructional coach, is still emerging from the field and from research.
Teachers’ professional development has made dramatic shifts over the past decades from
“one shot” offerings that may be disconnected to teachers’ actual needs to tailored
experiences that directly meet teachers where they are. Neufeld and Roper (2003) suggest
teachers’ professional learning experiences should be grounded in inquiry, reflection, and
experimentation; collaborative; ongoing and supported by modeling; connected to
teachers’ current work with students; and supported by the schools’ current
organizational structures. Furthermore, Killion and Harrison (2006) point out there are
several roles that professional developers may assume and one of those roles is that of an
instructional coach. Instructional coaches act as mentors, models, consultants, and
collaborators. While several models of coaching exist, in general, coaches work one-on-
one with individual teachers or with small groups of teachers to improve teacher practice
as a way to improve student learning. In this way, each coaching encounter is unique and
situated; instructional coaches can vary their practices and roles and, in turn, create a
tailor-made professional learning experience that is designed to meet the learning needs of individual teachers.

When teachers work directly with an instructional coach, they may be more effective in adopting new practices (Showers, 1982; Edwards, 2010), can have higher rates of implementation and continued use of those practices over time (Baker, 1983; Edwards), and can have an increased sense of efficacy (Edwards, 2010). (Campbell & Malkus, 2011; Mudzimiri, Burrougs, Luebeck, Sutton & Yopp, 2014). Furthermore, coaching can have a positive impact on teacher attitudes, lead to an increase in skill transfer, help increase teachers’ efficacy, and improve student achievement (Cornett & Knight, 2009). However, linking the practices of an instructional coach to teachers’ instructional practices and to student learning can be a difficult and treacherous path; numerous variables affect student learning. This study investigates coaching as a high-leverage strategy for mathematics teacher learning as an attempt to help build the foundation that will bridge the research gap between mathematics instructional coaching and teacher learning.

**Purpose of the Study**

In this study, I examined one coach’s practices with two different teachers in order to respond to questions in the field about the decision making strategies of the coach. More specifically, this study examined how a coach interpreted and responded to the learning needs of teachers and ways in which this coach adapted her practices with teachers. This was be done by closely examining the particular context of each situation. After providing a review of the pertinent literature and research in Chapter 2, Chapter 3
of this dissertation sets the stage for this study by considering relevant context. In Chapters 4 and 5, each individual case is considered in-depth. I compare and contrast the coach’s responses to the two teachers in Chapter 6 by conducting an overall analysis of the case. Chapter 7 presents the study’s overall findings.

**Instructional Coaching and Coaching Practices**

**Instructional Coaching: Defined**

“Instructional coach” and “coaching practices” are defined and discussed in detail in Chapter 2. However, for the purposes of ensuring a consistency of understanding throughout this dissertation, I frame the phrases “instructional coach” and “coaching practices” in this section. Treemant, Wink, and Tyra (2010) offer a definition of coaching that is not model specific: “coaching is job-embedded, teacher directed, school based, collaborative, ongoing, information rich professional development that focuses on student learning” (p. 685). The specific topics of discussion and ideas instructional coaches and teachers examine vary and this can make it somewhat difficult to clearly pinpoint exactly what instructional coaches do; in turn, this can muddy the waters a bit when trying to nail down a definition of an instructional coach. Nevertheless, instructional coaches engage teachers in a variety of ways: paraphrasing, attending fully and listening to understand as a way to determine the teacher’s current state of mind; using the pronoun “you” instead of “I;” pausing and allowing wait-time; following a coaching cycle (planning, observing, reflecting); asking open-ended questions to broaden or to focus thinking; and noting nonverbal and verbal cues teachers offer (Costa & Garmston, 2007). Instructional coaches also assume a variety of stances when working with teachers, depending on their
intention and purpose: coaching, collaborating, consulting, and evaluating (Costa & Garmston, 2007). These stances are defined and discussed in detail in Chapter 2. While some coaching models suggest instructional coaches can serve as evaluators, for the purposes of this study, this role will not be considered. Coaching is also considered by some coaching models as a stance the coach can take; in other words, because the coach may act in other ways, namely collaborating, consulting, and evaluating, coaching is also considered a specific stance the coach can assume.

The crux of the definition of an instructional coach that Treemant, Wink, and Tyra (2010) provided is that the instructional coach follows the direction of the teacher. In other words, when an instructional coach is assuming the role of a “coach,” she listens to the teacher with the intent to help him or her move in a direction determined solely by the teacher; the instructional coach does not enter the conversation with a predetermined agenda. (For convenience, throughout this dissertation, I use gendered pronouns “she” and “her” when referring to an instructional coach.) Also, while the primary goal of the instructional coach is to focus on student learning, the coach recognizes the learning of the teacher is an indirect, yet essential, step toward student learning. So, for example, an instructional coach may assume the stance of a consultant for the purposes of increasing a teacher’s pedagogical and content knowledge and skills in order to positively affect student learning.

Coaching Stances: Defined

Before considering the ways in which a mathematics instructional coach responds to a teacher, we first think about the stance she assumes. A “stance may be viewed as ‘the
way in which an agent during interaction positions him/herself toward the other and the topic of interaction”” (Poggie, D’Errico, & Leone, 2010, p. 3233, as cited in Wilder, 2013, p. 5). In other words, when working with a math teacher, before a coach determines how she will respond to a teacher, she first decides on the way in which she will position herself. For the purposes of this study, three types of stances will be considered: consulting, collaborating, and coaching (Lipton & Wellman, 2010; Costa & Garmston, 2002). (These stances will be described in more detail in Chapter 2). To illustrate this point, when a coach positions herself as a consultant, she may offer the teacher direct advice; when collaborating, the coach may act as a co-learner; and, acting as a coach, the coach, according to some coaching models, will focus on asking questions intentionally phrased to mediate the thinking of the teacher and focus on the teacher’s states of mind (Costa & Garmston, 2002). Because the stance a coach assumes is highly contextual, this study will examine the specific events the coach attends to, the stances she assumes, and the ways in which that influences her responses to the teacher.

**Coaching Practices: Defined**

In service of unpacking the study’s research questions, the phrase “coaching practices” must be defined. While the phrase “teacher practices” has been theorized for years in the literature (Noddings, 2003; Ball, 2002; Pajares, 1992), “coaching practices,” as referenced in the literature, is not as refined or distinct. Defining coaching practices is a complex task that will be discussed in more detail in Chapter 2 but for the purposes of establishing the need for this study, they will be briefly examined here. In its purest essence, a coach’s practices are a manifestation of her stances. In other words, the ways
the coach responds to the learning needs of a teacher, the practices she uses, are a direct result of the stance she assumes when working with that teacher.

Costa and Garmston’s Cognitive Coaching℠ model (2002) posits that instructional coaches mediate teachers’ thought processes by: pausing (providing wait-time so teachers can clearly form and articulate their thoughts, ideas, and responses), paraphrasing (summarizing teachers’ thoughts to ensure they completely understand the nature of teachers’ ideas), probing (supporting teachers in gaining clarity of thought by asking probing questions), and by attending to teachers completely with their mind and body (when appropriate, mirroring body language to engage in rapport-building). Additionally, coaches can ask mediating questions that intentionally draw upon and extend teachers’ states of mind (efficacy, flexibility, consciousness, craftsmanship, and interdependence). These types of questions can broaden or focus teachers’ thinking, depending on what the coach interprets as appropriate in terms of mediating teachers’ thought processes. While the Cognitive Coaching model labels these as “tools,” I will continue to use the language of “practices” throughout this dissertation, thereby signaling what a coach does (verbal exchanges, actions, nonverbal communication) in an attempt to influence the teachers’ states of mind. Taken together, I define coaching practices as the ways in which the instructional coach responds to teachers’ actions, language, and attitudes.

For this study, it was important I remain somewhat open when looking for coaching practices; I didn’t want to miss any particular way that a coach would respond because of a limited view on my part. Chapters 4 and 5 of this dissertation will highlight
specific coaching practices I observed. At the onset of the study, however, I felt strongly that when looking for coaching practices, I should be cognizant of any way the coach responded to the teacher.

The relationship of the coach’s stances to her practices can be considered visually as displayed in Figure 1.1. Overall, the coach selects her specific practices based on the way she positions herself towards the teacher, the stance she assumes. Again, we can consider the coach’s practices, her responses, as a direct manifestation of her stance; the coach’s stance is the foundation upon which her practices are selected.

![Figure 1.1. The relationship between coaching stances and coaching responses](image)

**Research Questions**

There is limited research available that investigates the knowledge that mathematics instructional coaches need to be considered effective (Sutton, Burroughs, & Yopp, 2011) and the coaching practices that are associated with teacher learning, practice, and student learning (McGatha, Davis, & Stokes, 2015; Gibbons & Cobb, 2011). This study investigates coaching as a high-leverage strategy for mathematics teacher learning and examines one coach’s practices with two different teachers in order to respond to questions in the field about how an instructional coach interprets and responds to the learning needs of teachers. More specifically, this study examines how one coach determines which practices to use and the ways in which a coach adapts her
practices with teachers. This study focuses intensely on the interactions of one coach with two teachers to addresses the following questions:

1. How do instructional coaches interpret and respond to the learning needs of teachers?
2. In what ways do instructional coaches adapt their practices to the differing learning needs of teachers?

**Conceptual Framework**

*There can be no such thing as an isolated utterance.*

-McGee, 1986, xix

To help me frame my research, I read literature about teacher decision-making. Since this study’s research questions focus on the ways in which an instructional coach interprets and responds to the learning needs of teachers and since this study address a gap in the research base, I focused my search on the decision-making practices of teachers. I extrapolated my readings and understandings to incorporate and include parallels that exist between instructional coaches and teachers as they make decisions about which coaching or teaching practices to use. I found a manuscript on teachers’ competence framed as a continuum (Blomeke, et. al, 2015), and upon my initial reading, I was struck with how part of this decision-making framework seemed to be somewhat parallel with current mathematics education literature on teachers’ professional noticing (Sherin, Jacobs, & Philipp, Eds., 2011). What most attracted me to this model was the focus on the “performance” or the “observable behavior” of the teacher and the interplay of the situation specific skills. Figure 1.2
Figure 1.2. Blomeke, et al. (2015), Competence as a Continuum

In its purest sense, the competence model created by Bloemke, et al. (2015) (see Figure 1.1), provides researchers with a way to understand the ways in which teachers’ practices (their “observable behaviors”) are connected to their dispositions via their perception, interpretation, and decision-making. The Blomeke, et al. model a teacher’s competence by drawing attention to the teacher’s dispositions and the ways in which those lead to the teacher’s performance/observable behavior. Teacher competence, according to these authors, is “performance in complex, messy, real-life situations” (p. 9). Because I operate from a situative perspective, I understand the critical role that context plays in shaping learning and decision-making. Specifically, these authors point out that “processes such as the perception and interpretation of a specific job situation together with decision-making may mediate between disposition and performance” (Blomeke, et al., 2015, p. 7). Primarily, Blomeke et al. (2015) attempt to bring together two perspectives on mathematics teachers’ knowledge: cognitive and situated. These
perspectives on knowledge serve as the foundation for teachers’ situation-specific skills (perception, interpretation, and decision making) and then “mediate between [teachers’] disposition and performance” (p. 7). This then helps us conceptually view a teacher’s competence as a continuum; “…competence should be regarded as a process, a continuum with many steps in between” (Bloemke, et al., 2015, p. 7). I argue that an instructional coach’s competence or her selected practices can also be viewed in a similar fashion, as a continuum. There exist at least three steps (perception, interpretation, and decision making) that stem from one’s dispositions and then lead to the practices that she selects and uses. Furthermore, this continuum is contextual; the specific context surrounding the coaching/teacher relationship also affects the practices that are selected and used by the coach.

While reading this manuscript, I was struck by its parallel nature to the current research of mathematics teachers’ professional noticing (Jacobs, Lamb, & Philipp, 2010). Upon making this connection, I knew that the professional noticing framework (Sherin, Jacobs, & Philipp, Eds., 2011) could serve as the foundation for the conceptual framework for this study; that the components of professional noticing had the potential to shape my data analysis and my findings. Although these ideas are discussed in more detail below, simply put, they help frame and conceptualize a coach’s decision-making process. In essence, the way that an instructional coach attends to a particular situation shapes her interpretation of events. Decision-making about how to engage teachers occurs after the instructional coach has interpreted the events around her. Therefore, the
instructional coach’s attention to events and her interpretation of those events lead to specific coaching practices (see Figure 1.3).

Figure 1.3 Conceptual Framework

Figure 1.3 connects the professional noticing framework of Jacobs, Lamb, & Philipps (2010) with part of the competence modeled as a continuum by Blomeke, Gustafsson, & Shavelson (2015). (Note for Figure 1.2: “attend,” “interpret,” and “respond” are from Professional Noticing Framework; “perceive” and “decision-making” are from Competence as a Continuum frame.) While other researchers have pointed out the “clear parallelism between attending and perception, [elaboration] and interpretation, and proposing improvements and decision making” (Santagata and Yeh, 2016, p. 155), to my knowledge, this is the first study to capitalize on this parallelism as a framework for examining the practices of a mathematics instructional coach. Although Blomeke et al.’s (2015) competence model and Sherin, Jacobs, and Phillip’s (2011) framework for professional noticing both have direct implications for mathematics instructional coaches and for mathematics teachers in terms of their decision-making, I posit that, when combined, these structures can specifically frame the practices of mathematics instructional coaches. To be clear, Jacobs, Lamb, and Philipps’s (2010) professional noticing framework provides a guide for how mathematics teachers make sense of and
respond to students’ mathematical thinking. For this study, I use this adapted frame to help understand what a mathematics instructional coach attends to, how she interprets those events, and how she responds to math teachers based on what she has noticed and how she has made sense of what she has noticed.

Drawing our attention to the interplay of the “situation-specific skills,” the perception, interpretation, and decision-making, it becomes clear that the interaction of these skills leads to the teacher’s performance and behaviors. These “situation-specific skills” are very similar to components of the professional noticing framework set forth by Sherin, Jacobs, & Philipp (2011): attend, interpret, and respond. Particularly, Sherin, Jacobs, & Philipp, in their 2010 book, Mathematics Teacher Noticing, solicit research from numerous authors to more clearly define what teacher noticing means and how it should be understood. As they point out, “the word noticing names a process rather than a static category of knowledge” (Sherin, Jacobs, & Philipp, 2011, p. 5). “The focus is on how, at a fine-grained level, the teacher interacts with [their] world rather than solely on a [his] reasoning” (Sherin, Jacobs, & Philipp, 2011, p. 5). The construct of professional noticing is defined as “how, and the extent to which, teachers notice children’s mathematical thinking” (Jacobs et al., 2010, p. 171). More specifically, this framework is used as a tool to help researchers determine the ways in which mathematics teachers make sense of and understand their students’ mathematical thinking. This three-part framework is composed of the following interrelated skills that can be seen as similar to Blomeke, et al.’s (2015) situation-specific skills: (a) attending to students’ solution
strategies, (b) interpreting students’ mathematical understanding, and (c) deciding how to respond to students’ understanding.

The professional noticing framework, merged with the competence as a continuum model, was used to structure this study on mathematics instructional coaches. Instead of focusing solely on the ways in which teachers notice students’ mathematical thinking and their observable behaviors, attention is focused on what guides the decision-making process of a mathematics instructional coach’s in-the-moment. In this way, the interrelated skills of the mathematics instructional coach are highlighted: a) what teacher behaviors an instructional coach attends to in the moment (teacher’s language, nonverbal communication, etc.), b) how an instructional coach makes sense of a teacher’s behaviors, and c) how an instructional coach decides to respond to the teacher’s behavior. For example, if a coach notices that a teacher uses deficit language about his students, the researcher might be interested in asking the coach about her interpretation of the teacher’s language and how this interpretation guided her decisions about which practices to use with that teacher.

The three components of this framework are not entirely distinct. For the purposes of this study, the attending and interpreting components have not been separated. These components have proven to be difficult to tease apart and for the purposes of this study, the focus is more on connecting what the coach notices to her specific responses. Therefore, during data analysis, these two components were considered as one by focusing on what the coach attended to and noticed and how she made sense of what she noticed. The “respond” component of the framework was then used as a way to
determine the specific coaching practices that the coach selected and used as a result of what she noticed and her interpretation of what she noticed.

Furthermore, when thinking about what the instructional coach attends to, her interpretation of events, and the ways in which she responds, we must also recognize that it is sometimes the case that the coach enters into coaching conversations with a predetermined idea of what she will attend to based on her previous responses. For instance, if during their last conversation, the coach focused on the teacher’s use of warm-up activities at the beginning of each class period and made a recommendation that the teacher use more warm-up based activities with the students, then during the next conversation the coach has with the teacher, the initial attention may be given to the extent to which the teacher is utilizing warm-up based strategies. To account for this, the conceptual framework graphic (Figure 1.3) includes a bottom arrow that returns the “response” to the “attend.” In this way, this study’s conceptual framework recognizes that sometimes what the coach initially attends to is related to how she last responded to the teacher.

The stances and practices that a coach uses can also be seen in this conceptual framework (Figure 1.3). Once a coach attends to, or notices, a particular instance of the coach-teacher interaction, the coach interprets the event and determines the ways that she wants to position herself, the stance she wants to assume. Once the coach has selected a stance (consultant, collaborator, or coach), she determines specifically how to respond to the teacher and which coaching practices to use. In this way, her coaching practices (language choice, nonverbal actions, asking a question vs. making a statement) are a
direct manifestation of the stance that she assumes. In other words, if Figure 1.1 and Figure 1.3 are overlaid, it becomes apparent that what the coach attends to leads to her interpretation of events and the stance she selects and then to the practices she employs. In other words, during the “interpretation” component of the framework, the coach determines which stance she will assume; during the “respond” component of the framework, the coach determines which practices she will use. The relationship between the coach’s stances and practices and what she attends to will be explored in-depth with each case.

**Significance**

“The available empirical evidence suggests that coaching is a promising professional development practice that can lead to improved teaching and learning. While the number of research studies on mathematics coaching is increasing, there is still much work to be done” (McGatha, Davis, & Stokes, 2015, p. 3). More specifically, studies are needed that draw attention to the intentionality of coaches’ practices. Because the research and literature on instructional coaching has not focused on this relationship to date, this study has the potential to contribute to the national (and possibly international) conversation on the intentionality of instructional coaching practices. My time spent searching and reading the literature and, more interestingly, my time spent in conversations with several of the authors of this literature (Baldinger, Campbell, Fennell, Gibbons, Jilk, McGatha, West, and Yopp) during the 2015 Association of Mathematics Teacher Educators Elementary Mathematics Specialists Research Conference and during the 2015 and 2016 Mathematics Specialists Research Conferences further strengthened
my resolve towards the importance of this study and the contribution that it can make to the current literature base. During this conference, no studies highlighted the intentionality of instructional coaches’ practices; furthermore, no researchers discussed planning to make this a focus of their research. Additionally, during the 2016 Mathematics Specialists Research Conference, attendees and researchers showed interest in the conceptual framework that guided this study. In addition to this study’s research findings, the ways in which the study’s data have been analyzed and understood has implications for the field of mathematics instructional coaching research.

**Organization of the Dissertation**

This dissertation is organized into seven chapters. In Chapter 2, I outline a review of the relevant instructional coaching and teacher decision-making literature and provide more detail regarding the study’s conceptual framework. In Chapter 3, the study’s methodological choices are explained and the context for the study’s cases is provided. In Chapters 4 and 5, the two cases are presented, the analysis of the data for that case is outlined, and the findings for each case are provided. Chapter 6 presents the data from the coach’s interactions with both teachers as a way to provide an overall analysis of the case. A discussion of the study’s findings, contribution, and potential future research options are provided in Chapter 7.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

In this chapter, I examine and critique the literature and research related to mathematics instructional coaching and decision-making. In doing this, I attempt to situate my study in the existing body of literature and highlight the ways in which this study will address a gap in the research. Specifically, in terms of instructional coaching, various definitions and models of instructional coaching, coaching roles and responsibilities exist; definitions of instructional coaching practices and stances, the knowledge needed for coaching mathematics, coach-teacher relationships must be examined in-depth. Literature related to teacher decision-making is also explored as a way to situate both of this study’s research questions in the current and relevant literature. To begin, literature related to defining mathematics instructional coaching, various coaching models, coach-teacher relationships, the knowledge that coaches need to coach, and the effect that coaching can have on teacher practices and student learning are examined. Decision-making practices and the ways in which coaches make in-the-moment decisions about how to respond and which coaching practices to employ are also considered.

In addition, a description about this study’s conceptual framework is provided; how it was conceived, the literature and research related to the framework, and the ways in which this framework serve to guide the study’s data collection and data analysis.

Instructional Coaching
Studies have revealed that teachers’ professional development is a critical factor in predicting teachers’ instructional practices and student achievement (Borko, 2009; Wenglinsky, 2000) and as early as the 1980’s, the state of professional development began expanding to encompass coaching as a form of teacher professional learning (Joyce & Showers, 1980; Costa & Garmston, 2002). Therefore, it is important that research examine the ways in which specific coaching practices influence teachers’ instructional practices in the classroom, because changes in instructional practices can lead to increases in student achievement. To do this, we consider coaching as a form of professional learning. Since its inception, the meaning of the term coach has evolved and shifted.

Coaching as a form of professional learning for teachers is not new; teachers who are coached are more likely to implement new practices and to continue to use those new practices over sustained periods of time (Joyce & Showers, 1980). In their 1980 study, Joyce and Showers found that “the most effective training activities [are] those that combine theory, modeling, practice, feedback, and coaching to application” (p. 384-385). When compared to other types of professional development (e.g. presentation of theory, modeling or demonstration, and practice under simulated conditions), Joyce and Showers (1980) found that when teachers were provided structured feedback, they were more likely to implement new teaching practices. However, when this structured feedback was combined with “coaching for application,” the impact was considerable. “Coaching for application involves helping teachers analyze the content to be taught and the approach to be taken and making very specific plans to help the student adapt to the new approach”
Edward’s (2010) synthesis of coaching research highlighted numerous benefits to coaching: increased student test scores, increased teacher reflection and efficacy, increased teacher job satisfaction, and increased teacher collaboration (Edwards, 2010). In her 2010 synthesis of the Cognitive Coaching research, Edwards noted that teachers who received Cognitive Coaching transformed their teaching practices (e.g. increased use of inquiry methods), created an atmosphere of trust and non-judgment in their classrooms, had students who performed better on end-of-year exams, and had dramatic increases in student-led questions during class discussions. Specifically, after the passage of one school year, “85% of students increased the quantity of questions asked, 91% of students increased the quality of questions they asked, and they decreased 46% in irrelevant responses” (Ushiima, 1996). Furthermore, teachers who received Cognitive Coaching grew in teaching efficacy on the Teacher Efficacy Scale (Gibson & Dembo, 1984) and more confidently and intentionally used paraphrasing, questioning, and coaching techniques with their students. Additionally, Cornett and Knight (2009) argued that coaching research demonstrates improved student achievement, improved teacher efficacy, improved implementation transfer, and a positive effect on teacher attitudes.

Despite these positive findings, there is still much work to be done in order to fully elucidate the role and effects of mathematics instructional coaches. In 2009, the National Council of Teachers of Mathematics (NCTM) published a Research Brief titled
Mathematics Specialists and Mathematics Coaches: What Does the Research Say? In this publication, NCTM cites only thirteen sources, three of which are not related directly to coaching research. Furthermore, in their opening paragraph under the heading “Research on Mathematics Coaching,” it becomes clear there is little research related to coaching; the author states “the research on mathematics coaching is more abundant [than that of Elementary Mathematics Specialists] but includes just seven studies that provide preliminary insights” (p. 1). In conclusion, McGatha states “The available empirical and anecdotal evidence suggests coaching is a promising professional development practice that can lead to improved teaching and learning. However, we need to continue to pursue research that can support these initial findings” (p. 2). In February of 2015, NCTM released an updated research report on the current state of mathematics instructional coaching research. According to McGatha (AMTE presentation, 2015), this new report rests upon only twenty-four studies; just eleven more studies are referenced. In the seven years that have passed, the research on coaching has not drastically increased; there is still a need to directly study the complexities and outcomes associated with instructional coaching.

This is of primary concern for anyone currently engaged in research related to instructional coaching: when searching for literature related to instructional coaching, citations abound. However, of these, the citations for practitioner-based pieces far outnumber those that are research-based. For example, one can easily find numerous books describing coaching methods and techniques with no research to support the types of practices espoused. Of those research-based pieces, one might question the quality of
the reporting of the research; often, in some of the earlier pieces, some critical details seem to be missing (number of participants, length of study, etc.). As an example, Joyce and Showers’ (1982) seminal piece entitled *Improving In-service Training: The Messages of Research* (a study, I might add, which is cited repeatedly in the coaching literature), was published in *Educational Leadership*, the primary journal for Association for Supervision and Curriculum Development (ASCD). According to their website, “ASCD is a partner in educator professional development, providing materials, resources, and experts to ensure student success” ([http://www.ascd.org/about-ascd.aspx](http://www.ascd.org/about-ascd.aspx)). To my understanding, the primary objective of ASCD is to provide literature to practitioners. This does not mean each published piece is as detailed as a research-based piece published by a research-focused organization. Returning to Joyce and Showers’ 1982 publication on coaching, we notice that the more than 200 studies they report to have analyzed the effects of different types of professional development on teachers’ changed instructional practices are not referenced specifically. This becomes problematic for those who wish to build on this research.

**Definitions of Instructional Coaching**

What, though, are the components of coaching and how is instructional coaching defined? What stances and responsibilities does an instructional coach assume? What knowledge must a coach possess in order to “effectively” coach teachers? What is most notable is, in the review of the scant research related to coaching, no one clear definition of coaching exists. Even when extending the search to a review of related coaching literature, it is apparent multiple definitions of coaching exist. Treemant, Wink, and Tyra
(2010) offer a definition of coaching that is not model specific: “coaching is job-embedded, teacher directed, school based, collaborative, ongoing, information rich professional development that focuses on student learning” (p. 685). This definition can help us begin to consider how coaching, regardless of the model, can be a unique type of professional learning for teachers. Coaches are able to work individually with teachers, assess teachers’ specific needs, and then find ways to work with teachers in a variety of ways so their needs are addressed. Instructional coaches can assume a variety of roles, depending on teachers’ needs: collaborator, coordinator, consultant, and mentor.

Currently, numerous coaching models exist and the term “coach” has several definitions. Cornett and Knight (2009) point out that while several coaching models exist, four approaches are most frequently mentioned in the literature: Peer Coaching, Cognitive Coaching, Literacy Coaching, and Instructional Coaching. While these approaches vary, similarities exist: respect for the professionalism of teachers, a partnership orientation, a focus on listening before talking, dialogical conversation, and recognition of the primacy of student learning (Garet, Porter, Drsimone, Birman, & Yoon, 2001; Hawley & Valli, 1999; Zepeda, 2008).

In the recent publication, *Principles to Actions: Ensuring Mathematical Success for All* (2014), the National Council of Teachers of Mathematics (NCTM) references coaching support as a method for teachers’ continued professional growth. In this document, a coach is defined as ““an individual who is well versed in mathematics content and pedagogy and who works directly with classroom teachers to improve student learning in mathematics”” (Hull, Balka, and Harbin Miles, 2009, p. 3). Returning
again to the description of instructional coaching referred to in Chapter 1, we are reminded that Treemant, Wink, and Tyra (2010) offer a definition of coaching that is not model specific: “coaching is job-embedded, teacher directed, school based, collaborative, ongoing, information rich professional development that focuses on student learning” (p. 685). With these definitions (Garet, Porter, Drsimone, Birman, & Yoon, 2001; Hawley & Valli, 1999; Zepeda, 2008; NCTM, 2014; Treemant, Wink, & Tyra, 2010) we can identify similarities and overlaps that help us clearly define “coaching” for the purposes of this study: a mathematics instructional coach is one who is well versed in mathematics content and pedagogy, works directly with mathematics classroom teachers to improve students’ mathematics learning, and who offers on-going, individual, job-embedded learning for teachers. Although this definition has been constructed and is not verbatim from the literature, it encompasses aspects of the definition as outlined in relevant literature.

**Coaching Defined**

A review of prevalent coaching models, coaching practices, and coaching stances helps to solidify our understanding of what “counts” as an instructional coach. Although the purpose of this literature review is not to formally define coaching, researchers in this field must possess firm understanding of coaching models. And for the sake of consistency, throughout this study, I use the overarching definition referenced above (Garet, Porter, Drsimone, Birman, & Yoon, 2001; Hawley & Valli, 1999; Zepeda, 2008; NCTM, 2014; Treemant, Wink, & Tyra, 2010 ): a mathematics instructional coach is one who is well versed in mathematics content and pedagogy, works directly with
mathematics classroom teachers to improve students’ mathematics learning, and who offers on-going, individual, job-embedded learning for teachers. A thorough review of current instructional coaching models and of the associated research and literature helps continue to situate this study.

Coaching Stances vs. Coaching Practices

Coaching stances. For the purposes of this study, it is necessary to differentiate between coaching practices and coaching stances. As discussed briefly in Chapter 1, a “stance may be viewed as ‘the way in which an agent during interaction positions him/herself toward the other and the topic of interaction’” (Poggie, D’Errico, & Leone, 2010, p. 3233, as cited in Wilder, 2013, p. 5). In other words, when working with a math teacher, before a coach determines how she will respond to a teacher, she first decides on the way in which she will position herself. Costa and Garmston (2002) define what this study refers to as “coaching stances” as the support services that coaches use to assist teachers in becoming more self-directed. “We distinguish four categories of functions intended to support teacher development: evaluating, collaborating, consulting, and [coaching]” (Costa & Garmston, 2002, p. 9). The authors of this coaching model, Cognitive Coaching, state when an instructional coach coaches, consults, or collaborates, she is changing support functions, shifting her stance, and ways of interacting with a teacher to improve the teacher’s instructional practice. For example, an instructional coach may find it necessary to consult a novice teacher more than a veteran teacher; an instructional coach may find one veteran teacher appreciates coaching while another may need to see the coach as a collaborator before allowing the instructional coach to assume
the stance of a coach. What is necessary to understand, though, is each of these three stances “plays a significantly different role, with very different mechanisms and intentions” (Costa & Garmston, 2002, p. 9). Of critical note: the creators of this coaching model use the language “support function;” I use the language of “stance.” A coach’s stance, the ways in which she interprets the teacher’s needs, is closely aligned with this study’s conceptual framework. A coach’s stance is what serves as the foundation for her practices (since her practices are a manifestation of her stance).

The three stances, consulting, collaborating, and coaching, are outlined by the authors of Cognitive Coaching as we might assume. When an instructional coach acts as a consultant, she offers her expertise to a teacher. As an example, an instructional coach might recognize a teacher does not fully comprehend the meaning of a standard and how to teach the standard. As a result, the coach can share her content knowledge or pedagogical knowledge with the teacher. When an instructional coach collaborates with a teacher, she acts as a co-learner; the instructional coach and the teacher work together to achieve a common goal. When an instructional coach assumes the stance of a coach, she, according to this coaching model, acts in ways that help mediate the thinking of the teacher, helping him become more efficacious and self-directed. An instructional coach can take any one of these three stances (consultant, collaborator, or coach) at any given time depending on what she believes the teacher needs. In this way, the coach is providing “individualized, job embedded learning” for the teacher; the coach acts in ways she feels are in-line with the teacher’s needs.
Coaching practices. When an instructional coach takes a particular stance (coach, collaborator, consultant), she engages in practices that allow her to act in these ways. In other words, the practices that a coach uses with a teacher is reliant upon the stance she believes will best facilitate the teacher's learning; her practices are a manifestation of her stance. For this reason, we can consider a coach’s practices, her ways of respond to the learning needs of teachers, are an indicator of her stance. For instance, if a coach is working with a novice teacher she believes needs help interpreting the content standards, she may decide to use language that elucidates the teacher’s need to increase his content knowledge. In this way, the coach acts as a consultant. As another example, if a coach working with a veteran teacher realizes the teacher is resistant to working with an instructional coach, she may decide to paraphrase the teacher in ways that helps the teacher feel heard and understood. The instructional coach may also ask the teacher questions that help build and strengthen their relationship. In this way, the instructional coach is acting from the stance of a coach. (Again, this study considers three distinct stances: collaborator, consultant, and coach. The stance of “coach” is not be confused with the person who is a “coach.”)

Thinking about the differences in “coaching practices” and “coaching stances” in this way can help us better understand these terms in relationship to this study. For the context of this study, I investigated an instructional coach’s practices. In order to understand and classify the instructional coach’s practices, I first investigated her stances and then linked particular practices to her stances.

The Effect of Coaching on Teacher Practices and Student Learning
The context situating this study contains the ways in which coach-teacher relationships develop, a coach’s beliefs about teacher learning, and how those beliefs relate to the coaching practices a coach selects. For this reason, findings are shared from the 2010 Final Evaluation Report on the coaching initiative examined in this study. (Again, this dissertation does not attempt to report findings from one particular coaching model or one particular coaching initiative; rather, I note the mathematics instructional coach in this study operates from a particular coaching model and within a specific coaching initiative. In an attempt to be transparent and up-front about the coach’s background and my researcher subjectivities, I continue to mention this actual initiative and the Cognitive Coaching model.) The 2010 Final Evaluation Report from the agency that funds the mathematics instructional coach I studied, “summarizes three years of data collection and analysis between 2007 and 2010 in the evaluation of [project name] (the organization who employees the instructional coach who is part of this study), a joint project between the two state organizations and the State Department of Education” (Larson, Stuhlsatz, & Shaw, 2010, p. i). Findings from three years of this initiative point out that as teachers worked with instructional coaches, they increased their repertoire of instructional techniques and became “more effective planners, teachers, and assessors of their students’ understanding of the content” (p. 22). Furthermore, this initiative also reveals increased student achievement on state achievement tests, as contrasted to comparison schools. Unlike some initiatives, this model selected and prepared instructional coaches by enhancing their pedagogical content knowledge, knowledge of
student assessment, knowledge of facilitating professional learning communities, and their knowledge of coaching (using the Cognitive Coaching) model.

Campbell & Mulkus (2011) have also reported increases in student achievement based on the implementation of an instructional coach in the school. While this study connects the effects of an instructional coach to changed teacher practices and increased student achievement, at the same time, researchers clearly state numerous limitations: a lack of attention to coaching practices, coach knowledge and skills, teachers’ existing instructional practices, and coaches’ roles (perceived and actual), (Campbell & Mulkus, 2011; Edwards, 2010; Sutton, Burroughs, & Yopp, 2011; Treemant, Wink, & Tyra, 2011). In other words, these same studies that claim links between instructional coaching and increased student achievement also point out there may be other contributing factors to the changes in teaching and learning: teachers’ time teaching in the district and students’ socio-economic status. Furthermore, these studies do not pinpoint specific coaching practices that led to the reported changes in teaching and learning and utilize relatively small sample sizes (Edwards, 2010).

**Coaching Models**

The specific roles and responsibilities of a mathematics instructional coach varies depending on her background, training, and the coaching model she uses as her guide and framework. Cornett and Knight (2009) point out although numerous coaching models exist, four are most referenced in the literature: Peer Coaching, Literacy Coaching, Instructional Coaching, and Cognitive Coaching. The characteristics and qualities of these models of coaching are not mutually exclusive; they overlap in ways that can help
us again return to the definition created from merging the components of coaching outlined in the literature: a mathematics instructional coach is one who is well versed in mathematics content and pedagogy, works directly with mathematics classroom teachers to improve students’ mathematics learning, and who offers on-going, individual, job-embedded learning for teachers. Since a discussion of these coaching models is not needed and does not contribute to answering this study’s research questions, the models will not be discussed; we only need an awareness that multiple models exist. However, since the mathematics instructional coach in this study was well versed in the Cognitive Coaching model, a brief discussion of that specific model is included.

**Cognitive Coaching**

Cognitive Coaching was first developed by Art Costa and Bob Garmston in 1984. In 1999, the Center for Cognitive Coaching was established and today this Center is run by Jane Ellison and Carolee Hayes. This coaching model rests upon the idea that the coach acts as a mediator of the teacher’s thinking; the coach listens to understand, paraphrases to seek clarity, and questions the teacher in ways that help her move forward in her thinking. Coaches who operate from this model seek to help teachers become self-directed and purposeful in their thoughts and actions. As with other coaching models, these coaches may assume a variety of stances: coach, collaborator, consultant, or coordinator. Research has been conducted on Cognitive Coaching for over 20 years and reveals that this type of coaching has been linked to increased student test scores, increased teacher efficacy, and increased teacher collaboration (Edwards, 2010).
For the purposes of this study, I primarily use Cognitive Coaching as a framework to guide my observations, although other models were considered to more firmly ground my understanding of Cognitive Coaching. The coach I worked with has been engaged in Cognitive Coaching since 2005. “Cognitive Coaching is a model that supports individuals and organizations in becoming self-directed, and in turn, become self-managing, self-monitoring, and self-modifying” (Costa and Garmston, 2002). While I do not advocate for one coaching model over the other, it is necessary to provide the details of the coaching framework before embarking on this research.

Coach-Teacher Relationships

Trust

Research conducted in the Chicago Public Schools from 1994-1997 indicated relational trust is a key resource for school improvement (Bryk & Schneider, 2002). Bryk and Schneider (2002) contrasted relational trust with two other kinds of social trust: organic trust, which is the unquestioning belief that an individual or organization will do what is right (for example the trust of parents in private or religious schools to educate their children), and contractual trust, the kind of trust used in which individuals or organizations spell out the scope of work to be undertaken and the product that will be delivered. They suggest neither of these forms of trust is appropriate for our schools today. A third form of trust, relational trust is an intermediate case between the other two types of trust. It is founded on both beliefs and observed behavior and requires expectations are validated through behavior. In relational trust, judgments are drawn from behavior, how people feel and beliefs about others’ intentions.
The lenses through which teachers observe and interpret the behaviors of others are called by researchers “criteria for discernment” (Bryk & Schneider, 2002). Essentially, teachers use these criteria in a school setting to determine whether or not a person (including an instructional coach) is trustworthy. The criteria for discernment are: respect, competence, personal regard and integrity. So, for example, teachers either intentionally or unintentionally use these criteria to determine the extent to which they can trust a coach. And, the development of this trust is vital to the development of the coach-teacher relationship (Tschannen-Moran, 2004).

Relational trust is also based on social exchanges organized around a set of role relationships in the school. These role relationships are school professional to community member, teacher to principal, teacher to teacher, and teacher to student. Particular expectations, obligations and dependencies characterize each of these relationships. For example, teachers depend on parents to bring their children to school and parents depend on teachers to effectively support the learning of their child. In general, the power base held by an individual directly affects the relational trust in any given role set. Although power distributions vary from school to school, no one person holds absolute power in a school. Even the school principal is dependent on both parents and teachers. As a consequence, all parties remain vulnerable to each other. Decreasing this sense of vulnerability is a key ingredient in the development of relational trust. In the coach-teacher relationship, this implies the relationship will be strengthened when the coach helps the teacher feel less vulnerable.

**Dimensions of Trust**
A summary of the research on trust in schools (Tschannen-Moran, 2004) revealed common dimensions across definitions of trust: willingness to risk vulnerability (a sense of interdependence, e.g., when a principal shares decision-making with staff), confidence (e.g., when a parent leaves her child with a child-care provider), benevolence (a mutual attitude of good will, resulting in, for example, experimentation with new teaching strategies), reliability (consistency, knowing what to expect), competence (skill in fulfilling expectations), honesty and openness. This overview of the research suggested there are five behaviors leaders can engage in to cultivate trust. They are: 1) acting in consistent ways, 2) acting with integrity, 3) having concern for others, 4) communicating, and 5) sharing control of situations with others. It is the leader’s (and coach’s) responsibility to initiate trusting relationships through trustworthy behavior. These behaviors mirror the facets of trust described by Bryk and Schneider (2002).

This research indicated consistency in personal beliefs, organizational goals and work performance are important, as are competence and even-handedness, all of which promote strong and healthy coach-teacher relationships. Integrity, resulting from telling the truth and keeping promises, is essential. Researchers found integrity also involved authenticity: accepting responsibility for one’s actions and not distorting the truth to shift blame to another. Coaches can promote trust by showing consideration and sensitivity for a teacher’s needs and interests, by acting in ways that protects his rights and, by refraining from exploiting him for the benefit of personal interests.

Some aspects of trust are more important to teachers than others (Bryk & Schneider, 2002). The qualities cited are benevolence/caring (e.g., covering classes for
each other, taking meals to families experiencing illness), openness (e.g., sharing professional “secrets,” strategies, materials, equipment in the interest of student learning), and honesty. Honesty is presumed among colleagues and when it is violated, it is difficult to regain. Interestingly, competence was not found to be a strong component of trust. With increased collaboration and school-wide accountability, beliefs regarding competence in one’s colleagues is likely to become the most important factor in developing trust (Pounder, 1988).

In summary, the primary contributing factor to the development of coach-teacher relationships is relational trust. When coaches and teachers develop relationships built on trust, it is more likely teachers in schools will begin and continue the kinds of activities necessary to improve student achievement.

**Beliefs**

Defining beliefs is critical when thinking about Research Question 1 (how do instructional coaches interpret and respond to the learning needs of teachers) because the coach’s beliefs about teacher learning serve as a foundation for establishing the much needed trusting relationship. However, I should not mention beliefs about teaching mathematics without first referring to Thompson’s (1992) seminal work in which the differences between teachers’ beliefs and knowledge about teaching mathematics were teased out. In her 1992 manuscript *Teachers’ Beliefs and Conceptions: A Synthesis of the Research*, Thompson’s overarching conclusion is rather than distinguishing between beliefs and knowledge, research should study teachers’ conceptions (beliefs and knowledge). She also suggested conceptions must be cultivated to best effect change in
particular fields (mathematics included) and asked, as a field, we begin to consider how
we can prepare teachers to reflect on their conceptions and how those conceptions
influence student learning. In the same vein, I would suggest we can examine a coach’s
conceptions (beliefs and knowledge) about teacher learning as a way to explore how
coaches’ practices influence teacher learning and teacher agency. Furthermore, the
mathematics instructional coach should reflect on her conceptions and the ways in which
those influence the relationships they form with teachers. I broadly suggest a coach’s
conceptions (beliefs and knowledge) about teacher learning do have a bearing on what
coaching practices she deems as appropriate when working with specific teachers.

Also related to this theory is the coaching frame created by Costa and Garmston
(2002). Their Cognitive Coaching model explicitly lays forth four propositions of
coaching, one of which is coaching mediates teachers learning new material by engaging
teachers in alteration of thoughts. Underlying this proposition is the understanding that all
teachers can learn. This proposition assumes teacher learning is important and coaches
approach their work with beliefs about the extent to which teachers can learn and act
independently even if external factors/persons suggest they should act in different ways.
Additionally, in their model for coaching, four (different) support functions that a coach
can adopt are discussed in detail: coach, collaborator, consultant, or evaluator. Because
these different roles are considered, we can assume the co-developers of this coaching
model understand instructional coaches can and will operate from different stances
depending on what the coaches view as a teacher need. For example, if a coach’s purpose
is to “increase [a teacher’s] pedagogical and content knowledge and skills [and]
institutionalize accepted practices and policies,” (Costa & Garmston, 2002, p. 5) she will operate from the stance of a consultant rather than a coach. Again, this can serve as preliminary evidence that the practices a coach employs rest upon the beliefs she holds about teacher learning.

While this idea has not been focused on overtly in the literature, it is a concept that guides this study and, more specifically, the data collection and analysis of the first research question. Recognizing each coach perceives teachers in a myriad ways, (e.g., the extent of teacher learning, the speed with which teachers learn) underpins the idea that coaches’ practices and coaching moves are directed by their beliefs.

**Practices**

In her 2011 synthesis of research on Cognitive Coaching (one of the specific instructional coaching models that are discussed in more detail in Chapter 2), Jenny Edwards found when instructional coaches used this specific coaching model, teachers grew in teaching efficacy. Edwards found “teachers who participated in a three-year project utilizing Cognitive Coaching grew more in teaching efficacy on the Teacher Efficacy Scale (Gibson & Dembo, 1984) than did teachers in a matched control group” (Edwards, Green, Lyons, Rogers, & Swords, 1998) and, in a separate study, teachers who worked with experienced instructional coaches scored significantly higher on the State of Mind of Efficacy than did a control group (Alseike, 1997). I posit that if mathematics instructional coaches are engaging in practices leading to increased teacher efficacy these instructional coaches are purposefully selecting practices and assuming roles they believe lead to increased teacher efficacy.
Which coaching practices lead to increased teacher confidence? This is a complex question that is not easily answered; the current coaching research and literature does not specifically address this question. In this study, I did not seek to specifically understand which coaching practices and coaching roles instructional coaches believe lead to increased teacher confidence; however, this study’s research questions lead to further research that could explicitly investigate this relationship. This study reveals the practices an instructional coach uses depend in great deal on the context she finds herself in and the specific teachers she is working with. Also, this study shows the coaching context is multi-faceted and layered; a coach does, indeed, believe the school culture and climate and the existing knowledge and skills of specific teachers affect which coaching practices she believes lead to increased teacher confidence.

Edward’s three year study (2010) used Gibson & Dembo’s *Teacher Efficacy Scale* (1984) to measure changes in teacher efficacy. In fact, upon a cursory search of the relationship between instructional coaching and teacher efficacy, it is easy to find numerous studies that assert as teachers spend time working with an instructional coach, they show gains in their efficacy related to instructional innovation and meeting students’ needs (Shidler, 2009). However, upon searching for possible relationships and links between instructional coaching and teacher agency, it becomes clear this relationship has not been examined (the distinction between agency and efficacy is discussed in more detail below); the results from these searches yield literature about instructional coaching and efficacy, organizational support for professional learning, student agency, and teacher quality, rather than on teacher agency.
Working with an instructional coach has the potential to increase teachers’ efficacy (Edwards, 2010). We turn to Gibson and Dembo’s use of the *Teacher Efficacy Scale* instrument (1984). Although this research is over thirty years old, this study is a seminal piece for studies related to teacher efficacy; researchers have referred to Gibson and Dembo’s instrument and study in their research (Guskey & Passaro, 1995; Edwards, 2010). Gibson and Dembo (1984) fractured teacher efficacy into two constructs: efficacy related to one’s internal locus of control and efficacy related to one’s external locus of control. We can liken teacher agency to teachers’ beliefs that they can act according to their perceived understanding of students’ needs despite conflicting outside sources (cultural and societal beliefs about who should learn, pressures from administration to ensure students perform well on tests, etc.); that is, a teacher’s efficacy related to an external locus of control. More specifically, we can rely on Campbell’s definition of agency (2012): “the state of agency enables individuals (and, to some degree, collectives, to make free or independent choices, to engage in autonomous actions, and to exercise judgment in the interest of others and oneself” (p. 183).

With this beginning concept of teacher agency in mind, we can again return earlier findings that were laid forth: working with an instructional coach has the potential to increase teachers’ agency. Because research has shown that links between teachers who work with an instructional coach and increases in their self-efficacy and because we might view teacher agency as closely linked with self-efficacy (Edwards, 2010), I assert there are relationships between teachers’ agency and the quality of time they spend working with an instructional coach. While I do not specifically investigate this assertion
in this study, I draw attention to relationships between an instructional coach’s practices and her reasons for selecting these practices. This has the potential to contribute to future studies by highlighting the fine-grained nuances related to a coach’s decision-making practices. This could, in turn, be used to determine teachers’ agency as it is related to specific coaching practices.

**Knowledge Needed for Coaching Mathematics**

Even though this study focuses explicitly on the ways in which a coach’s practices and stances are related to what she notices when working with teachers and the ways in which her practices are differentiated, it is interesting to consider how her selection of practices is based on her knowledge. For the past six years, research has been conducted that explores the knowledge that is needed to be a mathematics instructional coach. The findings from this research may contribute to and add to this study’s findings.

In 2010, Anstey and Clarke, in a review of the related coaching literature, identified the following skills and understandings a mathematics coach must possess to be able to act as a coach.

- the ability to interpret a variety of student data (achievement data, formative and summative assessments) and determine necessary actions by teachers to lead to increased student achievement (Boudett, City, & Murname, 2005);
- a solid understanding of the mathematics content (Feger, Woleck, & Hickman, 2004);
- pedagogical content knowledge that aids in productive conversations about instructional strategies (DEECD, 2006);
• the ability to model lessons for teachers (Feger, Woleck, & Hickman, 2005);
• the ability to identify teacher needs and facilitate relevant planning conversations (Burkins, 2007); and
• the flexibility to adapt her methods and strategies to be more in line with the teacher, school, and district goals (Feger, Woleck, & Hickman, 2005).

Their review of the coaching literature confirmed an instructional coach must have a firm grasp of content and pedagogical knowledge as well as knowledge about student assessment data and knowledge of coaching. Similarly, Hull, Balka, and Miles (2009) identify the following components as knowledge needed for coaching: mathematics content; pedagogy; teacher learning and development; group dynamics and social norms; data acquisition, analysis, interpretation, and application; trust-building; and student learning. In other words, the knowledge needed for coaching is diverse and requires training and support and related experiences that can be built upon.

At the University of Montana, team members associated with the Examining Mathematics Coaching (EMC, 2014) project examined four coaching models to arrive at the knowledge and skills they believe are essential for mathematics instructional coaches: Cognitive Coaching (Costa & Garmston, 2002), Content Focused Coaching (West & Staub, 2003), Instructional Coaching (Knight, 2007), and Mathematics Coaching (Hull, Balka, & Miles, 2009). Their analysis of these models helped them identify the specialized knowledge and skills needed by mathematical instructional coaches: mathematical content knowledge, knowledge of student learning, knowledge of teacher learning, knowledge of coaching. As they understand it, these types of knowledge needed
by a coach are not mutually exclusive; they are overlapping in a variety of ways as illustrated in Figure 2.1.

Figure 2.1: Knowledge and Skills Needed for Mathematics Instructional Coaches.

Mathematical Content Knowledge

Mathematical content knowledge (MCK) has been explicitly characterized by Ball et al, (2008) as common content knowledge and specialized content knowledge.

Common content knowledge is “the knowledge that teachers need in order to be able to do the work that they are assigning to their students” (p. 6) while specialized content knowledge is the “mathematics knowledge beyond that expected of any well-educated adult but not yet requiring knowledge of students or knowledge of teaching” (p. 9). Even though these characteristics of mathematical content knowledge have been defined in terms of what mathematics teachers need to know, we might extrapolate and suggest that
the above model (Figure 2.1) assumes that instructional coaches who work with mathematics teachers need to possess the same, if not more, mathematical content knowledge, in order to be considered effective.

**Coaching Knowledge**

As we might expect, this model also suggests instructional coaches must have knowledge of how to coach. Knowledge of how to coach is dependent upon which coaching model is being used and how her coaching role is defined. Within this knowledge of how to coach lie the practices and actions that a coach will rely on to “coach.” Inherent in this knowledge is knowledge of how teachers learn. In order for a coach to select and use a particular coaching move, she must have a repertoire of coaching moves to pull from and, at the same time, have an understanding of how the teacher he or she is working with approaches learning.

**Knowledge of Student Learning**

Additionally, because the primary role of a coach is to help teachers improve student achievement and learning, coaches must also have a working knowledge of how students learn. Coaches must be able to discuss a teacher’s students’ learning during any given moment. This includes having the ability to assist the teacher in analysis of summative and formative assessment data as well as finding ways to move students forward in their understanding of mathematical topics based on the interpretation of these data and the particular students’ learning needs.

**Knowledge of Teacher Learning**
Sutton, Yopp, & Burroughs’s review of the coaching literature also reveals additional important characteristics instructional coaches should possess if they are to be effective in helping mathematics teachers change their instructional practices. Instructional coaches must be able to develop trusting relationships with teachers, provide effective and timely feedback, be able to formulate and ask reflective questions, have knowledge of teacher development, understand different assessment practices, and be willing to co-teach with mathematics teachers (Yopp, Burroughs, Sutton, and Greenwood, 2014). The authors of this study have outlined these characteristics of coaching knowledge in a graphic. As can be seen below, their research on coaching knowledge has revealed eight factors contribute to the necessary knowledge base of a coach: knowledge of leadership, assessment, teacher development, teacher learning, teacher practices, student learning, communication, and teacher relationships. (Figure 2.2)

![Diagram](Image)

**Figure 2.2:** Knowledge Base of Mathematics Instructional Coaches.

Initial findings from their quantitative study suggest, after three to five years, as the instructional coach’s self-efficacy increases, the teachers’ mathematical knowledge of
teaching and self-efficacy also increase (Yopp, Burroughs, Sutton, and Greenwood, 2014). Furthermore, the content knowledge of teachers grew as the teachers worked with an instructional coach. Because there are several confounding variables in this study (professional learning experiences for teachers beyond working with the mathematics instructional coach, the variety of teaching experiences, etc.), the researchers admit it is difficult to pinpoint if this increase in teachers’ content knowledge was a result of working with an instructional coach. Additionally, the initial findings from this study suggest while the self-efficacy of the instructional coach increased, this was not correlated with an increase in self-efficacy for teachers and that there was no evidence of impact of increased self-efficacy for coaches with improved teacher practices (Yopp, Burroughs, Sutton, & Greenwood, 2014). The initial results of this quantitative study are quite promising, nevertheless. This study can claim as the coaches’ self-efficacy towards coaching improved, the effect on the teachers with whom they worked was three-fold: teachers’ content knowledge increased, teachers’ instructional practices improved, and teachers’ self-efficacy and confidence increased.

Although the EMC project has collected data from numerous participants (from four states) for five years, the limitations the team members outline are particularly interesting for the purposes of this study. Researchers found that as coaching intensity declined over time, there tended to be high teacher turnover in the schools that they partnered with, the instruments they developed were untried, the instructional coaches they examined were not prepared in uniform ways, and many outside or confounding variables were noted. I do want to recognize the contributions this study makes to the
field but I also offer one criticism: this quantitative study fails to account for the contextual nature of coaching. We might make generalizations about the effects of coaching and the types of knowledge needed for mathematics coaching based on this study but we should not extrapolate; we should not assume these findings would be the case for each coaching situation. Furthermore, as with other studies, this study does not explore the specific coaching practices that lead to the improvements in teachers’ self-efficacy and confidence.

**Decision Making**

As they work, teachers face a range of choices regarding possible actions, where pursuing one path may well mean forgoing others…seen this way, teaching can be regarded as an art form – grounded in principle, yet often spontaneous and opportunistic.  
Schoenfeld, 2008, p. 45

**Introduction and Overview**

Even though this quote by Schoenfeld references the decision-making practices of teachers, we can think of the decision-making practices of mathematics instructional coaches in a similar fashion. At any given time, when a mathematics instructional coach is working with a teacher, the coach is faced with decisions: give advice, provide materials, brainstorm, or ask open-ended questions. When a teacher asks for help, will the coach act as a consultant and tell the teacher what he can do or will the coach help the teacher determine the best course of action? When in this moment, how does the coach decide which move to make? To help consider these questions, I examine the literature related to teacher decision-making. Again, I liken teacher decision-making to the decision-making practices of an instructional coach.
There is no shortage of research and literature related to teacher decision-making; a cursory search of “teacher decision-making” using Google Scholar results in 1.89 million manuscripts (August 6, 2016). To hone one’s search, the search engine suggests searching for one of these related topics: expert and novice teacher decision making, classroom teacher decision making, teacher decision making instruction, teacher decision making school culture, or preservice teacher decision making. My search is more of a holistic search. I am most interested in seminal pieces that highlight decision-making practices and in the ways in which the research was conducted.

Literature related to novice and expert teaching is not new and several studies (Benner, P. & Part, M. 1984; Borko & Livingston, 1989; Sternberg, R. J, & Horvath, J. A., 1995; Schoenfeld, 2008) have been conducted that compare the decision-making strategies of novice vs. expert teachers. Borko and Livingston (1989) investigated novice and expert teachers’ pedagogical knowledge during planning, teaching, and reflecting meetings. Their study revealed “novices showed more time-consuming, less efficient planning, encountered problems when attempts to be responsive to students led them away from scripted lesson plans, and reported more varied, less selective post-lesson reflections than experts” (p. 473). To reach this conclusion, researchers identified categories of thinking and action which we might consider being representative of the decisions that teachers made; after identifying these categories, they noted patterns across novice behavior and expert behavior. Again, we can liken this to the decision-making practices on mathematics instructional coaches and extrapolate that novice coaches might be somewhat less efficient in their practices and may not be as reflective. On the other
hand, more experienced and well-versed coaches should be in a position to, when working with teachers, quickly and effectively select practices they believe are in-line with teacher needs.

In 2008, *The Journal of Research in Mathematics Education* published a monograph titled *A Study of Teaching: Multiple Lenses, Multiple Views*. Chapter 2 of this monograph, written by Schoenfeld, focused on, in part, the decision-making practices of teachers. In this chapter, Schoenfeld centered his discussion of teacher decision-making on the highly popularized recording of Ball’s third grade math lesson. He goes on to say “Ball’s actions during the first 6 minutes of instruction can be modeled by the use of one complex decision-making routine…the decisions are then made through cost-benefit analysis, on the basis of Ball’s attributed knowledge, goals, and beliefs” (Schoenfeld, 2008, p. 58). Of primary interest to this study is the framework he uses for teacher decision-making: goals, beliefs, and knowledge. Schoenfeld argued Ball’s decisions are driven by the goals she has for the lesson and for her students; by the beliefs she holds about mathematics, students, teacher, learning, and classroom environment; and by her common content knowledge, specialized content knowledge, knowledge of content and students, and her knowledge of content and teaching (Ball, 2008). Again, we can liken this to the decision-making practices of a mathematics instructional coach and claim the coach’s decisions are based, in part, on the goals she has as she works with teachers.

**Professional Noticing**
More recent literature on teacher decision-making, especially in the field of mathematics teacher education has been framed as professional noticing (Sherin, Jacobs, & Philipp, 2011), the ways in which teachers make in-the-moment instructional decisions based on students’ mathematical thinking. This idea is not novel to mathematics education research and literature; it has been called disciplined perception (Stevens & Hall, 1998), intentional noticing (Mason, 2002) and professional vision (Goodwin, 1994). However, the more recent terminology of “professional noticing” can be used as a framework to understand how teachers make instructional decisions. This is done by understanding the teacher’s ability to attend to, interpret, and respond to students’ mathematical thinking in the moment (Jacobs, et al., 2010). The construct of professional noticing, defined as “how, and the extent to which, teachers notice children’s mathematical thinking” (p. 171), and, more specifically, the framework of professional noticing of children’s mathematical thinking (Jacobs et al., 2010) explores how mathematics teachers develop their ability to unpack students’ mathematical thinking. This three-part framework is composed of the following interrelated skills: (a) attending to students’ solution strategies, (b) interpreting students’ mathematical understanding, and (c) deciding how to respond to students’ understanding.

Expanding our view of professional noticing is not a novel idea. According to the preface of their book, Mathematics Teacher Noticing: Seeing through Teachers’ Eyes, Sherin, Jacobs, and Philipp (2011) state, “there has been a ground swell of interest by researchers in a particular type of noticing – the noticing done by professionals” (xxv). They go on to claim “groups of individuals who hold similar goals and experiences often
display similar patterns of noticing” (xxv). For this study, this can be understood as having implications outside of mathematics teacher education; these ideas can also be applied to mathematics instructional coaching.

For the purposes of this study and this literature review, I expand our understanding of professional noticing as a decision-making framework beyond mathematics teachers; we also want to consider the ways in which this can serve as a decision-making framework for mathematics instructional coaches. In other words, this literature and research base is examined through the lens of understanding how a mathematics instructional coach makes decisions. For instance, instead of limiting our view of professional noticing to the ways mathematics teachers make in-the-moment decisions about their students’ mathematical understanding, we also consider how mathematics instructional coaches attend to math teachers’ behaviors, attitudes, knowledge, skills, and perceptions; how the mathematics instructional coach interprets those things she attends to; and how the mathematics instructional coach responds to the teacher with whom she is working. In this way, I examine the ways in which the coach’s practices (the ways she responds) are aligned or misaligned to what she attends to and interprets.

**Concluding Literature Remarks**

A review of the instructional coaching literature points to two obvious gaps in the research: 1) there is insufficient research about mathematics instructional coaches’ practices and the relationship of those practices to teachers’ work and 2) much of the highlighted work in the field is quantitative in nature. Due to the context-dependent
nature of instructional coaching, qualitative research is needed that addresses coaching practices related to specific contexts. Additionally, of the coaching literature that mentions coaching practices, it is often shared that coaches’ practices are determined by the model they are following and that these practices yield different results. Furthermore, these practices are nuanced and difficult to measure. “A great deal has been written about the process of coaching, and indeed, about the entire process of relationship building….Nevertheless, we can learn a great deal more if other aspects of coaching receive further study. A primary goal of research should be to identify the most effective and efficient ways to promote high-quality learning among professionals” (Cornett and Knight, 2009, 211). To follow this call for needed research, one needs to first define “effective and efficient” and “high-quality learning.” Rather than define these terms, we must explore the complex nature of instructional coaching and the ways in which context sets the stage for the decisions instructional coaches make about what practices and stances work best in a particular situation. This type of exploration can only be done qualitatively. A multiple case study has the potential to maintain the integrity of the complex space of coaching and teaching and, at the same time, unveil decisions instructional coaches make about the practices they use and the stances they assume.

A third point that becomes clear to upon a review of the literature is that providing the field with a useful conceptual framework can guide data collection and analysis for coaches’ decision process is needed. This study utilizes a novel conceptual framework to structure the data analysis and interpretation; the conceptual framework used for this study has not yet been used to consider the decision-making practices of
mathematics instructional coaches. Namely, the professional noticing framework (Sherin, Jacobs, & Philipps, 2011) was merged with Blomeke’s et al. competence as a continuum framework (2015) to create a new way to try to grasp the nuanced ways in which instructional coaches make decisions and how they adapt their decision-making practices when working with more than one teacher.

To summarize, I see this study contributing to the research in three ways: the qualitative nature of this study honors the complex nature of coaching and teaching by providing a detailed analysis on one coach’s practices; specific coaching practices that a mathematics instructional coach uses and the decision-making process that undergirds these practices are uncovered; and the theoretical framework that is used for this study has potential implications for how other researchers view and make sense of the coaching decision-making process. All three facets have potential to add to the research base on instructional coaching.
CHAPTER 3

METHODOLOGY

Study Design

This study investigated coaching as a high-leverage strategy for mathematics teacher learning. My study examined one coach’s practices with two different teachers in order to respond to questions in the field about the decision making strategies of a coach. More specifically, this study examined how a coach interpreted and responded to the learning needs of teachers and the ways in which the coach adapted her practices with two teachers. In this chapter I provide details regarding this study’s research design, data collection procedures, and data analysis techniques. Because I seek to answer “how” and “why” questions, I conducted an exploratory case study (Baxter & Jack, 2008). I followed Yin’s (2009) case study protocol as a way to increase the rigor of the study. The case study protocol outlines the procedures researchers should following when conducting a case study: provide an overview of the proposed study, outline field procedures, discuss the case study questions (questions I asked myself to guide the study), and discuss possible guidelines for a case study report. I also set the stage for this research study by providing detail related to the context of this particular study (demographic data) and by discussing my research subjectivities.

Overview

I seek to understand the context in which an instructional coach selects and uses coaching stances (e.g. consulting, collaborating) and coaching practices (language and word choice, questions, paraphrases, nonverbal communication) with two mathematics
teachers in one middle school in a large school district and the extent to which she
differentiated her practices with the particular teachers. This dissertation investigated
coaching as a high-leverage strategy for mathematics teacher learning. More specifically,
this study examined how a coach interpreted and responded to the learning needs of
teachers and ways in which the coach adapted her practices with teachers. The conceptual
framework for this study guided the data collection and analysis by providing a lens
through which to view and understand coach-teacher interactions. For this study, what the
coach attended to and noticed when working with teachers was connected to the ways in
which the coach responded to the teachers, the practices she decided to use.

Purposeful Selection

I purposefully selected one mathematics instructional coach in the first year of a
coaching initiative as she worked with two teachers with differing teaching practices; I
selected a coach who used a variety of coaching practices and assumed diverse coaching
roles with two different teachers. I observed the instructional coach as she interacted with
two mathematics teachers at her assigned middle school. Eleanor, the coach, selected two
teachers who would be amenable to participating fully in this study.

Unit of Analysis

Because I explored the ways in which one mathematics instructional coach
determined specific coaching practices to use with teachers, the coach, Eleanor, served as
the unit of analysis. This is a case of instructional coaching; therefore, the unit of analysis
for this study was the coach. Consequently, I studied an instructional coach’s interactions
(i.e. the ways she talked with the teachers, the types of meetings she determined were
needed, her nonverbal communication, the ways she modeled teaching behaviors) with two teachers. For this study, I had one case. I used a holistic case design that had one unit of analysis (Yin, 2009). (Figure 3.1) The case was housed within the same school district and the same school. (Figure 3.1)

To be clear, the boundary for this case was the instructional coach, Eleanor. Although I observed Eleanor as she worked with two teachers, I sought to understand how she interpreted and responded to the two teachers and how she differentiated her practices between the teachers. In this way, Eleanor served as the single case for this study.

![Figure 3.1: Design: Embedded Case Study Design.](attachment:image)

**Figure 3.1**: Design: Embedded Case Study Design.

**Case Study Design**

Data were collected from interviews with Eleanor and observations of Eleanor as she worked with two teachers, Tanner and Belinda. In other words, I observed and interviewed the coach and observed the coach interacting with each teacher separately. During instructional coaching meetings where the mathematics instructional coach
interacted with the two teachers, I observed Eleanor working with the teachers on eight
days over the course of the second semester of the 2015-2016 academic year. While I had
opportunities to observe Eleanor interacting with both teachers at once, I focused on the
interactions between the coach and each of the teachers separately by making detailed
notes about differentiations in coach behavior.

Figure 3.2: Case Study Method.

Following this model, I observed the mathematics instructional coach interacting
with two teachers with whom she worked. During these observations, I collected field
notes that captured specific coach language and that illustrated key coaching practices
utilized by the mathematics instructional coach. I also interviewed the instructional
coach thirteen times to collect overall impressions about the ways in which she
differentiated her coaching practices with the two teachers, noting exact language and
non-verbal responses, and her reasons for differentiating practices in particular ways. I
relied heavily upon detailed analytic memos recorded in my field notes journal. I also
took detailed field notes as a way to capture coach-teacher interactions when the coach
reflected with and planned with the teachers.
Researcher Subjectivities

“Qualitative inquiry is subjective” (Stake, 1995, p. 45). While this may concern some, others understand this is the beauty of qualitative research. When researcher subjectivities are outlined upfront, the qualitative study then becomes a unique view of a particular situation, in context, told from the researcher’s point of view. Since all data were collected, analyzed, and reported through the lens and filters I hold, this story becomes distinctive and may highlight different aspects that add to the literature and research base in unique ways.

Because I have served as a teacher and coach of coaches, it is of chief importance I outline my professional past and the ways in which my experiences act as the filters through which I view my world and, more specifically, this study. After obtaining a Bachelor of Sciences Degree in Mathematics Teaching (grades 9-12), I taught high school mathematics (Geometry, Pre-calculus, Academic Assistance Math, Math for the Technologies I) from 1997 to 2003. While teaching high school, I earned my Master’s Degree in Secondary Mathematics. For the next three years, I taught middle school math (Algebra I, Advanced Pre-Algebra, and Pre-Algebra); while teaching at the middle school, I added grades 5-8 to my teaching certification. In 2006 I was hired by the organization who employs Eleanor (the mathematics instructional coach who participated in this study) as a Mathematics Specialist. In this position, my primary role was to work with other Mathematics and Science Specialists across the state to hire, prepare, and support K-8 mathematics and science instructional coaches. This preparation entailed, for the coaches, three years of call-back meetings (two days per month) that consisted of
professional learning focused on developing content knowledge, understanding a variety of assessment techniques, and creating and sustaining professional learning opportunities for K-8 math and science teachers. As a Mathematics Specialist, I planned, developed, and facilitated the professional learning for the mathematics and science instructional coaches. I also supported instructional coaches on-site in a ten-district region. This support, for the coaches, consisted of weekly on-site visits (at the school and district level). During the on-site visits, I spent an entire day with the mathematics instructional coach, observing, conducting planning and reflecting conversations, and analyzing data with the coach; I acted as a meta-coach. (A meta-coach serves as a coach for the instructional coach, helping the coach plan for and reflect on her coaching practices.) Additionally, once per month, I met with the mathematics instructional coach and the administrator(s) to ensure we were working collaboratively as a team to achieve the school’s self-identified long-term goals.

Furthermore, during this time, I also became a Cognitive CoachingSM Agency Trainer. To become an Agency Trainer, I participated in the eight-day Cognitive Coaching training sessions three times both as a learner and as an observer. I then co-facilitated two eight-day trainings with an approved Associate Trainer and, in this role, I recorded, analyzed, and reflected on numerous coaching conversations I led and submitted videos and written reflections of these conversations to the Center for Cognitive Coaching in Denver, CO. I also spent a great deal of time reflecting on my progress in writing and in coaching conversations with the Associate Trainer with whom I worked. Once approved by the Center of Cognitive Coaching, I led seven Cognitive
Coaching sessions for the K-8 mathematics and science instructional coaches hired by the organization that currently employs Eleanor. During this time I also attended and participated in fifteen associated Cognitive Coaching conferences and training sessions. This training process occurred over eight years and helped me become well-versed in the language and intentions of Cognitive Coaching.

In this capacity, I worked as a coach of coaches; I coached the coaches in an effort to aid them in developing relationships, supporting the enactment of inquiry-based instructional practices, and helping teachers work as collaborative teams. Here, I outline the roles of that job so the reader will understand my familiarity with this state-wide coaching initiative and the specific coaching practices that the instructional coaches I worked with used and the distinct coaching stances they assumed.

While serving as a Mathematics Specialist I also worked with other Mathematics Specialists to plan, organize, and facilitate professional learning experiences for all mathematics and science instructional coaches across the state. One of the Mathematics Specialists, Eleanor, composed the case I studied for this research project. Eleanor and I had numerous opportunities to work together. While working together, we developed a friendship. Therefore, I have to be mindful to view the case as objectively as possible and to maintain my stance of observer-participant.

While conducting this research, I was careful to set aside my researcher subjectivities; I had to be mindful to take necessary measures to set aside my views about how I believed the coach should act and behave while working with teachers and I had to set aside my personal connections to the coach. To do this, I bracketed out researcher bias.
in my field notes and I made detailed analytic memos throughout the data collection process. I believe my past experiences helped me more clearly recognize and understand the nuances of this study, when properly bracketed out. Having a familiarity with the context of this study helps me identify interesting and unique situations of coaching and this aided me in addressing the research questions.

**Context**

This research focuses on one middle school mathematics instructional coach at one middle school in a large school district in the Southeast region of the United States as she worked with two teachers. While instructional coaches may work with more than one school and may work as mathematics instructional coach at different schools or districts, the coach I observed was housed at one school. Her role as an instructional coach was designed to “count” as 50% of her job; she continues to do other work for her organization (i.e. design and implement professional learning for K-8 mathematics teachers in this state, prepare STEM workshops for teachers, work on manuscripts for journal submissions, help external evaluators for this organization with data collection). As such, she is in this school as a coach two full days per week, on Monday and Wednesday. Because I focused exclusively on her work with one school in one district, I highlight the demographic data for this district and school. According to the 2010 U.S. Census (http://www.census.gov/2010census/), the school district is located in a county that houses 451,225 people (48.5% are male, 51.5% are female). This accounts for approximately 9.8% of the total population of the state. Of the population, 73.8% are Caucasian, 18.1% are African American, 1.96% are Asian, and 6.14% are classified as
other. Furthermore, 8.1% are classified as Hispanic/Latino and 91.9% are listed as non-Hispanic or Latino. 59,529 households have persons under the age of 18. This school district, the largest school district in the state, is composed of approximately 71,000 students and is made up of 52 elementary schools, 23 middle schools, 19 high schools, and five non-traditional schools. Several schools have a specialized focus (International Baccalaureate programs, Magnet programs, and technology centers, for example).

**School and Community**

The middle school participating in the coaching initiative that is the focus of this study will be referred to as Community Middle School (pseudonym). Community Middle School is an average sized school of this region. One interesting note is that this particular school, during the year of the study, employed thirty support staff; Eleanor, because she is considered an outside consultant, is not counted in this number. School demographic information is provided in Table 3.1.

Table 3.1

<table>
<thead>
<tr>
<th>School Population</th>
<th>Students</th>
<th>Teachers</th>
<th>Administrators</th>
<th>Support Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Middle School</td>
<td>530</td>
<td>38</td>
<td>3 (1)</td>
<td>30</td>
</tr>
</tbody>
</table>

Note: Number of Years of Principal at School in Parenthesis


Community Middle School was selected because the administrators recently received grant money to hire a mathematics instructional coach to work with their teachers in an effort to increase student achievement data. The 2015-2016 school year was the first year Community Middle School had worked with this instructional coach. Therefore, during
the 2015-2016 academic year, I had an opportunity to observe the ways in which the coach-teacher relationship formed. (Although I had hoped my observations could begin in August of the school year, I was not given approval to begin my observations until January.)

Also of interest is the number of math teachers at each grade level at Community Middle School.

Table 3.2

*Math Teachers per Grade Level*

<table>
<thead>
<tr>
<th></th>
<th>6th Grade</th>
<th>7th Grade</th>
<th>8th Grade</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>2 (33.3%)</td>
<td>2 (33.3%)</td>
<td>2 (33.3%)</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: N=6
Source: State Department of Education website

Additionally, 62.8% of teachers at Community Middle School hold advanced degrees.

Specific student demographic data can be found in Table 3.3.

Table 3.3

*Student Demographics*

<table>
<thead>
<tr>
<th></th>
<th>Community Middle School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>251 (44.2%)</td>
</tr>
<tr>
<td>Male</td>
<td>310 (54.6%)</td>
</tr>
<tr>
<td>American Indian or Alaska</td>
<td>3 (.53%)</td>
</tr>
<tr>
<td>Native</td>
<td></td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>1 (.18%)</td>
</tr>
<tr>
<td>Black or African American</td>
<td>269 (47.2%)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>150 (26.4%)</td>
</tr>
<tr>
<td>White</td>
<td>123 (21.7%)</td>
</tr>
<tr>
<td>2 or more races</td>
<td>15 (2.6%)</td>
</tr>
<tr>
<td>Free</td>
<td>499 (87.9%)</td>
</tr>
</tbody>
</table>
Participant Selection

The instructional coach for this study was purposefully selected based on three criteria: 1) I selected a participant who allowed me to maximize what I could learn; 2) I selected a participant who was accessible and amenable to my inquiry; 3) and I selected a participant who allowed me to learn from her differing views and approaches (Stake, 1995). Specifically, I wanted to include in this study an experienced coach who could analyze her stances and the practices she employed when working with a variety of teachers. After having numerous conversations with colleagues, I realized Eleanor (pseudonym) would be an ideal case, if she were willing to participate. Once gaining Eleanor’s permission, she and I worked collaboratively to select the two middle school math teachers who would participate in this study. Specifically, with Eleanor, I used deviant case sampling (Glesne, 2011) to select two mathematics teachers who used a variety of instructional practices and assumed diverse teaching stances. All participants returned signed consent forms (see Appendix A).

Eleanor: The Coach

One instructional coach, Eleanor (pseudonym) participated in this study. During the 2015-2016 academic year, the year of this study, Eleanor worked for a state organization whose purpose is to serve the state by focusing on science, technology, engineering, and mathematics.
The organization that hired Eleanor was composed of Mathematics Specialists, Science Specialists, and Coordinators. The state was divided into five regions and each region contained at least one Mathematics Specialist, at least one Science Specialist, and one Coordinator. The Coordinator oversaw all duties of the two specialists and developed relationships with school and district partners in the region. The Science and Mathematics Specialists served trainers and supporters of K-8 mathematics and science teachers in their region and throughout the state and developed and facilitated mathematics and science professional learning for K-12 teachers in their region and in the state. While this organization would prefer that the Mathematics and Science Specialists have experience with instructional coaching, that is not a requirement (this organization is currently involved in multiple projects across the state, not just an instructional coaching initiative). Experience teaching mathematics is a requirement for all Mathematics Specialists hired, though this experience could be in elementary, middle, or high school. (Eleanor has experience teaching and coaching middle school mathematics.) In this way, the organization is striving to ensure each employee has adequate and sufficient mathematics content knowledge as well as pedagogical content knowledge. In the job description it is noted that experience with instructional coaching, specifically the Cognitive Coaching model is preferred. However, in their role, Mathematics Specialists hold additional duties outside of their role as mathematics instructional coaches. This is important to note because, unlike some mathematics instructional coaching positions, this mathematics instructional coach’s attention was pulled in different directions; she was not able to focus exclusively on coaching. The diversity of her roles and the fact she was
considered an “outsider” (Eleanor does not work for the district or for the school that she supports; she works for the state organization), led to delays in the development of relationships formed with teachers. Specifically, Eleanor’s job description stated that 50% of her time was to be devoted to coaching; she arranged her schedule so that she is at Community Middle School two days per week. While this was not a specific factor for this study, it did mean my visits to Community Middle School were limited to only these two days per week. Additionally, this was a factor that delayed relationship building between Eleanor and the teachers at this school.

Because I studied the intentionality of a mathematics instructional coach’s practices, it was necessary for me to select a coach during her first year of that coaching initiative. For over two years, I had conversations with the Executive Director of this organization, Sandra (pseudonym), to help me make decisions about the sample from which I would select participants. After speaking with Eleanor, I realized she was an excellent fit. Furthermore, I used deviant cases by speaking with the coach, Eleanor, about selecting two different teachers with whom she works. Of particular interest was guaranteeing the two teachers selected were 1) willing to participate and 2) they were deviant samples (Glesne, 2011). Ensuring this helped me note similarities and differences in the coaching practices selected as the coach developed relationships with these teachers. And because the mathematics instructional coach was able to act with autonomy (to my knowledge, she was not evaluated or guided by an external agent) and act in ways that met teachers’ self-identified needs, each case had the potential to highlight differences as well as similarities. Each mathematics instructional coach-teacher
relationship was considered a case. Therefore, for this study, I sought to understand two separate cases. (Figure 3.1) Additionally, the following criteria were followed: 1) I selected participants that allowed me to maximize what I can learn; 2) I selected participants that were accessible and amenable to my inquiry; 3) and I selected participants that allowed me to learn from differing views and approaches (Stake, 1995).

Eleanor has been trained using the Cognitive Coaching model. In other words, Eleanor has attended the eight day Cognitive Coaching training twice and has had opportunities to refine her coaching skills by working directly with math and science teachers in a coaching capacity across the state for a number of years. During the years 2003–2010, Eleanor served as a Mathematics Specialist, supporting mathematics and science instructional coaches across the state. Now, she is acting as the instructional coach. Eleanor is also unique in that she held a mathematics instructional coaching position before being hired as a Mathematics Specialist (to train and support other mathematics instructional coaches). For the purposes of this study, Eleanor’s prior experience as a mathematics coach was significant; her depth of coaching experience was brought up throughout the study. So, it should be noted that, while this is Eleanor’s first year as a coach at Community Middle School, she has held this same position at another school housed in the same district. (Also of some note, Eleanor spent eleven years as an Accountant/Bookkeeper prior to entering education.)

Eleanor clearly exhibited several key components of the knowledge needed for coaching (Yopp, Burrough, Sutton, and Greenwood, 2014). For example, Eleanor’s experience in training to become a coach and acting as a coach provides evidence of her
knowledge of leadership, communication, teacher development, teacher practices, and
teacher learning. Eleanor’s time spent as a math teacher also provides evidence of her
knowledge student learning and assessment. Furthermore, Eleanor’s other work (the other
50% of her job) requires that she create and provide teachers across the state with
professional learning experiences that will refine their knowledge of assessment,
leadership, student learning, and instructional practices.

Table 3.4

*Instructional Coach’s Professional Experiences*

<table>
<thead>
<tr>
<th></th>
<th>Years as a Mathematics Teacher</th>
<th>Years Working as an Instructional Coach</th>
<th>Years in Other Professional Positions</th>
<th>Total Years in Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eleanor</td>
<td>12</td>
<td>10</td>
<td>11</td>
<td>22</td>
</tr>
</tbody>
</table>

Source: Instructional Coach Survey, Appendix D

To further consider the context of this study, it should be noted that Eleanor is an
African American female in her late fifties with over twenty years in the education
professions (twelve years as a mathematics teacher and ten years as a mathematics
instructional coach). The two mathematics teachers selected, Tanner and Belinda, had
considerably less teaching experience than Eleanor. Tanner is a white male in his mid-
twenties and is in his second year of teaching; Belinda is a white female in her early
thirties and is in her seventh year of teaching. It should also be noted only 21.7% of the
student population is white. Since 47.2% of the students are black or African American
and 26.4% of the students are Hispanic/Latino, the majority of Tanner and Belinda’s
students are of a different race. While outside the realm of this study, the race of
background experiences of Eleanor, Tanner, Belinda, and Tanner and Belinda’s students may be of interest to the reader.

**Tanner: 8th Grade Math Teacher**

Tanner was in his second year of teaching. This was Tanner’s first year teaching in this state, his first year teaching at Community Middle School, and his first year teaching 8th grade math (he taught 6th grade math during his first year of teaching). Tanner’s wife was a middle school science and math teacher at a nearby middle school located in the same school district, when this document was written. This year they struggled with many personal matters that have required a lot of focus (a sick newborn, buying a new house). Tanner’s classroom was four doors down from the only other 8th grade math teacher at Community Middle School, Belinda. When entering Tanner’s room for the first time (February, 2016), I noticed the walls were empty; there were only two posters displayed and no student work displayed. The blinds to the two windows were closed, the 24 student desks were spaced out in rows and were all facing the front of the room. Near the Interactive White Board (IWB) at the front of the room, was a small table with stacks of paper and a laptop (hooked up to the IWB). Tanner’s desk was in the back corner of the room, sandwiched between a tall, almost empty bookshelf, and the counters and cabinets that run the length of the back of the room.

Every day Tanner had two planning periods out of seven total 45-minute periods. During his first planning period (3rd period), Tanner and Belinda met for common planning time. Each Monday, Eleanor joined them during this time. During his second planning period, Tanner worked on his own. Often, the school asked Tanner and Belinda
to attend meetings or meet with other school staff during their shared planning time or after school.

**Belinda: 8th Grade Math Teacher**

This was Belinda’s eighth year of teaching and her first year teaching 8th grade; for the past seven years, Belinda taught 7th grade math. This year, she taught 8th grade math, one section of Algebra I, and facilitated one section of Geometry (the school adopted a computer-based program that students follow for this course). This was Belinda’s second year at Community Middle School; during her first six years, she taught at a middle school in a neighboring state. The previous school district Belinda worked in was considered small; the district had one elementary, one middle, and one high school. That district had one instructional coach who traveled to and supported all three of these schools. Often, Belinda would see the instructional coach only at faculty meetings; she never worked one-on-one with this coach. So, while technically Belinda had worked with an instructional coach in the past, this was her first occasion to work closely with an instructional coach and her first opportunity to work with an instructional coach whose focus was entirely on mathematics.

**Data Sources**

I had open access to the case in this study; I was able to arrange to visit Eleanor any time she was visiting Community Middle School. Eleanor was involved in selecting two mathematics teachers to participate in this study, which allowed for open access to observe her as she interacted with these teachers. The data set was designed to highlight
the intentionality of the coach’s practices with teachers who had differing teaching practices and approaches.

Data were collected that contextualized the ways in which Eleanor made decisions about her selection of specific coaching practices (questions, paraphrases, and nonverbal communication) with the two mathematics teachers, Tanner and Belinda. I also collected data about the extent to which and reasons why Eleanor was purposeful in her selection of specific coaching stances (coaching, consulting, collaborating) when working with two teachers. I used the following as sources of data: transcripts of interviews with the mathematics instructional coach, Eleanor, field notes and analytic memos from observations of the instructional coach working with the two middle school mathematics teachers, Tanner and Belinda, and audio recorded interviews with Eleanor.

Table 3.5

*Data Sources, Data Collection, and Data Analysis*

| Data Sources                      | Data Collection Techniques                                                                 | Data Analysis Procedures                                      |
|----------------------------------)|-----------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Primary Data                    | Coach interviews (audio recorded):                                                      | Thematic Analysis                                             |
|                                 | • August 31, 2015                                                                      | First cycle coding: Initial coding, constant comparative method|
|                                 | • September 30, 2015                                                                  | Second cycle coding: Focused coding                           |
|                                 | • December 2, 2015                                                                    |                                                                  |
|                                 | • February 8, 2016                                                                   |                                                                  |
|                                 | • February 22, 2016                                                                  |                                                                  |
|                                 | • February 29, 2016                                                                  |                                                                  |
|                                 | • March 14, 2016                                                                     |                                                                  |
|                                 | Open-ended coach survey                                                              | Thematic Analysis                                             |
|                                 | • January, 2016                                                                      | First cycle coding: Initial coding, constant comparative method|
|                                 | Administer survey to the mathematics instructional coach                              |                                                                  |
Field notes (including analytic memos) from observations of coach-teacher meetings and classroom observations  
- February 1, 2016  
- February 8, 2016  
- February 22, 2016  
- February 29, 2016  
- March 16, 2016  
- March 21, 2016  
- May 4, 2016  
Write memos throughout entire project (ongoing)  

### Second cycle coding:  
Focused coding  

| Secondary Data | Teacher interviews | Interview and audio record each teacher at the end of the 2015-2016 academic year; transcribe all recordings | Thematic Analysis | First cycle coding:  
Focused coding |
|---|---|---|---|---|
| | Teacher interviews  
- May 4, 2016 | | Thematic Analysis | First cycle coding:  
Focused coding |

### Case Study Questions

To aid me in maintaining a focus on the study’s research questions and to help me focus on sub-questions that guided my study, questions I did not specifically ask participants to answer but were only for the purposes of helping me focus on the research questions of this particular study, I developed Case Study Questions (Yin, 2009). Table 3.6 outlines the case study questions, how they align to my research questions, and the list of likely sources of evidence that helped me answer each question. Each source of evidence is also outlined in the next section of the dissertation.
During each school visit, I referred to my research questions, case study questions, and sources of evidence. This helped focus my interactions during each school visit and helped ensure that each school visit, observation, and interview was structured in a way to provide me with relevant data.

Throughout the data collection process, I acted as an “observer as participant” (Glesne, 2011); I remained primarily in the role of the observer, taking field notes, noting specific language and interaction structures, but, on occasion, I had limited interaction with the participant (coach) and teachers. In this role, I did not participate in the
meetings; I did not offer advice or feedback. I observed and limited my interactions with participants as much as I was able. For example, as an instructional coach engaged a mathematics teacher in conversation about planning for an upcoming lesson, I sat to the side (so as not to be in direct view of either the coach or teacher) and took note of specific language structures and body language of the instructional coach. In this way, I observed the coach’s moves and the stances she assumed.

**Interviews**

Merriam stated interviews, whether person-to-person or group-to-group, “can be defined as a conversation – but a conversation with a purpose” (Merriam, 1998, p. 71). The purpose of conducting interviews throughout this study was to determine the thought processes, especially related to the selection of particular coaching practices, of Eleanor while she was engaged in coaching conversations with specific middle school mathematics teachers. Interviews were necessary during this study because I was not able to directly observe the coach’s thoughts, feelings, or interpretations as she acted as an instructional coach (Merriam, 1998). Because I recognize the coach may not share my worldview, I want to allow her to share her unique thoughts and ideas on teacher learning and which coaching practices she believes are best suited for the teachers with whom she are working. In other words, I sought to understand Eleanor’s perspective. Therefore, I used semi-structured focused interviews (Glesne, 2011; Yin, 2009) when interviewing Eleanor throughout this study. In this way, I developed a set of topics and questions that guided the interview. However, I allowed the coach’s comments to lead the direction of the interview and to help determine specific questions and wording of questions.
As with any type of data collected, there are particular strengths and weaknesses afforded to interviews. According to Yin (2009), interviews allow the researcher to target specific areas of focus and can prove to be insightful by allowing the participants (coach, teachers) to share their ways of thinking. On the other hand, if questions are poorly worded, bias may be a resulting factor. Furthermore, of concern is the fact that participants (coach, teachers) may answer the researcher’s questions with answers they believe the researcher wants to hear. For these reasons, my specific motives and intentions were addressed prior to beginning the interview (Taylor & Bogdan, 1984). I wanted to ensure the coach understood there was no right or wrong answer to interview questions but that I was instead seeking to understand her ideas related to coaching. Furthermore, I wanted to make sure the coach and teachers understood I would not reveal their personal information; instead, I used a pseudonym when referring to the coach and the teachers. Additionally, I made it clear that the coach could ask questions throughout the process and that if she felt uncomfortable, she could end the interview (see Appendix A).

“Using words that make sense to the interviewee, words that reflect the respondent’s world view, will improve the quality of data obtained during the interview. Without sensitivity to the impact of particular words on the person being interviewed, the answer makes no sense at all – or there may be no answer” (Patton, 1990, p. 312). When composing interview questions (preplanned or decided upon in the moment), I used language that was familiar to the mathematics instructional coach. (I am familiar with the particular coaching model the mathematics instructional coach primarily operated from.)
Furthermore, I was cautious to ask questions that focused the coach’s attention on “how” rather than on “why”. Throughout the interview, I remained mindful that I must ask questions that “satisfy the needs of my line of inquiry while simultaneously putting forth ‘friendly’ and ‘nonthreatening’ questions in my open-ended interviews” (Yin, 2009).

I interviewed the instructional coach throughout the entire data collection phase: shortly after she began working with the assigned middle school (August, 2015), halfway through the fall term (September, 2015), at the end of the fall term (December, 2015), and throughout my onsite visits to the school (February – May, 2016). I also interviewed the teachers at the end of the 2015-2016 academic term (May, 2016). Each interview was audio recorded and transcribed verbatim.

**Coach-Teacher Observations**

Another vital source of data was the coach-teacher observations. The mathematics instructional coach followed (even if informally) a coaching cycle where she engaged the teachers in 1) planning conversations, 2) observations of teaching, and 3) reflecting conversations. (When planning and reflecting with the teacher(s), the instructional coach primarily operated from the Cognitive Coaching Planning and Reflecting Conversation maps that provide a structure to help teachers think in different ways.) During the planning and reflecting conversations, the mathematics instructional coach had opportunities to select specific coaching practices to use with teachers; the coach attempted to mediate thinking by pausing, paraphrasing, and probing, and, sometimes, consulted and offered solutions. During these observations, I remained focused on the research questions rather than being sidetracked by something I viewed as
“right” or “wrong.” I acted as an observer during these coaching conversations; I did not want to interfere with the coach’s authority (perceived or real) or with the language or behaviors the instructional coaches used. Rather, I acted as a passive observer, listening to the conversation and watching for nonverbal communication.

I sought to observe each coach-teacher pair in each stage of the coaching cycle (planning, observing, and reflecting) over the course of the school year, specifically the second semester of the school year. (I interviewed Eleanor three times during the fall semester and began observing Eleanor working with the teachers at Community Middle School in the spring semester.) During each planning and reflecting conversation, I determined it was not appropriate to audio record the conversations; instead, to ensure participants were comfortable, I recorded detailed copious field notes in my researcher journal. In this way, I made sure to not interrupt teaching or coach-teacher conversations. When collecting these data, I primarily paid attention to specific language (verbal and nonverbal) choices by scripting almost all coach comments, questions, and paraphrases. Immediately following each of the observed coaching conversations (planning and reflecting), I made notes and recorded memos in my researcher field notes journal; these notes later were compared with interview transcriptions. Again, during these coaching conversations, I remained in the role of observer; I hoped to minimize the extent to which my presence affected questions that were asked, coaching practices that were used, which coaching stances were assumed, and the types of responses teachers provided.

I observed all coach-teacher conversations at the school site during the teachers’ common planning time (teachers’ classrooms, meetings rooms, etc.). During this time,
Eleanor, Tanner and Belinda typically sat in a “circle” so they faced each other; I sat outside of the circle, off to the side, out of direct view of the coach and teachers. I took detailed notes during the conversations and I made additional notes in my field journal after each conversation. I captured specific phrases, questions, and instances from these coaching conversations. When I interviewed Eleanor, I sometimes referred her to specific conversations she had with Tanner and Belinda so I could ask her about her perspective of the conversation, the reasons she selected particular coaching practices, and the effect she believed the use of these practices had on the teachers.

**Researcher Journal**

Field note journals can include researcher “ideas, fears, mistakes, confusion, and reactions to the experience and can include thoughts about the research methodology itself” (Meriam, 1998). I used my researcher journal to record detailed notes and analytic memos based on my observations (coach-coach, coach-teacher) and ideas and questions that emerged as I analyzed and reflected on the data I collected. Also, I used my journal to list and bracket out subjectivities and insights I had related to my interactions with the case. Due to the nature of my past work, on a few occasions, I reacted in unexpected ways; my researcher journal served as a way for me to jot down my reactions and aid me in setting aside my subjectivities and biases. (For example, on February 29, 2016, I made a note about Community Middle School’s Principal. Although not relevant to this study, I wanted to capture this bit of context: “What changed? Why is Ms. S (pseudonym) all of a sudden interested in working with them? Does it have to do with a particular state mandate?”)
I recorded detailed and descriptive field notes during each school visit and I read, typed, and reflected on those field notes at the conclusion of each day. All of the notes I made in my researcher journal were compared to other data I collected (interview transcriptions, analysis of coaching conversations). As such, my researcher journal served as an additional data source for this study. By collecting and analyzing multiple data sources to answer the same questions, I triangulated the data I collected and increased the rigor of this study (Yin, 2009).

Classroom Observations

Observation is a research tool when it “1) serves a formulated research purpose, 2) is planned deliberately, 3) is recorded systematically, and 4) is subjected to checks and controls on validity and reliability” (Kidder, 1981, p. 264). I conducted direct observations of teachers during the observing phase of the coaching cycle, acting solely as an observer, as a way to further triangulate my emerging findings (Merriam, 1998). The purpose of these observations was to note what teachers working with a mathematics instructional coach do in-the-moment and the extent to which they enact planned behaviors, instructional strategies, and/or new techniques based on planning conversations they have had with the coach. Additionally, during the observations, I had an opportunity to watch Eleanor’s reaction in-the-moment to specific teacher actions; in this way, I made detailed notes of the coach’s nonverbal communication and body language. I observed Tanner and Belinda teaching on six occasions (see Table 3.5). Because I acted as an observer only, I did not audio or video record these lessons. (I did not want to be seen as an evaluator or judge of the teacher’s teaching ability or style.)
However, during the observations, I recorded relevant notes and memos in my researcher journal.

Furthermore, during my observations, I took note of the following: the physical setting, the ways in which the teachers interacted with students, the activities the teacher used with students, teacher language, and nonverbal communication structures of the Eleanor (Merriam, 1998). When examining the physical setting, I paid particular attention to the ways in which the desks were arranged, student work that may or may not have been displayed and other objects, materials, or technology that was available for students. While I do not think this relates directly to my study, the physical space and arrangement of the room should be noted because it directly influences the classroom environment and atmosphere. Of greater interest to this study were the specific language and nonverbal communication of the teacher, students, and the coach. I was curious to know if the coaching practices (e.g. pausing, paraphrasing, probing) of the mathematics instructional coach would be used by the teachers when talking with students. Do middle school mathematics teachers feel confident enough to talk with their students in different ways?

Notes and memos recorded during classroom observations were also used to triangulate data I collected from coaching conversations.

**Surveys**

Surveys have the potential to help the researcher answer “who, what, when, where, how many, and how much” questions, do not require the researcher to have control over events, and can help the researcher focus on contemporary issue (Yin, 2009). In addition to collecting basic descriptive data about Eleanor (number of years teaching,
number of years coaching, etc.), I posed questions about Eleanor’s coaching assignment and her coaching training and professional development in an open-ended manner. Furthermore, the survey questions helped me glean insight into Eleanor’s understanding of her developing coach-teacher relationships. Administering a survey to Eleanor helped give me the context and foundational knowledge I needed to answer both of my research questions.

Open-ended survey questions were developed as a way to elicit more specific and complete responses from the instructional coach about her professional background. Specifically, because my dissertation research focused on intentionality of the coach’s practices and differentiation of practices, I crafted questions that would help me better understand the coach’s relevant background experiences. I administered this survey at the beginning of the semester (January, 2016). (Appendix C)

**Data Collection and Analysis**

This study took approximately eighteen months, including study set-up, data collection and analysis, and data dissemination (see Table 3.7). See Appendix F for a more detailed Audit Trail.

**Data Analysis and Coding Methods**

To more concisely share my thinking about the qualitative methodologies associated with this project, I developed Table 3.7 to summarize my ideas about data sources, data collection, and data analysis procedures.

I used thematic analysis, specifically, a constant case comparison approach, to employ initial and then focused coding (Saldana, 2009) as a way to make sense of
individual interview transcripts and meeting notes. Furthermore, I created a codebook (based on first cycle coding and analytic memos) to guide my subsequent cycles coding. During second, third, and fourth rounds of coding I developed conceptual categories and themes to illustrate the patterns and connections that emerged from the data analysis. In this way, I looked for aspects of coach-teacher interactions and the ways these interactions helped the mathematics instructional coach build trusting relationships with the middle school math teachers, select coaching practices, and determine which coaching roles to assume. Making teacher comparisons within the case, using a grounded theory approach, helped me begin to look for patterns that existed.

Table 3.7

*Monthly Timeline of Study*

<table>
<thead>
<tr>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
</table>
| January-March 2015    | • Discussion of study with key stakeholders  
                       | • Initial conversations with study participants          |
| March-August 2015     | • Preparation of study proposal  
                       | • Continued discussion with key stakeholders  
                       | • IRB application and approval                          |
| August – December 2015| • Collected consent form from Eleanor  
                       | • Conducted interviews with Eleanor  
                       | • Recruited teacher participants                       |
                       | • Obtained district approval to conduct study at Community Middle School |
| January-March 2016    | • Selected teacher participants  
                       | • Cased the Joint (Dyson & Genishi, 2005)  
                       | • Collected consent form from Tanner and Belinda  
                       | • Administered coach survey  
                       | • Classroom observations  
                       | • Continued conducting interview with Eleanor  
<pre><code>                   | • Maintained field notes journal                        |
</code></pre>
<table>
<thead>
<tr>
<th>Period</th>
<th>Activities</th>
</tr>
</thead>
</table>
| April-May 2016         | • Transcribed interviews  
                          • Conducted initial data analysis  
                          • Amended IRB to include teacher interviews  
                          • Conducted interview with Tanner and Belinda  
                          • Transcribed interviews  
                          • Continued data analysis |
| May-August 2016        | • Continued data analysis  
                          • Continued dissertation edits and additions  
                          • Gathered validation data |
| August-September 2016  | • Continued dissertation edits and additions |
| October 2016           | • Submitted dissertation |
| November 2016          | • Defended dissertation |

**Overarching Method**

I used the study’s conceptual frame to focus my analytic techniques of searching the data for themes and patterns (Glense, 2011). I coded data using initial coding and a constant comparative method for first cycle coding and focused coding for the subsequent cycles of coding (Saldana, 2009).

**Conceptual framework and data analysis.** A coach’s practices are guided by her beliefs; her beliefs shape the ways in which she interprets specific coaching instances. As this study’s conceptual frame suggests, a coach’s interpretations of an event then shape her decisions about which coaching practices “work.” The necessity of the study’s conceptual frame then becomes clear; the conceptual frame guides the specific data collection and analysis. The three distinct components of decision making
(perceive/attend, interpret, respond) outlined in Chapter 1 provided a specific framework for the data collection and data analysis.

**Organizing the Data**

Data were initially organized by data type. Interviews were transcribed verbatim and field notes and analytic memos were typed. I organized ten interview transcripts (6 hours) and six site visit observation notes (27.5 hours) into separate files. On several occasions, an interview was conducted on the same day as a site visit. For this reason, data were organized by type (interview, field notes) and then by date. This aided in organizing and clarifying specifically how events unfolded over time and, of the twelve visits, which days held multiple data sources. For this study, there were a total of twelve interactions between the mathematics instructional coach and me (interview, conversation, site visit). On four of these instances field notes were collected and interviews were audio recorded. Two additional data sources, the coach survey and a descriptive email from the coach, were also added to this data set. I then created a data summary chart to serve as an overview of the data set, organized by collection date.

Interview transcripts contained details about the event: date, location, participants present, and line numbers. Field notes were initially hand-written in a researcher journal. During site visits, my field notes journal was used to capture and record thick descriptions (Glense, 2011): date, numerous time stamps, descriptions of events, participants involved, and classroom floor plan models, details about coach body language, direct quotes, and analytic memos, which I bracketed. As soon as possible after my observations, I typed field notes. I left a wide right margin and double spaced all text
to aid in initial readings of transcripts and field notes. Data analysis was done simultaneously with data collection (Merriam, 1998). Throughout the data collection process, I read and re-read transcripts, notes, and analytic memos to focus subsequent observations and interviews.

**Data Analysis and Conceptual Framework**

The unit of analysis for this study was the coach; contained within this case was the coach’s interactions with two teachers. This fit well with the conceptual framework for the study, the merging of the competence modeled as a continuum frame (Blomeke, et al., 2015) and the professional noticing framework (Jacobs, Lamb, & Phillips, 2010), which focuses on the ways in which an individual makes sense of a situation involving another individual; both the unit of analysis and the conceptual framework for this study focus on relationships. The study’s conceptual framework helped highlight the coach’s situation-specific skills (her perception of an event, her interpretation of that event, and the decision-making practices she employed to select specific coaching practices). The conceptual framework was used to provide a specific guide for the second round of coding; the unit of analysis, the coach-teacher relationship served as a guide for the third round of coding. Figure 3.3 shows an overview of this coding scheme.
Data Reduction Strategy

Interview transcripts, field notes, emails, and the coach survey were uploaded to NVivo. Initial coding (Saldana, 2009) was conducted according to this study’s two research questions: decision-making (about practices) and adaptations (of practices) codes were created. In other words, all data were re-read through the lens of the two research questions and categorized accordingly. Two codes were created in NVivo: Decisions about Practices (RQ1) and Adapting Practices (RQ2). Upon starting this analysis, I realized a third code was needed, specifically to capture the teachers’ meanings of coaching practices. A third code was created for this purpose: Teachers’ Perceptions. Categorizing the data in this way served as a data reduction technique; 193 pages of un-coded data were reduced to 25 pages of coded data.

Round one: Interviews and field notes contained a plethora of data not related to either research question. While interesting and helpful in developing the context related
to this study, these pieces of data did not directly align with either of the study’s research questions. Therefore, data reduction was needed prior to the first round of coding. The data reduction strategy also served as the first round of coding; data were categorized according to the coach’s decision-making practices or the ways in which she adapted her practices with two teachers. Categorizing the data in this way resulted in 34 pieces of coded data for Teachers’ Perceptions, 83 pieces of coded data for Adapting Practices, and 141 codes for Decisions about Practices.

Round two. This study’s theoretical framework outlines three distinct components of decision making that can be modeled with guiding questions.

1. How does the coach perceive and attend to events
2. How does the coach interpret the perceived activities?
3. How does the coach make decisions about what practices to use? In other words, how does the coach respond in situation specific events based on her interpretation of the events?

Because the first two aspects of noticing, attend and interpret, are “interrelated and cyclical” (Sherin, Jacobs, & Philipp, 2011, p. 5), these two ideas were collapsed into one code: Attend and Interpret. Previously reduced data (Decisions about Practices and Adapting Practices) were coded according to these two codes: Attend and Interpret, and Respond. For definitions and examples of these codes, see Appendix H. To aid with this round of coding, I focused specifically on what the coach attended to and interpreted and how she made decisions about responding. Focusing on the words “what” and “how” made this round of coding more efficient; this helped me focus more specifically on what
the coach attended to and how she made decisions about how to respond. The second round of coding resulted in 53 pieces of data related to what the coach attended to and what she interpreted and 138 pieces of data related to the ways in which the coach made decisions about how to respond to teachers in specific contexts.

In interview transcripts, the coach often shifted between attending/interpreting and responding to teachers. For example, during Round Two of coding, one piece of data from Round One was broken into four new codes (initial code: decision-making): *I needed to give the teachers time to allow students to complete the tests and take time to process in their own way* (attends to teachers’ need for time). *Now I want them to dig for gold within the student answers* (how she will respond to teachers). *It occurred to me that when I asked them to look for trends, that they may look for trends within the final answers and I was hoping for them to take a more granular approach* (interprets teachers may have a different approach). *So, I sent a few questions focused on some common student errors to guide their thinking along those lines* (how she responded).

**Round three.** During the third round of coding, data were combed with the unit of analysis in mind. Specifically, I searched the data from Round Two for interactions Eleanor had with Tanner and with Belinda. Because this study focused on the coach-teacher relationship and the ways in which the coach attended to and made decisions about working with different teachers, the data needed to be separated according to the coach’s interactions with those two teachers. Some of the data remaining from Round Two were not specific to Tanner or Belinda; these data were coded “general.” I did not
want to lose information about the coach’s decision-making practices or the ways in which she interacted with teachers other than Tanner or Belinda.

**Round four:** A fourth and final round of coding was conducted after differentiating attending/interpreting and responding statements according to the teacher they were intended for. Focused coding (Saldana, 2009) was used in Round Four; Tanner’s attending codes and Tanner’s responding codes were used to develop overarching categories. Round Four resulted in information about the stances Eleanor assumed when working with Tanner and Belinda and the coaching practices she employed when assuming each of the three coaching stances: consulting, collaborating, and coaching. In other words, during this round, the data coded under, for example, Tanner Responding, was further classified by the stance Eleanor assumed. Finally, specific coaching practices Eleanor used with Tanner were then identified according to the stance she assumed.

**Reliability and Validity**

According to Merriam (1998), qualitative “researchers seek to describe and explain the world as those in the world experience it” (p. 205). In this sense, the traditional and common understanding of reliability (“the extent to which research findings can be replicated) does not fit. In a case study, the qualitative researcher serves as an instrument and his or her experiences serve as filters during data collection and analysis. In this way, the case study becomes a story that is unique to the particular case; the intent is not to replicate the study but, rather, to understand relationships in a particular context. Therefore, “ensuring validity and reliability in qualitative research
involves conducting the investigation in an ethical manner” (Merriam, 1998, p. 198).

Furthermore, qualitative researchers ensure reliability and validity by providing thick and detailed descriptions that help the reader clearly understand the researcher’s conclusions.

I have striven to ensure this study is valid by keeping in mind the five of the six strategies Merriam (1998) discussed in *Qualitative Research and Case Study Applications in Education* (I have not involved participants in all phases of this research study). The five strategies I followed were: triangulation, member checks, long-term observations, peer examination, participatory models of research, and researcher bias (204-205). From the onset, I planned to use multiple data sources for the purposes of triangulation (coach interviews, coach surveys, coach-teacher observations, field notes, teacher interviews). Additionally, due to the nature of this study, asking the coach to examine and comment on my tentative results has been important. Member checking can be a critical aspect of any study and, in this case, helped me have confidence in the value of my interpretations of the participants’ actions. While this study may not be considered “long-term” by some, I conducted multiple observations and interviews over the course of an academic year; in other words, I gathered data over a period of time to increase the validity of my findings. Furthermore, I have laid forth my past experiences with instructional coaching as a way to consider biases I encountered.

In qualitative research, Merriam claimed “achieving reliability in the traditional sense is not only fanciful but impossible” (1998, p. 206). Nevertheless, this does not discredit qualitative research or mean qualitative research cannot be reliable. Instead, in qualitative research, the researcher is not interested in the extent to which the same
findings will be found with another study; rather, the researcher is guaranteeing “the results are consistent with the data collected” (Merriam, 1998, p. 206). This claim can be asserted when the researcher makes clear her position and assumptions, when multiple sources of data are examined, and when the researcher organizes and explains the data collection and analysis process. I have done all of these things in this study: I have described my lenses, collected and analyzed multiple data sources, and kept clear and detailed notes about my data collection and analysis process throughout the study.

Moreover, by following Yin’s (2009) case study protocol, I have increased the rigor of my study and therefore the reliability and validity of the study. In following Yin’s case study protocol, I have articulated the purpose of this study, my theoretical framework, my research questions, and my case study questions. I have also described my lenses and my role, how I have gained permission to move forward with data collection, the context of the study, the participants, and methodology. This case study protocol can be followed for any case study research. In this way, I am following a set of steps that can be followed with further studies.

**Ethical Issues**

As with any research study, it has been of the utmost importance to protect the rights of the participants. Glesne (2011) points out basic principles should guide researcher decisions: participants must have sufficient information to make an informed consent about participation; participants must be able to withdraw from the study if they choose, without penalty; unnecessary risks to participants must be eliminated; and any benefits must outweigh any risks. Furthermore, I adhered to the Ethical Principles and
Guidelines for the Protection of Human Subjects Research (The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) by submitting the appropriate Institutional Review Board (IRB) application and documents. Additionally, I developed Consent Forms for the mathematics coach and teachers that explained my role and this research study. I also sought permission from the school district to conduct this research. This particular school district demands any researcher working in their district complete their district application. I submitted the district application in order to gain consent. I also spoke with administrators at Community Middle School in an effort to ensure all participants understood my efforts.

Because I personally know the mathematics instructional coach in this study, I have been diligent in my efforts to maintain the ethical codes of qualitative research. I carefully clarified my researcher role to all participants (instructional coach and teachers) by meeting with individuals and small groups to discuss this project and to answer participant questions. Throughout the study, I continued to clarify my role and encourage participants and teachers to ask questions about my role. Additionally, I employed member checking as a way to ensure the trustworthiness of my data. Doing this also continued to remind participants of my role and the nature of this study. Because I believe understanding is emergent, I contacted Eleanor to help ensure my data were valid and, at the same time, ensured the participants agreed with how their voices are portrayed through my lens. (As a note, I contacted Eleanor two months after the conclusion of the data collection process; I asked her to check my interpretation of her practices. Because
she preferred to be contacted via email, I am not assured Eleanor fully understood or realized my findings. Her response, nevertheless, was confirmatory.)

**Boundaries and Strengths**

In this section, the limitations and strengths of this research are addressed. I recognize increasing my number of participants and increasing the length of time data were collected would be considered ideal. Furthermore, the small number of cases and time frame of the study (data collection occurred over one school year) may be perceived by some as a limitation of this study. Additionally, I have had to be cognizant of participants’ views of my perceived power. Because so many non-qualitative researchers may potentially have a different understanding of what counts as research, I have been aware the participants in this study may have sometimes thought I was looking for right or wrong ways to coach and act. I have continued to remind the participants in this study I am only seeking to understand their ways of knowing this work; I have continued to be aware that, even with these reminders, some participants may have altered their behaviors and actions when I observed them. Throughout this process, I have been aware all data were analyzed through my filters. While I see this as a contribution to the data analysis and to the research base (my story has not been told), some may view this as another limitation of the study.

At the same time, I believe this study has been strengthened by my familiarity with instructional coaching; I have been in a position to identify nuances others not familiar with instructional coaching would miss. I have been able to listen for the distinct language choices of coaches: types of paraphrases, adjectives and descriptors used in
questions, questioning techniques. Also, I was able to watch for slight changes in body language in the instructional coach and the teacher as they engaged in conversations.

Because of my extensive work with Cognitive Coaching, I was well-positioned to pick up on the coaching practices and stances the instructional coach used and the responses teachers offered. My open access to the participants and my familiarity with instructional coaching allowed me opportunities to “see” what others may have missed.

As discussed earlier, another strength of this study is that I followed Yin’s case study protocol (2009) in an effort to increase reliability. Following this protocol potentially may allow other researchers to replicate this study. In doing this, the intention would not be to obtain the same results; rather, the intent would be researchers and readers of this study would be able to follow my research process. Furthermore, using multiple sources of data helped me better understand the perceptions of the participants in this study. In this way, I used multiple sources of data to continually refine my emerging findings (Merriam, 1998).

Chapters 4 and 5 of this dissertation examine the ways in which Eleanor interpreted and responded to Tanner and Belinda. Chapter 6 compares Eleanor’s responses to Tanner and Belinda as a way to consider how her practices were differentiated when working with two different teachers. In the final chapter, Chapter 7, a full discussion of this study, coupled with the study’s contributions, will be discussed.
CHAPTER FOUR

ELEANOR AND TANNER: “I feel like I can talk to him and be real”

Introduction and Overview

In the previous chapter, I laid forth the methods for this paper. This exploratory case study followed Yin’s (2009) case study protocol to increase the rigor of the dissertation. Yin (2009) argues when this protocol is followed, others can clearly follow each step of the study, therefore increasing the rigor. Context surrounding the case, the coach and her coach-teacher interactions, and the coach-teacher relationships were described in light of my researcher subjectivities. Additionally, primary and secondary data sources were discussed and data collection and analysis techniques were described.

In this chapter, I analyze Eleanor’s coaching practices with Tanner. For this analysis, I examine six coach-teacher interactions, twelve coach interviews, and one teacher interview. From this analysis, I discuss the specific ways the coach made decisions about which coaching practices to use with this teacher and the intentionality of her decision making practices. Specifically, I looked at what Eleanor attended to when working with Tanner and the ways in which she responded to Tanner. Overarching themes for Eleanor’s attending and responding are developed and discussed in detail. To begin this chapter, I provided context: district and school administrative structures, an illustration of Tanner’s classroom, and information about Tanner and Eleanor’s relationship. The second research question (adaptability of coaching practices) is discussed in Chapter 6 when Eleanor’s practices are compared across her work with Tanner and Belinda.
In what follows I will show that when interacting with Tanner, Eleanor noticed and paid attention to Tanner’s actions (planning, classroom management and organization, content knowledge, reactions of defeat, and he often let Belinda lead conversations and planning meetings), his readiness to work with Eleanor, and his attention to his students. In response, Eleanor often consulted Tanner, providing him direct advice, in an effort to boost his confidence, build his content knowledge, and increase his awareness of how to manage student behavior. In some instances, Eleanor collaborated with Tanner and coached Tanner as a way to increase his consciousness and flexibility. On two observed occasions, Eleanor also assumed the stance of a collaborator when she brainstormed with him about the meaning of particular content standards.

**Decision-Making is Often Guided by the Administration: “The noise”**

In March of 2015, the four instructional coaches associated with this particular grant, the two program evaluators for the coaching initiative, and the Associate Director for the grant, David, met at a separate location to discuss and reflect on progress made during the first year of the initiative and to plan for next steps. During the beginning of the meeting, David articulated his understanding of how the instructional coaches were positioned within this initiative.

We are uniquely positioned…In the middle of three concentric circles. One of them being our obligations to On Track Implementation partner. You know, we wrote this grant, we got this grant, here’s what we think we’re going to do. The second concentric circle being the district itself. You know, the district having more of an emphasis on secondary literacy, what that looks like as it connects to
Read to Succeed, and then implications on the school level. Third is the school itself. With [this district’s] schools being fairly autonomous entities inside of a large district, having a lot of say over a lot of stuff. What are the priorities of the school level, too? And who are the staff inside of each of these concentric circles who are interested in and focused on supporting instructional practice in the school? So, I see the coaches as very uniquely positioned in the center of those concentric circles and it reminds me of the complexity of this work. (Audio recording, March 24, 2016).

According to David’s continued comments, each of these entities, the funder, the district, and the school, all had specific expectations for the instructional coach.

*Figure 4.1* David’s description of the coaching context

David’s comments called attention to some of the intricacies of this particular coaching initiative and the ways these complexities lead to administrator support or lack thereof at Community Middle School. Because the funding for this initiative was officially secured only days before the start of the 2015-2016 academic year, Eleanor was never formally introduced to the faculty at her school. This lack of an introduction,
coupled with the fact that the school already had one full-time, in-house instructional
coach and two district coaches who were in the school at least one day per week, led to
confusion for teachers. Teachers were slow to understand Eleanor’s role and purpose in
the school. As she assumed her coaching responsibilities at Community Middle School,
Eleanor struggled to find purposeful ways to engage with teachers that did not overlap
with the roles of the existing support staff.

In addition, Eleanor often felt unsupported by the administrative staff at
Community Middle School. Even though she met with other instructional coach support
staff and the assistant principal assigned to curriculum on a regular basis, she was not
assigned an office space. Eleanor often commented on this lack of personal space. Even
when she found a space she could call her own (a “Supply Closet”), in May, she
commented that the principal didn’t know she had commandeered this space. To her, this
represented a lack of support from the administration for her role.

The administration’s desire to have Eleanor act as an evaluator of teachers also
guided and shaped some of the coaching practices she enacted. “In fact, I’m getting a
little pressure from the administration. And I’ve got to figure out how to handle that.
Because I told them that I don’t evaluate; so I may have to start doing that.” Even though
Eleanor maintained her non-evaluative stance throughout the academic year, some
administrative decisions continued to limit her abilities to work with teachers. As Eleanor
shared, the administration stated to her, “[the quarterly district-wide standardized testing]
is going on, so please, if you don’t mind, do you mind not going into classrooms or not
meeting with teachers?”
Coaching Context

Tanner’s Classroom Culture

It is late March and I am sitting in one of the eight empty student seats in Tanner’s 2nd period 8th grade math classroom, amidst his sixteen students. Tanner is wearing khaki pants, a long-sleeve white button down shirt, and a tie. Tanner’s 24 student desks are arranged in rows, spaced out to fill the entirety of the room, all facing the front of the classroom. Eleanor is standing in the back of the room, leaning against the counter that houses extra curriculum materials, mainly math textbooks. She is holding her clipboard close to her body with both hands, brow furrowed, intently studying the interactions of the students in the classroom. As she catches the eye of one particular student who is sitting on the other side of the room, she motions for the student to copy the notes that are displayed on the Interactive White Board (IWB) at the front of the room. As I look around the room, Eleanor and I lock eyes; she shakes her head slightly back and forth.

Tanner is sitting at his desk in the back of the classroom, working on his laptop. He stands, goes to the front of the room and tells students they should copy the notes that are shown on the IWB. Today’s lesson is an introduction to solving systems of equations and students have begun the lesson by copying notes that provide information about three specific solution methods. Two students are arguing, other students are talking, two students are listening to music on their headphones, and one student’s head is down on his desk; I hear him snoring. When Tanner determines the students have finished copying their notes, he shows a video from YouTube of a teacher providing direct instruction on
how to solve a system of equations graphically. One student mutters under her breath, “Jesus Christ.” Tanner continues to stand at the front of the room, near the IWB where the video is displayed. He pauses the video briefly so that the students can copy the solution steps the video displays.

After 45 minutes have passed, Eleanor and I leave Tanner’s classroom. As we walk down the 8th grade hallway to Susan’s office (Susan is an English Language Arts instructional coach at Community Middle School), Eleanor quietly says, “Oh boy.” We walk the rest of the way to Susan’s office in silence. Upon entering the office, we find Wendi (District Title I Math Coach) sitting at one of the tables working on her laptop. After we are settled, Eleanor begins to talk about teachers who lack passion. She doesn’t mention Tanner by name, but Wendi and Eleanor speak for almost an hour about some teachers’ lack of passion and the promise of past programs that are no longer in place.

**Eleanor and Tanner**

When asked about his previous experiences working with an instructional coach, Tanner doesn’t provide much detail. He simply says “The school I worked at was not like this school, no.” In this sense, the relationship Tanner and Eleanor built was without preconceived notions on the part of Tanner. In all of his interactions with Eleanor, Tanner wanted Eleanor’s guidance; he often sought Eleanor’s advice and uttered statements such as, “I…I don’t know. What do you think?” Tanner often asked questions about the content, the standards, and teaching practices that would better meet the students’ needs.

In reference to his work with Eleanor, Tanner states Eleanor’s meetings and observations were “just part of her job.” He also says “…she would help my kids, you
know, if we were starting to work, she would go around and help them. She didn’t just sit around and watch. She would help, too.” Tanner agrees that while sometimes Eleanor would announce her observations, sometimes she would just show up but this was always beneficial. Tanner made it clear he “liked how [Eleanor] was always available to help us plan out the rest of the year” and he liked “how she was able to be there with us and…basically plan out every day, day by day, all the way through the rest of the year.” Tanner says it was easy to work with Eleanor and she was “accommodating…just made you feel like…not intimidated.”

Eleanor, when asked specifically about her work with Tanner, often pointed out she wanted to help Tanner focus more on his communication with his students. As an example, during one of her observations, in the middle of his lesson, Tanner asked Eleanor about the strength of the correlation in one of the problems the students were working on. Eleanor wondered why Tanner didn’t ask the students about their thoughts instead. She later told me that he should, “ask the kids what do they think. That’s what I wanted to say! I’m not taking the test tomorrow. Your kids are taking a test and so I would have preferred that he would have given them some – I mean, had they even had that conversation before? Have they talked about, other than positive or negative; you know, have they talked about what are those adverbs, no adjectives, I don’t know, strong positive, whatever? So had they done that and what could he have done to trigger their memory about when he taught that? That’s what I was kind of thinking….but anyway.”

Eleanor often struggled with performing tasks she felt were not related to her role when observing Tanner. “So instead of me slowing down and observing, I was observing
the students just sitting there and so I start going over to kids and saying, well, do you have some paper? Do you have a pencil? I’m thinking why [isn’t Tanner] asking…these kids are not doing what you said, what is your responsibility, these kids are in 8th grade, they’re failing so obviously they don’t know what they’re supposed to do at this school – even though they’ve been in school for eight years, some of them probably nine. So what is your 8th grade contribution to their education? I know people feel like by 8th grade they should know.” Furthermore, Eleanor often expressed coaching tensions she wrestled with when coaching Tanner. “I feel like there are some things that need to be addressed like not attending to your students, not attending to their needs.” Eleanor often brought up her ideas about what coaching stance (coach, collaborator, or consultant) she should assume when working with Tanner and her struggles with finding the most effective stance to use with Tanner.

**Overview of chapter 4.** In what follows, I outline what Eleanor attended to and noticed when working with Tanner and the ways in which she responded to Tanner. Overall, Eleanor shared her general perspective related to her work with Tanner and often spoke of his actions (actions related to planning, classroom management, content knowledge, and feelings of defeat), his readiness to be coached, and the attention Tanner paid to his students. Outlined below (Table 4.1) are the ways in which Eleanor responded to Tanner. Overall, Eleanor responded by coaching, consulting, or collaborating. Within each of these stances are specific responses based on Eleanor’s noticing.

The headings and subheadings in the remainder of this chapter are the codes were developed as a result of data analysis. As can be seen in Table 4.1, the study’s theoretical
framework served as a data analysis tool. An overview of all codes connected to Eleanor and Tanner’s interactions can be found in Table 4.2. However, a brief outline is provided below.

Table 4.1

<table>
<thead>
<tr>
<th>Attention/Interpretation</th>
<th>Stances</th>
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<tbody>
<tr>
<td>Tanner’s actions</td>
<td>Consulting</td>
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<td></td>
<td>Collaborating</td>
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<td>Coaching</td>
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<tr>
<td>Tanner’s readiness</td>
<td>Consulting</td>
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<td>Tanner’s attention to his students</td>
<td>Consulting</td>
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<td>Coaching</td>
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**Findings**

**Attending**

The ways in which Eleanor responded to Tanner and the decisions she made about which coaching practices to use are shaped by what she attends to (what she pays attention to) and how she interprets specific events. Over the course of one academic semester, I noticed Eleanor attended to and struggled to make sense of (interpret) Tanner’s actions, his readiness to be coached, and the ways he interacted with his students. Eleanor also shared her general perspectives of Tanner over the course of time. In the sections below, I draw attention to the things Eleanor attended to when working with Tanner. The headings, also the overarching codes, are: general perspective, Tanner’s actions, Tanner’s readiness, and attention to students.
General perspective. Overall, Eleanor feels like she can talk with Tanner: “And so, he doesn’t really remind me of my son-in-law but I feel like I can talk to him and be real” (Interview, December 2, 2015). This comfort level has the potential to lead her to attend to and respond to Tanner in more intimate ways. Even with this level of perceived familiarity, Eleanor expresses her noticing of Tanner’s low levels of consciousness and craftsmanship: “He doesn’t even seem to be aware that [different goals] exist” (Interview, February 8, 2016) and “He was, to me, to be honest, I don’t even think he’s capable of thinking at this time” (Interview, March 14, 2016). Eleanor’s expression of Tanner’s low levels of consciousness of what he could be doing instructionally focuses her later responses on his awareness of what is going on in his classroom and his responsibility to address these things.

Tanner’s Actions. Eleanor discussed five specific things she attended to when working with Tanner: his planning, his classroom management and organization, his content knowledge, his feelings of defeat, and the fact that he often allowed himself to be guided by Belinda. In regard to his planning, Eleanor referenced his lack of planning and that, on several occasions, he was not doing what he had planned to do. For instance, every Monday Eleanor met with Tanner and Belinda together during their common planning time; this was an arrangement they had agreed upon. On one specific occasion, Eleanor found Tanner in his own classroom room rather in Belinda’s room (where they typically met). “And then today when I walk in he was in his classroom when he should have been planning with his partner. And so I walked in and I said, oh you guys planning today? And he was like, I’m trying to check my email. You know, it was like he was
about to choke” (Interview, September 30, 2015). On another day, Eleanor encountered Tanner in a similar way: during his common planning time, he was in his classroom writing a test he and Belinda would use. The test was planned to be administered the following day. Eleanor pulled up a student desk to his work space and proceeded to ask him reflection questions about the lesson she had just observed. Instead of responding by answering her questions, he asked her questions about how to use the computer software program he was accessing to create the test. As Eleanor later stated:

“And it was really interesting just watching him kind of pecking away between me asking him a question and him thinking, how do I get into this bank? I’m like, you’re responding to my question with another question that’s totally not related” (Interview, March 14, 2016).

As Eleanor attended to Tanner’s lack of planning and preparation, she pointed out he often failed to do what he should be doing, what he agreed to do. In this way, she typically followed-up these thoughts with comments about how overwhelmed he seemed.

“And I’ve already figured out he is, you know…he’s just kind of haphazardly doing stuff” (Interview, February 8, 2016). While Eleanor doesn’t directly make a connection between Tanner’s lack of planning and his content knowledge, she typically mentions these things in the same thought. Additionally, Eleanor sometimes references Tanner’s lack of content knowledge at the same time: “…I’ve been in his classroom when he’s made some content – blaring content errors” (Interview, February 22, 2016). And, referencing a specific instance, “You know, just saying this is what categorical data is, this is what this means because I don’t know if he’s going to take the time on his own
because I’ve seen him just get up in the classroom and start saying stuff that was wrong” (Interview, February 22, 2016).

Overall, Eleanor repeatedly attended to Tanner’s lack of planning and insufficient content knowledge; she interpreted this as leading to a defeated and overwhelmed state of mind. “…his is so often seems to be, I’m a loser” (Interview, March 14, 2016). Because he often displays this type of body language (head down, head shaking), he often allows himself to be guided and led by his partner, Belinda. “Um, they would probably start off similar and then they would diverge but it would be based on what she says back” (Interview, February 8, 2016).

**Tanner’s readiness.** On occasion, Eleanor referred to Tanner’s content knowledge as an opportunity to learn. During a grade level planning meeting with the District’s Title I Facilitator, Wendi, and Eleanor worked on a challenging 8th grade math problem with Tanner and Belinda. Both Tanner and Belinda struggled with this particular problem. Eleanor stated, “And I think he’s one of the ones that was masking his lack of understanding with that behavior because I stood there with him and I walked him through it step by step and we would talk about it” (Interview, December 2, 2015). Although she is concerned about his content struggles, she sees this as an opportunity to consult. “So I – since that’s what I kind of like to do anyway, you know, just sharing what I know or what I’ve learned or sharing ideas. I don’t feel guilty doing that with him or I don’t think that it’s really breaking the coaching much because he’s open and he’s like a clean slate” (Interview, December 2, 2105). Even though her attention to Tanner’s content knowledge leads her to sometimes capitalize on these opportunities to consult
Tanner, based on her interpretation of his content knowledge, she often wonders if it will make a difference. “He is not as open to that but he’s open to trying it. He’s like, oh I think I’ll try that one day. Will he ever? I don’t know.” (Interview, December 2, 2105).

Attention to students. When Eleanor is in Tanner’s classroom, observing his teaching, almost all of the time, her eyes are on the students. Eleanor most often stands in the back of Tanner’s classroom, leans against the counter in the back of his classroom, clasps her clipboard close to her chest, and occasionally jots notes (Field Notes, March 14, 2016). Sometimes Eleanor walks around the room and when she notices students not paying attention or struggling with a concept, she bends at the waste so her head is level with the student’s head and quietly speaks to the student (Field Notes, March 14, 2016). On occasion, Eleanor worked with one student for several minutes, helping him make sense of the concept. When Eleanor observes Tanner doing something she may question, her brow furrows and she is less likely to write notes (Field Notes, March 14, 2016). It’s as though, on some occasions, she doesn’t want to notice the events in Tanner’s classroom; she doesn’t want to intentionally attend to or interpret events. Through our conversations, it is apparent Eleanor is fighting a tension: consulting and evaluating vs. coaching. “And so my role is not to…I mean, I don’t have a hammer. I mean, I’m not the evaluator” (Interview, February 8, 2016). Eleanor sees her role as to “coach” Tanner, to help him discover his potential, to raise his consciousness, to model for him how he could be interacting with his students. In this way, she often attends to the students’ needs and does not intentionally attend to what Tanner is doing or not doing.

Responding
Eleanor’s selected coaching practices, the ways in which she responded to Tyler, were shaped by the events she attended to and the ways in which she interpreted those events. On several occasions, Eleanor mentioned feeling comfortable talking with Tanner and being direct with him. “He’s one of those people I don’t feel like I have to be too careful with how I say stuff. I can just say well, how are the warm-ups going? How are your class starters going? Are the kids getting in here okay” (Interview, September 30, 2015). Along those same lines, Eleanor mentioned that Tanner reminded her of her son-in-law and she often found herself acting as a mother figure when working with him (August, 2015). Attending to these aspects of their relationship (his lack of experience and her wealth of experience) led her to respond to him in three specific ways: consulting, coaching, and collaborating (see Chapter 2 for definitions). During the fourth round of coding, I found 21 instances of Eleanor consulting Tanner, 18 instances of coaching, and 4 instances of collaborating.

During the fourth round of coding, as a reminder, I connected Eleanor’s practices to what she attended to when working with Tanner. However, because Eleanor’s coaching practices were a manifestation of her stances (consulting, collaborating, or coaching), I first categorized her practices according to her stances. In what follows, I outline the stances Eleanor assumed when working with Tanner and the practices she used as a result of this positioning.

**Consulting.** According to the coaching model Eleanor followed, Cognitive Coaching, coaching encompasses three distinct support functions (what I call “stances”): consulting, collaborating, or evaluating. When a coach consults, collaborates, or
evaluates, she still act as a coach, but with the purpose and intention of supporting the person she is working with in different ways. More specifically, when a coach acts from the stance of a consultant, she shares information and expertise from her own professional experience...consulting often includes modeling, planning, data-analysis, problem-solving and self-reflection processes that helps to develop an individual’s professional practice (Costa & Garmston, 2002). When consulting, the coach is aiming to increase the teacher’s pedagogical and content knowledge and skills and has the goal of institutionalizing accepted practices and policies.

*Classroom management.* In my observations of Tanner and Eleanor, I noted 21 specific instances of consulting. Of those instances, Eleanor comments on Tanner’s content knowledge, his classroom management, goal setting, and helps him determine if he is “effective.” Related to his classroom management, Eleanor states, “Yeah, I feel like – him – he needs some good consulting in that whole management piece. Because there are so many little tiny things that if they were tweaked – it would run so much better” (Interview, February 8, 2016). Sometimes she refers to specific events we observed while in his classroom. On February 8th, Tanner wanted all students to have earphones so that they could listen to a video on their laptops. He instructed the students to get headphones from the box on the shelf. It took the students approximately 10 minutes to get headphones (Field Notes, February 8, 2016). Afterwards, Eleanor said, “So then I thought it might be a good idea to just give him some good ideas for that rather than having everybody come over, either have a row at a time or why not just have a kid walk around with a box” (Interview, February 8, 2016).
Other consulting instances were in reference to the general structure of Tanner’s class. On more than one occasion, Eleanor mentions Tanner does not start class with a “starter.” Eleanor suggested to Tanner repeatedly he should have a “starter” or warm-up displayed as students enter the classroom and the expectation should be set that students would immediately begin working on these problems as soon as they enter the room. Eleanor even went so far as to create a set of warm-ups Tanner and Belinda could use each day. After continued observations, Eleanor found Tanner rarely used the starter problems with his students. “It was just like every day, where’s your starter? And he was like…oh…and I was like really…do you want me to write you some? And so that kind of thing, like I can help you with that” (Interview, December 2, 2015). Because she noticed Tanner was not implementing starters (this is what she attended to), she interpreted this as a lack of classroom management (how she interpreted the event) and therefore decided she should write starter problems for him (consulting).

Content knowledge. While Eleanor sometimes mentions this may not be the most effective method of coaching, she feels like she sometimes has no choice when working with Tanner. “But it was hard because with him, he’s very welcoming of consulting and he doesn’t have a lot; he even said, I don’t know a lot” (Interview, February 22, 2016). Because of this, she sometimes responds to Tanner by giving him specific suggestions (when/when not to pre-teach vocabulary, the potential of using a word wall) (Field Notes, February 22, 2016). And when Tanner states, “It’s still murky to me (referring to the standards and his content knowledge),” Eleanor says, “…okay. Let me tell you what I did.” When Eleanor yields and gives Tanner specific directions, he becomes excited and
his voice inflection rises (Field Notes, February 22, 2016). Despite his perceived lack of resources, Eleanor recognizes that sometimes Tanner (and other teachers in general) may want her support in this way because they do not want to think. “You know, and both of them ask me, you know, what do you think? Well from him I felt like he was asking me because he didn’t want to think” (Interview, March 14, 2016).

**Modeling.** Eleanor also attempts to consult Tanner by modeling for him the ways in which she thinks he should engage with his students. While observing in his classroom, Eleanor sometimes walks around and examines student work. When doing this, she bends at the waist so her head is level with the student’s, and speaks quietly with the student about their work and about their mathematical thinking. (Eleanor does this each time she talks one-on-one with a student in Tanner’s class.) When doing this, Eleanor spends approximately one – two minutes with the individual student. She doesn’t rush her conversation with the student; instead, she takes time to understand the student’s approach and to push the student’s thinking forward. “So I’m thinking even in that, I’m modeling for them how to look at students work. What you should be looking for, not just at the bottom” (Interview, December 2, 2015). In this way, Eleanor is noticing Tanner’s lack of attention to his students (attending) and responding by modeling for him, in the moment, how he can individually engage all students in learning.

All of these instances of consulting (responding) can be tied directly to the ways in which Eleanor attends to and interprets her interactions with Tanner. She attended to Tanner’s classroom management, his content knowledge, his feeling of defeat, and her belief he is a “clean slate.” These can be seen as being tied to her responses of consulting.
Collaborating. In Eleanor and Tanner’s case, four specific instances of collaborating were recorded: brainstorming, discussing the meaning of standards together, and focusing on students’ strengths and weaknesses. Each of these collaborative responses can be tied to what Eleanor attended to and interpreted. We can see her attention to Tanner’s content knowledge and students leads to her discussing content and directing Tanner’s attention to his students.

Discussing standards together. In terms of his content knowledge, when in a planning meeting, Tanner asks about the meaning of specific standards. Instead of directing Tanner and telling him her interpretation of the standard, she says, “Let’s read it…” and then they discuss how to teach that standard. In this way, Eleanor is showing herself as a learner with Tanner; someone who does not have all of the “answers.” Similarly, in an early interview (September 30, 2015), Eleanor states, “So I think it’s good because some of the standards are really complex. And I think it helps them to see that even I don’t have all the answers. So I think it helps them to see that I’m here to struggle right along with them. In unpacking these things and in being a learner. So I think it’s a positive thing.” In acting intentionally as a collaborator, Eleanor is spotlighting herself as a learner, helping Tanner feel comfortable with this type of vulnerability.

Brainstorming activities for students. Eleanor also acts as a collaborator when she helps focus Tanner’s attention on his students. During an all-day planning meeting, before Belinda joins them, Eleanor talks with Tanner about implementing a problem-based unit. After discussing the standards, she suggests he come up with a list of projects
(“we can brainstorm”) and if they want to create or come up with a topic, [the students] have to get it approved by him (Field Notes, February 22, 2016). In this way, she is helping him come up with ideas and, at the same time, painting him as the authority (students have to get his approval before beginning the project of their choice).

Furthermore, Eleanor suggests part of their brainstorming focus on the students’ strengths and weaknesses. Eleanor records students’ strengths and weaknesses by writing down what he says on the blank side of the back of one of her documents (Field Notes, February 22, 2016). Here, Eleanor is intentionally putting herself on Tanner’s level; she is collaborating with him rather than consulting him.

**Coaching.** Cognitive Coaching states the intention of coaching is to “transform the effectiveness of decision-making, mental models, thoughts, and perceptions, and to habituate reflection….and to enhance self-directed learning,” creating those who are self-managing, self-monitoring, and self-modifying (Costa & Garmston, 2002, pg. 13). In terms of this study, we can liken a self-directed learner to one who is empowered to make decisions; one who is confident in his abilities to control what is within his realm. In order to help someone gain this confidence, the authors of this coaching model suggest the coach focus on the teacher’s state of mind: his consciousness, efficacy, craftsmanship, interdependence, and flexibility. To do this, the coach intentionally frames questions that use language that helps the teacher be more conscious of his actions, become more confident, reflect on his content and pedagogical content knowledge, and think from other perspectives. When focusing on Eleanor and Tanner’s relationship and their interactions, 21 instances of coaching are noted.
Within the instances of coaching noted, Eleanor can be observed: using practices that help build a strong relationship; attempting to increase Tanner’s consciousness, efficacy, and flexibility; holding him accountable for his actions; and engaging Tanner in activities that build capacity. In terms of relationship building practices, Eleanor notes at times she is cautious in how she engages Tanner. “So I didn’t, I don’t know, I’m still trying to be very cautious because I feel like I’m still in the relationship building phase and I’m still trying to feel him out and see how conscious he is of his practice” (Interview, February 8, 2016). Eleanor notes if she stops “herself before [she] says something stupid” (Interview, February 8, 2016), then she has a better chance of refraining from being “judgmental or harsh.” Even though she is seven months into the school year, Eleanor responds to Tanner in intentional ways, using specific practices, so she can continue to build trust and strengthen their relationship.

**Increasing consciousness.** Eleanor also shows an awareness of Tanner’s states of mind, specifically, his consciousness, efficacy, and flexibility. When focusing on the instances and events that Eleanor attended to and interpreted when working with Tanner, it should be noted her overall and general perspective of Tanner was that he had low consciousness; she noted he wasn’t aware of the types of instructional goals he could set for himself and she thought he was not capable of thinking for himself at times. In response, Eleanor uses coaching practices intended to raise Tanner’s consciousness. “So think spending a lot of time with him, talking with him, asking him a lot of questions. So what are some reasons, what is this connecting to, what are the kids going to walk away knowing. Those questions he doesn’t ask himself” (Interview, September 30, 2016). In
addition to repeatedly asking Tanner questions she believes he should be asking himself, she sometimes gives him these questions in written format. During one all-day planning meeting, Eleanor gave Tanner a list of questions to help him reflect on past lessons and plan for future lessons (Field Notes, February 22, 2016). In some ways, this can be seen as being related to Eleanor’s desire to build Tanner’s capacity. “Today when we started I wanted him to reflect and the reason I gave them some guiding questions for their reflection and planning was because I want them to start asking themselves those questions. So I thought, let’s just be very transparent. You know we’re going to keep going back to these over time…” (Interview, February 22, 2016). In repeating these actions (asking verbally and in writing the same questions over time), Eleanor helps Tanner become aware of the self-talk he should use when reflecting on his lessons.

**Increasing efficacy.** Additionally, Eleanor can be seen using coaching practices that raise Tanner’s efficacy and flexibility. “At some point I know I need to start – he knows something and I need to start pushing his thinking in that way” (Interview, February 22, 2016). Almost a month after this interview, Eleanor returns to this thought by saying, “…sometimes I feel the need to pull him out, to draw him out to try to see what he’s thinking about…” (Interview, March 14, 2016). Eleanor is positive and encouraging and believes Tanner has something to offer, if only he had more self-confidence and an increased level of efficacy. She also tries to remind him of all he knows. When Tanner says, “I really don’t know. I’m struggling. I don’t know. What would you do?” Eleanor responds by saying, “Well, they’re your kids…” (Observation,
March 14, 2016). In this way, Eleanor is attempting to build Tanner’s confidence, reminding him he is the one who knows what is best for his students.

*Increasing flexibility.* As a way to help Tanner think more flexibly, she uses questioning that helps him think about things from another perspective. “So I have to be really conscious of trying to get them to turn the page and not stay there. And so, I try to maybe change their point of view or get them to think differently” (Interview, September 30, 2015). Even though she says “sometimes you need a pity party” (Field Notes, February 22, 2016), she wants Tanner not to wallow in his concerns; rather, she helps him think from his students’ perspective and she tries to build his confidence as a way to move his thinking forward and to focus his attention on all that is in his control.

*Nonverbal Communication.* While observing interactions between Eleanor and Tanner, I captured notes about both Eleanor and Tanner’s body language and their nonverbal communication (eye movement, hand movement, body positioning). Although these notes do not directly help me answer this study’s research questions, do not necessarily align to any of the stances, or come to the forefront of the data analysis, they are interesting and add to the context of this case.

In addition to responding to Tanner in verbal ways (questions, paraphrases), Eleanor’s nonverbal communication can be considered as responses to Tanner’s needs. Overall, Eleanor’s nonverbal communication to Tanner can be interpreted as an effort to build trust and rapport with Tanner. As already stated, Eleanor engaged Tanner intentionally in relationship-building practices. Her nonverbal responses can be seen as an extension of this. When meeting with Tanner during planning meetings, Eleanor
always attempted to make eye contact with Tanner (even if his eyes were turned
downward or looking at his computer screen). Additionally, she always sat in a student
desk after pulling it towards his seat. She shifted her body so her torso was facing Tanner.
Her feet were flat on the floor and it was clear she listened to him intently (nods her head,
says, mmm…). She also confirmed Tanner’s statements by chiming in with “exactly,”
“okay,” “yeah.” (Field Notes, February 22, 2016). In doing these things, Eleanor was
responding to her interpretation of Tanner’s perceived state: feeling deflated, having low
consciousness and efficacy; Eleanor’s body language communicated she trusts Tanner
and she cares about what he has to say and what he thinks.

**Summary of Findings: Eleanor and Tanner**

This study’s conceptual framework served as the lens through which the data was
analysis was conducted (a coach’s noticing: attending and interpreting, responding). In
this chapter, the analysis of the data from Eleanor and Tanner’s interactions address this
study’s first research question: How does a coach make decisions about which coaching
practices to use with teachers. This data analysis makes clear Eleanor’s coaching
practices are related to what she notices as she works with Tanner. In Table 4.2,
Eleanor’s responses/coaching practices are listed in the right column; the coaching
practices she selected are in response to what she attended to when working with Tanner;
the things Eleanor attended to when working with Tanner are in the left column.

Table 4.2

_Eleanor’s Interpretations and Responses When Working with Tanner_

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<th>Attention/Interpretation</th>
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<td>Practices</td>
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<th>Collaborating</th>
<th>Coaching</th>
<th>Meta-coaching</th>
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<td>• increasing craftsmanship</td>
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<td>• Demonstrating feelings of defeat</td>
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<td>• Following Belinda</td>
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This study reveals Eleanor pays attention to and interprets Tanner’s actions (planning, classroom management and organization, content knowledge, and feelings of defeat), his readiness, and his attention to his students. As a result, Eleanor’s decision-making about which coaching practices to use centers on consulting (classroom management, content knowledge, modeling how to work with students), collaborating.
(content knowledge, pedagogical content knowledge), and coaching (building confidence, increasing consciousness, and growing flexibility). In this way, Eleanor’s decision-making practices are unveiled. This analysis is a fine-grained analysis that reveals how Eleanor’s responses to Tanner, the coaching practices she uses, are related to what she attends to.

**Connections to Literature**

The findings discussed above can also be connected to this study’s literature review. Part of this study’s literature review stated experienced mathematics coaches select coaching practices based on their ideas about teacher learning. Specifically, Thompson’s (1992) work on differentiation of beliefs, conceptions, and knowledge was discussed. For Eleanor and Tanner, it is clear Eleanor bases her practices on what she attends to as she works with Tanner. This study did not set out to investigate the extent to which Eleanor’s beliefs guided her attention to Tanner. However, considering this has implications for future research and this will be discussed further in the final chapter. Furthermore, the literature bases states instructional coaches most often use coaching practices they believe lead to increased teacher efficacy and agency. For the case of Eleanor and Tanner, Table 4.1 shows that in terms of Tanner’s readiness and his actions, Eleanor employs coaching practices she believes will directly impact his efficacy. In other words, this serves as evidence that, in this particular instance, the coach used practices she believed would lead to increased teacher efficacy. Additionally, the literature review reviled that working with an instructional coach has the potential to increase teachers’ agency. Again, this study did not address the extent to which a
teacher’s agency was altered due to his work with an instructional coach. Therefore, I cannot make a determination about the truth of this proposition. We should be reminded, however, that research by Edwards (2010) clearly shows working with an instructional coach can increase teachers’ efficacy. Teasing out the differences between efficacy and agency and determining the ways in which a teacher’s agency is affected by working with a coach should be the topic of another study. Again, this is addressed in the final chapter of this dissertation.

Coaching Tensions

Throughout the course of this study, Eleanor expressed a particular coaching tension she wrestled with: feeling she should be acting from the stance of a coach even when she consulted. As stated earlier in the chapter, Eleanor stated during an interview on February 8, 2016, “And so my role is not to…I mean, I don’t have a hammer. I mean, I’m not the evaluator.” Even though Eleanor’s brow furrows during her observations, even though she is confronted by Tanner’s content specific questions and calls for detailed guidance, she begins every coaching meeting with Tanner from the stance of a coach; Eleanor begins every conversation with Tanner with a question (for example, “How are things going,” “How are you coming along on making the test,” “How do you feel about [the student’s] level of preparation?”). From interviews and from field notes (based on classroom observations), it is clear Eleanor feels Tanner needs more specific direction and guidance. However, as she wrestles with her desire to consult Tanner, she continues to attempt to primarily assume the stance of a coach. This is apparent by comparing the quantity of coaching codes (18) to the quantity of consulting codes (21).
Also of interest, and related to the above coaching tension, is Eleanor’s awareness of her coaching, specifically her choice of language when phrasing questions. During an observation of a coaching meeting between Tanner, Belinda, and Eleanor on February 8th, Eleanor began to ask a question (“How can you…”), paused, glanced at me, and then rephrased the question (“What are some ways you might….”). In this way, Eleanor revises her coaching questions, in the moment, seemingly based on my presence. In this particular instance, Eleanor’s revised language reflects a question that allows for multiple responses (“ways” vs. way) that all have the potential to be correct (“might” is tentative). Here, in this example, Eleanor’s self-awareness of her coaching questions further reveals her desire to ask questions that open up the thinking of the teacher; in other words, she is struggling to act as a “better” coach. Overall, Eleanor prefers to assume the stance of a coach, asking open-ended questions that allow for multiple responses; she sees that as her job, her responsibility. Even if it means missing opportunities to consult when asked to consult, in some instances, Eleanor ignores Tanner’s behaviors, instead focusing her attention on Tanner’s students; rather than consulting Tanner about his classroom behavior (lack of attention to his students), she instead attempts to model for Tanner how she thinks he should interact with his students (bending down to their eye level, talking with each individually quietly, answering all student questions).

Summary

As Eleanor worked with Tanner over the course of the 2015-2016 academic year, it became clear she often noticed and paid attention to Tanner’s actions (planning, classroom management and organization, content knowledge, feelings of defeat, and the
fact that he often let Belinda lead conversations and planning), his readiness to work with an instructional coach, and his students. In response, Eleanor often consulted Tanner, providing him direct advice, in an attempt to build his content knowledge and his classroom management skills. Additionally, Eleanor collaborated with Tanner and coached Tanner in an effort to increase his consciousness and flexibility related to his work with his students and to strengthen her relationship with him, to be seen as a co-learner with Tanner when discussing standards, for example.

Eleanor struggled with her desire to consult Tanner, to give him specific advice, and her need to coach him. As a way to resolve this tension, she modeled for Tanner behaviors she thought he should engage in (attending to students’ needs, working with individual students and answering their content related questions). Eleanor, on occasion, developed material for Tanner to use in his classroom (bell-ringers) and then acted from the stance of a coach when asking about the effectiveness of those materials. In doing this, Eleanor sought to resolve this tension; in her own way, she sought to connect her consulting with her coaching attempts.

In the next chapter, I look at how Eleanor interacts with another teacher, Belinda. Specifically, I examine what Eleanor attends to when working with Belinda, how she interprets events, and the ways in which Eleanor responds to Belinda. The chapter structure parallels this chapter’s arrangement by outlining the context of Eleanor and Belinda’s relationship and interactions, denoting what Eleanor attends to when working with Belinda, discussing how Eleanor responds to Belinda (the stances she assumes and the practices she uses), and providing an overall summary of the findings.
CHAPTER FIVE
ELEANOR AND BELINDA: “Her middle class way”

Introduction and Overview

In the last chapter, I provided details about the data analysis process for Eleanor and Tanner’s interactions. I discussed the ways the study’s theoretical framework guided the analysis and how the results of that analysis relate to the study’s first research question. In this chapter, I do the same for the remainder of the study’s case: Eleanor and Belinda’s interactions. I examine and analyze the data related to Eleanor and Belinda using this study’s theoretical framework as a lens. Next, I relate the analysis to the study’s first research question: How does a coach make decisions about which coaching practices to use with teachers? Specifically, this chapter outlines what Eleanor attended to when working with Belinda and the ways in which she responded to Belinda. General themes related to Eleanor’s attending and responding are discussed, with relevant examples. The study’s second research question (Why does a coach adapt her coaching practices when working with different teachers?) will be addressed in Chapter Six.

In what follows I will show as Eleanor worked with Belinda, she noted Belinda’s attitude and perspectives, her actions, and her attention to her students. In response to what she noticed, Eleanor most often assumed the stance of a coach and attempted to increase Belinda’s efficacy, her flexibility, and her craftsmanship. Overall, Eleanor attended to and noticed Belinda’s teaching experiences and her perspective of her students. As a result, Eleanor engaged Belinda using practices would honor her content
and pedagogical content knowledge and would raise her awareness of her students’ points of view.

Coaching Context

Belinda’s Classroom Culture

It is mid-March and I am sitting in one of two empty student seats in the back corner of Belinda’s classroom. Belinda is wearing a denim knee-length skirt, a black Pi-Day T-shirt over a white long sleeved shirt, and black boots. Eleanor is standing in the back of the classroom, eyes roaming around the classroom, taking notes on her note pad. Belinda is guiding the students through a test review; the students will take a test the following day. Eleanor informed me that she will take notes on the students’ content knowledge; after administering the last test, Belinda was surprised by the students’ poor grades and responses. Eleanor’s hope is to have a conversation with Belinda during her next planning period about her perspective on the students’ content knowledge.

This 8th grade math class is composed of 22 students; ten students are Hispanic, two are Caucasian, ten are African American. At the moment we arrive, Belinda asks the students to take a few minutes to create a two-way table. After a few seconds pass, Belinda explains to the class how they should set up their two-way table. She leads the students through setting up the table, with limited student input. Next, Belinda moves on to the next problem on the test review sheet. As students are working, she circulates around the room and calls on some students by name to respond to her questions.

After 20 minutes, Eleanor and I leave Belinda’s class. As we leave, Eleanor tells me she was collecting data on the number of students who responded to Belinda’s
questions. Eleanor tells me she noticed when Belinda called on students by name (rather
than letting students volunteer to answer a question), they were more likely to respond.
She then expressed concern about how to address that with Belinda in a nonjudgmental
way; she doesn’t want Belinda to be offended by this fact. Eleanor wants to honor
Belinda’s professional experiences and, at the same time, challenge her to find new ways
to engage her students in learning mathematics.

Eleanor and Belinda

Although the last district Belinda worked for housed an instructional coach,
Belinda had extremely limited interactions with that coach. Therefore, Belinda and
Eleanor’s relationship was built without much of a preconceived notion, on Belinda’s
part, of the role and actions of an instructional coach. Belinda’s seven previous years of
experiences, however, in large part, defined the relationship she had with Eleanor.
Belinda occasionally asked Eleanor for specific advice but more often she engaged in
conversations with Eleanor. Overall, Eleanor and Belinda’s relationship was collegial;
Eleanor listened to Belinda and occasionally offered suggestions but, more often, she
“coached” Belinda. As an example, during a planning meeting after Eleanor observed one
of Belinda’s 8th grade math classes, Eleanor informed Belinda she “was recording
[Belinda’s] questions and who answered...” (Field Notes, March 14, 2016). Eleanor told
Belinda that a specific student was answering more than others. Belinda responded,
“Who else? I’m interested” (Field Notes, March 14, 2016). Eleanor and Belinda’s
conversations were generally composed of equal interactions; both fully participated in
the conversation, asking each other questions, and listening to the other.
During every planning meeting I observed, Eleanor always met Belinda in her classroom. As Eleanor walked in, Belinda would be sitting at her teacher’s desk in the front right corner of the classroom. Typically, she was grading papers or looking for teaching resources on her laptop. Eleanor would enter, walk to the student desk nearest Belinda’s desk, and pull the student desk up so it was almost touching Belinda’s desk. Belinda would remain in her seat, often continuing her work (grading, planning, etc.) until Eleanor began the conversation. In this way, Belinda exuded confidence about her role; she did not work to develop rapport with Eleanor. Instead, Eleanor worked to develop trust and rapport with Belinda.

When Belinda was asked about her interactions with Eleanor, she commented that Eleanor “came in and observed our classes pretty…almost once a week…” and these observations were not “always planned. Sometimes she would just show up” (Interview, May 4, 2016). Belinda continued by stating that when Eleanor was in her classroom observing, Eleanor “was always willing to help. That was beneficial…It provided an extra person to help one on one” (Interview, May 4, 2016). Belinda believed Eleanor’s role as an instructional coach to be a helpful one: “It was always really good that if we asked for something she was always really good to research for us and when we had questions about the end-of- grade tests she even called somebody she knew at the State Department to ask about that. So she was really good if we had something we couldn’t answer or she didn’t know the answer for. She was always very good about researching that for us” (Interview, May 4, 2016). Furthermore, Belinda did not see Eleanor as an expert: “…it was never like I’m the guru – I’m here to tell you how to do it. It was
always well let me tell you what worked for me, then let me tell you how I messed up on this. I mean she was very...accommodating...not intimidating” (Interview, May 4, 2016).

Overall, Belinda described Eleanor’s job as that of a “supporter, encourager” (Interview, May 4, 2016).

**Overview of chapter 5.** In what follows, I outline what Eleanor attended to and noticed when working with Belinda and the ways in which she responded to Belinda. Overall, Eleanor often spoke of Belinda’s actions (dominating), Belinda’s attitude and perspective (cynical and middle class), and her attention to her students. Also, outlined below (Table 5.1) are the ways in which Eleanor responded to Belinda; the coaching practices she used. Overall, Eleanor responded by coaching, consulting, or collaborating. Within each of these categories are specific responses based on Eleanor’s noticing.

The headings and subheadings in the remainder of this chapter are also the codes that were developed as a result of data analysis: Belinda’s attitude and perspective, Belinda’s actions, and Belinda’s attention to her students. As can be seen in Table 5.1, the study’s theoretical framework served as a data analysis tool. An overview of all codes connected to Eleanor and Belinda’s interactions can be found in Table 5.2. However, a brief outline is provided below.

**Table 5.1**

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<th>Attention/Interpretation</th>
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<td>Belinda’s actions</td>
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<td>Belinda’s attitude and perspective</td>
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Findings

Attending

The events and details Eleanor attends to and interprets when working with Belinda shape the decisions she makes about which coaching practices to select. Over the course of one academic semester, I noted Eleanor attended to Belinda’s readiness to be coached, her attitude and her perspective, her actions, and her perception of her students.

General Perspective. Every time Eleanor mentioned Belinda’s readiness to be coached, she referred to Belinda as open and receptive to working with her: “She’s really open to asking me for an idea. She’s open to implementing it and reflecting on it all at the end” (Interview, December 2, 2015). Even at the beginning of the academic year, Eleanor commented on Belinda’s readiness to be coached: “So, fortunately, she’s very receptive” (Interview, August 31, 2015). As the school year progressed, Eleanor’s ideas about Belinda’s willingness to be coached did not change; however, she began to mention during their planning meetings, Belinda was not a blank slate: “So it is different when I am talking with her because she’s bringing ideas” (Interview, February 22, 2016).

When Belinda was asked about her relationship and interactions with Eleanor, she stated that she appreciated and valued Eleanor’s help and support and that she was open to Eleanor’s ideas. However, she claimed she would not have necessarily been ready and receptive to working with any instructional coach. During an interview on May 4, 2016, Belinda said, “I think [Eleanor’s] great! I have heard stories about other instructional
coaches and I’m like, oooohh, glad that’s not us!” Belinda’s comment references other mathematics instructional coaches in the district. Unlike the relationships these other instructional coaches have built with the teachers they work with, Belinda says that for her and Eleanor, “I think it’s been an easy relationship which is always good” (Interview, May 4, 2016). In this way, the “readiness” Eleanor attends to in Belinda is due in part to the way in which she presents herself to Belinda.

**Belinda’s attitude and perspective.** Eleanor commented on Belinda’s attitude towards teaching and her perspective of how her students best learn infrequently. However, when she did, her comments were clear, to the point, and definitive. In this way, Eleanor made it clear she was often attending to Belinda’s outlook and her view of her students’ learning.

**Cynical, middle class way.** Eleanor does not outwardly mention Belinda’s attitude and perspective towards teaching and her students often. However, two pieces of coded data reveal Eleanor is, in fact, attending to and interpreting how she perceives Belinda to perceive working with her particular student population. “The thing I have to think about with her is that she can become…I guess I’m going to use the word cynical” (Interview, December 2, 2105). Eleanor doesn’t elaborate on this; rather, she seems to feel ashamed that she mentioned this because in her next sentence she says, “But she’s such a lovely person!” (Interview, December 2, 2016). However, she does go on to explain she is confused by Belinda’s attitude: “…I really find it surprising when she says some of the things that she says because I’m working my tail off over here. ‘If they don’t want to work, let them sit over there.’ And that surprises me because I find her a very
warm and caring individual” (Interview, December 2, 2015). In this instance, Eleanor is attending to an attitude she finds surprising in Belinda. She struggles to interpret this attitude so she can figure out how to respond to Belinda in specific ways. In her attempt to interpret Belinda’s attitude, she reflects on what she perceives to be Belinda’s perspective: “…but it’s like to help her see another perspective other than her, I don’t mean this in a harsh way, her middle class way. The way you raise your children, these children were not raised that way. So they don’t have anybody at home saying let me see your homework, you know” (Interview, December 2, 2105). These conversations about Belinda’s attitude and perspective shape Eleanor’s decision-making process about which coaching practices to use with Belinda.

**Belinda’s actions.** When referring to Belinda’s actions, Eleanor often comments on Tanner and Belinda at the same time. In some instances, Eleanor seems to compare Belinda and Tanner: “I think their body language is certainly sending different messages and I think the reason is because they are different people. Mentally they are in different places…” (Interview, March 14, 2016). From here, Eleanor continues to talk about Tanner’s body language in detail; she does not mention Belinda’s body language at all. It almost seems as though she, to a certain extent, feels she doesn’t need to attend to Belinda’s nonverbal communication.

**Dominating.** Eleanor also references Belinda’s tendency to dominate the planning conversations they have when Tanner is present. “Um, they would probably start off similar and then they would diverge but it would be based on what she says back” (Interview, February 8, 2016). In other words, Eleanor notices and attends to the
fact that Belinda most often leads the planning conversations (Tanner is quiet, often looking at his phone, minimally participates, and follows Belinda’s lead). Even though Eleanor seems to not focus intentionally on Belinda’s body language, she does attend to and interpret Belinda’s tendency to dictate the direction of the conversations and her propensity to control the teaching decisions that are made.

**Attention to Belinda’s Students.** When Eleanor is in Belinda’s classroom observing, she often “stands in the back watching, taking notes on a note pad” (Field Notes, March 14, 2016). She sometimes circulates to make note of what specific students are doing but, more often, she remains in the back of the room observing and occasionally taking notes. After one particular observation on March 14, 2016, Eleanor tells me “that she was collecting data on who and the number of students responding to her questions and that she noticed that as Belinda walked around and called on students by name, more students responded” (Field Notes, March 14, 2016). In this way, Eleanor is sharing that she was attending to a specific aspect of Belinda’s teaching and Belinda’s students. Her attention to these specific aspects of Belinda’s class helps Eleanor determine which coaching practices she will assume when working with Belinda.

**Responding**

The events, communication from, and perspectives of Belinda, the things Eleanor pays attention to when working with Belinda, guide the ways in which she makes decisions about which coaching practices to use with Belinda. For example, during the December 2, 2015 interview, when Eleanor explains her understanding of Belinda’s perspective of her students (“…but it’s like to help her see another perspective other than
her, I don’t mean this in a harsh way, her middle class way. The way you raise your children, these children were not raised that way. So they don’t have anybody at home saying let me see your homework, you know.”), she also mentions how she might respond to Belinda. “So I try to ask her questions to just try to kind of make her think – see the other side of things. So I have a totally different mindset” (Interview, December, 2015). Eleanor selects specific coaching practices to address her interpretation of what she attends to. In this instance, Eleanor specifically tries to shift Belinda’s point of view; she tries to help her better understand some of the difficulties her students face. By asking questions that focus on Belinda’s flexibility (appreciation for diverse perspectives), Eleanor is responding to her interpretation of Belinda’s “middle class way.”

Eleanor responds in ways that are specific to what she attends to and interprets; Eleanor responded to Belinda by coaching, consulting, collaborating, and in nonverbal ways, with her body language. Specifically, 13 instances of coaching were coded, three occurrences of consulting were noted, and three examples of collaborating were coded.

Coaching. Primarily, Eleanor decides to coach Belinda. Her coaching practices take on a variety of forms, depending on what she attends to: increasing Belinda’s flexibility, efficacy, or craftsmanship; focusing on relationship building. Only one instance of relationship building is noted: “I told her, I love algebra! That’s why I keep coming! She said, oh, I know! I can tell!” (Interview, September 30, 2015). This inattention to responding to Belinda in ways that build their relationship may be due, in part, to Eleanor’s interpretation of Belinda’s readiness to be coached.
**Increasing craftsmanship.** When coaching Belinda, Eleanor most often selects coaching questions that concentrate on Belinda’s craftsmanship. In the Cognitive Coaching model, craftsmanship refers to helping the teacher “seek precision, refinement and mastery; striving for exactness of critical thought processes” (Costa & Garmston, 2020, p. 13). When thinking about a teacher’s craftsmanship, it is typical to think of her attention to detail related to her job or profession. As stated by Eleanor during an interview conducted on February 22, 2106, “And so a lot of the times when we are together, the three of us, she’s bringing forth ideas and I’m encouraging her. I’m trying to encourage her to think more deeply and share more of what she’s done and talk about how did it work with her other kids and things like that, and wait before I interject or try to ask a question that may make her think about making her idea clearer or more appropriate for the situation or asking her something about the standards – does that, when you use that idea does it align with this particular standard in the same way as you used it before?” Here, Eleanor describes how she attempts to help Belinda focus on her content knowledge, her knowledge of her students, and her pedagogical content knowledge. In other words, she wants Belinda to reflect on and refine her craft, teaching.

**Increasing flexibility.** Additionally, Eleanor occasionally responds to Belinda by attempting to increase Belinda’s flexibility. “I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective.” In the coaching model Eleanor uses, flexibility refers to considering the perspective of another; of demonstrating respect for and empathy for diverse perspectives (Costa & Garmston, 2002, p. 129). Because Eleanor attends to the ways Belinda interacts with her students,
she often asks Belinda questions in an attempt to increase her empathy for her students’ point of view.

**Increasing efficacy.** In an effort to build Belinda’s efficacy, she sometimes responds to Belinda in ways that help her feel more confident in her capacity to make a difference. Both instances that are recorded, however, overlap with Eleanor’s response to Tanner. Again, this might mean Eleanor attended to Tanner more than Belinda due to their different experiences and needs. Nevertheless, it is worth pointing out the instances in which Eleanor made an effort to increase Tanner and Belinda’s efficacy. During an observation of their planning conversation on February 29th, Eleanor stated, “Sometimes you need a pity party! But you have a couple of things you’re going to do. An item analysis, DCR’s (starters/warm-ups), a survey, break it down by raw scores to see if there’s any progress.” In this way, Eleanor is reminding Belinda what is within their control, reminding them that they can make a difference and they have the capacity to do so. When people feel they can control part of a situation, their confidence and efficacy tend to rise.

**Consulting.** Eleanor did not as often consult Belinda. However, on occasion, Eleanor could be observed offering Belinda direct advice, suggesting to Belinda how she might approach a particular problem, or sharing comments designed to boost Belinda’s confidence.

**Encouraging.** Eleanor demonstrated three instances of consulting Belinda. Two of these occasions overlap with her attempts to also consult Tanner. Even though some of Eleanor’s consulting is directed at both Belinda and Tanner during their common
planning time, it is important to examine these instances in light of this unit of analysis, Belinda and Eleanor’s interactions. During the one event that was exclusive to Belinda, Eleanor said, “Well, I think modeling with her and talking with her about it or letting her know – and I hate to give empty compliments, but just giving her a ‘this is great’” (Interview, December 2, 2015). This was Eleanor’s response when she was asked about how she intentionally boosted Belinda’s confidence. Boosting confidence can also be accomplished via coaching but, in this instance, Eleanor felt modeling an instructional strategy and complimenting Belinda on her enactment of it was most appropriate.

**Modeling.** On two occasions, the ways Eleanor consults Belinda overlapped with her consulting of Tanner: “So I find myself trying to make a goal for them” and “So, I’m thinking even in that, I’m modeling for them how to look at student work. What you should be looking for, not just at the bottom. Sometimes it’s just little tiny things in the middle of a process. So I feel like that’s still coaching even though it’s kind of a sneaky way” (Interview, December 2, 2015). It should be recognized, according to the coaching model Eleanor follows, consulting does “count” as coaching; it is just one of the three stances that can enhance one’s coaching. When observing Belinda, Eleanor often circulated among the students, speaking with the students in ways she felt Belinda should speak to the students; she modeled this behavior for Belinda. During their planning conversations, Eleanor frequently asked Belinda specific questions about what students *did* understand, trying to help Belinda recognize her students often knew more than what might be immediately apparent.
Collaborating. Infrequently, Eleanor assumed the stance of a collaborator when working with Belinda. When doing this, Eleanor acted as a co-learner, sometimes brainstorming ideas with Eleanor.

Brainstorming. Three pieces of data were coded for collaborating in this unit of analysis, one of which overlapped with an instance with Tanner. For the two that were distinct to Eleanor and Belinda, the events reference the ways in which Eleanor works collaboratively with Belinda. These collaborative actions are the coaching practices Eleanor decides to use based on what she has attended to and interpreted when working with Belinda. During an interview on March 14, 2016, Eleanor prepares for the planning conversation she will shortly have with Belinda. Specifically, she is thinking about the questions she will ask and the dialogue she will use with Belinda. “So if we had to make a list of tips for students for studying and tips for teachers in preparing kids for that, what would be on our list? And so together maybe we can come up with a list of what should the teacher be doing, what should the student be doing.” In this way, Eleanor is planning to collaborate with Belinda, to work with her as a partner to develop a list of teacher and student actions that can help her better prepare for her next test review day.

On one occasion, Eleanor’s collaborating overlaps with her collaborating with Tanner. During this instance, Eleanor refers to a common all-day planning meeting she had with Tanner and Belinda. During this time, both Tanner and Belinda struggled to complete a challenging 8th grade math problem. “So I think it’s good because some of the standards are really complex. And I think it helps them to see that even I don’t have all of the answers. So I think it helps them to see I’m here to struggle right along with them. In
unpacking these things and in being a learner. So I think it’s a positive thing” (Interview, September 30, 2015). According to Belinda, this is one of Eleanor’s strengths: “…she was not intimidating…and very real with herself as a teacher, you know. Not saying, I did it right all the time. But saying, yeah, I’ve had one of those days where you’ve done a lesson and it just flops” (Interview, May 4, 2016). In essence, Belinda is confirming Eleanor’s attempts at collaboration are beneficial to her.

**Nonverbal Communication.** While observing interactions between Eleanor and Belinda, I captured notes about both Eleanor and Belinda’s body language and their nonverbal communication (eye movement, hand movement, body positioning). Although these notes do not directly help me answer this study’s research questions, they are interesting and add to the context of this case. Implications of studying coach-teacher body language will be discussed in more detail in Chapter 7.

Eleanor’s nonverbal communication with Belinda was positive and confirmatory: “There is laughter from both, eye contact from both. Eleanor uses her hands when she talks” (Field Notes, March 14, 2016). Eleanor even used her hands when Belinda talked: “Eleanor uses her hands even when Belinda talks. Her hands open up and widen [to show understanding and empathy]” (Field Notes, March 21, 2016). Interestingly, Eleanor mirrored Belinda’s nonverbal communication. “Eleanor uses her left hand as she talks, mirroring Belinda who uses her right hand” (Field Notes, February 29, 2016). In Cognitive Coaching, mirroring body language is a way to build rapport and trust with another. According to Edwards (1998), “during the coaching process, the coach uses skills of rapport building, questioning, paraphrasing, and probing” (pg. 3). In these
instances, Eleanor was responding to Belinda by building trust to strengthen their relationship.

Summary of Findings: Eleanor and Belinda

This study’s data analysis was conducted through the lens of the study’s conceptual framework (a coach’s noticing: attending and interpreting, responding). This chapter addresses the study’s first research question only (How does a coach make decisions about which coaching practices to use with teachers?). Since the second question relies on data from the entirety of the case (Eleanor’s practices with Tanner and Belinda), it is addressed in Chapter 6.

This data analysis makes clear Eleanor’s coaching practices are related to what she notices as she works with Belinda. In Table 5.2, Eleanor’s responses/coaching practices are listed in the right column; the coaching practices she selected are in response to what she attended to when working with Belinda; the things Eleanor attended to are in the left column.

Table 5.2

Eleanor’s Interpretations and Responses When Working with Belinda

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<tr>
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Particularly, it should be noticed that Eleanor responds directly to Belinda’s attitude and perspective towards teaching by attempting to increase Belinda’s flexibility and ability to consider another’s point of view. Eleanor also encourages Belinda to work on her craft, teaching, which will, in turn, increase her efficacy. Eleanor does these things by modeling for Belinda new ways to interact with her students and by working collaboratively, as a colleague, with Belinda in planning sessions. Eleanor also mentions while talking informally with me Belinda tends to dominate the meetings that the three of them have together (Tanner, Belinda, and Eleanor). In an effort to respond to this, Eleanor coaches Belinda, attempting to increase her craftsmanship; Eleanor also offers both Belinda and Tanner encouraging statements as a way to boost their overall confidence.

**Connections to the Literature**

Eleanor’s work with Belinda over the course of the academic semester revealed she did make decisions about which coaching practices to use based on her assumptions about Belinda’s knowledge and past learning; in this way, Eleanor’s beliefs undergirded her coaching practices. More specifically, Eleanor can be seen as acting in a way that is
in line with the coaching model she is following. The Cognitive Coaching model asserts coaches act from the belief all teachers have the ability to learn. When this idea is combined with the idea that Eleanor bases her practices on Belinda’s past learning and knowledge, we can understand Eleanor’s practices are a result of her recognizing Belinda has years of mathematics teaching experience. Again, out of the stances she could have assumed when working with Belinda (coaching, consulting, or collaborating), Eleanor most often coaches Belinda.

Eleanor’s actions also reflect she uses coaching practices with Belinda she believes will increase Belinda’s confidence and flexibility. Returning to the data, we find Eleanor engages Belinda in efficacy building and flexibility building practices almost equally (three times and two times, respectively). The literature states teachers who engage with an instructional coach grow in teaching efficacy (Gibson & Dembo, 1984; Edwards, Green, Lyons, Rogers, & Swords, 1998; Alseike, 1997; Edwards, 2010); in this particular instance, at least, we cannot claim the coach was intentionally engaging the teacher primarily in efficacy building practices. For this case, the coach tended to engage the teacher almost equally in coaching practices to raise her efficacy and flexibility.

Coaching Tensions

As she works with Belinda, Eleanor references a coaching tension she repeatedly wrestles with in her interactions with Belinda. On occasion when Eleanor speaks with me privately (interviews and field notes), she seems to struggle with how to resolve Belinda’s attitude towards her students and her own interactions with Belinda. For example, Eleanor states that Belinda tends to be “cynical” and not recognize her students
may not “have anybody at home saying let me see your homework…” (Interview, December 2, 2015). Eleanor points out Belinda is not able to easily understand a perspective other than her own. At the same time, Eleanor quickly follows up these statements with positive comments about Belinda. It is as though Eleanor credits Belinda with their positive interactions and her willingness to work with a coach. As a result of attempting to resolve this tension (lack of a flexible perspective vs. pleasant attitude), Eleanor engages Belinda primarily in coaching practices (rather than consulting or collaborating practices). Eleanor’s coaching questions are framed in a way that directly addresses this tension: her questions are an attempt to help Belinda consider other points of view and are about increasing her confidence. Eleanor states she does not believe that consulting “counts” as coaching and this may be another reason she primarily acts from a coaching stance when working with Belinda.

Along a similar vein, it is of interest that there is only one instance of Eleanor consulting Belinda (not an overlapping occurrence) or giving her evaluative feedback. The lack of this type of practice being evidenced is meaningful. When Eleanor states that she tells Belinda, “…this is great,” (December 2, 2015), she is offering Belinda feedback from a consulting perspective; letting Belinda know she is on the right track and doing the right work. Again, a reason for the lack of the appearance of this quote could be contributed to the fact that Eleanor believes consulting does not “count” as coaching; it could also be attributed to Eleanor’s understanding that she has to engage Belinda in non-consulting ways to recognize and honor Belinda’s years of experience.

**Summary**
As Eleanor worked with Belinda, over the course of the 2015-2016 academic year, it became clear she often noticed Belinda’s readiness to work with an instructional coach, her attitude and perspectives, her actions, and her attention to her students. In response to what she noticed, Eleanor most often coached Belinda in an attempt to increase her efficacy, her flexibility, and her craftsmanship. On occasion, some instances overlapping her work with Tanner, Eleanor consulted Belinda by modeling how to interact with students and collaborated with Belinda to build relationships and to be seen as a co-learner.

Overall, the data analysis for this portion of the case revealed that Eleanor attended to and noticed Belinda’s years of experience and her perspective of her students. As a result, Eleanor most often decided to engage Belinda in coaching practices would honor Belinda’s content and pedagogical content knowledge (coaching) and would increase her ability to understand the point of view of her students (coaching, increased flexibility).
CHAPTER SIX

CASE ANALYSIS: "Because the whole goal is to build their efficacy so they’re making better decisions."

Introduction

This dissertation investigates coaching as a strategy for mathematics teacher learning. In this study, I examine one coach’s practices with two different teachers in order to respond to questions in the field how an instructional coach interprets and responds to the learning needs of teachers. More specifically, this study examines how one coach determines which coaching practices to use and the ways in which this coach adapts her practices with two teachers. I linked a coach’s coaching practices to an adaption of the professional noticing framework (Jacobs, Lamb, & Philipps, 2010) and the continuum of competence model laid forth by Blomeke et al. (2015). Data were analyzed for each coach-teacher interactions separately (Eleanor-Tanner and Eleanor-Belinda) and conclusions were drawn for each portion of the case. In what follows, I perform a case analysis, investigating the extent to which this study’s conclusions hold for the entire case, Eleanor’s overall stances and practices with two teachers. Specifically, the ways Eleanor attended to both teachers and responded to both teachers will be compared and analyzed according to the themes outlined in Chapters 4 and 5. Eleanor’s coaching practices (the ways she responded to the teachers) will be outlined and examples for practices used with Tanner and Belinda will be provided.

Eleanor’s Stances and Practices: An Overview

As a reminder, when working with Tanner, Eleanor consulted Tanner (21 instances), coached Tanner (18 instances), and collaborated with Tanner (4 instances).
These stances were assumed in response to Eleanor’s noticing of Tanner’s content knowledge, classroom management practices, and his expressed feelings of defeat. When working with Belinda, Eleanor assumed the same stances but in different ways: Eleanor coached Belinda (13 instances), consulted Belinda (3 instances), and collaborated with Belinda (3 instances). Eleanor assumed these stances in response to her attention to Belinda’s expressed perception of her students’ needs and her content and pedagogical content knowledge.

Appendix I provides an overview of all of the stances Eleanor assumed and the practices she used when working with Tanner and Belinda (not separated by teacher). The table in Appendix I was created by closely analyzing and comparing the ways in which Eleanor interacted and responded to Tanner and Belinda (Table 4.2 and Table 5.2). This table is meant to represent all of Eleanor’s ways of responding; in other words, it is a summary of the stances Eleanor assumed as she worked with Tanner and Belinda and the coaching practices she employed. Practices were sorted according to the stances Eleanor assumed. Because Eleanor operated from a Cognitive Coaching standpoint, she tended to assume three of the stances (also known in this model as “support functions”) outlined by this model: coaching, consulting, and collaborating. Because the first research question addressed Eleanor’s interpretation and ways of responding, her practices were sorted according to the stance she assumed. This helps us recognize Eleanor selected practices based on the stances she assumed. In this way, we are able to see which distinct practices Eleanor decided to use with Tanner and Belinda.
When viewing the data organized in this way, we can see that if Eleanor operated from a coaching stance, she used practices intended to do one of the following: increase efficacy, increase flexibility, increase consciousness, or increase craftsmanship. In other words, when she operated from a purely coaching standpoint, Eleanor tended to make it clear through her language, paraphrases, and choice of questions she was attempting to build teacher capacity. As an example, when working with Belinda, Eleanor stated, “I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective” (December 2, 2015). In the instance Eleanor is referring to, she attended to Belinda’s inability to understand perspectives other than her own, specifically that of her students. In this situation, Eleanor had a choice: give Belinda advice on how she might better understand where her students are coming from (consult) or ask questions to increase Belinda’s flexibility (coach). Once she decides to coach Belinda, she selects an increasing flexibility practice.

We can see (Appendix I) that when Eleanor decided to operate from the stance of a consultant, she employed one of the following practices: modeling, boosting confidence, sharing strategies, establishing goals, or improving content knowledge. Again, once Eleanor determined her stance, in this case, consulting, the coaching practices she used were then selected. As an example, when talking about Tanner on March 14, 2016, Eleanor said, “And so the mother in me wants to try to cheer him up and try to say, you know, it’s not so bad, what are some things that we can do?” In this instance, Eleanor attended to Tanner’s actions and attitude. The class observation on that day had not gone as planned; one student walked out of the classroom, two students were
sleeping, other students were yelling at each other across the room during instruction. Afterwards, during their reflecting conversation, Eleanor, after attending to his actions and his attitude, determined to act as a consultant by attempting to boost Tanner’s confidence and to confirm for him things would, in fact, improve. If Eleanor had decided to operate from the stance of a coach she may have instead asked him questions to increase his efficacy. The difference here, between increasing one’s efficacy and boosting one’s confidence is in the intention behind the practice. In all instances when Eleanor acted as a coach, she asked questions and provided paraphrases. Instead, when acting as a consultant, Eleanor offered statements rather than questions intended to help the teachers realize their potential. Eleanor offered a counterexample to this when, during a separate reflecting conversation, the following exchange occurred (February 22, 2016): Tanner, “I really don’t know. I’m struggling. I don’t know. What would you do?” Eleanor, “Well, they’re your kids…” In this way, Eleanor attempted to help Tanner realize he knew more about his students than she did; in deciding to coach him, she questioned his knowledge of his students in an attempt to help him feel empowered.

We can understand, on occasion, Eleanor decided to operate from the stance of a collaborator. When she did this, she used practices that positioned her as a co-learner, someone who was not the expert but, rather, someone who wanted to learn with Tanner and Belinda. Both instances of collaborating (Appendix I) were observed during the same planning meeting on February 22, 2016. In the following example, it might appear as though Eleanor’s collaborating practices were similar to coaching practices. She suggests he come up with a list of projects (“we can brainstorm”) and if they want to create or
come up with a topic, [the students] have to get it approved by him (Field Notes, February 22, 2016). Instead of operating from the stance of a coach, though, Eleanor, after noting Tanner did not have project ideas for the next unit, decided to assume the stance of a collaborator. In this example, Eleanor pulled her chair beside Tanner’s so both could work together to brainstorm a list of project ideas.

In all of these instances, no matter the stance she assumes, it is clear the practices Eleanor employees with Tanner and Belinda result from the stance she takes on; in other words, her practices are a manifestation of her stance. When she coaches, Eleanor uses practices to build capacity (increase the teacher’s efficacy, flexibility, craftsmanship, or consciousness). When she consults, Eleanor uses practices that more directly advise the teacher. When Eleanor assumes the stance of a collaborator, she uses practices that position her as a co-learner.

**Findings: Overall Analysis of the Case**

To address this study’s second research question (why does a coach adapt her coaching practices when working with different teachers?), the entirety of the case in this study are analyzed together (Eleanor’s interpretation and responses to working with two teachers, Tanner and Belinda). To begin the overall analysis of this case, Table 4.2 and Table 5.2 (Eleanor’s decision-making with Tanner and with Belinda) and the connections between the tables are discussed. Next, the stances Eleanor assumed and the practices she used with Tanner and Belinda are compared in Table 6.1.

Table 6.1

*Overall Case Analysis*
<table>
<thead>
<tr>
<th>Examples: Tanner</th>
<th>Coaching Practices</th>
<th>Examples: Belinda</th>
</tr>
</thead>
<tbody>
<tr>
<td>(frequency, overall %)</td>
<td>(Stances)</td>
<td>(frequency, overall %)</td>
</tr>
<tr>
<td><strong>Tanner:</strong> “I really don’t know. I’m struggling. What would you do?”</td>
<td>Increasing Efficacy (Coaching)</td>
<td>I have to ask her questions to build her...</td>
</tr>
<tr>
<td><strong>Eleanor:</strong> “Well, they’re your kids...”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>So, I have to be really conscious of trying to get them to turn the page and not stay there. And so, I try to maybe change their point of view or get them to think.</td>
<td>Increasing Flexibility (Coaching)</td>
<td>... it’s like to help her see another perspective.</td>
</tr>
<tr>
<td>So I think spending a lot of time with him, talking with him, asking him a lot of questions. So what are some reasons, what is this connecting to, what are the kids going to walk away knowing. Those questions he doesn’t ask himself.</td>
<td>Increasing Consciousness (Coaching)</td>
<td>What I would like for them to walk away with is some things in their minds about during a review, because today we’re specifically talking about that, what are some things the teacher should be doing...</td>
</tr>
<tr>
<td>And so for him I’m thinking we need some long term planning strategies. Some strategies that he can get ahead.</td>
<td>Increasing Craftsmanship (Coaching)</td>
<td>I think we should talk you know, maybe her and I would talk about it together ahead of time. Like, what do you think a good lesson looks like? What is the teacher doing? What are the students doing? And that kind of thing. Maybe come up with a list, let’s look for these things when we are going through the lesson.</td>
</tr>
<tr>
<td>So I’m thinking even in that, I’m modeling for them how to look at student work. What you should be looking for, not just at the bottom. Sometimes it’s just little tiny things in the middle of a process. So I feel like that’s still coaching even though it’s kind of a sneaky way, I guess.</td>
<td>Modeling (Consulting)</td>
<td>Well, I think modeling with her and talking with her about it or letting her know...</td>
</tr>
</tbody>
</table>
And so the mother in me wants to try to cheer him up and try to say, you know, it’s not so bad, what are some things that we can do?

**Boosting Confidence**  
*(Consulting)*  
…and I hate to just give empty compliments, but just giving her a “this is great.”

It was just like every day, where’s your starter? And he was like...oh...and I was like really...do you want me to write you some? And so that kind of thing, like I can help you with that.

**Sharing Strategies**  
*(Consulting)*  
NA

So I find myself trying to make a goal for them. Like with Tanner – your goal is going to be...getting his classroom started in an orderly fashion every day. We’re going to focus on starting and ending.

**Setting Goals**  
*(Consulting)*  
NA

So one of the things I try to do is just really talk to him about what this means in mathematics or really discuss the content or maybe it’s not really even a discussion maybe it’s just me talking.

**Improving Content Knowledge**  
*(Consulting)*  
NA

When Tanner asked about the meaning of a specific standard, Eleanor says, “Let’s read it...” then they discuss how to teach that standard.

**Improving Content Knowledge**  
*(Collaborating)*  
NA

She suggested that he come up with a list of projects (“we can brainstorm”) and if they wanted to create or come up with a topic, [the students] have to get it approved by him.

**Brainstorming**  
*(Collaborating)*  
So if we had to make a list of tips for students for studying and tips for teachers in preparing kids for that, what would be on our list? And so together maybe we can come up with a list of what should the teacher be doing, what should the student be doing.
So I didn’t, I don’t know, I’m still trying to be very cautious because I feel like I’m still in the relationship building phase and I’m still trying to feel him out and see how conscious he is of his practice.

Today when we started I wanted him to reflect and the reason I gave them some guiding questions for their reflection and planning was because I want them to start asking themselves those questions. So, I thought, let’s just be very transparent. You know we’re going to keep going back to these over time but also I wanted him to read.

Table 6.1 lists the coaching practices Eleanor employed (middle column) and examples of statements she issued as a way to put the particular practice into play with Tanner (left column) and Belinda (right column). An overall case analysis reveals the ways in which Eleanor adapted her coaching practices when working with Tanner and Belinda. What might be immediately apparent is Eleanor used every listed coaching practice with Tanner; when working with Belinda, though, no evidence was captured to illustrate her using the following practices: sharing strategies, setting goals, improving content knowledge, or building capacity.

Stake (1995) states “The quantitative side of me looked for the emergence of meaning from the repetition of phenomena. The qualitative side of me looked for the emergence of meaning in the single instance” (p. 76). I acknowledge in a case study, one utterance may bear more weight and importance than the comments one makes.
repeatedly. To begin this overall case analysis, I searched for patterns in the practices Eleanor uses when interacting with Tanner and with Belinda.

When interacting with Tanner, Eleanor most often shares strategies, asks questions to increase consciousness, and asks questions to build efficacy. When working with Belinda, Eleanor most often asks questions intended to increase Belinda’s efficacy. Eleanor then engages Belinda in three strategies equally (as the second most common practice used with Belinda): asking questions to increase Belinda’s consciousness and craftsmanship, and modeling strategies for Belinda. It is of interest to note that there is overlap in these “most often used coaching practices:” Eleanor asks questions that are intended to build a teacher’s efficacy, from the coaching stance. This shouldn’t be a surprise, however. Since Eleanor was a mathematics teacher for twelve years, a mathematics instructional coach for ten years, and has been in her current role (including serving as a mathematics instructional coach and training mathematics instructional coaches state-wide) for eleven years, this data analysis reveals Eleanor most often “coaches” according to the coaching model she is most familiar. Within that particular stance, Eleanor most often frames her questions in a way that allows her to try to build each teacher’s efficacy and confidence.

In her work with Tanner and Belinda, Eleanor engaged both teachers in ways she hoped would increase their efficacy, flexibility, consciousness, and craftsmanship. She also modeled for them the ways in which they could work with their students and, on occasion, she tried to boost their confidence. At times Eleanor brainstormed with both Tanner and Belinda. She also continued to work with Tanner and Belinda in ways that
would strengthen their coach-teacher relationship. She did these things as a result of what she attended to and interpreted when working with Tanner and Belinda: their actions, their attitudes, the attention to their students, and their readiness to be coached. Again, what is apparent in Table 6.2, though, is 1) that Eleanor engaged Tanner and Belinda in these practices in different ways and 2) that she clearly adapted her practices because she did not engage Tanner and Belinda equally in these practices.

Early in this study, Eleanor stated, “…because the whole goal is to build their efficacy so they’re making better decisions” (Interview, February 8, 2016). Eleanor went on to say she didn’t want Tanner and Belinda “just to be accepting of [her] word over their own.” Although it may not be clear in Table 6.2, Eleanor began all conversations with Tanner and Belinda with open-ended questions; in other words, she attempted to engage both teachers by using coaching practices (increasing efficacy, flexibility, consciousness, and craftsmanship) before resorting to consulting (modeling, boosting confidence, sharing strategies, goal setting, improving content knowledge), collaborating practices (brainstorming), relationship-building practices (not necessarily associated with a particular stance), or capacity building practices (not necessarily associated with a particular stance). Even though she began with coaching practices, she often adapted her practices based on the teacher’s: planning needs, classroom management and organization needs, content knowledge, feelings of defeat, perspective of students, and their readiness to be coached. Because Eleanor recognized Belinda as a more experienced teacher, during the time of this study, Eleanor did not work with Belinda to set goals, she did not share strategies with Belinda, she did not work to improve Belinda’s content
knowledge, and she did not work to build Belinda’s capacity. It could be inferred that this is because Eleanor recognized Belinda as the more experienced teacher. It could also be assumed this was because Eleanor recognized Tanner’s lack of teaching experiences and often became overwhelmed with her perspective of how much help and support he needed. In other words, Eleanor adapted her practices to accommodate what she understood to be each teacher’s most immediate need. In Tanner’s case, this was clear, direct, consulting about his actions as well as an attempt to build his efficacy and his capacity as a teacher. In Belinda’s case, this was a focus on improving her craftsmanship and her flexibility about her view of her students.

**Summary of Findings**

When interacting with Tanner, Eleanor most often assumed the stance of a consultant by sharing strategies; she also often assumed the stance of a coach and used language intended to increase Tanner’s consciousness and to build his efficacy. When interacting with Belinda, Eleanor most often assumed the stance of a coach by asking questions intended to increase Belinda’s efficacy and flexibility. Eleanor used these practices with Tanner and Belinda based on what she noticed when working with each teacher. As Table 6.1 makes clear, Eleanor’s practices are differentiated; she does not use the same practices with both teachers, nor does she use similar practices with the teachers with the same frequency. The differentiation of her practices is a result of what she notices in her interactions with the teachers: in her work with Tanner, Eleanor often mentions his feelings of defeat, his content knowledge, and his classroom management practices. In her work with Belinda, Eleanor most often references Belinda’s perception
of her students may not be sufficient. In these ways, Eleanor makes intentional decisions about which coaching stances to assume and which coaching practices to use when working with the two teachers.
CHAPTER 7
DISCUSSION

Overview

In Chapter 4, I examined the ways in which a mathematics instructional coach, Eleanor, worked with a second-year 8th grade math teacher, Tanner, and the ways in which she made decisions about how to engage Tanner in specific coaching practices. In Chapter 5, I investigated how Eleanor made decisions about which coaching practices to use with another 8th grade math teacher, one who was in her eighth year of teaching. Both of these chapters focused on my examination of data related to this study’s first research question: How does a coach make decisions about which coaching practices to use with teachers? In the previous chapter, I conducted a cross-case analysis as a way to address this study’s second research question: Why does a coach adapt her coaching practices when working with different teachers? Specifically, I examined interview and observational data to compare Eleanor’s actions with two different teachers, Tanner and Belinda. I then considered the reasons why she engaged the teachers in different practices, thereby adapting her coaching practices. In this chapter, I situate the findings from each research question in the review of the relevant literature from Chapter 2. I end this chapter by considering this study’s contributions, the additional questions I have, and the ways in which this study can contribute to my future research agenda.

Discussion of Findings

This study’s conceptual framework offered a powerful and unique way to examine the ways in which the coach interpreted and responded to the learning needs of
teachers; this study’s conceptual framework allowed me to gain insights I might not have gained otherwise. Specifically, the conceptual framework, merged from the competence modeled as a continuum frame (Blomeke et al., 2015) and the professional noticing structure (Sherin, Jacobs, & Philipp, 2011) helped me consider specific things the coach attended to when working with two teachers, the way she interpreted these events, and, as a result, the ways in which she responded to the teachers (employing different coaching practices). Instead of connecting coaching practices to a mathematics instructional coach’s knowledge (Yopp, et al., 2014; Ball, Lubienski, & Mewborn, 2001; Ball, Thames, & Phelps, 2008; Hill, Ball & Schilling, 2008), I connected a coach’s practices to her attending to and interpretation of her interactions with teachers.

As a reminder, the National Council of Teachers of Mathematics 2009 Research Brief titled *Mathematics Specialists and Mathematics Coaches: What Does the Research Say?* Only found and cited thirteen studies. Of these, three were not directly related to coaching research. In 2015, NCTM published a follow-up to this Research Brief and cited 24 studies; an increase from their prior publication. In this updated Research Brief, the authors identified three questions worthy of being addressed: 1) How do coaches interact with teachers?, 2) What knowledge do coaches need, and 3) What is the impact of mathematics coaching? Of these questions, this research study most closely aligns with the brief’s first question. Since this study explored the ways in which a coach interpreted and responded to the learning needs of teachers, we can say, in turn, this study explored the ways in which a coach interacted with teachers. Overall, this study’s findings support the current research: the coach’s practices and responses lied along a continuum from
“more-directive” (i.e. telling) to “less-directive” (i.e. assisting teaching in becoming reflective practitioners). This dissertation’s findings bolster current research and further contribute by laying forth more specific practices as they relate to what the coach attends to and to her stances.

Although examining the coach’s coaching knowledge was not part of this study, it is noteworthy to note the types of knowledge Eleanor possessed are related to the knowledge coaches need, as laid forth by current research (Anstey & Clarke, 2010; Sutton, Yopp, & Burrough, 2011; Yopp Burroughs, Sutton, & Greenwood, 2014). Because Eleanor had significant past experiences serving as a mathematics instructional coach, as a math teacher, and as one who developed and delivered professional learning experiences for teachers, she entered into her work with Tanner and Belinda at Community Middle School with knowledge of teacher practices, student learning, effective communication methods, teacher relationships, leadership, assessment, teacher development, and teacher learning. Her knowledge in these areas was critical (Sutton, Yopp, & Burrough, 2011) and served her well as she began to work with Tanner and Belinda. Especially, her knowledge in these areas helped her intentionally select stances and practices related to specific contexts.

Over the course of this study, from August, 2015 to May, 2016, the coach, Eleanor, repeatedly attended to different aspects of her work with each teacher. With Tanner, Eleanor attended to and interpreted Tanner’s lack of planning, classroom management, and content knowledge as his need for more direction from her. As stated on December 2, “So he’s the one I’m most direct with.” In her interactions with Tanner,
Eleanor always began with an open-ended coaching type question (focused on raising Tanner’s efficacy, consciousness, craftsmanship, or flexibility); however, she sometimes felt a need to adapt her practices and move towards engaging Tanner in practices intended to direct him towards specific teaching goals, an attention to his content knowledge, or his interactions with his students. With Belinda, Eleanor attended to and interpreted Belinda’s dominance over Tanner and her “cynical” views of her students as Belinda’s need to work on her teaching craft and her flexibility in how she perceived her students. Specifically, Eleanor engaged Belinda by encouraging “her to think more deeply and share more of what she’s done” (February 22, 2016) and by “modeling for [her] how to look at student work” (December 2, 2016). Overall, Eleanor adapted her coaching practices with Tanner and Belinda and her practices varied according to what she attended to in her work with each of the teachers. Taken as a whole, my research shows 1) this study’s conceptual framework is a unique and practical way to examine a mathematics instructional coach’s practices, 2) Eleanor’s decision-making practices revolve around what she attends to when working with teachers, and 3) a coach adapts her coaching practices according to her understanding of teachers’ specific needs. Furthermore, in this study, the instructional coach initially set out to engage the teachers from a coaching stance, in ways that would increase the teachers’ efficacy, consciousness, craftsmanship, and flexibility but, after attending to differences in the teachers’ needs, varied her practices by engaging teachers as collaborators or by consulting.
As a reminder, Eleanor had ten prior years of experiences as a mathematics instructional coach during the time of this study. She was well versed in mathematics content and pedagogy; in her coaching capacity she worked directly with middle school classroom teachers to improve student learning; and she offered individual, job-embedded learning for teachers. She was not afraid to be vulnerable (she collaborated, as a learner, with teachers on occasion rather than attempting to be seen as an expert) and she consciously worked on strengthening her relationships with teachers. In these ways, she strove to bolster trust with the teachers (Tschannen-Moran, 2004).

Mudzimir, Burroughs, Sutton, & Yopp (2014) suggest coaches act in both collaborative and directive roles. Eleanor’s coaching practices confirm this and, at the same time, expand upon this: Eleanor acted as a coach by mediating the teachers’ thinking; she acted as a collaborator by brainstorming with the teachers; and she acted as a consultant by boosting the teachers’ confidence, by being directive in setting goals for the teachers, and by strengthening the teachers’ content knowledge.

Also of interest is the fact that Eleanor consulted Belinda only when attempting to boost her confidence; Eleanor consulted Tanner far more often than Belinda by modeling for him how to look at student work, by sharing instructional strategy ideas, by helping him set goals, and by helping him to improve his content knowledge. Again, Eleanor’s coaching stance (coaching, collaborating, consulting) and her coaching practices (modeling, boosting confidence, sharing strategies, setting goals, improving content knowledge) can be directly tied to what she attends to and to what she notices when she works with Tanner and Belinda. From the outset, Eleanor recognizes and responds to
Belinda’s prior teaching experiences and the fact that Tanner is more of a novice. Eleanor notices Tanner does not have classroom structures in place to support student learning and he lacks knowledge of instructional strategies that will encourage students to make sense of the mathematical content. Furthermore, Eleanor perceives that Belinda draws upon her previous experiences to try to create a classroom atmosphere that encourages student learning. However, Eleanor also attends to and interprets Belinda’s attempts to create a supportive atmosphere as being limited by her own viewpoint and therefore, responds by engaging Belinda in coaching practices designed to help increase the flexibility of her perspective and the strengthening of her teaching craft.

When interpreting teachers’ learning needs, Eleanor interpreted what she attended to in order to respond to teachers by engaging them in specific practices. Although this was not directly discussed with Eleanor, the findings of this study make it clear that Eleanor did not overtly assume one stance more than another and did not use one practice more than another. As a result, I might suggest Eleanor did not treat the stances as hierarchal; in other words, Eleanor’s actions did not reflect a belief that collaborating and consulting lead to coaching or that consulting or collaborating were less important than coaching. Instead, this study’s findings show Eleanor’s practices, her ways of responding to the learning needs of teachers, were based on what she attended to. Again, as the study’s conceptual framework shows, Eleanor’s attention was sometimes directed by her previous interactions with teachers. Nevertheless, based on the study’s findings, I can conclude that Eleanor selects coaching practices based on her interpretation of the teachers’ learning needs rather than on what she feels she “should be doing.”
Eleanor does vocalize tensions between the stances she assumes with Tanner and Belinda on occasion. These voiced concerns are not numerous enough to claim Eleanor sees one stance as being more important than another, though. Rather, in these instances, even though Eleanor states she wants to coach more, she recognizes her interactions with Tanner and Belinda are contextual; she needs to enter each conversation with Tanner and Belinda as “a blank slate.” Eleanor’s attention to the learning needs of teachers shows she attempts to enter each interaction with the teachers without preconceived notions of how she would respond further bolsters the fact that she does not view the stances or practices as hierarchal.

Another consideration is Eleanor’s attention to the teachers’ perceived learning needs. Did Eleanor attend to Tanner and Belinda’s learning needs or did she enter conversations with Tanner and Belinda with ideas of how the conversation should be directed. As stated in the previous paragraph, Eleanor did state she wanted to enter each conversation with Tanner and Belinda as “a blank slate.” However, I cannot conclude this happened. Eleanor began each conversation with Tanner or Belinda with a question in an attempt to let them guide and direct the conversation. However, Eleanor also entered each conversation with ideas and memories of previous conversations and her previous ways of responding. In this way, I can only conclude Eleanor attempted to start each conversation fresh with each teacher; that Eleanor’s intention was to base her stance selection and practices based on the teacher’s current learning needs. That is not to say if and when Eleanor referenced past interactions, her practices were not “effective.” Rather, I only state that while this dissertation’s findings relate Eleanor’s practices/responses to
what she attends to, it is not always clear whether Eleanor is attending to the teacher in-the-moment or to their previous interactions.

NCTM’s most current Research Brief of coaching (which provides an overview of current mathematics coaching related literature and research) calls for further studies that explore “how coaches work with individual teachers” and that examine “what aspects of teacher-coach interactions are most productive in supporting teachers’ growth” (McGatha, Davis, & Stokes, 2015). This study provides a contribution by considering how a coach’s practices are related to her interpretations and to her stances and how a coach’s practices are adapted and differentiated when working with two different teachers. Although current research on coaching does not call for a framework to guide national and international coaching research, this study also contributes a conceptual framework that can serve as a model for further studies. If the field is to come to some common understandings of what it means to be a mathematics coach, act as a mathematics coach, and support teacher learning as mathematics coach, it would be helpful if there were a common guide that could shape our perspective works. In this way, the field can better consider the ways in which a coach’s practices and responses to teachers are differentiated and based on their interpretations.

Conclusions

Research Question One

In response to this study’s first research question (how do instructional coaches interpret and respond to the learning needs of teachers), overall findings suggest Eleanor, an experienced mathematics instructional coach, most often engaged teachers in coaching
practices that required she act as either a coach (when working with Belinda) or a consultant (when working with Tanner). These responses were made as a result of what Eleanor noticed, what she paid attention to during her interactions with the teachers, and the ways in which she interpreted those interactions. When working with Tanner, Eleanor most often commented on Tanner’s planning (or lack thereof), his classroom management style, his need to increase his content knowledge, his attention (or lack thereof) to his students, and his feelings of defeat. In response, Eleanor most often consulted Tanner. In some instances, Eleanor offered Tanner direction related to how to run his classroom: “So then I thought it might be a good idea to just give him some good ideas for that rather than having everybody come over…” (Interview, March 14, 2016). Sometimes this consulting came in the form of direct advice: “So he’s the one that I’m most direct with” (Interview, December 2, 2015) and sometimes it came in the form of nurturing: “And you know I always have to remember about those support functions. And so sometimes people need a mom. And maybe he’s young enough, maybe that’s the reason” (Interview, September 30, 2015).

When working with Belinda, Eleanor most often commented on Belinda’s dominance over Tanner, her attitude and perspective, and the ways in which she interacted with her students. As a response to this, Eleanor most often assumed the stance of a coach when working with Belinda. When operating from this stance, Eleanor phrased her questions in a way intended to increase Belinda’s flexibility (“I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective”), craftsmanship (So when I asked her for the next…how might you
approach your next review day I was trying to give her an opportunity to commit to setting up the expectation that they work, maybe some things that we had talked about”), and confidence (“I also wanted to remind them of their own ideas during our meeting yesterday. This was to build their sense of empowerment”).

Although not always directly or succinctly stated, Eleanor does allude to the reasons she consults Tanner more often and why she coaches Belinda more often. Eleanor repeatedly mentioned Tanner was only in his second year of teaching and this was his first year of teaching middle school and his first year teaching 8th grade math. On top of this, and not referenced in this study’s data collection, was the fact that Tanner was experiencing a personal family trauma during the spring semester. Eleanor also referenced she wanted to work with Belinda in a way that honored and recognized her prior years of teaching; she wanted to interact with Belinda in a way that allowed her to “drive” the conversations.

Research Question Two

In some ways, the data analysis for this study’s first research question illuminate the study’s second research question: in what ways do instructional coaches adapt their practices to the differing learning needs of teachers? Findings from the study’s first question indicate Eleanor did differentiate her practices when working with Tanner and Belinda; she used different coaching practices as she worked with them separately and even when she worked with them together in the same room (during their common planning meetings). As Table 6.1 has shown, Eleanor did not use the same practices with each teacher; and, when similar coaching practices were used, they were not used with
the same frequency. The practices she decided to use with each teacher were
differentiated based on what she attended to when interacting with the teacher.

**Contributions**

This study contributes to the existing research and literature base on mathematics
instructional coaching in two ways: 1) it elucidates the practices a coach used with
teachers with disparate teaching approaches, and 2) it used a conceptual framework new
to the existing literature base to examine how and for what reasons a coach selected
specific practices. These contributions can also be taken as one overarching contribution:
the study’s conceptual framework highlights what a mathematics instructional coach
attends to and the ways in which she then responds to teachers; in this way, the coach’s
decision-making processes are revealed. This study provides a novel approach to
analyzing the decision-making practices of mathematical instructional coaches.

**Questions Raised and Future Research**

This study investigated the following questions: 1) how do instructional coaches
make decisions about how to respond to the learning needs of teachers? and 2) how do
instructional coaches adapt their practices to the differing learning needs of teachers? As
a way to begin to address these generalizable questions, this study examined two specific
cases: Eleanor-Tanner and Eleanor-Belinda. In this section, I draw attention to additional
questions raised and the ways in which these questions have the potential to guide my
future research agenda.

**Developing Common Understandings**
To what extent does the field have a common definition and understanding of instructional coaches? A cursory search informs us that literature on numerous coaching models exists but research-based studies continue to be scarce. Without an attempt at a national and international level to understand and define a coach’s role, the practices and stances she assumes, the question posed at the beginning of this paragraph will not be answered. I am fortunate to have been invited to attend the past two national coaching conferences. During both of these events, I communicated with and learned from researchers in the field. Collaborations at this level will encourage the field to work together to refine the definition of an instructional coach and the practices she uses. Furthermore, this collaboration can extend the field’s efforts beyond a local or regional level to a national, and perhaps, an international level.

**Teacher Agency**

What coaching practices and stances does an experienced mathematics instructional coach believe increase teachers’ agency about teaching mathematics? In what ways does an instructional coach’s practices relate to teachers’ agency? I initially hoped to explore these questions as part of this research. However, I quickly realized this would add a layer of complexity to one study and that examining and attempting to understand the decision-making practices of an instructional coach could serve as a foundation for future work that investigates possible relationships between a coach’s practices and teachers’ agency. While research has shown links exist between coaching and teachers’ efficacy (Edwards, 2010), there is no research documenting possible links between coaching and teachers’ agency. This research could be seen as relevant to other
fields of study: policy related to testing, teacher accountability, and social justice. Because “teachers are seen alternatively as agents of socialization as well as change agents” (Campbell, 2012, p. 183), many teachers experience a tension between preparing students for mandated standardized tests and for engaging students in tasks that will help them explore mathematics conceptually from multiple perspectives. Research that attempts to link teacher agency to the teacher’s interactions with an instructional coach could contribute to gaps that exist in multiple research bases.

**Sustained Investigation and Inquiry**

This research investigated one coach’s practices with two 8th grade mathematics teachers over the course of one academic year. Furthermore, the data for this study were collected during the coach’s first year working in this particular school. Additional research should be conducted to explore the ways in which the instructional coach’s practices evolve over time. Over the course of the 2015-2016 academic year, Eleanor wrestled with finding appropriate ways to engage the teachers at Community Middle School in coaching because, in this new role, she was never formally introduced to the faculty. Eleanor spent a great deal of time imagining how she would work with teachers if her role were better understood. For this reason, continuing to observe Eleanor’s work with Tanner and Belinda, potentially for another year, would be advantageous; sustaining this line of research for another year has the potential to add to the study’s overall findings and solidify the study’s contributions. I suspect during the second year, Eleanor would spend much less time developing a relationship with Tanner and Belinda; much less time would be devoted to introducing and explaining her role. Additionally, this
could possibly add to (and at least fortify) the list of coaching practices Eleanor engages in and could more completely illustrate the ways in which Eleanor makes decisions about her practices.

**Multiple Cases**

Examining how another coach interprets and responds to the learning needs of teachers and then comparing those to the findings of this study would support this study and fortify the contribution to the research base. Methodologically, adding new cases that explore the same two research questions will continue to fill in gaps that exist in the field.

**Refined Analysis**

In this study, I examined what the instructional coach, Eleanor, attended to and interpreted as she worked with two teachers, Tanner and Eleanor. I coded all data (field notes, transcripts, surveys) with this in mind by pulling out pieces of data aligned to what Eleanor attended to. I then coded data according to the specific ways in which Eleanor responded to Tanner and Eleanor. Overall, I categorized the data according to Eleanor’s stances (coaching, consulting, and collaborating) and then identified how she responded to the teachers. I called these ways of responding “coaching practices.” Furthermore, I also provided examples of how Eleanor engaged each teacher with these practices. There remains a need to explore the language (verbal and nonverbal) instructional coaches use with teachers. As an example, when Eleanor was acting as a coach, she asked of Tanner, “Why might it not be feasible?” (February 28, 2016). When Eleanor acted as a consultant when working with Tanner, she stated, “So, that’s something you can do…Now I’m telling you what to do!” (February 28, 2016). In these instances, we might compare and
contrast the language choices of the coach. For example, when questioning Tanner, Eleanor used tentative language (might) to indicate there can be more than one way to consider feasibility. When Eleanor consulted, she used directive language (something you can do). Methodologically, performing a discourse analysis on the data collected for this study and from additional cases has great potential to further highlight coaching practices. This work could then be linked to teacher agency by examining the relationship between a coach’s language and teacher

**Meta-coaching**

An unintended aspect of a coach’s decision-making arose during this study: the coach’s opportunity to be meta-coached. Throughout this study, during our interview sessions, Eleanor often thought aloud about the approaches she would take and the practices she would employ with Tanner and Belinda. When I visited Eleanor early in February, we had a conversation after observing Tanner and Belinda. (I call this a conversation rather than an interview because I did not follow the semi-structured interview protocol; rather, I asked Eleanor questions specifically about her observations and how she wanted to respond to Tanner and Belinda as a result of those observations.) During that conversation, I kept my researcher perspective at the forefront of my mind and asked questions to help me address this study’s research questions. Below is part of the transcript of the conversation from February 8th.

Eleanor: …are you coaching me or are you…?

Me: No! I actually am trying to be really intentional of the questions I ask. Sometimes I feel like the line is a little blurred.
Eleanor: It does get blurred! And for me too which is a good thing because it helps me to think, you know, about my practice.

It may be specifically because of our past interactions when we worked together from 2007-2011, but in the beginning of this study, I had to make a great effort to constantly remind myself of my researcher role; because of my earlier professional experiences related to coaching (working as a Cognitive Coaching Agency Trainer), I diligently worked to set aside my subjectivities; I bracketed ideas and thoughts related to this in my field notes journal.

This blurring of the lines between researcher and coach, at least for the instructional coach, brought to forefront that, in this particular instance, the instructional coach did not receive coaching support herself. While during our interviews I asked questions about coaching practices and the adaptation of those practices, the coach used our interview time as a way to think about and reflect on her practices and her interactions with teachers; Eleanor saw her involvement in this project as a way to grow and develop professionally. In what ways do instructional coaches not involved in research projects such as this one reflect on their practices? This is a question for my future research agenda.

An unintended outcome from this study was Eleanor’s sense of my coaching her during the interviews. Although I set out to use semi-structured interviews, my interview questions more often focused specifically on the events Eleanor wanted to discuss (as related to Tanner and Belinda and the study’s research questions). At one point in time, Eleanor even asked me if I was coaching her. I responded that my role was that of a
researcher and I was asking questions because I was attempting to answer my research questions. Nevertheless, Eleanor often used our interview sessions as opportunities to think aloud about the coaching practices she would use with Tanner. She also used this time to reflect on her own coaching practices. In this section, specific instances of this, as related to Tanner, are highlighted.

“So, I’m thinking about, I mean I don’t know how I’m going to handle this. I didn’t think about it ahead of time and I guess that’s coaching, you don’t really think about – you don’t plan everything ahead. But I want, now that I’ve observed both of their review/study guide styles, to get them with me, not necessarily with me but I guess if I’m going in there if we could talk about what makes a good, successful study day” (Interview, March 14, 2016). On this day, Eleanor was wrestling with how to respond to an observation she had conducted in Tanner’s classroom. Eleanor wanted to address specific student misbehavior and Tanner’s review approach but struggled with how to do that strictly as a “coach.” Here, she demonstrates this tension. As a way to think about specific questions to ask during a follow up meeting with Tanner, she even verbalizes some of the questions she may ask and the responses she thinks Tanner will offer: “So, how do you think the lesson went? Oh, I think it’s going pretty good. I think the kids are getting it. What does getting it mean? Which probably would have been a pretty good question. You know, if I had said, what does ‘getting it’ mean? You know, and what is your evidence? So just on and on – tell me more about that. What about this kid over there? What about the ones that didn’t get it? You know, I mean all of those are important questions…But I think what I didn’t go in so – I guess I’m trying to gradually move there
and not try to go in so fast because I don’t want to scare him off” (Interview, February 8, 2016).

Even though this study was not designed to focus on meta-coaching (coaching the coach) or on the types of supports and professional learning coaches need, this is an interesting aspect of this study that should be discussed. Often, at the end of the school day, I would thank Eleanor for her time. Eleanor’s response most often was to thank me for helping her think about her coaching practices in more detail. Again, it should be noted that although it was not intended, Eleanor tended to use our interviews to help her reflect on and plan for her work with Belinda; the line between researcher and meta-coach were blurred for Eleanor. While Eleanor remarked that these conversations were immensely helpful for her, they also served as data for this study, as insight into her intentionality about her decision-making practices.

Further investigating the extent to which instructional coaches have opportunities to learn and be meta-coached could lead to additional research. Additionally, an investigation of the blurring of the lines between researcher and meta-coach could potentially become a manuscript.

Conclusion

My time in the field observing Eleanor and her work with Tanner and Belinda convinces me the field of mathematics instructional coaching could benefit from more focused and intentional preparation and support for coaches. Eleanor entered her role at Community Middle School as an experienced math coach with ten prior years serving in this capacity at other schools. If Eleanor had walked into this role with no knowledge of
or experience with coaching, I am convinced she would not have been at a point where she could intentionally select stances and practices; she would not have been as efficient. Past research has shown when teachers work with a mathematics instructional coach, student learning is improved (Edwards, 2010). Imagine what might happen if resources were pooled, a common and proven approach was taken, and coaches had access to ongoing opportunities to improve their craft.

Overall, this study sought to explore coaching as a high-leverage strategy for mathematics teacher learning by examining one coach’s practices with two different teachers. This research responded to questions in the field about the decision-making strategies of coaches by employing a conceptual framework unique to the field of instructional coaching. The conceptual framework used in this study provides a contribution to the field, in terms of considering how our work is done. The study’s findings provide a way for other researchers to appreciate some of the ways in which a coach’s responses to teachers and the ways in which a coach’s practices are linked to what her attention is drawn to when working with teachers. More research should be conducted to more fully understand the complexities of a coach’s decision-making strategies. Nevertheless, this study can serve as a jumping off point for my future research agenda as well as for the continued research of others.

Further research must be conducted that examines the relationship between mathematics instructional coaching and student achievement; student learning should remain at the forefront. To connect student learning to a coach’s practices, research should also be conducted that examines the ways in which the coach directs teachers’
attention towards a “granular approach” of examining student work and student thinking (email correspondence, March 1, 2016). Eleanor shared with me she wanted the teachers to “get in the habit of looking closely at all student processes in case misconceptions are hiding in correct answers” (email correspondence, March 1, 2016). In a way, this research parallels Eleanor’s approach with Tanner and Belinda; I have attempted to take a granular approach in examining Eleanor’s practices and in thinking about how her practices are differentiated. I will continue this work, using the same conceptual framework, as a way to continue to explore the ways in which mathematics instructional coaches shape the learning and teaching practices of teachers and the learning of students.

In Eleanor’s words (email, October 17, 2016):

I made decisions based on a number of factors including level of experience as a teacher, number of years at the school, types of struggles (management, instructional strategies, unpacking of standards, etc.). Belinda loved to try new things. She was frequently seeking new approaches to teaching the content. My coaching of her was designed to get her to focus on the impact of the strategies on her students’ understanding and refinement of her practice. Tanner often would say, ‘I just don’t know what to do, do you have any ideas?’ The different approaches felt right because they are different people, have had different experiences and are in different places in their careers.
This dissertation has sought to draw attention to “what feels right” and give meaning to the ways in which the coach’s responses are intentionally connect to her stances and what she attends to. In this way, this dissertation serves as a contribution to the field.
Appendix A

IRB Approved Consent Forms

Information about Being in a Research Study
Clemson University

Unveiling Hidden Conceptions: An Exploration of Instructional Coaching Practices

Description of the Study and Your Part in It

Dr. Nicole Bannister, along with Ms. Leigh Haltiwanger, is inviting you to take part in a research study. Dr. Bannister is a professor of mathematics education at Clemson University. Ms. Haltiwanger is a faculty member in secondary education and a doctoral candidate at Clemson University. Ms. Haltiwanger is conducting this study with the assistance of Dr. Bannister. The purpose of this research is to explore possible the extent to which instructional coaches make decisions about which practices to use and which stances to assume when working with teachers.

Your part in the study will be to let Ms. Haltiwanger shadow you at the predetermined middle school(s) you will work with. Ms. Haltiwanger anticipates being at the selected school(s) approximately two days per week. Additionally, Ms. Haltiwanger will schedule a minimum of three interviews with you. Each interview will be audio recorded. Ms. Haltiwanger will also ask that you work with her to select at least one teacher to participate in this study and then schedule a time to observe, video record, and audio record a minimum of three coaching conversations that you conduct with this selected teacher.

In addition to your normal and expected Instructional Coaching duties, it will take you approximately 15-30 hours to be part of this study.

Risks and Discomforts

We do not know of any risks or discomforts to you in this research study.

Possible Benefits

We do not know of any way that you would benefit directly from taking part in this study. However, this research may help us understand the ways that Instructional Coaches select which practices to use and which stances to assume when working with teachers.
Protection of Privacy and Confidentiality

We will do everything we can to protect your privacy and confidentiality. We will not tell anybody outside of the research team that you are in this study or what information we collect about your responses in particular. We will randomly assign you a pseudonym and will use that when we refer to you in any publications or presentations. Audio and video files will be transcribed and linked to your pseudonym. These files will be maintained in a locked file cabinet located in a locked office. All documents will be secured for a five-year period, at which time they will be destroyed.

Choosing to Be in the Study

You do not have to be in this study. You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Contact Information

If you have any questions or concerns about this study or if any problems arise, please contact Dr. Nicole Bannister at Clemson University at 864-250-6709.

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-6460 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC’s toll-free number, 866-297-3071.

Consent

I have read this form and have been allowed to ask any questions I might have. I agree to take part in this study.

Participant’s signature: ____________________________ Date: __________

A copy of this form will be given to you.
Unveiling Hidden Conceptions: An Exploration of Instructional Coaching Practices

Description of the Study and Your Part in It

Dr. Nicole Bannister, along with Ms. Leigh Haltiwanger, is inviting you to take part in a research study. Dr. Bannister is a professor of mathematics education at Clemson University. Ms. Haltiwanger is a faculty member in secondary education and a doctoral candidate at Clemson University. Ms. Haltiwanger is conducting this study with the assistance of Dr. Bannister. The purpose of this research is to explore possible the extent to which instructional coaches make decisions about which practices to use and which stances to assume while working with teachers.

Your part in the study will be to let Ms. Haltiwanger observe you as you work with the designated Instructional Coach. Ms. Haltiwanger will audio and video record a minimum of three coaching conversations that you have with the Instructional Coach. Ms. Haltiwanger may also ask to observe you as you have informal conversations with the Instructional Coach and as you teach. During these observations, she may take field notes to document her experiences.

In addition to your normal and expected teaching duties and work with the Instructional Coach, it will take you approximately 1-2 hours to be part of this study.

Risks and Discomforts

We do not know of any risks or discomforts to you in this research study.

Possible Benefits

We do not know of any way that you would benefit directly from taking part in this study. However, this research may help us understand the ways that Instructional Coaches select which practices to use and which stances to assume when working with teachers.
Protection of Privacy and Confidentiality

We will do everything we can to protect your privacy and confidentiality. We will not tell anybody outside of the research team that you are in this study or what information we collect about your responses in particular. We will randomly assign you a pseudonym and will use that when we refer to you in any publications or presentations. Audio and video files will be transcribed and linked to your pseudonym. These files will be maintained in a locked file cabinet located in a locked office. All documents will be secured for a five-year period, at which time they will be destroyed.

Choosing to Be in the Study

You do not have to be in this study. You may choose not to take part and you may choose to stop taking part at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study.

Contact Information

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Consent

I have read this form and have been allowed to ask any questions I might have. I agree to take part in this study.

Participant’s signature: __________________________________________ Date:
____________

A copy of this form will be given to you.
Appendix B
Coach Semi-Structured Interview Protocol

Pseudonym: Date/Time: Location:

Thank you for agreeing to meet with me today. I am going to ask you some questions about your role as a mathematics instructional coach. There are not right or wrong answers. If you’re not sure how to answer a question, that’s okay; you can just state, “I don’t know.” Also, please feel free to stop me at any time and ask me questions. If you become uncomfortable at any time, you can stop me and tell me that you do not want to continue.

Semi-structured Interview Questions

1. How would you describe your relationship with the mathematics teachers?
2. What are some things that you do to help teachers consider and then implement new teaching techniques?
3. What are some things that you have done to help teachers continue using these techniques over sustained periods of time?
4. What do you do to help teachers reflect on their learning?
5. What do you think is the relationship between your coaching and changes in teacher practice?

I want to shift gears slightly now and ask you some questions specifically about your coaching practices. Again, there is no right or wrong answer. If you’re not sure how to answer a question, that’s okay; you can just state, “I don’t know.” Again, please feel free to stop me at any time and ask me questions or let me know if you are uncomfortable and do not wish to continue.

6. How do you make decisions about paraphrasing?
7. How do you make decisions about the types of questions to ask teachers?
8. How do you determine which coaching techniques work best with different teachers?
9. What are some ways you differentiate your coaching when working with different teachers?
10. How do you know when a particular coaching technique is working or is not working? (in the moment, during the coaching conversation)
11. How do you know when your coaching has led to changes in teachers’ practices?
12. What changes in teachers’ practices do you believe are most important?
Appendix C

Instructional Coach Survey

Background and Formal Training
1. How long have you been a mathematics coach?

2. How long have you been in your current position?

3. How many years have you been an educator? Other than coaching, what educational positions have you held?

4. What degrees have you earned and what are the major emphasis areas of these degrees?

5. What additional certifications do you hold?

6. What type of coaching training and support have you had in the past? When did the training take place?

Coaching Assignment
7. What is your current title?

8. What best describes your current role as a coach? What are some of your specific job duties and responsibilities related to your role?

9. What other coaching titles exist in the school(s)?

10. What were some things that you or others did at the beginning of the school year to inform school administrators of your role and duties? What continues to be done?

11. What does a typical work week look like for you?

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12. What does a typical coaching session look like?

13. In what ways does your work at the schools compare with the job you have been charged with and/or envisioned?

14. Related to coaching, what are some successes you’ve had so far this year? To whom/what do you attribute those successes?

**Coaching Training and Professional Development**

15. What books, articles, and/or literature influences your instructional coaching work?

16. How often do you meet with other instructional coaches? What is the nature of these meetings?

17. What additional comments might you like to add?

*Questions 1-4, 6, 8, 12, and 14 are adapted from Mudzimiri, et al. (2014). A look inside mathematics coaching: Roles, content, and dynamics. Education Policy Analysis Archives, 22 (53).*
Appendix D
Teacher Semi-Structured Interview Protocol

Pseudonym: Date/Time: Location:

Thank you for agreeing to meet with me today. I am going to ask you some questions about your relationship with the mathematics instructional coach that you have worked with this year. I will record the questions that I ask and your responses. The audio file will be transcribed verbatim; no one will hear your responses. Additionally, I will only refer to you by your pseudonym. There are no right or wrong answers. If you’re not sure how to answer a question, that’s okay; you can just state, “I don’t know.” Also, please feel free to stop me at any time and ask questions. If you become uncomfortable at any time, you can stop me and tell me that you do not want to continue.

Semi-structured Interview Questions
1. How many years have you worked as a teacher?
2. How many years have you been in your current position at this school? Have you taught other grade levels and/or courses at this school in the past?
3. Have you worked with a mathematics instructional coach before this school year? If so, for how long and in what capacity?
4. How often do you meet with the coach? In what ways do you meet? Where? Who initiates these meetings?
5. How would you describe your interactions with the mathematics instructional coach this year?
6. What are some things that you have done to build a relationship with the coach this year? What are some things that you think she has done to build this relationship?
7. On a scale of 1-10 (1=low; 10-high), how comfortable are you interacting with the mathematics instructional coach? How did you determine this ranking?
8. When you meet with the coach, what are you most conscious of about yourself? About her?
9. How would you classify the coach’s practice? In other words, what are some specific things she engaged you in? How did she engage you? What do you think might be some reasons for her specific actions?
10. Are there other factors that contribute to the relationship you have built with the mathematics instructional coach? If so, please describe those factors.
11. What are some goals you have as you work with the coach? In other words, how do you expect your interactions with the coach to benefit you and your work?

12. What changes in your practice (instructional methods or strategies, assessment, etc.) did you make as a result of working with the mathematics instructional coach?

13. You will have an opportunity to work with this same mathematics instructional coach next year. What do you hope remains the same? What do you hope might change?

14. What other comments would you like to share?
# Dissertation Data Collection: Audit Trail

## Eleanor

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<tr>
<td>1.20.15</td>
<td>I emailed David to ask if he knew which schools I would be able to work with in the fall of 2015. He informed me that they would be the four feeder middle schools to a local HS (Community Middle School is one of those feeder schools). The grant had not yet been awarded.</td>
<td>No action taken</td>
</tr>
<tr>
<td>2.2.15</td>
<td>I emailed David to ask how many coaches would be working with the four schools and for past data associated with their project.</td>
<td>David sent me their past coaching data on 2.2.15</td>
</tr>
<tr>
<td>3.30.15</td>
<td>David emailed Tommy (copied me) to inform/remind her that I will be partnering with them in order to collect data for my dissertation. Tommy responded to remind David that he had already spoken with her about this.</td>
<td>No action taken</td>
</tr>
<tr>
<td>7.10.15</td>
<td>I emailed David an updated version of my abbreviated proposal (because I emailed my committee my final proposal on this day)</td>
<td>David sent this to Tommy and I work with him; Tommy said that he would be the “quickest path to the right person in school district and with Public Education Partners”.</td>
</tr>
<tr>
<td>7.13.15</td>
<td>Email from David to Eleanor: his intent is to make my research part of their internal evaluation</td>
<td>No action taken</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>8.17.15</td>
<td>IRB Approval granted from University</td>
<td></td>
</tr>
<tr>
<td>8.19.15</td>
<td>Meeting with Sandra, 2:30, at UCG – Sandra had met with Jeff regarding this project – this is the first time that Sandra expressed concern about my moving forward – he was worried that the schools would be overwhelmed with another adult in the school. He was also concerned about my timeline – suggested that it may be more appropriate to work with the teachers starting in the spring of 2016. I convinced Sandra that I should be allowed to move forward as long as Tommy and Eleanor felt comfortable with the pace.</td>
<td></td>
</tr>
<tr>
<td>8.20.15</td>
<td>I emailed Eleanor information about my proposed research (“formal email”) – after obtaining Sandra’s “consent”</td>
<td></td>
</tr>
<tr>
<td>8.31.15</td>
<td>Eleanor, 1st interview; researcher office (38 minutes)</td>
<td></td>
</tr>
<tr>
<td>9.21.15</td>
<td>I emailed Eleanor to ask to schedule her second interview</td>
<td></td>
</tr>
<tr>
<td>9.30.15, 1:00pm</td>
<td>Eleanor, 2nd interview; first time at Community Middle School (46 minutes)</td>
<td></td>
</tr>
<tr>
<td>10.1.15</td>
<td>Email from Sandra requesting an update</td>
<td></td>
</tr>
</tbody>
</table>

8.17.15: IRB Approval granted from University
8.19.15: Meeting with Sandra, 2:30, at UCG – Sandra had met with Jeff regarding this project – this is the first time that Sandra expressed concern about my moving forward – he was worried that the schools would be overwhelmed with another adult in the school. He was also concerned about my timeline – suggested that it may be more appropriate to work with the teachers starting in the spring of 2016. I convinced Sandra that I should be allowed to move forward as long as Tommy and Eleanor felt comfortable with the pace.

8.20.15: I emailed Eleanor information about my proposed research (“formal email”) – after obtaining Sandra’s “consent.”

8.31.15: Eleanor, 1st interview; researcher office (38 minutes)

9.21.15: I emailed Eleanor to ask to schedule her second interview

9.30.15, 1:00pm: Eleanor, 2nd interview; first time at Community Middle School (46 minutes)

10.1.15: Email from Sandra requesting an update

I notified Sandra that I had already conducted two interviews with both Terrie and Eleanor; he said that I should continue, following Tommy
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.20.15</td>
<td>I emailed Eleanor to ask to schedule a school visit.</td>
</tr>
<tr>
<td>10.23.15</td>
<td>Eleanor responded via email to let me know that her brother had been in a serious car accident and that now was not a good time but that she would be in touch with me at a later date to schedule a visit.</td>
</tr>
<tr>
<td>11.3.15</td>
<td>I emailed Eleanor. I shared that I hoped her brother’s recovery was going well and that when she was ready to schedule our visit, she should email me.</td>
</tr>
<tr>
<td>11.4.15</td>
<td>Eleanor responded to my email by asking if I could send her the “administrator participant form.”</td>
</tr>
<tr>
<td>11.4.15</td>
<td>I responded that this particular form only needed verbal consent.</td>
</tr>
<tr>
<td>11.4.15</td>
<td>Eleanor responded to my email by stating that she would speak with the administrator at Community Middle School and be in touch with me again soon.</td>
</tr>
<tr>
<td>11.6.15</td>
<td>Sandra emailed me and copied the ELA instructional coach from Community Middle School. Sandra wanted to introduce me and let the ELA coach that I may also interview/work with them.</td>
</tr>
<tr>
<td>11.6.15</td>
<td>ELA coach from CMS replied to my email and we scheduled an interview.</td>
</tr>
<tr>
<td>11.13.15</td>
<td>Eleanor emailed Sandra and I to share her response from the Community Middle School principal: as long as the school district approves of my research, I am welcome to visit Eleanor and the teachers in the school</td>
</tr>
<tr>
<td>11.13.15</td>
<td>Sandra said that she would reach out to the district. I shared research documents with her via email that she could share with the district office staff.</td>
</tr>
<tr>
<td>11.18.15</td>
<td>Sandra emailed me and asked that I call her.</td>
</tr>
<tr>
<td>11.18.15</td>
<td>I called Sandra as soon as I received the email. Sandra shared with me.</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
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<tr>
<td>------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11.19.15</td>
<td>I emailed Eleanor to let her know that I would have to complete the district’s research proposal request before we could arrange my first official visit to Community Middle School.</td>
</tr>
<tr>
<td>11.23.15</td>
<td>I submitted the school district’s research proposal request, with a letter of support from my committee chair. I also sent the relevant documents to Sandra.</td>
</tr>
<tr>
<td>11.25.15</td>
<td>Eleanor emailed me to request that we schedule her third interview.</td>
</tr>
<tr>
<td>12.2.15</td>
<td>Eleanor, 3rd interview; researcher’s office (48 minutes)</td>
</tr>
<tr>
<td>12.11.15</td>
<td>I emailed Sandra to ask about my research proposal request to the school district.</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>12.11.15</td>
<td>I received an email from a school district representative letting me know that my research request had been granted.</td>
</tr>
<tr>
<td>12/16.15</td>
<td>Eleanor replied to my email. We agreed that I would begin my visits to Community Middle School after January 25th and that I would come on Mondays.</td>
</tr>
<tr>
<td>1.4.16</td>
<td>I sent Eleanor a reminder email to let her know that I would begin my visits on Monday after January 25th.</td>
</tr>
<tr>
<td>1.11.16</td>
<td>I sent Eleanor the Coaching Survey (via email) that I created.</td>
</tr>
<tr>
<td>1.24.16</td>
<td>Eleanor emailed me apologies for not sending the Coaching Survey yet. She said that she was working on completing the form and should be able to send it to me soon.</td>
</tr>
<tr>
<td>1.31.16</td>
<td>I emailed Eleanor to remind her that I would be at Community Middle School tomorrow (2.1.16).</td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
</tr>
<tr>
<td>--------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>2.1.16</td>
<td>First “official” visit to Community Middle School (second visit)</td>
</tr>
<tr>
<td></td>
<td>(3.5 hours)</td>
</tr>
<tr>
<td>2.8.16</td>
<td>Second visit to Community Middle School (3.5 hours)</td>
</tr>
<tr>
<td></td>
<td>Eleanor, 4(^{\text{th}}) interview, CMS (28 minutes)</td>
</tr>
<tr>
<td>2.22.16</td>
<td>Third visit to Community Middle School (3.5 hours)</td>
</tr>
<tr>
<td></td>
<td>Eleanor, 5(^{\text{th}}) interview, CMS (22 minutes)</td>
</tr>
<tr>
<td>2.29.16</td>
<td>Fourth visit to Community Middle School (4.5 hours)</td>
</tr>
<tr>
<td></td>
<td>Eleanor, 6(^{\text{th}}) interview, CMS (30 minutes)</td>
</tr>
<tr>
<td>3.1.16</td>
<td>Eleanor send me a long email with a rationale for some of her work.</td>
</tr>
<tr>
<td></td>
<td>During our time together on 2.29.16, I asked her questions that she</td>
</tr>
<tr>
<td></td>
<td>continued to think about; she emailed me her responses.</td>
</tr>
<tr>
<td>3.14.16</td>
<td>Fifth visit to Community Middle School (4 hours)</td>
</tr>
<tr>
<td></td>
<td>Eleanor, 7(^{\text{th}}) interview, CMS (3 parts, total of 52 minutes)</td>
</tr>
<tr>
<td>3.18.16</td>
<td>I emailed Sandra to ask if I could attend an upcoming meeting</td>
</tr>
<tr>
<td></td>
<td>between her, the coaches, and the new external evaluators.</td>
</tr>
<tr>
<td>3.21.16</td>
<td>Sixth visit to Community Middle School (4 hours)</td>
</tr>
<tr>
<td>3.24.16</td>
<td>“PEP Principal Meeting Debrief”/meeting with external evaluators</td>
</tr>
<tr>
<td></td>
<td>(1.5 hours)</td>
</tr>
<tr>
<td>4.15.16</td>
<td>Submitted IRB amendment to include teacher interviews</td>
</tr>
<tr>
<td>4.17.16</td>
<td>I emailed Eleanor to ask if I could interview Tanner and Belinda</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>---------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.4.16</td>
<td>Seventh visit to Community Middle School (3 hours)</td>
</tr>
<tr>
<td></td>
<td>Tanner and Belinda, 1&lt;sup&gt;st&lt;/sup&gt; interview, CMS (33 minutes)</td>
</tr>
<tr>
<td>7.23.16</td>
<td>I emailed Eleanor: member checking of stances, practices, and cross-case analysis.</td>
</tr>
<tr>
<td>10.13.16</td>
<td>I emailed Eleanor questions about her decision-making practices.</td>
</tr>
<tr>
<td>10.17.16</td>
<td>Received email response from Eleanor regarding her decision-making practices.</td>
</tr>
</tbody>
</table>

Interviews: 297 minutes, 4 hours and 57 minutes

Observations: 27 hours, 30 minutes
## Appendix F

Participants and Those Associated with Coach’s Role

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eleanor</td>
<td>Mathematics Instructional Coach, Community Middle School</td>
</tr>
<tr>
<td>Tanner</td>
<td>8\textsuperscript{th} Grade Mathematics Teacher, Community Middle School</td>
</tr>
<tr>
<td>Belinda</td>
<td>8\textsuperscript{th} Grade Mathematics Teacher, Community Middle School</td>
</tr>
<tr>
<td>Susan</td>
<td>ELA Instructional Coach, Community Middle School</td>
</tr>
<tr>
<td>Wendi</td>
<td>District Title I Mathematics Coach</td>
</tr>
<tr>
<td>David</td>
<td>Associate Director, Funding Agency for Eleanor and Susan</td>
</tr>
<tr>
<td>Sandra</td>
<td>Executive Director of State Agency that employees Eleanor</td>
</tr>
</tbody>
</table>
## Appendix G

## Codebook

<table>
<thead>
<tr>
<th>Code</th>
<th>Sub-code</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attend and Interpret</td>
<td></td>
<td>What the coach focuses their attention on and for how long; coach also is able to notice where their attention is not needed and, again, for how long. The ways in which the coach interprets what they see and hear, relating observed events to abstract categories and characterizing what they see in terms of familiar episodes; the ways in which the coach makes sense of specific coaching events.</td>
<td>Um, one of the teachers, the one that I’m thinking that she’s really ready to grow, ready to grow to the next level. I want to be careful to think about her state of mind and um, I think she has high consciousness and she has high efficacy, I think.</td>
</tr>
<tr>
<td>Tanner</td>
<td></td>
<td>The ways in which the coach attends to Tanner; information/events that the coach attends to and interprets as it relates exclusively to Tanner.</td>
<td>And I think he’s one of the ones that was masking his lack of understanding with that behavior...</td>
</tr>
<tr>
<td>Belinda</td>
<td></td>
<td>The ways in which the coach attends to Belinda; information/events that the coach attends to and interprets as it relates exclusively to Belinda.</td>
<td>...but it’s like to help her see another perspective other than her, I don’t mean this in a harsh way, her middle class way.</td>
</tr>
<tr>
<td>General</td>
<td></td>
<td>The ways in which the coach attends to and responds to teachers, in general; specific to teachers that are not Tanner or Belinda.</td>
<td>So when I hear them asking themselves questions that I typically ask, then I know that it’s working.</td>
</tr>
</tbody>
</table>

193
<table>
<thead>
<tr>
<th>Respond</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The ways in which the coach chooses to respond to a teacher/teachers during a coaching event. The coach’s responses are based on the ways in which they attend to and interpret the event. The ways that the coach responds to events, in turn, shape the event.</td>
<td>I may need to be careful about how I question you. I may need to give you more wait time or are you nervous about wait time. Because if you think you’ve done something wrong. So, just learning the different personalities and what drives them crazy and what supports them. It’s going to be different for each one.</td>
</tr>
<tr>
<td>The ways in which the coach responds to Tanner (nonverbal, paraphrases, questions)</td>
<td>So he’s the one that I’m most direct with.</td>
</tr>
<tr>
<td>The ways in which the coach responds to Belinda (nonverbal, paraphrases, questions)</td>
<td>I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective.</td>
</tr>
<tr>
<td>The ways in which the coach responds to groups of teachers or specific teachers, not Tanner or Belinda</td>
<td>And I try to use with everybody, evidence and data. This is what you said and what I’ve observed, you know, how does that compare. I think data kind of drives a lot of it. Whether it is data based on a conversation or data based on an observation of student performance data. All of that goes into it. Taking people back to that, referring them to that helps to make, determine the approach you take with the teacher.</td>
</tr>
</tbody>
</table>
So, I sent a few questions focused on some common student errors to guide their thinking along those lines.
Appendix H

Round Four of Coding: Eleanor’s Attending to and Responding to Tanner and Belinda

And then today when I walk in he was in his classroom when he should have been planning with his partner. And so I walked in and I said, oh you guys planning today? And he was like, I’m trying to check my email. You know, it was like he was about to choke.

I know when I go in with him it’s going to be something crazy. And I’m going to really have to pin him down on some things and say like, for the longest, it’s like where’s your starter.

Plus my knowledge of the fact that he doesn’t return stuff to kids on a timely basis.

And I’ve already figured out he is, you know…he’s just kind of haphazardly doing stuff.

So, it’s like y’all call Ms. Eleanor, I’m busy over here! So that’s good! It’s like we’re partners. And that’s good and they know and it’s important to me that they know that I want what’s best for his students. And I don’t have all the answers and so we’re partners in finding what that is and we’re working towards it.

Um, they would probably start off similar and then they would diverge but it would be based on what she says back.

You know, just saying this is what categorical data is, this is what this means because I don’t know if he’s going to take the time on his own because I’ve seen him just get up in the classroom and start saying stuff that was wrong.

Mentally they are in different places so sometimes his body language is – I don’t know, maybe I’m not good at assigning, interpreting body language, but his is so often seems to be, I’m a loser.

I could tell when we talked during their planning period on Monday that they were completely blinded by their despair and hopelessness based on what they were saying, “I’m overwhelmed,” “they are just not getting any of it.” Their body language (heads down, heads shaking, facial expressions) were also indicators of disappointment and frustration.

I was just trying to think could I have done something differently or I was asking myself, why did I say this or that. Like I was reliving what was happening when I was sitting there. And it was really interesting just watching him kind of pecking away between me asking him a question and him thinking, how do I get into this think? I’m like, you’re responding to my question with another question that’s totally not related.
| **Tanner’s readiness** | He is not as open to that but he’s open to trying it. He’s like, oh I think I’ll try that one day. Will he ever? I don’t know.  
And I think he’s one of the ones that was masking his lack of understanding with that behavior because I stood there with him and I walked him through it step by step and we would talk about it.  
So I – since that’s what I kind of like to do anyway, you know, just sharing what I know or what I’ve learned or sharing ideas. I don’t feel guilty doing that with him or I don’t think that it’s really breaking the coaching much because he’s open and he’s like a clean slate. |
| **Eleanor’s attention to Students** | Eleanor is standing in the back of the room, leaning on the counter, eyeing the room, occasionally jotting down notes on her note pad.  
Eleanor stands in the back, with her back to Tanner’s desk and jots down some notes. A student raises his hand. Eleanor goes to talk to him. She bends at the waist so that their heads are at level heights, points to his computer screen, and speaks to him quietly. She stays with him for several minutes.  
Eleanor is mostly walking around. I don’t notice her jotting as many notes as she did in Belinda’s room.  
Eleanor is still watching – looking at the ppt. Her left hand is in her jean jacket pocket. Her brow is furrowed; she is frowning.  
And so, he doesn’t really remind me of my son-in-law but I feel like I can talk to him and be real. |
| **Eleanor’s general perspective of Tanner** | I think the consciousness is, yeah because I don’t think you can set – you can’t set a goal if you don’t know, if you don’t have – of all the goals that you can set in teaching, you know, because you can have a classroom management goal, you can have an instructional goal, just a bunch of things you can have – he doesn’t have any of them. He doesn’t even seem to be aware that they all exist.  
He was, to me, to be honest, I don’t even think he’s capable of thinking at this time. |
Planning – Coaching (Craftsmanship)

As so for him I’m thinking we need some long term planning strategies. Some strategies that he can get ahead.

Helping him get his structure and everything in place. I think that’s what he needs.

So you know, I have the time, I can be in there and so just helping him get set up. Even if it’s just one little things. That’s what I started out thinking.

We’re just going to get these warm-ups going, we’re going to get this classroom procedure. I sent him stuff for him to process and to consider just that first 5 minutes of class. You know, how do we get that and how much more smoothly things would go. He hasn’t implemented it yet. So…

And you know I always have to remember about those support functions. And so sometimes people need a mom. And maybe he’s young enough, maybe that’s the reason.

So he’s the one that I’m most direct with.

It was just like every day, where’s your starter? And he was like…oh…and I was like really….do you want me to write you some? And so that kind of thing, like I can help you with that.

Consulting

So I find myself trying to make a goal for them. Like with Tanner – your goal is going to be…getting his classroom started in an orderly fashion every day. We’re going to focus on starting and ending.

Well sometimes when I was making statements is because I was thinking. Then I was trying to decide what do I want to say and what do I want to do; what – and not that I am supposed to be guiding him – but sometimes I sort of feel that responsibility. Because I don’t know if he has a good way to guide himself or a good way to determine if what he’s doing is effective or he’s just doing stuff. And so, sometimes I guess I fear getting too intense too fast. Or him feeling uncomfortable, so I may make a statement and I’m thinking this is probably, this is just way out there.
So then I thought it might be a good idea to just give him some good ideas for that rather than having everybody come over, either have a row at a time or why not just have a kid walk around with a box.

Yeah, I feel like – him – he needs some good consulting in that whole management piece. Because there are so many little tiny things that if they were tweaked – it would run so much better. Tanner: “It’s still murky to me.” Eleanor: “They’re going to need your counsel.” Eleanor: “…okay. Let me tell you what I did. Tanner is excited to hear about what Eleanor found; his voice inflection went up.

She gives him some suggestions: when/when not to pre-teach vocabulary and the potential of using a word wall.

But it was hard because with him, he’s very welcoming of consulting and he doesn’t have a lot; he even said, I don’t know a lot.

So one of the things I try to do is just really talk to him about what this means in mathematics or really discuss the content or maybe it’s not really even a discussion maybe it’s just me talking.

You know, and both of them ask me, you know, what do you think? Well from him I felt like he was asking me because he didn’t want to think.

Eleanor: “Let me know what you want me to do. Give me a job!”

I feel like there are some things that need to be addressed like not attending to your students, not attending to their needs.

<table>
<thead>
<tr>
<th>Perceived familiarity – GENERAL/ OVERVIEW</th>
<th>He’s one of those people I don’t feel like I have to be too careful with how I say stuff. I can just say well, how are the warm-ups going? How are your class starters going? Are the kids getting in here ok?</th>
</tr>
</thead>
</table>

So one thing for me is to help him get grounded and I’d like to keep him in the field because he has a good, um, a very pleasant demeanor.

So I think spending a lot of time with him, talking with him, asking him a lot of questions. So what are some reasons, what is this
<table>
<thead>
<tr>
<th><strong>Increasing consciousness - COACHING</strong></th>
<th>connecting to, what are the kids going to walk away knowing. Those questions he doesn’t ask himself.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Holding accountable - CONSULTING</strong></td>
<td>So then I thought well, so I said, well how about the papers that you took up? Are you going to, how are you going to use those or what were they for? I wanted to know what he was going to do with them, you know. And so that’s why I asked him how many papers did you receive back. Because I wanted to know! Not all those kids turned in a paper. And so, as the conversation went on I was hoping that he would say well, those kids that didn’t, you know, rather than saying, he never turns in anything, the two Spanish girls never turn in anything, so that’s two, he never turns in anything because he’s a repeater, and so all of these things but so they didn’t turn anything in.</td>
</tr>
<tr>
<td><strong>Relationship building - COACHING</strong></td>
<td>Well, I’m going to keep going back. And I’m going to say, since our last conversation about that in particular I think it was maybe last Wednesday….so what did you decide about where they’ll do their warm-ups or did you decide to put them in a notebook? Because this is what he was going to do. So I need to have a follow-up – what did you decide. I’m not going to let it go. You know, I’m not trying to be his mom but I know that this is going to help him. It’s going to help his kids.</td>
</tr>
<tr>
<td><strong>Meta-coaching</strong></td>
<td>So that’s why I asked him how many papers did you receive back. Because I wanted to know! Not all those kids turned in a paper. And so, as the conversation went on I was hoping that he would say well, those kids that didn’t, you know, rather than saying, he never turns in anything, the two Spanish girls never turn in anything, so that’s two, he never turns in anything because he’s a repeater, and so all of these things but so they didn’t turn anything in.</td>
</tr>
<tr>
<td><strong>Relationship building - COACHING</strong></td>
<td>And so, I guess I feel so hesitant. I stop myself before I say something stupid. Not really stupid but he’ll say something like this kid over there and I’ll come in about what I know about that kid over there. But I guess the statements are kind of scattered in to keep the moment not so – I don’t want him to feel like I’m so – being judgmental or harsh. But I’ve got to find a way -</td>
</tr>
<tr>
<td><strong>Meta-coaching</strong></td>
<td>So, I’m just going to…the way this could have gone. So, how do you think the lesson went? Oh, I think it’s going pretty good. I think the kids are getting it. What does getting it mean? Which probably would have been a pretty good question. You know, if I had said, what does getting it mean? You know, and what is your evidence? So just one and on – tell me more about that. What about this kid over there? What about the ones that didn’t get it? You know, I</td>
</tr>
</tbody>
</table>
mean all of those are important questions…But I think what I didn’t

So, I’m thinking about, I mean I don’t know how I’m going to

handle this. I didn’t think about it ahead of time and I guess that’s

coaching, you don’t really think about – you don’t plan everything

ahead. But I want, now that I’ve observed both of their review/study

guide styles, to get them with me, not necessarily with me but I
guess if I’m going in there if we could talk about what makes a
good, successful study day.

Collaborating

She suggest that he come up with a list of projects (“we can
brainstorm,”) and if they want to create or come up with a topic, [the
students] have to get it approved by him.

When Tanner asked about the meaning of a specific standard,
Eleanor says, “Let’s read it…” then they discuss how to teach that
standard.
Eleanor records students’ strengths identified by Tanner and their
weaknesses. She writes down what he says on the blank side of the
back of one of her documents.

So I think it’s good because some of the standards are really
complex. And I think it helps them to see that even I don’t have all
the answers. So I think it helps them to see that I’m here to struggle
right along with them. In unpacking these things and in being a
learner. So I think it’s a positive thing.

At some point I know I need to start – he knows something and I
need to start pushing his thinking in that way.

Tanner: “I really don’t know. I’m struggling. I don’t know. What
would you do?” Eleanor: “Well, they’re your kids…”

So sometimes I feel the need to pull him out, to draw him out to try
to see what he’s thinking about and so often he’ll say you know, I
agree with [Belinda].

So I have to be really conscious of trying to get them to turn the page
and not stay there. And so, I try to maybe change their point of view
or get them to think.
Eleanor arrived after about 2-3 minutes and started the planning meeting with Tanner by giving him a one page list of “As you Reflect” and “As you Begin to Plan” questions. She told Tanner that one of her goals is to build capacity and to help him be more reflective. She also had a copy of the questions for me. She asked him to look over the questions while she ate her lunch.

Today when we started I wanted him to reflect and the reason I gave them some guiding questions for their reflection and planning was because I want them to start asking themselves those questions. So I thought, let’s just be very transparent. You know we’re going to keep going back to these over time but also I wanted him to read.

Eleanor: “Sometimes you need a pity party! But you have a couple of things you’re going to do. An item analysis, DCR’s, a survey, break it down by raw scores to see if there’s any progress.” [She paraphrases what IS in their control – is she also trying to boost their confidence?]

I also wanted to remind them of their own ideas during our meeting yesterday. This was to build their sense of empowerment – these were their ideas! And although they did not ask me for support with them, I believe that it is easy to forget commitments in the midst of “the noise.”

So if I were an administrator and I observed this class I would be doing a whole lot different than my role because as an administrator I would expect you to show up mentally and physically.

What I would like for them to walk away with is some things in their minds about during a review, because today we’re specifically talking about that, what are some things the teacher should be doing, what are some things the student should be doing? And even to the point, what are some things the teacher should have done ahead of time; before, during, and after.

<table>
<thead>
<tr>
<th>Intentionality - COACHING</th>
<th>There are so many things I just keep – I just hold – for future conversations. Because he can’t focus on everything at one time.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questioning coaching practices – META-COACHING</td>
<td>You know, I’m not – I should have stood beside him longer so I could see what he was doing.</td>
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</tbody>
</table>
**Encouraging - CONSULTING**

And so the mother in me wants to try to cheer him up and try to say, you know, it’s not so bad, what are some things that we can do.

She said she “just needs to have a conversation with him.” I asked, “What would you want to say during that conversation?” Eleanor: “That it can be better; that it doesn’t have to be this way.”

**Modeling - CONSULTING**

So I’m thinking even in that, I’m modeling for them how to look at student work. What you should be looking for, not just at the bottom. Sometimes it’s just little tiny things in the middle of a process. So I feel like that’s still coaching even though it’s kind of a sneaky way, I guess.

**Nonverbal responses**

She is listening to him intently (eye contact, head nods, mmhmmmm….., moves her upper body forward towards him, both feet flat on the floor, hands in her lap, head tilted).

Eleanor: “So, what are some indicators they were engaged?” (turns whole body towards him, chin in left hand, elbow on the table).

Eleanor: nodding, “exactly,” “okay,” “yeah,” head nods, makes eye contact, smiles

As she thinks, her eyebrows go up; glasses in right hand, moving around; glasses in mouth; one hand pointing to paper, tapping while she is talking about the project. She’s leaned back in her chair, mostly her body is turned toward him.

Tanner sits in the student desk and Eleanor sits in another student desk. She turns it towards Tanner and Belinda.

Eleanor sits at a student desk beside Tanner. She turn the desk towards him, both of her feet are flat on the floor, her note pad and pen are on the desk, her arms are crossed on the desk top, she makes eye contact, smiles and laughs some.
**Attending: Belinda**

<table>
<thead>
<tr>
<th>Belinda’s readiness</th>
<th>She’s really open to asking me for an idea. She’s open to implementing it and reflecting on it all at the end.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>With her, when she came in she had some ideas already.</td>
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<td></td>
<td>So it is different when I am talking with her because she’s bringing ideas.</td>
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<td></td>
<td>So, fortunately, she’s very receptive.</td>
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<tr>
<td>Belinda’s attitude</td>
<td>The think I have to think about with her is that she can become…I guess I’m going to use the word cynical.</td>
</tr>
<tr>
<td>Belinda’s perspective</td>
<td>…but it’s like to help her see another perspective other than her, I don’t mean this in a harsh way, her middle class way. The way you raise your children, these children were not raised that way. So they don’t have anybody at home saying let me see your homework, you know. So I try to ask her questions to just try to kind of make her think – see the other side of things. So I have a totally different mindset.</td>
</tr>
<tr>
<td>Belinda’s Actions</td>
<td>Um, they would probably start off similar and then they would diverge but it would be based on what she says back.</td>
</tr>
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<td></td>
<td>I think their body language is certainly sending different messages and I think the reason is because they are different people.</td>
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<td></td>
<td>I could tell when we talked during their planning period on Monday that they were completely blinded by their despair and hopelessness based on what they were saying, “I’m overwhelmed,” “they are just not getting any of it.” Their body language (heads down, heads shaking, facial expressions) were also indicators of disappointment and frustration.</td>
</tr>
<tr>
<td>Eleanor’s attention to students</td>
<td>Eleanor stands in the back watching, taking notes on a note pad. Belinda is doing a test review. Eleanor wants to see what the kids actually know.</td>
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<tr>
<td></td>
<td>We left. As we walked down the hall, Eleanor told me that she was collecting data on who and the number of students responding to her questions and that she noticed that as Belinda walked around and called on students by name, more students responded.</td>
</tr>
</tbody>
</table>
Responding: Belinda

I told her, I love algebra! That’s why I keep coming! She said, oh, I know! I can tell!

…just building her confidence and complimenting her on things that she’s done well, even in, not an “attaboy” kind of way, but if I say this was good because, you know, it was an efficient way to do it.

I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective.

So I had to make sure that I encouraged her thinking and not start telling her all the stuff we had already talked about.

Coaching (relationship building; increasing efficacy, flexibility, craftsmanship)

And so a lot of the times when we are together, the three of us, she’s bringing forth ideas and I’m encouraging her, I’m trying to encourage her to think more deeply and share more of what she’s done and talk about how did it work with her other kids and things like that, and wait before I interject or try to ask a questions that may make her thing about making her idea clearer or more appropriate for the situation or asking her something about the standards – does that, when you use that idea does it align with this particular standard in the same way as you used it before.

So when I asked her for the next…how might you approach your next review day I was trying to give her an opportunity to commit to setting up the expectation that they work, maybe some things that we had talked about.

So I have to be really conscious of trying to get them to turn the page and not stay there. And so, I try to maybe change their point of view or get them to think.

I think we should talk you know, maybe her and I would talk about it together ahead of time. Like, what do you think a good lesson looks like? What is the teacher doing, what are the students doing. And that kind of thing.
Maybe come up with a list, let’s look for these things when we are going through the lesson.

Eleanor: “Let me know what you want me to do. Give me a job!” Tanner and Belinda smiled.

Eleanor: “Sometimes you need a pity party! But you have a couple of things you’re going to do. And item analysis, DCR’s, a survey, break it down by raw scores to see if there’s any progress.” [She paraphrases what IS in their control – helping boost their confidence?]

What I would like for them to walk away with is some things in their minds about during a review, because today we’re specifically talking about that, what are some things the teacher should be doing, what are some things the student should be doing? And even to the point, what are some things the teacher should have done ahead of time; before, during, and after.

I never have liked that question in cognitive coaching. Where it says, well how has this conversation helped you? I hate that question! So I shouldn’t be surprised if she doesn’t know exactly what I’m talking about. Like this conversation, the things that we’ve talked about – how might you apply it?

Eleanor: “Anything else that I can do?” No response. “Spring Break is coming!”

Well, I think modeling with her and talking with her about it or letting her know – and I hate to just give empty compliments, but just giving her a “this is great.”

So I find myself trying to make a goal for them.

So I’m thinking even in that, I’m modeling for them how to look at student work. What you should be looking for, not just at the bottom. Sometimes it’s just little tiny things in the middle of a process. So I feel like that’s still coaching even though it’s kind of a sneaky way, I guess.

[It seems like Belinda takes charge and Eleanor takes more of a back seat…]
So I think it’s good because some of the standards are really complex. And I think it helps them to see that even I don’t have all of the answers. So I think it helps them to see that I’m here to struggle right along with them. In unpacking these things and in being a learner. So I think it’s a positive thing.

So if we had to make a list of tips for students for studying and a tips for teachers in preparing kids for that, what would be on our list? And so together maybe we can come up with a list of what should the teacher be doing, what should the student be doing.

Eleanor expressed concern/uncertainty about how to address that with Belinda in a non-judgmental way.

I think I’ll play it by ear. If it were individual, if I were talking to the teachers one on one, I would share more. I would think that I had more active data to share for Belinda’s class because she did more.

There are some things that I need to think about that we talk about in the future. You know, ways to dig some stuff out of kids. You know, and both of them ask me, you know, what do you think?

So I’m thinking about, I mean I don’t know how I’m going to handle this. I didn’t think about it ahead of time and I guess that’s coaching, you don’t really think about – you don’t plan everything ahead. But I want, now that I’ve observed both of their review/study guide styles, to get them with me, not necessarily with me but I guess if I’m going in there if we could talk about what makes a good, successful study day.

[This conversation seems easier.] There is laughter from both, eye contact from both. Eleanor uses her hands when she talks – she didn’t do this at all with Tanner.

Eleanor uses her hands even when Belinda talks. Her hands open up and widen – to show understanding/empathy?
As Eleanor listens to Belinda, she makes eye contact, her ankles are crossed, her hands are together on the desk top. Eleanor sits closes to Belinda.

Eleanor: nodding, “exactly,” “okay,” “yeah,” head nods, makes eye contact, smiles

Tanner sits in the student desk and Eleanor sits in another student desk. She turns it towards Tanner and Belinda.

Eleanor uses her left hand as she talks [mirroring Belinda, who uses her right hand]
## APPENDIX I

### ELEANOR’S COACHING STANCES AND PRACTICES

<table>
<thead>
<tr>
<th>Coaching Stances</th>
<th>Coaching Practices</th>
<th>Examples of Coaching Practices</th>
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<tbody>
<tr>
<td>Increasing efficacy</td>
<td>...just building her confidence and complimenting her on things that she’s done well, even in, not an “attaboy” kind of way, but if I say this was good because, you know, it was an efficient way to do it.</td>
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<td>Increasing flexibility</td>
<td>I have to ask her questions to build her, I don’t want to say, nurturing side, but it’s like to help her see another perspective.</td>
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<tr>
<td>Increasing consciousness</td>
<td>And then I thought well, so I said, well how about the papers that you took up? Are you going to, how are you going to use those or what were they for? I wanted to know what he was going to do with them, you know.</td>
<td></td>
</tr>
<tr>
<td>Increasing craftsmanship</td>
<td>So when I asked her for the next...how might you approach your next review day I was trying to give her an opportunity to commit to setting up the expectation that they work, maybe some things that we had talked about.</td>
<td></td>
</tr>
<tr>
<td>Relationship building</td>
<td>Eleanor: “Let me know what you want me to do. Give me a job!”</td>
<td></td>
</tr>
<tr>
<td>Building capacity</td>
<td>Today when we started I wanted him to reflect and the reason I gave them some guiding questions for their reflection and planning was because I want them to start asking themselves those questions. So, I thought, let’s just be very transparent. You know we’re going</td>
<td></td>
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</tbody>
</table>
Modeling how to interact with students and how to interpret students’ mathematical thinking

So I’m thinking even in that, I’m modeling for them how to look at student work. What you should be looking for, not just at the bottom. Sometimes it’s just little tiny things in the middle of a process.

Encouraging teachers, boosting confidence

She said that she “just needs to have a conversation with him.” I asked, “what would you want to say during that conversation?” She responded, “That it can be better; that it doesn’t have to be this way."

Consulting

Sharing classroom management strategies

So you know, I have the time, I can be in there and so just helping him get set up. Even if it’s just one little thing.

Establishing instructional goals for teachers

So I find myself trying to make a goal for them. Like with Tanner – your goal is going to be...

Improving teacher content knowledge

So one of the things I try to do is just really talk to him about what this means in mathematics or really discuss the content or maybe it’s not really even a discussion maybe it’s just me talking.

Discussing the standards, as a co-learner

So I think it’s good because some of the standards are really complex. And I think it helps them to see that even I don’t have all the answers. So I think it helps them to see that I’m here to struggle right along with them. In unpacking these things and in being a learner.

Collaborating

Brainstorming, as a co-learner

She suggests that they come up with a list of projects (“we can brainstorm”) and if they want to create or come up
with a topic, [the students] have to get it approved by him.
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Merriam, S. B. *Qualitative Research and Case Study Applications in Education*. United States of America: Josey-Bass.


