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Joanna L. Michelson

Learning to Navigate Problems of Coaching Practice:
A Study of Instructional Coach Development

Joanna L. Michelson

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Reading Committee:

Chrysan Gallucci, Co-Chair

Michael S. Knapp, Co-Chair

Elham Kazemi

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Abstract

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Joanna L. Michelson

Co-Chairs of the Supervisory Committee:
Professor Michael S. Knapp and Professor Chrysan Gallucci
Educational Leadership and Policy Studies

This qualitative case study explores middle school instructional coach learning from problems of practice in a reforming, mid-sized, diverse school district over the course of one school year. Drawing on sociocultural learning theory, specifically the idea of learning as guided participation in culturally valued activities, this study investigates what mediated coach learning in the context of problems of practice. Using a framework built from Rogoff's (1995) notion of guided participation, I explore how coaches came to find, understand, and handle problems of practice as they coached teachers. Findings suggest that focal coaches navigated problems of prompting data-based instructional practice and reflection *and* problems of prompting instructional change. This study offers increased nuance to the field regarding the problematic nature of coaching. Findings suggest that problems of practice do constitute powerful sites of learning for coaches. Findings also suggest that coach learning in the context of problems is mediated by a combination of their own current and past experiences and values, as well as

formal guidance from professional development for coaches. The study furthermore illuminates the kinds of interactions in professional development for coaches that supported coach learning from problems, like modeling and guided work with tools. This research suggests that district leaders may find that investing in particular kinds of frequent, differentiated professional development for coaches will help this group of mid-level leaders to develop practices needed to address problems in their work. Implications for district leaders and others concerned with leader development are also considered, as well as conceptual implications regarding the process of learning to coach.

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DEDICATION

To the coaches, teachers, and leaders in this study. Your willingness to open your practices made this work possible. Thank you for what you have now taught the field, and for what you do on behalf of your students.

And, to all the coaches out there, on the sidelines and in the thick of it all.

Chapter 1.
**Instructional Coach Learning: Daily Problems of Practice
and Professional Development as Sources for Learning**

Researchers repeatedly note that student achievement tends to increase when the quality of classroom instruction improves (Darling-Hammond, 2000). Given the complexity of learning to enact the research-based, ambitious instructional practices (Lampert, 2001) associated with increased student learning, recent reforms expect significant learning on the part of teachers (Stein & Coburn, 2008) and leaders throughout systems (Hubbard, Mehan, & Stein, 2006; Supovitz, 2006). In fact, studies have repeatedly demonstrated that achieving lasting changes in classroom practice requires school systems to develop systematic support for teachers *and* the formal and informal leaders throughout the system responsible for guiding and directing teacher learning (Elmore, 2003; Elmore & Burney, 1997; Knapp, Copland, Honig, Plecki, & Portin, 2010; Spillane, 2002; Supovitz, 2006).

In this reform context, districts have started enlisting in-service teachers to serve in a wide variety of leadership roles, including instructional coaching, as part of systems-wide strategies to influence classroom practice. While some literature, largely conceptual in nature, asserts that teachers in these roles have the potential to influence others' instruction (J. E. Taylor, 2008) and achieve instructional reform goals (Teemant, Wink, & Tyra, 2010), researchers consistently find that due to a host of factors (to be explored in greater detail later in this chapter) teacher leaders and instructional coaches face considerable obstacles when working to influence instruction (Katzenmeyer & Moller, 2001), particularly at the secondary level (Snow, Ippolito, & Schwartz, 2006). Furthermore, as many researchers have indicated (Gallucci, Van Lare, Yoon,

and Boatright, 2010), we have relatively little empirical research examining how coaches learn to navigate obstacles in their work or how systems might organize opportunities for *their* learning.

While we know that the work of supporting adult professional learning differs markedly from the work of teaching students (Gibson, 2005) and that reform contexts require significant learning on the part of leaders (Hubbard et al., 2006), many instructional coaches and teacher leaders receive no training at all when placed in their roles (Murphy, 2005; Neufeld & Roper, 2003). Practitioner (Casey, 2006; Knight, 2009a) and empirical literature (Marsh, McCombs, & Martorell, 2012), has started to clarify important coach competencies and has asserted the importance of coaches experiencing their own professional development. Yet we currently have scant research examining district-based approaches to systematic coach support or how such support influences coaches' actual work.

The current standards-based reform movement (Hamilton, Stecher, & Yuan, 2012) clarifies and demands improved performance from all members of a system, from district office leaders, principals, teachers, to students. Most research on teacher leadership and coaching in the standards-based climate consists of descriptive studies or conceptual arguments about the problems that emerge as teacher leaders interact with other teachers in service of improved instructional practice (Mraz, Algozzine, & Watson, 2008). While we have much to learn about these problems, there is also a larger set of questions regarding what guides how coaches and teacher leaders learn to navigate these problems in their daily work. Like Gallucci et al. (2010), I assume that coaches in the current reform context are themselves learners, and we know relatively little about how they learn from their daily work or from professional development.

Research on coaching and teacher leadership asserts that this work is highly problematic, and yet we do not know how coaches learn to navigate problems in their work. Research on

principal leadership asserts that school leaders are essentially “problem-finders and solvers” (Leithwood & Steinbach, 1995), and that the work of leading a school requires the continual diagnosis of and response to problems of practice (Spillane & Coldren, 2011). However, similar attention has not been paid to coaches’ problem solving processes in practice. Insights from several streams of educational leadership literature suggest that problems in and of themselves can constitute powerful sites for learning, particularly when leaders experience opportunities for facilitated, small group conversation about these problems over time (Copland, 2002; Donaldson, 2008; Hallinger, Lu, & Showanasai, 2010; Leithwood & Steinbach, 1992a; M. Taylor, 2011). These insights suggest that coaches may learn a great deal from their daily problem-solving work, particularly if they receive support in negotiating these problems. However, we have no research that examines the process of learning to navigate these problems, with or without support.

We also know that some districts are starting to design systematic approaches to supporting leader development, including the leadership of principals and teacher leaders. Research on these systems of support suggests that leaders may benefit from on-going, differentiated, responsive, intellectually and emotionally engaging professional learning opportunities that consistently model desired leadership and instructional practices (Knapp et al., 2010). While insights from empirical research concerning these “systems of leadership support” help us imagine what coaches *may* experience in systematic professional development, we have limited research examining these professional development opportunities directly. Furthermore, we have no research examining what happens when coaches return to their schools and encounter problems of practice. We do not know if and how coaches take up ideas from district

support systems in their work with teachers, or the extent to which the support actually helps them with problems that emerge in their day-to-day coaching work.

This dissertation study examined the learning of two middle school instructional coaches working to influence instructional and collaborative practices at their schools in a mid-sized, diversifying school district engaged in standards-based reform. I examined the problems they identified, how these coaches learned to understand and respond to these problems, and what guided their learning. The study also examined this district's system of coach support, a relatively rare phenomenon. I considered the extent to which and how the district-based professional development guided the coaches' abilities to navigate the problems they encountered in their work. This study responds to the call for research concerning what and how coaches learn from district-based professional development and how that professional development influences, if at all, their work with teachers in schools. It also considers what else, besides formal district professional development, guides coaches' learning and practice. The study addresses the following research questions:

1. What kinds of problems of coaching practice do secondary instructional coaches encounter in their daily coaching work with teachers in a reforming district?
 - In what ways, if at all, do these problems become sites of these coaches' learning about coaching practice?
 - To what extent are these problems, and the learning about them, similar or different for coaches in different schools?
2. What mediates coaches' learning about how to respond to these problems?
 - To what extent and how does the system of support in the district mediate coaches' learning about how to respond to these problems?
 - How do conceptual and practical tools, or other facets of the system of support, mediate how coaches notice, understand, and handle these problems?

- To what extent do different coaches take up similar or different forms of guidance and tools to address their problems of practice?

What follows is a dissertation study organized into seven chapters. The first chapter presents an argument for this research problem; the second chapter grounds the research problem and way of conceptualizing it more thoroughly in relevant literature; the third chapter describes and justifies the methodology chosen for answering the research questions presented in the first chapter; the fourth chapter presents the context for the coaches' learning and coaching work; the fifth and sixth chapters present and analyze problems of practice that two coaches encountered in the work with teachers; and chapter seven provides concluding reflections about the findings, as well as illuminating the contributions of the study to both the field of academic research and educational practice.

The rest of Chapter 1 presents an argument for the study. In the sections that follow, I describe what the research asserts about the work of coaching, what we know about the kinds of problems coaches tend to face, what is known about the impact of coaching on teaching and student learning, and what is known currently about the nature of district-based professional development for coaches. I provide a general introduction to problems of practice as a source of leadership learning, a topic that will be more thoroughly examined in Chapter 2.

The Research Problem: Learning to Navigate Problems of Coaching Practice

Much current research on coaching, a form of teacher leadership, characterizes the practice as either highly promising in its potential to influence instruction or highly problematic in its actual implementation. Recent empirical studies have documented that given certain conditions, coaching does appear to have a positive influence on teacher implementation of

desired instructional practices (McCrary, 2011) and student learning (Matsumura, Garnier, Correnti, Junker, & Bickel, 2010; McCrary, 2011). Other research emphasizes that coaches face significant challenges when attempting to shift teacher instruction through their interpersonal work with teachers as lateral leaders (Rainville & Jones, 2008), including problems of establishing legitimacy, power, and learning to push their peers in an egalitarian profession. Yet, as others have highlighted (Gallucci et al., 2010), coaches are often depicted as “static entities” who either know how to navigate these problems and influence instructional change, or those who do not. We currently lack research that explores *how* coaches learn to navigate these problems in the context of their daily work, and what guides that learning. The current study fills this gap.

Despite the profusion of teacher leaders and instructional coaches in the field, both roles have been described as variable, locally-defined (M. Taylor, Goeke, Klein, Onore, & Geist, 2011), and highly ambiguous (Blanchovicz, Fogelberg, & Obrochta, 2005). Educators who are considered teacher leaders hold a range of titles (department chair, curriculum leader, etc.), or no title at all, and many continue to teach students. I define teacher leader using Katzenmeyer and Moller’s (2001) generally accepted definition, “Teachers who are leaders lead within and beyond the classroom, identify with and contribute to a community of teacher learners and leaders, and influence others toward improved educational practice” (p. 5). This general definition includes three essential components: expertise in teaching, ability to collaborate with educators, and capacity to influence instructional practice through relationships. Furthermore, I assert that teacher leadership differs sharply from supervisory leadership since it is grounded primarily in relationships, not formal position (Mangin & Stoelinga, 2008b).

Research identifies one kind of teacher leadership, coaching, as holding particular promise

for shifting teacher practice. While the tradition of leaders providing feedback to teachers on their instruction dates back to the early 1800s (Oliva & Pawlas, 2004), peer coaching emerged in the 1980s as a way to provide cyclical, classroom-based, peer-to-peer instructional support in the implementation of complex instructional practices (Showers, Joyce, & Bennett, 1987) and to extend the instructional reach of the principal (J. E. Taylor, 2008). Throughout the 1980s and early 90s, people called coaches performed a range of functions in schools including, primarily, supporting groups of students (Dole, 2004).

Today, definitions and roles for coaching work and coaches continue to vary widely. Some coaches are based at schools, and some are based at district central offices. Some coaches focus primarily on supporting the development of particular content-area pedagogical practices, generally in reading (Bean & Eisenberg, 2009; Denton & Hasbrouck, 2009) or math (McCrary, 2011; West & Staub, 2003). Other common approaches to coaching include new teacher mentoring (Barrera, Braley, & Slate, 2010), data coaching (Marsh, McCombs, & Martorell, 2010), cognitive coaching (Costa & Garmston, 2002), leadership coaching (Neufeld & Roper, 2003), and technology coaching (Sugar, 2005). These approaches all have different aims and audiences. Research has also revealed that even within a particular model or type of coaching, implementation varies widely (Bean, Draper, Vandermolen, & Zingmond, 2010).

Furthermore, Walpole et al. (2010) have commented that research tends to treat all forms of coaching as the same “add-on” professional development structure regardless of model. In addition to synthesizing research across approaches to coaching, we need more depictions of what actually happens when coaches work with teachers, regardless of model.

Defining Instructional Coaching

This research is concerned with *instructional* coaching, an approach that Knight (2009)

describes as, “intensive, differentiated support to teachers so they are able to implement proven practices” (p. 30). This is the approach taken in the district of focus in this study. Sometimes people called instructional coaches may actually work in the context of particular content areas (Gallucci et al., 2010). Recognizing the variation in and across approaches to coaching, I am primarily concerned with coaching that takes as its aim the improvement of classroom instruction in some way, though not necessarily tied to a particular content area.

Knight’s (2009) descriptive work regarding instructional coaching details a set of strategies that instructional coaches may employ in order to ensure classroom implementation of general (rather than content area specific) instructional practices. For instance, Knight (2009) emphasizes the importance of a coach and teacher working collaboratively in a partnership where both partners have equal voice, control over the content and process, and where both partners learn from the experience. Currently, there are few studies empirically examining Knight’s approach to cross-content coaching, including the problems coaches encounter when enacting it.

Research suggests the process of instructional coaching typically includes assessing teacher practice and student learning in a classroom, then devising and implementing a classroom-based plan for that teacher’s learning with the teacher’s input. The plan might include co-planning, modeling instruction, observing instruction, and providing feedback (Poglinco et al., 2003). Coaches may work with teachers one-on-one or in small or large groups. We know relatively little about how coaches learn to enact these practices and use these structures to shift teacher practice.

I further define instructional coaching as a situated practice. Like Gallucci, Van Lare, Yoon, & Boatright (2010), I define “practice” both practically in the sense of what coaches *do*

when they work with teachers, and theoretically as a social practice or as "a process through which we experience the world and our engagement with it as meaningful" (Wenger, 1998). This latter definition of practice implies that instructional coaching derives its meaning not only from coaches *doing* certain things, but also through negotiations of meaning through interactions among coaches and their colleagues in a particular social and historical context. Instructional coaching is "situated" (Wenger, 1998) in the sense that it occurs in the context of teachers' and schools' own everyday questions, classrooms (J. E. Taylor, 2008), and school or district reform goals (Mangin & Stoelinga, 2008).

Instructional coaching in secondary schools. Much of the research and practitioner literature on instructional coaching (and content coaching) practice focuses on the elementary level (Collet & Hayden, 2011; L'Allier, Elish-Piper, & Bean, 2010). While certain aspects of coaching practice and learning to coach may overlap across elementary and secondary schools, research suggests some do not. For instance, in their survey of middle and high school level reading coaches, Blarney, Meyer, and Walpole (2008) reported that secondary coaches often contend with unique challenges stemming from highly compartmentalized school days and departments, firm norms of privacy, and a focus on content rather than student learning. These demands, coupled with the wide range of student need and high levels of failure in high-poverty secondary schools (Sturtevant, 2003), necessitate further research on the development of coaches who can navigate these contexts.

The Effects of Classroom-Based Instructional Coaching

Many researchers and practitioners argue that coaching has strong potential to improve teacher practice and student learning since it aligns with the growing consensus regarding the components of effective professional development (Neufeld & Roper, 2003; J. E. Taylor, 2008).

Specifically, coaching is grounded in teachers' classrooms; it can prompt reflection, experimentation, and develop teacher communities. Furthermore, coaching tends to be sustained, ongoing, intensive, and organized around specific problems of practice connected to and derived from teachers' work with students (Bean & Eisenberg, 2009; Walpole & McKenna, 2004). Others argue that coaching can support teachers to enact practices just beyond what they could enact alone, operating in their "zone of proximal development" (Teemant, Wink, & Tyra, 2011). Yet, supporting teacher practice change is complex, and even professional development with these components does not necessarily prompt deep change in instruction (Finkelstein, 2011).

Despite claims about why coaching *should* work, there have been few empirical studies of effectiveness of different coaching models. Nonetheless, some recent case literature does offer existence proofs and initial data revealing impact on teachers. One case study suggests that literacy coaching can help high school teachers develop a research stance towards their students and shift teacher beliefs about and standards for student ability (Boatright, 2008). Other case study research demonstrates that coached teachers may experience increased self-efficacy (Cornett & Knight, 2009), develop nuanced understandings and increasing facility with reform instructional practices in literacy (S. A. Gibson, 2006) and mathematics (Kohler, Ezell, & Paluselli, 1999), and increased collaboration with other teachers (Guinney, 2001). Additionally, three mixed methods studies have noted an increase in coached teacher knowledge of reading and a shift in literacy instruction to from more traditional to meaning-based practices involving rich student discourse (Garet et al., 2008; Matsumara et al., 2010; Teemant et al., 2010).

Researchers have also started trying to correlate different models of coaching with increased student achievement. At least two studies have found small (Marsh et al., 2010) or no

effect (Garet et al., 2010) of content area coaching on student learning in middle schools. However, preliminary findings from two large-scale studies of comprehensive literacy coaching programs offer more optimistic results. First, Biancarosa, Bryk, and Dexter (2010) report significant gains in student achievement in schools with coaches, and furthermore that these gains increased over time. A different recent study (Matsumara et al., 2010) found that English Language Learners in classrooms where teachers experienced coaching scored significantly higher on standardized language tests than did students in comparison schools. Notably, both of these studies focused on programs that supplied their coaches with intensive, on-going, collaborative professional development on coaching adult learners and on content-area instructional practices. This is a significant departure from the tendency to treat coaches as relatively static, stable, and interchangeable. However, due to the nature of the studies, these researchers did not explore what or how coaches learned in the professional development, or the influence of this professional development on different coaches' practices. Furthermore, external organizations rather than districts provided the support to coaches.

Problems in the Work of Instructional Coaches

Researchers agree that instructional coaches face numerous tensions as they shift from primarily teaching *students* to primarily teaching *adults*. I am most concerned with problems that tend to emerge in the context of coaches' daily interactive work with teachers as they work towards instructional change. These tensions are well documented, but little attention has been given to the processes for navigating them (Finkelstein, 2011) or how coaches *learn* to navigate them, potentially through formal professional development. Regardless, it seems that negotiating problems of instructional change constitutes an important aspect of coaching as a situated practice. The literature generally identifies three broad, interconnected problems for coaches of

all kinds: establishing legitimacy, navigating power and positioning, and pushing peers' learning in an egalitarian profession.

The literature suggests that coaches often face the task of *establishing and maintaining the legitimacy* of three main areas: the work of coaching, the reform instructional practices, and themselves as coaches. In some school contexts teachers view themselves as independent practitioners (Lortie, 1975) without need of assistance, particularly at the secondary level (Portin et al., 2009). Some teachers may view coaches as a wasted resource, question why they are not teaching students full-time (Rainville & Jones, 2008), or suspect the coach must have evaluative responsibilities (Portin et al., 2009). Research suggests coaches rely on establishing instructionally-focused, trusting relationships with their peers to create legitimacy. One source of legitimacy is successful teaching experience (Marsh et al., 2012) and teachers' perceptions of a coaches' instructional knowledge (Bruce & Ross, 2008; Mangin & Stoelinga, 2008a). Yet, the process of building trust is often unspecified or idealized in the literature; for instance Knight (2009) simply comments coaching is, "grounded in partnership[s]...coaches see themselves as equal partners or collaborators with teachers" (p. 19). Instructional coaches, in working across content areas, may experience particular challenges in this area given that they may be coaching in areas in which they have no teaching experience. We do not know how coaches learn to gain and maintain legitimacy over time while building partnerships with teachers.

Issues of power constitute another source of problems for coaches. Research asserts that coaches occupy a complicated middle ground or act as conduits or brokers between traditional authority levels in school systems, including the district office, principals, and teachers (Swinnerton, 2007). Many researchers have noted that this middle ground can be highly contested and teacher leaders may feel torn between internal and external demands on the school

(Little, 2001), or questions of who has authority for goal-setting, who sets the agenda for a coaching cycle (Gibson, 2005) what kind of expertise is valued, and how feedback is given (Finkelstein, 2011). Research is clear that these middle spaces can spark considerable role confusion (MacGillivray, Ardell, Curwen, & Palma, 2004; J. E. Taylor, 2008; Tung, Ouimette, & Feldman, 2004), but that successful coaches learn to “bridge” this space and communicate messages from and to teachers and administrators (Portin et al., 2009). Some studies contend that coaches or teacher leaders can actively construct their own position between teacher and administrative priorities (Rainville & Jones, 2008; M. Taylor et al., 2011), but we do not know how they learn to do this.

A third tension, intricately related to the first two, reflects coaches’ struggles to *push teachers’ learning in an egalitarian profession* among teachers (Lortie, 1975). We have evidence that classroom-embedded professional development can make teachers feel vulnerable and exposed (Sztajin, Hackenberg, White, & Allexaht-Snider, 2008). The research literature offers multiple examples of coaches debating how to push a colleague’s thinking or practice, particularly managing their own fears about making a teacher vulnerable (Gibson, 2005; Rainville & Jones, 2008). In all cases, the literature suggests that negotiating this tension requires the development of trust and clear communication between a coach and teacher, though the process of learning to recognize and manage the tension, and the process of becoming a coach who can manage it, are less clear.

Coaches grapple with interrelated problems of practice on multiple levels. I distinguish *problems of teacher practice* from *problems of leadership practice*. *Problems of teacher practice* pertain to issues of attempting to influence teacher learning about instruction, assessment, and planning as well as changes in classroom practice. For instance, a problem of

teacher practice might stem from navigating a math teacher's tendency to plan lessons based only on the curriculum instead of planning from student need and standards. *Leadership* problems of practice refer to problems arising from sharing responsibility for issues of department or school culture, interpreting student-learning data, or setting and justifying direction for improvement efforts. These leadership problems may stem from the coaches' often ambiguous, relational leadership (Mraz et al., 2008) positions as part of a larger fabric of instructional leadership in a school (Portin et al., 2009). These problems tend to emerge as coaches take on leadership roles for departments or for schools as a whole. For instance, a coach may face leadership issues like how to prompt teacher collaboration during their common planning time when teachers are accustomed to using that time for individual work.

I contrast coaches' problems of practice (both *problems of leadership practice* and *problems of teacher practice*) from the kinds of problems that teachers face. Teachers face problems of practice regarding influencing student learning. For instance, a teaching problem of practice might include determining how to effectively scaffold student understanding of fractions. While coaches may grapple with the same kinds of questions regarding student learning, this study is most concerned with how coaches learn to negotiate problems unique to their roles as coaches and leaders. Coaches do not tend to address issues of student learning *directly*; instead, they hope to exert that influence on student learning "through the work of others" (Knapp et al., 2010, p. 15). Thus, while coaches continue to learn about classroom practice and student learning (Gallucci et al., 2010), their levels of separation from classroom practice further complicate their problems of practice.

Leadership and Coach Learning and Development

Given the preponderance of research emphasizing the problematic nature of coaching, we have much to learn about how coaches come to identify, respond to, and navigate these problems. Much of the literature asserts or implies that the problems in coaching differ markedly from problems in teaching, suggesting coaches have lots to learn in order to navigate their new roles. As Gibson (2005) argued, “coaches will experience a set of specific and challenging issues requiring learning and growth” (p. 72). Insights from other research on learning to lead in educational contexts suggests that *problems of practice* can, given certain conditions, become sources of powerful learning and development (Donaldson, 2008). Donaldson (2008) defines such problems as ones that are “sufficiently irritating...” or “important to success and won’t go away,” and ones that “promise significant personal growth” (p. 44).

The following section explores what we know from the small, but growing literature regarding the content of coach learning, the conditions for coach professional development, and then briefly review the theme of problems as a source of leadership learning.

Domains of Coach Learning

In general, research has found that coaches benefit from development in two broad areas: *working with adult learners* and *instructional practice expertise*. Working with adult learners includes knowledge of adult learning processes (Marsh et al., 2010; Marsh et al., 2008), team facilitation and collaboration skills (Lowenhaupt & McKinney, 2007; Neufeld & Roper, 2003), communication skills (McCrary, 2011) and sensitivity to emotional and relational dynamics of learning (Finkelstein, 2011). Insights from survey research (Blarney, Meyer, & Walpole, 2008) as well as mixed methods studies (Marsh, McCombs, & Mantorell, 2012) suggest that coaches often want more support regarding influencing adult learning. Significantly, at least two studies

focused on content-area specific coaches found that ability to work with adult learners proved more important than content-area or pedagogical expertise (Marsh et al., 2012; McCrary, 2011).

The instructional practice domain of coach learning varies based on the particulars of the local coaching model (cross-content or subject-area specific), and to some extent the level of school (elementary vs. secondary). Insights from investigations of *content-focused* instructional coaches suggest that this domain includes working with student learning data (Marsh et al., 2010), building nuanced understandings of academic content (Manno & Firestone, 2008), developing fluency with reform practices, and increasing proficiency with implementing reform instructional practices in the local context (Gallucci et al., 2010). Descriptive and practitioner literature on *instructional coaches* who focus on *general* aspects of instruction also asserts that coaching requires knowledge of principles of pedagogy and local instructional models (Kowal & Steiner, 2007; Knight, 2009b; Neufeld & Roper, 2003).

Some researchers have posited that these two main domains (adult learning and instructional understanding) converge in a concept akin to pedagogical content knowledge (Shulman, 1987), meaning that over time, coaches develop ways of thinking about teacher development, ways of assessing teacher practice, and appropriate ways to support teacher growth (Gibson, 2005). After following two elementary reading coaches across a year and analyzing shifts in thinking about how to influence teacher learning, Gibson (2005) concluded “learning how to coach effectively is likely to be at least as challenging and complex an endeavor as learning to teach is...” (p. 72). In a similar argument about leaders across a school system, Stein and Nelson (2003) coined the term “leadership content knowledge,” asserting that leaders at all levels of the system in instructionally reforming districts require understanding of content, instructional practice, and how to create conditions supportive of teacher learning about that

content and instructional practice. We do not know as a field how these kinds of pedagogical and leadership knowledge develop. The field would benefit from greater elaboration of the nature of coach knowledge that includes the dynamic relationship between knowledge of adult professional learning and knowledge of instructional practices and content.

Additionally, research suggests teacher leaders benefit from learning more about themselves as learners (M. Taylor, 2011) Based on his work with principal preparation, Donaldson (2008) asserts that leadership learning includes not only cognitive and interpersonal dimensions, but also the “intrapersonal domain.” He defines this domain as concerned with leaders’ self-identification as leaders and knowledge of their strengths and needs, motivations, past experiences, and impact on others.

This research provides important insight into the content of what district leaders might try to provide coaches in their professional learning opportunities. Given the newness of the research on coaching in general, insights regarding domains of coach learning may be conflated across models, contributing to our uneven understanding of what coaches learn. We also do not have research that examines how instructional coaches develop their skills in these domains in the context of their everyday work, how these skills help them negotiate problems of practice, or how this learning might develop in district-based professional learning.

Structures and Conditions for Coach Professional Development

Despite the clear documentation of the struggles coaches face in their work, we have relatively little research on coach professional development. Some reports on coaching initiatives have recommended that coaches may benefit from phased-in, on-going support (C. Gallucci & Swanson, 2008). The small empirical literature on coach professional development asserts that coaches may benefit from professional development that is facilitated, on-going,

collaborative, grounded in problems of teaching and learning, and includes people in roles like theirs (Neufeld & Roper, 2003; Gallucci et al., 2010; Portin et al., 2009), including coaches working in similar schools (Blarney et al., 2008). Such formal or informal groups of coaches may provide an opportunity to discuss coaching dilemmas, trade strategies, and receive feedback on their work (Biancarosa et al., 2010; M. Taylor, 2011; Showers, 1985). This coaching professional development may also allow coaches to learn reform instructional practices in the local context (Gallucci et al., 2010).

Additional research suggests that coaches benefit from experienced mentors (experienced coaches) who can model desired coaching and leadership practices (Knapp et al., 2010; Marsh et al., 2010). Research on leadership learning in general also suggests that leaders in ambiguous roles (like teacher leadership) also benefit from professional development that clarifies their roles for them and others (Knapp, Copland, Plecki, & Portin, 2006; Portin et al., 2009).

Taken together, these general recommendations for on-going, job embedded, content-focused, inquiry-based professional development for coaches matches the recommendations for high-quality professional development for teachers (Hawley & Valli, 1999; Penuel, Fishman, Yamaguchi, & Gallagher, 2007), and furthermore aligns with findings from research on professional learning communities (Gallimore, Ermeling, Saunders, & Goldenberg, 2009). However, other literature on teacher communities also questions the effectiveness of even facilitated collaboration; some researchers have found that norms of politeness and privacy can constrain teacher ability to pose challenging questions or probe differences in practice or beliefs, leading to little or no change in instruction (Nelson & Slavit, 2010).

No studies actually document coach learning in interactions in these communities, so we do not know at this time if coaches in group professional development develop productive,

inquiry-based norms, or if they reproduce habits of keeping practice private, swapping stories, and discussing logistics (Little, 2003); we also do not know if learning in these communities shapes their work in schools. For instance, Nelson, Slavit, Perkins, and Hawthorn (2008) studied issues that developed in a teacher leader (not coach) community, but did not then follow the leaders to their work at schools.

Problem-Based Learning as a Theme in Supporting Leader Development

Researchers agree that educational leadership of all kinds is highly contingent and complex (Copland, 2002). Some research on principal, and more recently, teacher leadership development programs at universities suggests that problem-based pedagogies can shape leaders' abilities to navigate complex, ambiguous work. Universities have developed programs that engage new leaders in collaborative problem solving, assuming that such efforts will help leaders navigate similar problems in the field. After over a decade of studying novice and experienced leaders' problem-solving abilities in their daily work, Leithwood and Steinbach (1992) wondered if it would be possible to influence novice leaders' problem-solving skills in their preparation programs. They concluded that working with realistic, "problematic" case studies in their preparation programs improved leaders' problem-solving ability, including their ability to understand subsequent problems' causes and the values evoked when framing and addressing them (Leithwood & Steinbach, 1992b, 1995). At least one other study found that principals who participated in a problem-based learning training program exhibited better problem-framing skills in the field (Copland, 2002). However, both these studies used "post-tests" to measure their leaders' learning, rather than following their leaders into their work in schools.

Other leadership preparation programs focus on collaborative problem-solving around problems that leaders themselves identify in their daily work. Donaldson (2008) organizes his

new principal and teacher leader program around leaders' self-identified problems of practice. Drawing on the work of Boyatzis, Cowen, and Kolb (1995), he notes that learning from "irksome" problems in daily work requires collaboration and a clearly defined, context-specific plan and desire to learn from experience. Taylor et al. (2011) reached similar conclusions regarding her inquiry-based program for emerging teacher leaders.

These studies suggest that learning about how to address problems of practice can be quite complex, but that problems can constitute important sources of leadership learning. None of these studies examine *coach* learning about how to navigate problems of practice, but strongly suggest that such learning could have important implications for coach development, particularly in collaborative settings.

Summary

Given the complexity of current district reform initiatives and the wide-spread use of coaches of various types in such efforts, there is an urgent need for research concerning how coaches learn to navigate problems in different kinds of school and district contexts. While we do know that across coaching models, coaches encounter numerous problems of legitimacy, power, and pushing their peers' learning, we do not know what guides coaches' learning about these problems as they interact with teachers and other social partners. Insights regarding coaches' self-identified problems, how they navigate them, and what guides and supports their problem navigation, could inform districts and universities seeking to prepare and train teachers to thrive in these roles.

Furthermore, much of the existing research on instructional leader *and* coach learning does not theorize about *how* this learning occurs. For instance, while some leadership learning literature draws on cognitive approaches to study problems as a source of learning for leaders

(Leithwood & Steinbach, 1995), other literature leaves the process of learning vague (Smylie, Bennett, Konkol, & Fendt, 2005). While there is a growing tradition of applying concepts from sociocultural learning theory to understand teacher learning from practice (Kelly, 2006), there is not a similar tradition for studying teacher leader or coach learning, even though the work of coaching is understood as complex, interactive, and socially situated. In fact, literature reviews have highlighted the atheoretical nature of the research on teacher leadership and coaching in general (Neufeld & Roper, 2003; York-Barr & Duke, 2004). In response to these observations, the current study brings concepts from sociocultural learning theory to bear on coach leadership development in a reforming district. It examines how coaches come to find, understand, and navigate problems of coaching practice as they attempt to prompt the kinds of teacher practices valued in the district. The chapter that follows proposes a theoretical and conceptual framework examining why problems might constitute a powerful source of learning for coaches in the context of their daily interactive work with teachers.

Chapter 2. **Towards a Theory of Instructional Coach Learning from Problems of Practice**

As described in Chapter 1, much research literature asserts that instructional coaches encounter significant problems as they attempt to influence teacher instruction. Also, as previously mentioned, several streams of literature on principal, teacher, and teacher leader learning have suggested that *problems*, given certain conditions, can constitute powerful sources of learning. Additionally, the notion of problems as a site of learning has been well-established in sociocultural learning theory (Rogoff, Baker-Sennett, Lacasa, & Goldsmith, 1995). Such theory provides theoretical grounding for a study of coach learning from interactions in daily practice. It also provides a way to consider what guides and mediates coach participation in work with teachers, including guidance from formal professional development. Most literature on coaching leaves vague or ignores coaches' own learning processes. This chapter presents an argument for understanding coaching problems as sites of learning and for using concepts from sociocultural learning theory as a helpful lens to analyze that learning.

In what follows, I first define leadership as relevant to coaching, and then review the literature on problems as a source of leadership learning. Since I assume that coaches are teacher leaders, this definition of leadership helps explain the nature of their leadership. Then, I offer theoretical grounding for problems as a source of learning, drawing from sociocultural learning theory. Finally, I present a conceptual framework that draws on specific concepts from sociocultural learning theory to help illuminate the process of coach learning through problems of practice. The framework shows that this learning occurs through guided participation (Rogoff et al., 1995) in the work of coaching in particular school and district communities. The framework offers a way to examine what mediates how coaches learn to “find, understand, and

handle” particular problems (Rogoff, 1990) in their work supporting teachers.

Perspectives on Learning-Focused Leadership

Researchers have conceptualized coaches as instructional leaders who constitute part of a school’s leadership team (J. E. Taylor, 2008), along with the principal and other teacher leaders like department chairs or specialists. I assume leadership does not lie in individuals, but in relationships that span across people and tools, or “stretched over the social and situational contexts of school...it is the activities engaged in by leaders, in interaction with others in particular contexts around specific tasks” (Spillane, Halverson, & Diamond, 2004). This means that instructional leadership is “stretched over” teachers (Mangin & Stoelinga, 2008b), the community of coaches, principals, documents, and leadership activities like creating school goals or designing a master schedule. I assume that the knowledge, actions, tools, and practices that influence teacher practice are not housed in one individual or set of individuals, rather they are distributed across documents (like curriculum or standards), coaches, teachers, principals, and district-level administrators. No one actor or tool contains all the “leadership;” it is a quality that is enacted when people work together with each other (using tools) in culturally defined leadership acts (Spillane et al., 2004).

I am particularly concerned with instructional leadership that aims to influence the learning of all members of a system with the ultimate goal of improving student learning via changes in instructional practice. I define such leadership as, “the shared work and commitments that shape the direction of a school or district and their learning improvement agenda” (Knapp et al., 2010, p. 4). These shared commitments might include efforts to reform assessment practices and raise standards for student learning. While this study is concerned with coaches’ learning in particular, this conception of leadership acknowledges that coaches and their efforts constitute

just one part of a larger set of “shared work and commitments” including the efforts of district leaders, principals, specialists, and other teacher leaders to influence classroom instruction.

Instructionally focused leadership aims to increase instructional capacity in a system. I take Cohen and Ball’s (1998) notion of instruction as the interaction of what a *teacher knows and can do* with a particular *group of students* with particular *content* and material. The interaction of teacher, students, and content constitute the “instructional unit” (Cohen & Ball, 1998), or what others have termed the “technical core” (Meyer & Rowan, 1977) or the “instructional core” (City, Elmore, Fiarman, & Teitel, 2009). Leadership that aims to improve instructional capacity, then, as Spillane and Louis (2002) argue, attends to all three parts of the instructional unit (teacher, students, and content), systematically and in relationship with each other. Influencing the instructional unit in lasting ways is complex. This study examines some of the problems coaches encounter and navigate as they attempt to influence the instructional unit, as well how they learn to navigate them.

Problems as a Site of Leadership Learning

Several streams of research in educational leadership assert that the ability to navigate *problems of practice* is critical to learning to lead educational organizations. Problems of practice reflect the values of an organization, and also constraints on its success. These insights, then, establish the importance of problems as a source of learning for practitioners. Research concerning policy implementation, principal preparation, and in-service leadership support draw on multiple conceptual foundations to make a case for problem solving as a stimulus for and source of learning. Foundations include experiential learning theory (Boyatzis, Cowen, & Kolb, 1995), cognitive learning theories (Fredericksen, 1984), transformational learning theory (Mezirow, 2000), and organizational learning theories (Argyris & Schon, 1978). Yet, all

leadership research that draws on these theories agrees that given the complex nature of schools and districts, and the highly uncertain nature of educational leadership, contextual problem-finding and solving ability are critical aspects of leadership practice (Copland, 2002; Donaldson, 2008; Leithwood & Steinbach, 1992b; Schechter, 2011; Spillane & Coldren, 2011). As many assert, due to their vexing nature, problems can serve to stimulate prolonged inquiry, change, and reflection (Schechter, 2011).

In the sections that follow, I describe what is known about the process of learning from problems of practice, how support programs for leaders have used problems as sources of learning, and the conditions that seem to foster learning from and about problems. This literature provides further grounding for problems as a source of coach learning.

Leadership Learning as Defining and Framing Problems of Practice

Conceptual and empirical research has long asserted that educational problems themselves are not objective entities “awaiting discovery” (Coburn, 2006). Instead, teachers and leaders socially construct problems in their contexts based on messages about what is valued, normative, or a stated purpose of a school or district. As Spillane and Coldren (2011) theorize, leaders may recognize an event or phenomenon as a “problem” when the unexpected or unwished for happens, like receiving news of lower than anticipated test scores. They argue that the work of leading entails “constructing” problems and “gathering and marshaling data, constructing evidence of and for a problem, and making decisions about how to remedy the problem as defined” (p. 7). In this view, problems do not define themselves and are highly dependent on the perceptions, negotiations, and values of people in particular policy contexts (Coburn, 2006; Spillane & Miele, 2007; Weiss, 1989). Problems, furthermore, depend on the ability of the leaders themselves to recognize them, generally through interactions with people

and tools in the environment. However, some problems *are* expected (for instance, anticipated dips in test scores scores), and sometimes, positional leaders point out problems to principals or coaches.

If the recognition of problems is partially subjective and depends on one's experiences, then it is likely that as leaders develop, they will notice different kinds of problems. In fact, Leithwood and Steinbach (1992) offer a framework for distinguishing novice from expert principal problem solving based on two decades of research. Furthermore, when describing his work preparing principals and teacher leaders, Donaldson (2008) describes leader development as coming to think differently about leadership problems and situations, seeing them as opportunities for leadership, and then “fashion[-ing] appropriate means of acting and being with others” (p. 8). Donaldson (2008) describes helping leaders recognize problems, or “pebbles in their shoes” (p. 40), as diverse as implementing standards based grading practices, encouraging parent involvement in school, and managing one's own impact on staff, situations they might not have originally seen as problems. This literature suggests that the process of developing as a leader entails learning to attend and respond to different kinds of problems over time.

Many argue that problem *framing*, or the way one comes to understand the nature of a problem, is a critical aspect of problem solving skill. Research has found that novice leaders may quickly decide they already know the nature of a problem and act in haste before considering multiple causes or examining assumptions (Copland, 2002; Leithwood & Steinbach, 1992a). Skilled problem solvers take time to consider the nature of the problem, the values embedded in it, the role of one's own values in addressing it, and its possible causes before pursuing particular solutions (Leithwood & Steinbach, 1995). Problem framing is important because the way in which a problem is framed reflects the way leaders think about its causes

(*diagnosis*), and then guides the actions a leader takes (or encourages others to take) in addressing it (also known as *prognosis*) (Benford & Snow, 2000; Coburn, 2006; Spillane & Coldren, 2011). Once a problem has been defined as such, generally represents a constraint on success, and contains one or more barriers to accomplishing organizational purposes. The importance of framing, diagnosing, and responding to problems has been well-established as important to leadership development and seems fruitful ground for studying coach development. I argue below that this problem framing, diagnosing, and responding occurs in distinct sociocultural contexts, and that coaches' participation in navigating problems of practice is best understood through a sociocultural lens, rather than a cognitive one.

Acknowledging the importance of framing and navigating contextual problems as a leader, since the 1980s, universities and districts have developed problem-driven pedagogies for preparing leaders. Problem Based Learning (PBL) (Barrows, 1996), an instructional approach sometimes applied in K-12 schools, reflects one trend in leadership preparation program pedagogy. PBL is based on engaging emerging leaders with realistic “problem scenarios” (or case study) in collaborative teams (Fenwick, 1998; Leithwood & Steinbach, 1992b). Other leadership preparation programs prompt leaders themselves to identify and address their own problems for inquiry (Barnes, Camburn, Sanders, & Sebastian, 2010; Donaldson, 2008). Taking a similar approach for supporting emerging teacher leaders, M. Taylor et al. (2011) engaged emerging teacher leaders in inquiry-based cycles regarding problems in their practices.

Conditions that foster learning from problems of leadership practice. All these approaches assume that learning from problems of leadership practice is most effective when grounded in realistic, personally meaningful problems of practice explored collaboratively and with feedback. Without developing the “intent” to learn, collaboration and feedback, Donaldson

(2008) and others have argued that learning from one's own experience alone tends to be random and episodic. Collaboration has also been found to play a role in learning from problems for teachers as well as teacher leaders. Horn and Little (2010) documented that when teachers discuss particularly "troublesome, challenging, confusing, recurrent, unexpectedly interesting" (p. 189) teaching problems with each other, there is the potential for them to learn about classroom practice by moving back and forth between general principles of teaching and the specifics of the problem.

Summary: Problems Matter in Professional Learning

These insights from different streams of research in education offer a strong case for problems as a source of learning for education practitioners. Although no research currently explores the role of problems as sites of learning for coaches, the studies reviewed here suggest that given certain conditions, including guidance and community support, coaches might experience considerable growth as they come to find, frame and address certain problems of practice over time. This literature provides empirical evidence for problems as a source of leadership learning in educational settings, given support from others. Furthermore, the notion of *problem framing* helps illuminate the process of a learner unpacking his or her assumptions about the nature of a problem, a notion that is less clear in sociocultural learning theory.

However, relying exclusively on problem based learning literature is insufficient to understand in-service coach learning. There are several points of agreement between the (largely cognitive) problem based learning literature and the treatment of problems in sociocultural learning theory. Both literatures recognize the developmental nature of learning to address problems that matter in particular settings, as well as the role of the learners' prior experiences and values in the problem-solving process. However, the problem based learning literature is

largely concerned with the *preparation* of leaders for subsequent work in the field, generally through the development of cognitive strategies and heuristics that will make problem solving more efficient, or develop a learner's expertise (Leithwood & Steinbach, 1992b). This literature describes a pedagogical approach, not a theory of learning in context. The problem based learning literature's notion of problem solving does not fully illuminate how in-service coaches come to identify, understand, and respond to problems in their daily work and what guides their problem-solving efforts, including learning opportunities that may or may not be deliberately organized around problems of practice. Furthermore, the problem based learning literature does not fully account for the complex, situated nature of problem solving, or how a coach's participation in coaching is inseparable from the specific context in which she works, rather than the development of expertise outside of context.

I now turn to sociocultural conceptions of learning as a helpful lens for understanding how coaches learn through problems of practice and what guides their problem solving efforts (Rogoff, 1990). I begin with a general overview of sociocultural learning theory and the role of problems in this theory. I then present a conceptual framework for a study of how coaches learn from problems, considering what guides and mediates their learning. I conclude with an argument for why this approach is well-suited for a study of coach learning.

A Sociocultural Approach to Professional Learning

Sociocultural learning theory starts with the assumption that learning is situated in distinct social settings (Vygotsky, 1978), that learning consists of changes in participation in these settings, and that it cannot be separated from these settings (Rogoff, 1995). More specifically, in this view, learning consists of how people's participation in sociocultural activity changes from "peripheral" (Lave & Wenger, 1991) including observing or carrying out

secondary roles, to “assuming various responsible roles in the management of such activities” (Rogoff, 1997). This study is concerned with learning to participate in the sociocultural activity of instructional coaching. In a study of coach learning, this change in participation comprises a shift from, for instance, observing coaching or skilled facilitating of adult learning to taking responsibility for the entire process.

Furthermore, sociocultural perspectives assume that learning is a social, cultural, and historical process (Vygotsky, 1978). In schools and districts, people learn particular ways of knowing and doing that are valued by stakeholders in the community; and this learning is shaped by larger institutional, political, cultural contexts (Herrenkohl & Mertl, 2010), including, in this case, the pressure to clarify and raise standards for student performance. Learning also involves emotional, volitional and intellectual aspects (Vygotsky, 1978); learning is not purely intellectual. Learning to coach, for instance, engages not only the emerging coach’s thinking but her past experiences and what she feels and believes about the role, the district, and the teachers, and what she wants to learn. Furthermore, ways of thinking and acting are not located in individuals; rather they are “distributed across” people and tools (Lave & Wenger, 1991). In educational settings, ways of thinking and acting might be distributed across coaches, leaders, teachers, students, conceptual tools (e.g., a theory of adult learning) and physical tools (e.g., a job description for coaches) (Kelly, 2006).

Sociocultural learning theories also attend to the particular role of tools in mediating thinking and development (Vygotsky, 1978). Tools are social, historical objects or concepts, “representatives of earlier solutions to similar problems by other people, which later generations modify and apply to new problems, extending and transforming their use” (Rogoff, 2003, p. 274). Sociocultural learning theorists have argued that cultural tools mediate all action

(including thinking) and furthermore aid in the process of appropriating culturally valued ways of acting in particular settings (Wertsch, 1998). The tool itself represents the community's valued way of participating or interacting, or the standard against which participation might be measured in the context (Wertsch, 1998). A tool "mediates" between the culturally valued ways of participating and what the learner can currently do or currently understands. For instance, a school district may have a particular coaching model that describes a particular way to collaborate with a teacher. This coaching model is a cultural tool, or a representative "of earlier solutions to similar problems by other people intended to mediate how coaches interact with teachers" (Rogoff, 2003, p. 280). This coaching model and associated ideas and values may appear in a physical representation, or reification (Wenger, 1998), or "points of focus around which the negotiation of meaning becomes organized" (p. 58). When a coach works with a teacher, her actions may be mediated by this reification.

Learning to use a tool, or develop fluency with its use, occurs "...with the help of others more experienced with such tools..." (Rogoff, 2003, p. 237). I take Rogoff's (1995) notion of *guided participation* as the intentional and unintentional efforts of others to coordinate and aid in the development of a learner's participation in a particular setting, which includes their ability to use particular cultural tools. Thus, studying the process of learning to coach using a particular coaching model is an investigation of a district's efforts to *guide* coach ability to coach as mediated by the coaching model. I describe guided participation in greater detail below. The guided participation itself may serve to mediate the coaches' learning and participation in the work of coaching.

I distinguish between conceptual tools (a coaching model) and practical tools (like a list of coaching questions), acknowledging the importance of both kinds of tools in mediating

problem-solving efforts (Grossman, Smagorinsky, & Valencia, 1999). For instance, coaches may use a practical tool, like a district-generated list of questions to start a coaching conversation, or work from a conceptual tool like the model of coaching in general. Physical tools may also be seen as reifications of ideas that transform through participatory processes over time (Wenger, 1998).

Like Wertsch (1998), I distinguish between *appropriation*, or the process of making something one's own, from *mastery*, which means "knowing how" to do something as guided by the tool, with varying levels of proficiency (p. 50). Wertsch (1998) argues that people may master a particular tool, but not transform it or truly incorporate it into one's practice. For instance, a coach might appropriate the list of coaching questions by adjusting them slightly to match her own needs, views, values, and setting. However, a different coach might master the questions by reading them to a teacher in a rote fashion, without adjusting or making them her own.

The Role of Problems in Sociocultural Learning Theory

The importance of situated problem identification, clarification, and solving has been well-established in sociocultural learning theory. Rogoff (1990, 1995) and others have argued that learning is the product of engaging in interdependent, culturally defined goal-directed activities, often including negotiation of problems interfering with the achievement of particular goals (Billett, 2002; Greeno & Simon, 1998; Prawat, 1993). Other theorists, studying team learning across communities in the workplace, have noted that complex, poorly understood problems can prompt a sequence of problem-solving interactions over time (Engestrom, Engestrom, & Karkkainen, 1995).

Furthermore, as Rogoff (1990) argued, the process of cognitive development involves “coming to find, understand, and handle particular problems” (p. 190) in particular settings. This definition suggests that development *is* the process of adopting ways of noticing, conceptualizing, and approaching certain kinds of problems in a social setting over time, guided by tools, values, and social partners. Furthermore, learning to address problems also entails learning when certain kinds of participation are appropriate for a given situation or problem, or the “creative role of individuals in relating one situation to another” (p. 258). For a coach, this might mean coming to “find, understand, and handle” particular problems of teacher learning like managing the vulnerability that comes with examining student learning data, drawing on tools like a model for adult learning or a coaching model graphic, and knowing when these particular ways of participating are appropriate. These ideas also suggest that through participation over time, as learners develop, they come to “find, understand, and handle” different problems, and recognize similarities across those situations. The settings themselves define the kinds of problems worth addressing and acceptable ways to do so, including with what tools.

This concept of problem solving as coming to find, understand, and handle particular problems is useful for understanding coach learning and development for several reasons. First, it views learning as situated in issues that emerge in daily, interactive workplace practice, while also keeping the larger social context in view. This conceptualization of problem-solving activity as the unit of analysis highlights the interaction among: 1) the coach’s daily practical work and efforts to understand it, 2) efforts to shape that practical work, and 3) messages, values, and goals in the sociocultural context. Second, this notion of problem-solving (finding, understanding, and handling) clarifies the idea of learning from problems, depicting it as

involving a series of socially situated cognitive processes, including first recognizing a phenomena as problematic, conceptualizing and understanding the problem and its causes, and then fashioning an appropriate response.

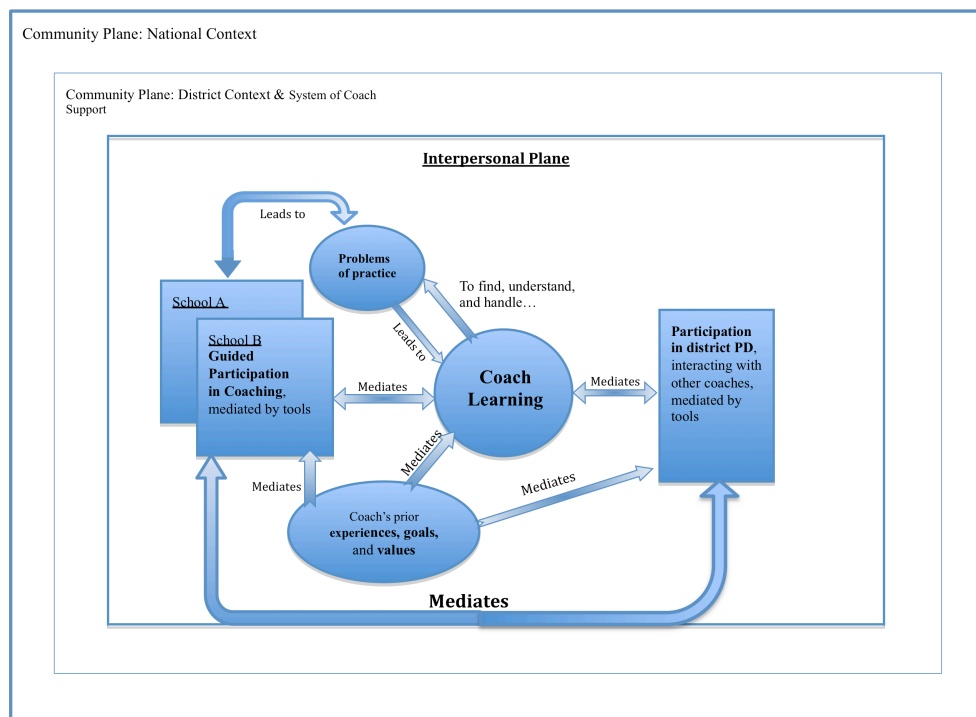
Through studies of workplace learning, Billet (2002) asserts, the workplace constitutes a setting where adult learners often encounter vexing tasks or problems to solve. He furthermore asserts that the kind of learning that results from negotiation of a problem is influenced by the nature of the guidance (formal or informal) that a learner experiences in the navigation process. Both Rogoff (1990) and Billet (2002) describe the importance of skilled, experienced participants in a setting guiding the participation of newer participants. Much of sociocultural theory aims to understand what guides the participation of people as they interact and encounter socially defined problems. The idea of guided participation with problems will be explored in more depth in the next section.

Conceptual Framework: Coach Learning from Problems of Practice

In what follows, I propose a framework for understanding what mediates coach learning to navigate problems of practice. Put another way, this framework depicts how coaches' prior experiences, various kinds of tools, and guided participation on the interpersonal plane mediate coach learning. Figure 1 visually depicts that framework. I define *coach learning* as the process and product of coming to find, understand, and handle particular problems of practice. I define problems of practice as vexing, reoccurring discrepancies between how a coach wants to influence teacher learning, classroom practice, and school-wide practices, and what the coach perceives to be happening. These may be problems of leadership practice or of teacher practice (described in Chapter 1). The framework describes what mediates coach learning to navigate these problems, including guided participation.

Figure 1.

Conceptual Framework for Coach Learning from Problems of Practice



I first describe the framework as a whole. I then elaborate the major parts of the framework: the *community plane: the national, district, school contexts, and the system of support*; the *interpersonal plane: guided participation in coaching and in district professional development*; and *coach learning as coming to find, understand, and handle problems of practice*. Generally speaking, *problems of practice* are vexing, reoccurring discrepancies between how a coach wants to influence teacher learning and practice, and what actually is happening.

Framework Overview

The framework depicts the process of coach learning from problems of practice guided by district professional development, prior learning experiences, and mediated by tools (Rogoff,

2003; Wertsch, 1998). The rectangles represent the context of the coaches' learning. Taking Rogoff's (1995) term *community plane* to describe this context, I assume coach learning is situated inside a particular *national policy context*, a *district policy context*, with particular student learning initiatives and a particular coaching model, and the *system of support* for coaches. These levels of nested context together constitute the "community plane," or the site of official values, goals, and priorities in which coaches learn (Rogoff, 2003, 1995).

Focal coaches in this study work in particular school contexts, *School A and B*, constituting an additional community (context) for coach learning. Components of the schools like available collaboration time, school improvement plans, and the principals' goals guide how coaches participate in these contexts, though these formal structures were not a direct focus of the study.

The main focus of the framework is a large rectangle representing the *interpersonal plane*, the site of interaction among social actors and tools as well as the site of *guided participation*. Since the framework describes what influences how coaches navigate problems of practice in coaching, the major emphasis of the study is on the *guided participation in coaching*, mediated by tools (depicted in Figure 1 as two squares indicating the two schools). As coaches work with teachers in their schools, they encounter *problems of practice*. Their interactions with these problems of practice lead to *coach learning* and coach learning also leads to the ability to find, understand, and respond to these problems.

Guided participation refers to the interactions of "individuals and their social partners, communicating and coordinating their involvement as they participate in socioculturally structured collective activity" (Rogoff, 1995, p. 146), or the "guidance" that social actors experience while "participating" in particular activities. The guided participation in *coaching*

section of the framework shows coaches participating in the “socioculturally structured activity” of coaching, mediated by tools. The framework uses arrows to depict what guides coach participation in coaching, including their own *prior experiences and values*, *coach learning*, and *guided participation in district professional development* (depicted as rectangles with arrows leading to the coach learning). Guided participation in coaching also mediates coach learning (about many ideas, but in particular how to find, understand, and handle problems of practice). Coach learning can be a part of the guidance or an outcome of that guidance.

Guided participation also occurs in *district professional development* itself, as coaches interact with tools and other coaches, leaders, and facilitators. Sometimes this guided participation in professional development also leads directly to guided participation in coaching without much learning, as when a coach takes up a tool encountered in PD without understanding. Furthermore, sometimes, guided participation in coaching guides how coaches participate in district PD, including when coaches ask questions or raise particular problems. Coaches are active in their guided participation, meaning that they enter learning situations with goals and questions of their own, and through their actions (asking questions, not asking questions, talking to some people and not others, etc.), play a role in what they observe and discover.

Guided participation (in the everyday work of coaching and in the coach professional development) mediates coach ability to *find, understand, and handle problems of practice* (depicted in Figure 1 as an oval). *Coach learning* is the product and process of coming to find, understand, and handle particular problems of practice, guided by district professional development and past experiences. Additionally, as coaches learn to find and understand *problems of practice*, this learning also shapes their participation in district PD as well as their

schools. These theoretical ideas help illuminate the process of learning in the context of particular problems of practice.

Now, I elaborate each section of the framework.

Coach Learning as Guided Participation on the Interpersonal Plane

This framework highlights the process of coach learning from problems of practice through guided participation on the interpersonal plane. Rogoff (1995) described the learning process as unfolding simultaneously on three mutually constituting planes, separated for analytical clarity (Rogoff, 1995): the *community plane*, the *interpersonal plane*, and the *personal plane*. The community plane refers to the institutional structure, formal purposes, values, and resources that enable and constrain the process of learning through apprenticeship to officially defined ways of interaction. While I use Rogoff's (1995) term "community" for this plane, I acknowledge Herrenkohl and Mertl's (2010) clarification that there is a difference between the official values of a context and how they are communicated through interactions on the *community plane*. Like Herrenkohl and Mertl, I consider the contextual level of analysis as attending to the "proscriptive or idealized version of a physical and social setting and the values, principles, and practices it should espouse" (p. 20). As mentioned above, to understand coach learning through interactions, I use the lens of guided participation on the interpersonal plane. Interactions on this plane contribute to the structuring and development of coaches' abilities to recognize and respond to problems of practice. The personal plane refers to how individuals "transform their understanding of and responsibility for activities through their own participation" (Rogoff, 1995, p. 151). While I attend some to the personal plane, particularly to the ways in which individual coaches take up, resist, adapt, and appropriate (Rogoff, 1995) various ways of responding to problems of practice, I emphasize the interactions that take place

on the interpersonal plane, considering what guides and shapes coach learning in the context of problems.

Community plane: national, district, and school contexts for coach learning. The community plane constitutes the official, institutional context for the learning. Analysis of this plane includes attending to how, through interaction with tools and other social partners, learners are apprenticed to the values, goals, and expected ways of working in a community. In this case, coaches can be viewed as apprenticed to the norms and values in the district policy context, their stated roles and purposes in the district’s learning initiatives, their job description, and standards for coaching practice. I acknowledge the role of the “historical/institutional contexts” (Rogoff, 1995, p. 144), or the community plane, which provides context, goals, purposes, values, and idealized ways of solving problems.

National policy context. The national policy context provides guidance regarding school accountability measures, the importance of standardized tests, and the importance of raising expectations for all members of the school system. Coaches in this study learned to navigate particular problems of practice in the context of the national standards based reform movement, a movement that prioritizes the improvement of student test scores, particularly in the most struggling schools.

District policy context and system of support for coaches. The district provided a set of goals and priorities regarding what matters for school improvement and how coaches fit into the strategic plans for improving student learning. This strategic plan includes the learning initiatives that the district crafts, communicates, and supports. The district in this study also created a system of support (Knapp et al., 2010) for coach learning and development that includes such measures as budget allocations for their roles and their professional development,

time and resources for their professional development, standards and a job description for their performance, and an evaluation process. The idealized values, purposes, goals, and messages in the district provide context for coach learning. The district's learning initiatives and the structure of support for coaches will be described in greater detail in Chapter 4.

Interpersonal plane: participation in coaching and encountering problems of practice. I examine what guides coach interactions in their schools, including how they come to encounter and respond to problems of practice. I consider the guiding role of their own prior experiences, district professional development, their own learning, as well as particular goals, beliefs, and values in the school and district communities.

As coaches interact with teachers (and principals) at their schools, they learn to attend to, understand, and address particular kinds of culturally valued coaching *problems of practice*, or discrepancies between how they want to be influencing teacher learning and practice and what they think is happening. As research from several traditions suggests, problems are not objective facts waiting to be discovered (Spillane & Coldren, 2011), and instead, coaches learn to notice and respond in particular ways due to the guidance in the community. This learning occurs through guided participation (Rogoff, 1995, 2003). I assume guided participation is always occurring, using the concept as a lens for understanding *how* people are participating in a setting, what is guiding that participation, and how that participation transforms over time (Rogoff, 2003; Rogoff et al., 1995). Rogoff et al. (1995) argued that guided participation includes both intentional guidance (a modeled coaching conversation) and unintentional guidance (an overheard conversation about using data at schools). They furthermore argued that guided participation also involves learning partners who are not physically present anymore, as in a remembered coaching conversation.

A coach's past experience guides his/her navigation of problems. When coaches are working with teachers and encountering problems, they may be guided by *previous experiences* from outside this system of support, including: their own teaching experiences, their participation in coaching in other districts, other professional development, or discussions with other educators. Rogoff (2003) and others have argued that old situations guide how learners participate in subsequent ones.

Tools mediate the navigation of problems. Participation is mediated by cultural tools (Rogoff, 2003), like frameworks for adult learning or lists of coaching questions. Taking Wertsch's (1998) notion of meditated action, when a coach uses a tool (like a framework or a list of question) while navigating a problem of practice, this coach's actions are mediated by the affordances and constraints of the tool (what it makes possible and limits). For instance, the list of questions may prompt the coach to ask the teacher, "what do your students' assessment results suggest about what you should do next?", a question valued in the setting that the coach may not have known to ask without the tool. This same coach may have experienced multiple forms of guidance about the role of assessment data in coaching (a modeled coaching conversation with the district coach, informal advice from a colleague, a memory of assessment data use in her own teaching), but in the moment of *action* in the everyday work of coaching, the tool enabled her to actually shift her participation. Tools are physical or conceptual manifestations of guidance in the interpersonal plane, as well as manifestations of valued ways of interacting.

Coach navigation of problems of practice may be guided by learning from experiences in district professional development. District professional development leads to particular kinds of participation in the schools as well as to coach learning (coming to find, understand, and handle problems of practice), which then forms a source of guidance in their daily coaching work.

Coaches participate in professional development, where they interact with other coaches, district officials, and tools. Through *direct* and *indirect guidance* and the processes of *mutual bridging of meanings* and *mutual structuring of participation*, coaches may encounter messages about what constitutes a problem of coaching practice, how to recognize it, how to conceptualize it, and how to respond to it appropriately. These interactions may occur in professional development workshops held in the district office or in one-on-one support with a district coach who comes to the coach's school. The following section describes the process of *guided participation* (including mutual bridging of meanings and structuring of participation) that occurs in this professional development. In this study, I examine what guides and mediates coach participation in navigating coaching problems, and this portion of the framework theorizes about the possible role of guidance from professional development.

Interpersonal plane: guided participation in district professional development.

There are three main venues for coach learning in district professional development (1-1, small group, and whole group professional development, all explained in Chapter 4), and this framework visually depicts all three as a single rectangle labeled *guided participation in district professional development*.

Professional development opportunities have stated (or unstated) goals and purposes, including notions about desired ways to coach in this district. The valued ways of coaching in the district, or its coaching model, is an important conceptual tool in the setting, and professional learning may be designed to help coaches learn to coach in the ways the model expects. Rogoff (1995, 2003) and others have argued that guidance by those more experienced with particular tools can shape the subsequent participation of the less experienced with those same tools. For example, practicing using a particular set of questions for launching a coaching cycle in a district

professional development (for instance, in a role-play) can prepare a coach for subsequent coaching conversations at her school. We can understand the coach's subsequent participation in a later coaching conversation with a teacher as guided by the coaching model as a whole, coaching questions practiced with a colleague, the interactions during a role-play, as well as previous conversations with other teachers and coaches.

These professional learning sessions provide coaches with opportunities to interact with other coaches, facilitators, and tools in ways intended to prepare them to navigate particular problems of practice in their work. All these interactions in professional development attempt to guide, directly or indirectly, how coaches come to notice, understand, and respond to problems in their work. Essentially, through guided participation “individuals learn to solve complex problems that have been defined and organized by their community” (Rogoff et al., 1995, p. 54). The following two concepts, mutual bridging of meanings and mutual structuring of participation, help explain how the process of guided participation occurs.

Mutual bridging of meanings. In order for community members to engage in guided participation, they must attempt to understand each other's perspectives. This process involves using culturally available tools, like language, to “bridge perspectives.” Through this mutual, interactive process, participants “stretch” and modify their own perspectives, and Rogoff (2003) asserted that this process in and of itself is part of learning. This process is a particular kind of mediation, one in which participants use tools to mediate their understanding of *each other*. For instance, a district coach may use a particular tool, such as a district-generated depiction of a “coaching cycle,” in an interaction with a school-based coach in order to mediate the bridging of meanings. Through interaction, the school-based coach may come to understand what the

district coach means by “coaching cycle,” and the district coach may come to understand what the school-based coach understands herself.

Through mutual bridging of meanings, learners leave the learning situation with new understanding of their own and others’ perspectives on an idea, process, or problem. This is a particularly important concept in ambiguous settings, like schools, where there are always multiple, conflicting interpretations of what is happening (Rogoff, 2003).

Mutual structuring of participation. This aspect of guided participation involves the inclusion or exclusion of learners from aspects of a learning situation, including live activities or accounts of activities. Learners also actively choose what they themselves observe or when and how they participate. This process may also include structuring during direct interaction, including a more skilled participant directing attention to some but not other aspects of an activity, providing feedback, modeling, organizing activities to get increasingly complex, and responding to learners based on what they seem to know/be able to do. It may also include activities like role-play or discussing particular ways to address coaching scenarios. Such opportunities offer learners the chance to learn the structure of events, social moves, and ways to act and respond to particular problems (Rogoff, 2003).

Direct and indirect guidance. Rogoff (2003) did not distinguish analytically between guidance by a more experienced other intended to instruct (for instance, a district coach modeling for or providing direct feedback to a coach) and guidance that is more accidental or informally provided by colleagues of relatively equal experience levels (for instance, a coach overhearing another coach’s strategies for using data in professional development or observing another teacher leader’s facilitation process), or that occurred in the past.

Billett (2002), however, examining workplace learning in particular, distinguished these two forms of guidance as *direct* and *indirect*. He asserted that some of the more nuanced aspects of work cannot be learned through indirect guidance or observation alone. He furthermore argued, “everyday participation in work activities has been shown to develop many of the capacities required for effective work practice” (Billett, 2001a, as quoted in Billet, 2002, p. 29). This means that left alone, coaches participating in coaching conversations guided by prior experiences and observations will learn “many of the capacities” they may need to navigate problems of practice. However, Billet (2002) also asserted that if workers do not have access to more specific, direct guidance on their work performance in a range of routine and more complicated scenarios, they may not fully develop.

Taken together, these concepts from guided participation (mutual bridging of meanings, mutual structuring of participation, direct and indirect guidance) help illustrate the interactive process of learning to become a coach who addresses certain kinds of coaching problems in certain ways. Attending to guided participation in the interpersonal plane allows me to examine how, through mutual bridging of meaning and mutual structuring of participation, coaches actually interact with each other and with teachers and leaders at their schools, what kinds of problems they actually address and how, guided by the values and messages in the system of support.

Coach learning to find, understand, and handle particular problems of practice.

Through guided participation in the everyday work of coaching, over time, coaches come to develop new ways to find, understand, and handle problems of coaching practice. These changed ways of participating (Wenger, 1998) in coaching in the context of problems of practice constitute coach learning. Overtime, coaches learn different ways of coming to find, understand,

and handle these problems of practice, and their learning about these problems continues to inform their participation in coaching. This learning is developmental since, in theory, the changed ways of participating occur in particular directions valued in the local community (Rogoff et al., 1995).

Summary: Using Theory to Understand Coach Learning

This research seeks to understand how coaches learn from problems in their work, and what guides that learning. The role of *problem solving* as a mechanism or motivation for learning has been well-established in several streams of research on leadership learning (Donaldson, 2008; Leithwood & Steinbach, 1992a), teacher professional development (Hawley & Valli, 1999), teacher collaboration as professional development (Horn & Little, 2010), and on classroom pedagogy in general for higher education and K-12 classrooms (Dewey, 1910; Prawat, 1993). Educators have long associated problem framing, the suspending of judgment, and the ability to consider the nature of a problem before crafting a solution with the development of practical and critical thinking (Dewey, 1910).

Much of the leadership learning literature on problem solving draws on cognitive or situated cognitive perspectives on learning (Copland, 2002; Leithwood & Steinbach, 1992a), which assert that through exposure to different kinds of problems with varying levels of definition and structure (routine and ill-defined problems), learners develop increasingly complex schema for approaching future problems. Over time, individual thinking processes, which guide action, become increasingly efficient. The situated cognitive perspectives assert that individual schema and problem-solving expertise develops first through social interactions.

While acknowledging the important contributions of cognition to problem solving, I take a sociocultural perspective on coach learning through problems of practice. This perspective

defines learning as changes in participation, including ways of knowing, doing, and being (including emotion and volition) in a particular sociocultural context (Herrenkohl & Mertl, 2010), rather than as changed ways of knowing (thinking) alone. The cognitive perspective leaves vague the larger sociocultural context in which learning occurs. Rogoff's (1995) three planes of analysis allow a researcher to consider the relationship among the larger historical/institutional community, daily interactions on the interpersonal plane, as well as personal appropriation, providing a more robust lens for understanding learning, even while focusing on just one plane. Furthermore, the cognitive view, even the situated perspective, leaves vague the process through which learning to solve problems occurs through interactions with others. Guided participation, in particular, focuses attention on ways in which coaches learn to attend to particular problems, guided by their own experiences as well as the messages, tools, and social actors in their community directly or indirectly supporting their learning.

The next chapter details and justifies the research strategy employed to investigate the process of coach learning from problems of practice through guided participation in the interpersonal plane.

Chapter 3. Research Strategy

This research employed qualitative case study methods to explore 1) how and what two different secondary instructional coaches learned while navigating problems in their work with teachers, and 2) what guided and mediated their participation when navigating these problems, including district professional development for coaches. Since this research was concerned with how people “construct reality in interaction with their social worlds,” it fits broadly in the “basic qualitative” (Merriam, 2009) tradition. The study’s overall purpose was “to understand how people make sense of their lives and experiences” (p. 23). More specifically, this research employed a case study design. A case is “an in-depth description and analysis of a bounded system” (Merriam, 2009, p. 42). Secondary coach learning in a single school district constituted the bounded entity. A case study was particularly useful here because it would be impossible to separate the phenomenon’s variables from the context (Yin, 2003); in this case, due to its situated nature, I could not separate coach support and learning from the communities in which it occurred, and furthermore, I was curious to understand if different school communities presented different problems and sources of guidance.

There were two smaller cases of individual coach learning nested inside the larger district case. The choice of a multiple embedded case design offered “an even deeper understanding of processes and outcomes of cases” (Miles & Huberman, 1994). In this study, the nested cases helped me examine the processes and outcomes of secondary coach learning in different school communities, considering how (if at all) different communities shaped the problems coaches learned to navigate.

District Context for Coach Learning

Patton (2002) recommended purposeful sampling for locating information-rich cases or, “those from which one can learn a great deal about issues of central importance to the purpose of the inquiry” (p. 230). I developed three selection criteria for a district setting for this study, specifically one that: 1) provided differentiated, collaborative, centralized professional development for its coaches, 2) employed school-based secondary instructional coaches, and 3) expected its coaches to work with teachers on problems of student learning.

These criteria lead me to select Sandersville School District (pseudonym), a mid-sized, urbanizing district in the Pacific Northwest. Sandersville identified instructional coaching as central to its reform strategy. District officials informed me that coaching had been in place in elementary, middle, and high schools in Sandersville for 8 years, though it became a mandatory position at each school four years ago, funded by the Title I department. During the 2011-12 school year, Sandersville employed 11 secondary-level instructional coaches in each of its 11 comprehensive middle and high schools. Informal conversations with coaches and teachers suggested that the district intended coaches to spend most of their time working with teachers in one-on-one, small group, or whole group professional learning settings. Additionally, during the 2011-12 school year, the district also employed two central office based “coach of coaches” responsible for providing regular, inquiry-based, collaborative coach professional development. These features made Sandersville an ideal choice for a study of secondary coach learning.

Furthermore, Sandersville represented an interesting context for studying coach learning due to its rapidly changing student demographic profile. Like many districts in urbanizing areas, Sandersville has been undergoing a rapid diversification in the past 10 years. According to an internal district presentation concerning the profile of Sandersville’s students, in 2000, 64% of

the student population in Sandersville was white, whereas in 2011, it was only a third white (State-level data from 2012 estimated the district was closer to 36.8% white.). The state also reported that in 2012, Sandersville's student population was 23% Hispanic, 11.5% black, 16.8% Asian/Pacific Islander (Schoolreportcard, 2012). This demographic information indicated that Sandersville was in transition, and implied that teachers were learning how to support a wider variety of students. This transition made an interesting context for coach learning.

Settings for Studying Coach Learning in Practice

In this study, there were three main settings for studying coach learning and development: district professional development sessions for coaches and two schools (Thunder and Renaissance Middle Schools) where two coaches (Beth and Nicole) worked with teachers and experienced their own one-on-one support. These kinds of settings, which I call "communities," are sites where "values, principles, practices, and tools are interpersonally negotiated among participants" (Herrenkohl and Mertl, 2010, p. 22). These communities were the sites of coach learning.

District professional development for coaches. I observed interactions in formal professional development sessions in Sandersville. Much of the study's data was collected in this coach professional development since I wanted to understand what might guide the coaches' work in schools. Secondary coaches in Sandersville experienced professional development almost every week: bi-weekly self-facilitated problem-focused **coach professional learning communities** (CPLCs) for coaches by level (elementary, middle, high); monthly, half-day, secondary-level **Coaching Academies** focused on district initiatives, student data use, issues of equity, and strategies for conducting coaching conversations; and monthly **one-on-one coaching conversations**, facilitated problem-focused coaching support (with additional one-on-ones for

new coaches). Additionally, Sandersville contracted with the **National Equity Project**, a West Coast based professional development organization focused on supporting teachers and leaders in addressing issues of justice and equity in districts, who also provided six full-day workshops for all of the coaches (K-12), intervention specialists, mentors, and district content specialists. Taken together, these settings represented a systematic, multi-setting approach to coach learning, and offered multiple, year-long opportunities to observe coach professional development in action.

Coaching at Renaissance and Thunder Middle Schools. I used within-case sampling (Miles & Huberman, 1994) to select two secondary coaches to observe in their coaching work with teachers at their schools, Renaissance and Thunder Middle Schools. These two schools will be described in greater detail below. These two coaches' learning at their schools was "nested" inside the larger case of district wide coach learning (Miles & Huberman, 1994). I discuss selection criteria for coaches below. I presumed, based on this design, that I would gain increasing levels of access over time (Baca-Zinn, 2001), particularly with regard to school-based work. I allowed the focal coaches to select the events for me to observe, although I requested events that presented some sort of problem and that I could observe over time. In the end, these decisions also included the coaches' and corresponding teachers' levels of comfort with being observed. (I discuss this issue in the limitations section.)

Participants

Study participants included district-level and school-level coaches, teachers, and administrators in Sandersville. Responding to the need for more research on secondary level coaches, I focused data collection on the middle school level coaches. I observed high school coaches during the coach professional development sessions, but they were reluctant to allow me

to conduct observations at their schools. Furthermore, several high school coaches reported during initial interviews and during informal conversations that they were conducting limited actual coaching with teachers because of other pressures at their schools. I describe rationale for selection of the two specific middle school focal coaches below.

District-level. Rene, the district coach of coaches, and Danielle, the Director of Title I/LAP, and supervisor of the coaches, were the district level participants.

Rene, the secondary level coach of coaches, became one of the study's primary informants. At the time of the study, Rene had been in her role as coach of coaches for 4 years. After a brief experience teaching English overseas, she built her 16-year career working in Sandersville's secondary schools. She had worked as a middle school language arts teacher for 9 years and then helped found a small high school, Red Springs. At Red Springs, Rene worked in a formal teacher leadership role, entitled Distinguished Teacher, for 3 years. This role entailed full-time classroom teaching and some coaching and facilitation responsibilities. During this time, the school broke into smaller academies, and Rene began working in a pseudo-administrative role while also teaching and completing an administrative internship. "...so I still had a lot of roles I was doing. That included, I was still doing some small group, some large group, some 1-on-1 coaching, mostly whole staff professional development, mostly with the district work" (initial interview, 10/17/11). Rene learned about leading professional learning during this time.

Despite the scope of the role at Red Springs and the associated expectations, Rene does reference this as a formative time for her as a leader, in terms of building a professional network, developing leadership skills, and having a strong impact on students. Other coaches who had also worked at Red Springs with Rene remembered the strong camaraderie among staff, and one

coach commented, “we recruited kids with less than average grades, and we brought them up to Red Springs as 9th graders and just totally immersed them in pre-AP and AP and we were relentless. We met everyday and talked about kids at lunch, we talked about instructional strategies, we implemented those, uh, across our curriculum, in our classrooms, and we moved these kids in four years to full AP-monsters. And, a number of them went on to college” (Ed, instructional coach, interview, 1/25/12). As Ed explained, teachers at Red Springs developed a collaborative environment where they could talk about students and plan instruction together.

Rene was then recruited to move to the district level to help launch the K-12 coaching program. She worked with Danielle, the Title I/LAP director, in order to design the model, plan professional development for the coaches and advocate for the program with principals and senior leadership. Rene shared that she appreciates the opportunity to work at the district level and lead without being a supervisory leader. As she commented, “I like the challenge and the visionary aspect of this type of work...It still helps me grow and lead, and learn, and see things from a very different perspective than I would if I were in a building...I don’t supervise these people, however, but I do inspire and lead them and support them as a large cohort..” (initial interview, 10/17/11). The coaches and principals all report having the utmost respect for Rene. Coaches admire her “strong, clear leadership of coaching” and “equity focus,” as well as her ability to be responsive to their needs. Principals appreciate her clear communication and consistent advocacy for district work. Many principals also referenced the reputation she built as a strong teacher and leader at Red Springs.

Coaches and focal coaches. 10 of the 11 secondary-level, school-based instructional coaches in Sandersville agreed to participate in the study (3 high school and 7 middle school

coaches). Additionally, 2 intervention specialists who had some coaching responsibilities also joined the coaching cohort in February, and both agreed to participate.

I aimed to select from the coaching cohort at least 4 focal coaches who were engaging in regular coaching work with teachers and could articulate specific coaching problems (like difficulty influencing norms in the language arts department or influencing the implementation of balanced literacy instruction), and who might present some contrasts in school contexts. This selection process had several steps. First, I invited all 10 participating coaches and 2 intervention specialists to participate in initial semi-structured interviews so I could get a sense for how each one described his or her coaching, instruction, and school. I also considered school-level factors like involvement of the principal, role clarity, collegial culture, and collaborative norms have been documented to influence coach effectiveness (Mraz, et al., 2008).

Of the 10 participating coaches, 8 agreed to participate in initial interviews. I also spoke with the district coach of coaches, Rene, to learn more about the coaches' practices. From these conversations, I identified 4 coaches (Nicole, Beth, Jodie, and Lauren) who described participating in regular coaching work with teachers, who could articulate specific coaching problems, and who represented some variety in experiences and school cultures. I further considered which coaches regularly attended district professional development.

By January, I selected Beth and Nicole to become main, focal informants. Over time, it had become clear that Jodie and Lauren, both first-year coaches, were not comfortable having me observe multiple examples of their coaching work at their schools. Both Nicole and Beth are experienced coaches who the district coach, Rene, reported had been successful in the past at influencing instruction and who had been involved in district-level work for many years. Furthermore, these coaches and their schools also presented some interesting differences, making

them appropriate focal coaches in a study of school-level coach learning from problems of practice. Much literature speaks in general terms about the problems in coaching; this design allowed me to consider how problems of establishing legitimacy, power dynamics, and pushing one's peers emerge in different school communities, including their similarities and differences. It furthermore allowed me to consider how coaches' questions and learning needs vary by community, or if there are more general trends across schools.

Both Nicole and Beth had experienced a range of professional development and had a range of experiences coaching adults prior to the study. As I tried to make sense of the ways the coaches came to find, understand, and respond to problems of practice, I considered what guided their problem-solving, including prior experiences, as is appropriate in a sociocultural approach (Herrenkohl & Mertl, 2010). For instance, while Nicole had only coached at Renaissance, Beth had worked in several different schools. I attended to the extent to which and how prior experience in different schools influenced the coaches' work. Additionally, the two focal coaches, while working in the same district context and instructional coaching model, had different content area backgrounds as teachers as well as in content area instruction or professional development. I considered the extent to which and how these content area prior experiences also influenced coach thinking and decision-making. I invited the coaches to reflect on their prior experiences in order to start to identify which earlier experiences they considered most formative and why.

I also acknowledge that this study design does not adequately address coach learning that occurred prior to the observed coaching and its influence on the 2010-11 school year's work. Had Lauren or Jodie agreed to participate as focal coaches, their experiences as *new* coaches

would have provided more clarity about what coaches may learn that is specific to the model and support provided in Sandersville.

In 2011, Beth was in her first year of coaching at Thunder Middle School, but her seventh year as a coach in her career. She came to Thunder with a background in elementary literacy instruction and coaching as well as elementary teaching. This was also Beth's first year in the Sandersville secondary coach cohort; for three years she had worked at an elementary school as a coach and so had participated in the elementary coach cohort. I knew Beth from her work in a previous district, though we had not been direct colleagues there, we had only interacted at district meetings and trainings. Though it was only her first year at Thunder, Beth's teacher colleagues described her as approachable, positive, knowledgeable about teaching, devoted to the students, and respectful of what teachers know. As one teacher commented of her work, "She does a really good job of asking reflective questions. So I think the goal is that I come up with the answers and she is kind of guiding me through it," she later added, "she just knows a lot about teaching and has great ideas" (Raseel, interview, 5/25/12). While Celia, the vice principal reported feeling satisfied with what Beth had accomplished in a single year, Rachel, the principal reported wishing that Beth had been "tougher" and had "tougher conversations" with teachers. Rachel thought these "tougher" conversations would have led to more change in teacher practice.

Thunder Middle School has a reputation as the most "challenging" middle school in the district due to its test scores and the lack of cohesion among the staff. It was the only middle school in Sandersville to be targeted for state restructuring due to its persistently low-test scores in reading and math. (However, its scores were actually not that much lower than those of the district: 64.9% passing the 8th grade reading test compared to 68% district-wide; 50% passing the 8th grade math test, compared to 52% district wide). Except for a slightly higher percentage of

African American students (16% compared to 11% district-wide) and slightly lower percentage of white students (30.3% compared to 36.7% district-wide), the ethnic make-up at Thunder also paralleled that of the district. The most significant difference between Thunder and other district schools was its level of students living in poverty. In 2011-12, Thunder was the highest poverty secondary school in the district, with a 69% free and reduced lunch rate (compared to 56.4% district-wide). During its first year as a restructuring school, the school was divided into two schools – a Traditional School and a Science Technology Engineering and Math (STEM) school. Teachers had to apply to participate in the STEM school, where they would receive professional development in project-based learning and incorporating science across the curriculum. Beth explained that after a year, all teachers had to apply to (and be accepted to) teach at STEM, or leave. The vice principal, Beth, and interviewed teachers reported that this created a divided school culture.

In order to understand what similarities and differences exist across coach learning from problems in different communities, Nicole presented several important contrasts to Beth. Nicole was in her 4th year of coaching at Renaissance Middle School. Unlike Beth who had experience in several districts, Nicole had worked only in Sandersville, in a variety of roles, for 15 years. Following her work as a middle school language arts, French, and math teacher, Nicole worked briefly at the district level for the Title I department, serving 8 different elementary schools, a job she found overwhelming. She reported to me that she loved middle school coaching and was quite happy at her school, finding the staff “supportive” of each other and the students.

Prior to coaching at Renaissance, Nicole had been working at the same school as an intervention specialist, a position that used to be closely affiliated with school and district supervisory leadership. Mark, the principal at Renaissance, reported that teachers all knew

Nicole quite well, and when her title and role changed to “instructional coach,” he had worked hard to “re-envision” her so that teachers would no longer see her as an “administrative lackey” (interview, 2/29/12). This process reportedly involved his taking more public leadership during department meetings and communicating the clear divide between his work and hers. He reported that this transition had been successful, and he could tell because teachers were volunteering to work with her, including during their lunch breaks. Ken, a second year math teacher, verified this, also reporting that he appreciated her “collaborative” style, finding it preferable to the more “teacherly” styles of mentors and supervisors he had had as a student teacher and first year teacher, asserting, “I think that she feels comfortable saying, *do you think this will work?* to me. And I feel comfortable saying *do you think this will work to her?*” (interview, 5/25/12). Ken appreciated Nicole’s collaborative, non-evaluative approach to coaching.

Renaissance Middle School also presented some useful contrasts to Thunder, suggesting that as a context for coach learning, it might present different problems. First, Renaissance had not been targeted for restructuring. Its test scores were slightly higher than Thunder’s (and thus, the district’s), particularly in reading (68.1% in 8th grade, compared to 64.9% at Thunder; though both school’s 8th grade math scores were around 50%). Demographically, Renaissance was fairly similar to the district as a whole, with a slightly higher Asian and white population, and slightly lower Hispanic population. Its Free and Reduced lunch population was higher than the district’s (61.2% compared to 56.4%, but lower than Thunder’s 69.9%). Coaches referenced Renaissance as a “turn-around school,” one that used to be viewed as a struggling school, but one that through Mark’s leadership had turned into a place where parents would choose to send their children. Yet, over the course of the study, I learned from Ken and from Nicole that despite

norms of congeniality (Barth, 2006) and kindness among teachers, there were low levels of teacher collaboration on instructional goals, instructional practices, or even discipline expectations.

Other school-level participants. At the two schools where my focal coaches worked, I recruited other participants for triangulation and contextual purposes. I interviewed the principals at each school. Using iterative sampling (Miles & Huberman, 1994; Patton, 2003), I asked the focal coaches to identify two-five teachers at their schools who: 1) they coached on a regular basis (regular basis will be locally defined, but more than once or twice a year), 2) they were interested in learning how to better coach, but, who 3) currently presented some kind of coaching dilemma to them. The coach’s explanation of why each teacher’s practice presented a particular problem also became data. The table below lists these other participants.

Table 1

School-Level Participants

Participants	Thunder Middle School	Renaissance Middle School
Coach	Beth	Nicole
Administrative Leaders	Rachel, Principal Celia, Assistant Principal	Mark, Principal
Teachers	Raseel, math teacher Ron, science teacher Heather, language arts teacher and department chair 13 language arts teachers (the department)	Ken, math teacher

Note that despite the significantly fewer participants at Renaissance, Nicole was extremely generous with her time in other ways, including sending me regular emails, documentation, and participating in phone calls to update me on her progress.

Methods for Data Collection

There were 3 main sources of data for this study: observations of coach professional development and coaching cycles, semi-structured and debriefing interviews with participants, and document review.

Observations

Since I assumed that learning is a process and not just an outcome (Greeno, 2002), I sampled coach professional development sessions from across the year (late October – May). These observations also allowed me to observe the full cycle of a school year and to observe changes in participation as the year progressed. I conducted observations of coach professional development sessions and coaching sessions with teachers in schools, attempting to “notice things that have become routine to the participants themselves” (Merriam, 2009, p. 119). In general, I engaged in non-participant observation. However, due to the nature of the professional development sessions and my growing connections with the coaches, over time I was on occasion invited to serve as a “partner” to a coach who did not have one, or to complete a “triad” for a debriefing protocol. These observational approaches ultimately allowed me to gain more insight and access. As coaches understood that I had experience as a coach in a local district, they became increasingly willing to share their stories and questions with me.

Coach professional development. The following section summarizes the observations I conducted at district professional development sessions for coaches. As a whole, these

observations helped me to build context for what the coaches were learning about the district’s goals, problems of practice valued in the district, how to conduct their work, and what they were expected to do. The observations also helped me to understand how coaches interacted with each other and with district coaches and leaders. All of these observations contributed to my understanding of possible sources of guidance for coaches’ ability to notice, understand, and respond to problems of practice. The table below summarizes the observations.

Table 2

Coach Professional Development Observations

Type of Event Observed	Months Observed	Duration of Event	Participants Present
Secondary Coaching Academies	October, December, February, April, May, June	3 hours	All middle and high school coaches, Rene (coach of coaches)
Middle School PLC	October	90 minutes	All middle school coaches, Rene
National Equity Project Sessions	December, February, March	2 days each (6 hours each)	All instructional coaches, intervention specialists, district coaches & specialists, mentors
One-on-One Coaching Support	February, April, May	90 minutes each	Nicole and Rene
	November, March, April	90 minutes each	Beth and Rene
	November, March, May	90 minutes each	Jodie and Rene
	November, March, May	90 minutes each	Lauren and Rene

The Coaching Academies and National Equity Project Sessions constituted pre-planned, large group settings for coach learning. The PLC and One-on-One Support Coaching Sessions constituted smaller group (or 1-1) opportunities for coaches to raise their own questions for discussion and support. At all these sessions I considered: How is coaching defined in this

community? What issues of student learning and teaching are important in this district? What content and processes reoccur in these professional development sessions? What counts as a “problem of practice” for discussion in professional development and how are these determined? What are the similarities and differences between problems coaches pose and problems presented by official professional development? How do coaches describe their own learning and dilemmas in these sessions? How are teachers described as learners, if at all, and what factors are presumed to constrain or enable their learning? What strategies are suggested and modeled for solving problems and how do coaches interpret or respond to these strategies? What tools and resources are offered and how do coaches respond to them? These kinds of questions allowed me to consider the context for coach learning and the messages about problems worth pursuing and how to pursue them.

School-based observations of coaching. The following section summarizes the observations conducted at the two focal coaches’ (Nicole and Beth) schools. As a whole, these observations allowed me to observe coaches navigating self-identified problems of practice in their work and enacting coaching as they understood it. Such observations also allowed me to observe the school-based context for their learning. Furthermore, these observations allowed me to triangulate how coaches described their coaching work, colleagues, and schools. These observations directly informed my inquiry regarding the nature of problems of practice and how coaches addressed them, including what guided their work. The table below summarizes these observations for the two focal coaches.

Table 3

School-based Observations of Coaching

Coach and School	Type of Event	Month (s)	Duration	Participants Present
Beth, Thunder	Language Arts Department Meeting	February (2 sessions), April, May (2 sessions)	60 minutes each	The 15 teachers in the language arts department; Heather, (Department Chair); Celia and Rachel (principal and assistant principal); Beth
	Whole School Professional Development	March	60 minutes from a 7-hour day	Self-selected group of 15 teachers from different content areas, Rachel (principal), Beth
Nicole, Renaissance	1-1 Coaching Sessions	April (beginning and end)	Two 30-minute sessions	Ken (math teacher), Nicole

As a whole, while both coaches reported coaching both one-on-one and through group professional development structures, I only observed Nicole engaging in one-on-one coaching, and I only observed Beth engaged in group professional development. This difference in observation opportunities was a result of the coaches' own self-selection of coaching events they considered problematic, that occurred over time, and that they were comfortable having me observe. However, this feature of the design also presents a limitation. It is possible that findings regarding problems of practice and learning about the problems could be traced to the structure I observed rather than coaching practice itself.

In the observations of focal coaches leading one-on-one and small group professional development, I attended to interaction patterns among teachers and the coach. I attended to the content of the coaching work, to what the coaches used to help navigate particular issues, and in what ways the coaches employed tools or strategies that were similar or different from those that emerged in their own professional development. I also observed the kinds of interactions themselves that the coach considered problematic in order to better understand the coach's perspective.

I took notes during all observations and then created more detailed field notes (Merriam, 2009) with thick description (Geertz, 1973) of events and interactions.

Interviews

As previously mentioned, I conducted initial semi-structured interviews (Merriam, 2009) with 8 coaches to build some context for the coaching program, to hear different perspectives on the district and coaching, and to select focal coaches. I also conducted a single semi-structured interview with participating principals (4 principals in all), the Director of Title I/LAP (Danielle), and 4 participating teachers (3 at Thunder, one at Renaissance), to further build context and history, triangulate observations, and gather other perspectives on the coaches' work (see Appendices A and B for observation guides and sample interview protocols).

The focal coaches (Beth and Nicole) and the district coach of coaches (Rene) participated in multiple interviews over the course of the year for several reasons, including: to trace their thinking over time, to identify new problems and questions that had emerged, to consider what was guiding their work and identification of problems of practice, and to triangulate observations of their work. Semi-structured interviews tended to last 45-60 minutes and debriefing interviews

lasted 15-30 minutes each. The table below summarizes the interviews with focal coaches and the coach of coaches.

Table 4

Interviews with Focal Coaches and District Coaches

Coach Name	Debriefing Interviews After Coaching Academies or National Equity Project Sessions	Debriefing Interviews After Coaching Work at Schools	Semi-Structured Interviews
Rene	December, February, March, April, May (after Coaching Academies)	N/A	October, March, May
Beth	February, May (Coaching Academies) March (National Equity Project)	Before and after each LA Team Meeting: February (2 sessions), April, May (2 sessions) [5 total session] After the March Whole School Professional Development	October, late April
Nicole	February, April (Coaching Academies) National Equity Project Sessions (December, March)	After each of two April coaching sessions with Ken	December, May

While the main semi-structured interviews with the coaches gathered broad reflections on their work, the semi-structured debriefing interviews explored work with teachers immediately before (when possible) and immediately after (when possible) they conducted coaching work. These interviews permitted me to hear coaches' immediate responses to what happened and what might influence their future work. They included general questions about what the coach had been aiming to do, thinking about, and feeling during the coaching session, and what they had noticed or learned about their teachers, as well as any new or old problems that they were

noticing. I furthermore interviewed focal coaches after they participated in district professional development to try to understand how they were making sense of the learning experiences and how they were connecting them with their work at their schools (if at all). These interviews also triangulated my observations of the various coaching and professional development.

All interviews were digitally recorded and transcribed.

Document Review

Written documents provided additional sources of triangulation, descriptive information, historical perspective, and insight into change and development (Merriam, 2009) in the coaching work, schools, and district as a whole.

Along with interviews with district leaders and principals, document review provided much of the information regarding the district context described in Chapter 4. I collected official district-produced documents like the website's descriptions of the learning initiatives, correspondence from the superintendent to parents about the district initiatives, agendas and PowerPoint slides from coach professional development sessions and sessions with the National Equity Project, the Sandersville Coaches' Handbook (which included descriptions of the coaching model, the coach job description). I also collected Rene's email correspondence with teachers and the materials she provided them electronically (previous years' agendas, professional readings). I compared these documents across the year with each other and with my observations of professional development. These documents presented the official, espoused beliefs and goals of the district.

I also collected and examined the focal coaches' documentation that they shared with the district (reports of how they spent their time each month, Student Centered Coaching Tools reflecting the data they collected around their coaching), as well as any agendas or other

supporting hand-outs they used with teachers, and any email correspondence with teachers that they were comfortable sharing with me (invitations to professional development, reminders about up-coming trainings). Additionally, I retained and examined all email correspondence I conducted with focal coaches.

Data Analysis

The overall purpose for data analysis in this study was understand how a group of coaches, and two individuals, recognized, learned from, and addressed problems of coaching practice across the school year. Since I assumed that learning to coach occurred in negotiated interactions among coaches and teachers, the majority of the data analysis process was grounded in transcripts of observations and interviews that showed coaches thinking about and responding to dilemmas in their work with teachers. Data analysis occurred in four phases: 1) initial analysis during data collection, 2) coding, 3) generating themes, and 4) verifying and revising themes.

I began with reading through data sources and engaging in open coding (Merriam, 2009) to extract initial categories. This process began towards the end of data collection (April) and then continued after I exited the field in June of 2012. Beginning data analysis during data collection allowed me to be responsive to initial hypotheses that emerge in the field (Glaser & Strauss, 1967).

Then, once data collection had been completed, I began open coding and generating a tentative list of codes. In addition to emergent coding, I located and highlighted instances of coaches discussing dilemmas in coaching with each other. In this sense, I used my initial frameworks to flexibly guide some of the coding (Coffey & Atkinson, 1996), while remaining sensitive to emergent patterns and themes in the data, taking an inductive approach (Patton,

2003). In this phase of analysis, I developed a set of contextual codes that eventually informed the initial findings about the system of support.

My next read of the data involved a closer examination of the moments I had labeled as “problems” in my open coding process. I looked carefully at these moments to determine which ones were: reoccurring across the year, across coaches, and across types of data; interfering with how the coach wanted to work with teachers; and involving problems of trying to influence teacher learning toward particular ends. I then engaged in focused coding of these problems, using analytic questions to guide my closer read and ultimately, writing of memos about these problems. I considered: What are these problems? Why are they particularly vexing? What assumptions is the coach making about the problem? How does she attempt to address it and when? What is guiding her participation in addressing this problem? I used these problems as anchors as I explored the data on coach professional development, looking for how (if at all) coaches were influenced by the larger system of support when addressing the problems of practice. Through this process, two major themes emerged: *problems of data-use with teachers* and *problems of instructional practice change*.

I then continued coding data, testing codes, and revising codes until I had developed initial themes (Merriam, 2009) regarding coach problems of practice and sources of guidance regarding addressing them. I used basic conversational analysis techniques to analyze segments of the data in which coaches negotiated participation (Herrenkohl & Mertl, 2010) with other coaches or with teachers. I then moved from concrete description and analysis of these moments and other coded data to a somewhat more abstract level (Merriam, 2009), extracting meaning across the codes, looking for patterns and similarities as well as contrasts, paradoxes, irregularities (Coffey & Atkinson, 1996). For instance, I identified instances when coaches

discussed – with each other or with me - navigating a particular coaching dilemma, and then observed how the coach actually navigated that dilemma with the teacher and in the professional development she received herself. This process led to the creation of claims.

I conducted within-case analysis first then cross-case analysis, aiming to generate a general explanation that fit both cases in addition to claims about each case (Yin, 2003). In order to verify conclusions, I looked for disconfirming cases and examples, engaged in member checks as initial themes and findings emerged (Merriam, 2009), contacting Nicole, Beth, and Rene during August and November of 2012, and again in March of 2013. Furthermore, I shared slices of data with conclusions with my peer-writing group throughout the 2011-2013 years.

Methodological Limitations

This qualitative case study design with two nested cases had several notable limitations. The largest limitation in this study concerns the limited level of access I was able to achieve to coaches' own bi-weekly Coach Professional Learning Communities (middle/high school self-facilitated sessions dedicated to their own questions) and to coaching at the schools, though this limitation also reveals important aspects of the context. First, when I arrived at my first coach professional development session to observe in October, Rene pulled me aside to explain that the coaches were completely overwhelmed by the Standards Based Education initiative. She explained that I would have to be sensitive regarding the level of stress. Subsequently, several coaches raised some questions about why I was conducting this research, and ultimately requested that I not attend the coach professional learning community sessions so they could have a place where they could talk about the Standards Based Education stress without an outsider present. While I was eventually welcomed into the coaching community and was invited to attend as many other professional development sessions as I wanted, I acknowledge

that these Professional Learning Communities constituted an aspect of the system of support that I only observed on one occasion.

Second, while coaches assured me prior to the study that they engaged in instructionally-focused coaching with teachers, as the year progressed it became clear that many did not. This may have been a by-product of the amount of pressure on the system to implement particular district initiatives, but could also have been a trend across the years. In fact, as I got to know the coaches better, several confided to me that teachers tended to be resistant to coaching in Sandersville, particularly at the secondary level. In some cases, coaches commented that coaching felt so “fragile” at their school that they were not comfortable having an observer present out of fear that it could interfere with tentative gains. Several informants (principals, district leaders, and coaches) commented that the district was working hard to make a clear distinction between evaluation and coaching, partly due to union concerns, and this may have also contributed to the fear of an outside observer. Overall, I learned that culturally, coaching was not a publically observed practice in Sandersville. Rene (the district coach of coaches) commented at the end of my study that I had observed more coaching in one year than she had. The relatively few number of observations of coaching, particularly at Renaissance, represents a significant limitation in the study. As previously discussed, having my access constrained to one-on-one coaching at Renaissance and large-group coaching at Thunder further limits my ability to draw conclusions across cases.

Another limitation lies in my selection criteria for a district of focus and focal coaches. There are relatively few districts with secondary coaches in the region, and while I purposefully limited myself to this subgroup, I might also have excluded districts and coaches who might have presented interesting learning and coach support. Furthermore, while I strove to select coaches

locally respected and recognized as “successful,” it is possible that other coaches might have also offered a different window into coaching practice and learning in this district.

As in all qualitative research, my position as the researcher also influenced the findings of the study. I have worked as a teacher, coach, and coach professional developer with experience in content-specific, instructionally-focused reform that includes principal learning in the reform strategy. These experiences have shaped how I interpreted data, selected coaches, and interacted with participants. Additionally, due to the nature of the National Equity Project and Coaching Academy sessions, I was unable to fully participate in a passive role. I was frequently invited to participate in partner or small group discussions, particularly when there were not enough people. This participation may have allowed me to gain more trust and access, but also exposed some of my beliefs and experiences to the coaches, who soon learned that I also was a coach. This likely influenced how they interacted with me. I described these assumptions and interactions in my analytic memos. I have worked hard to make the familiar seem strange (Thorne, 1995). My peer writing group and member checks helped me avoid drawing conclusions that were not rooted in the data. The use of different data sources and multiple perspectives from different participants also helped ensure the quality of the data and conclusions (Merriam, 2009).

Summary

This chapter presented a strategy for exploring what kinds of problems middle school instructional coaches encounter in their work with teachers and what guides their understanding of and responses to these problems. The nested, multiple case study design allowed me to examine the learning of two coaches in the context of their daily work with teachers and in the larger context of a district’s professional development for coaches. This design allows me to

focus on the interpersonal plane of learning, the site of guided participation (Rogoff, 1995), to observe and understand how coaches learn to notice, understand, and respond to particular problems of coaching practice. Assuming that I cannot understand learning without understanding the community in which it occurs (Rogoff, 2003), the next chapter presents important contextual information surrounding the coaches' learning. Then, chapters 5 and 6 explore two main problems of practice that Beth and Nicole, the focal coaches, encountered in their work. These problems include navigating data use with teachers and supporting content-area instructional change.

Chapter 4. **Elaborating the Context for Coach Learning in Sandersville**

As previously noted, despite the complexity of learning to coach, coaches and teacher leaders often enter their roles and receive little to no support for their own growth. The Sandersville School District (SSD) offers an example of a district, engaged in multiple learning improvement initiatives, which has also built a comprehensive support system for its cadre of K-12 instructional coaches. These initiatives and the professional development for coaches comprise the context for coach learning in Sandersville, or the “community plane” of analysis in Rogoff’s terms.

I gathered information for this chapter through a review of official district publications (see Chapter 3 for a description of these sources) as well as interviews with the district coach of coaches (Rene), the director of Title I/LAP (Danielle), principals, and secondary coaches. Observations at district professional development for coaches served as triangulation. The following sections describe the context for coach learning in Sandersville. First, I describe Sandersville’s learning initiatives. Then, I describe the system of support designed for coach learning. Next, I describe the coaching model, official aims, and the professional development offered to coaches.

Sandersville School District’s Approach to Learning Improvement

During the 2011-12 school year, the Sandersville School District (SSD) was engaged in a set of three general, interrelated, district-wide initiatives: *standards based education* (SBE), the *prompting of equity conversations*, and a *focus on data*. These official goals formed an important part of the context for coach learning. Put another way, these initiatives reflect the way in which “people in power in a context want people to be, know, and to behave within that context”

(Herrenkohl & Mertl, 2010). I first describe each initiative and then comment on how they were interrelated.

Raising and Clarifying the Learning Standards for All Students

During the 2011-12 school year, in the context of a rapidly diversifying student population, Sandersville focused its attention on three interrelated, cross-content, district-wide initiatives intended to create the conditions for improving student learning. District publications framed these initiatives as a continuation of its reform efforts since the late 90s, which have all been “built on a foundation of equity and achievement for all students,” aimed specifically at “closing the achievement gap between white and non-white students” (Sandersville, 2012). The district’s website emphasizes Sandersville’s commitment to closing the achievement gap through attention to clear and consistent standards and curriculum, fostering strong relationships between schools and families, and working towards cultural competence.

Standards-Based Education (SBE). Sandersville, like many districts nationwide, sought to align its curriculum, instruction, and assessment practices. The Sandersville Standards-Based Education initiative was intended to ensure students had access to rigorous content and as a way to provide “a fair and objective way to evaluate students based on what they have learned” (Sandersville, 2012) or an attempt to align curriculum and assessment. The push began in 2010 when a group of teachers, coaches, and principals started meeting to review existing curriculum and standards and specify a manageable number of “power standards” (Reeves, 2011) for every course in the district. For a year, Sandersville provided professional development to teachers in each content area communicating the new standards and initiating the process of creating uniform assessments matched to the standards.

During the year of this study, the Standards-Based Education initiative had entered its second and more visible phase, the implementation of a district-wide online grading system called Grade Book – a program based entirely on standards (rather than points, percentages, or traditional letter grades). While the previous phase of the initiative had some influence on classrooms, the adoption of Grade Book catapulted the initiative into every Sandersville classroom. Sandersville required all teachers to grade students according to the new power standards, present specific evidence to justify every grade, and offer students opportunities to revise their work to meet standards. As Nicole, one of the focal coaches explained, “it’s really about how do we communicate...it’s not about awarding or rewarding someone with a grade, it’s about how do we communicate what students are learning” (interview transcript, 12/16/11). Nicole and others explained that the Grade Book adoption was intended to clarify for students and parents how students were doing. This represented a significant cultural shift in how teachers viewed the role of grades, from rewards and punishment to formative feedback (Marzano & Heflebower, 2011).

Equity conversations. Sandersville also aimed to place deliberate, public focus on the achievement gap between white students and students of color in the district. The terms “equity,” “all students,” and “achievement gap” permeated all publications, communications, and professional development for coaches and teachers originating in the district office. During the 2011-12 school year, all principals, coaches, and interventionists were invited to attend optional “K-12 Equity Conversations;” day-long workshops led by the district coaches of coaches (Rene and Eileen) and other district-level leaders, focused on examining district and school-wide trends in student learning data, practices that may be contributing to the inequitable outcomes (like the exclusionary nature of the honors classes), and ways to use data to inform change efforts. Rene

began the October session by sharing the demographic changes in the district. According to her October PowerPoint, in 2000, 64% of the student population in Sandersville was white, whereas in 2011 it was 28% white. The presentation further highlighted increases in the ELL, free and reduced lunch, African American, Latino, and Pacific Islander populations and shared the discrepancies in student test scores by race (e.g. 41% of African American students passed the 2010 tenth grade math assessment compared to 76% of white students).

Rene explained that these “K-12 Equity Conversations” attempted to confront (and equip leaders to confront) assumptions people make about student learning, “...there can be a lot of assumptions about what is getting in the way, and [current practice] does not really cause people to look within and to see whether or not we hold a causation...” (interview transcript, 10/12/11). This desire to confront assumptions about student ability also appeared in Rene’s approaches to conducting professional development for coaches.

A focus on data. The Sandersville School District placed new attention on the use of student learning data in guiding, informing, and assessing all school improvement work during the 2011-12 school year. District officials viewed data as a way to create motivation for change, to draw attention to inequities in student outcomes, and to guide decisions about how to organize time for professional development. Rene, for instance, regularly asked coaches to explain the data-based rationale for any professional development they were planning, “What does the data say? What are the trends and patterns? Why should teachers care?” (field notes, 11/30/12), conveying her belief that data should ground professional development.

There were several structures in the district intended to support teacher use of data. Schools received and could generate data reports from the Grade Book program. Quarterly, schools held a full day of professional development called a “Data Day.” While principals and

coaches could plan these days in a variety of ways, they were expected to include analysis of student learning data in some way. Some schools designed these days around “Data Walls,” or public displays of scores on benchmark tests in reading and math.

Many schools renamed their existing content or grade level teams “Data Teams” (Love, 2004) and created new time in the schedule for teachers to meet and talk about data. While interviews with district officials and principals suggested that the district did not consider Data Teams a mandatory practice, two of the interviewed principals, Rene, and most coaches described these teams as quite critical to their school reform efforts. Mark, principal of Renaissance Middle School where Nicole worked, described the Data Teams at his school this way:

And twice monthly they meet their grade level counterparts who teach the same subject. And we call them, Data Teams. Sometimes called PLCs, but here we call them data teams because the idea is we focus on the data. And that happens – well, it happens whenever they want – we provide common planning, because we realized it’s best to meet during the day...so all our data teams meet during their planning time. So, basically the way it works is they meet twice a month at least in their data teams to look at practices, *how are our kids doing, how do we know how they are doing?* Really, we focused on those three formative assessment questions and questions I would say are questions that determine whether high quality instruction is happening which is one, *do I know where I want my students to be?* That’s the standards piece, do I know what is expected for my course. And then where are they, and *how do I get them there.* So the data team is there to help you do the stuff you have to do anyway. So *how do WE know...where our kids are? And how do WE know where they need to be and do we have a shared understanding of where they need to be* (2/29/12, interview transcript).

This quote reflects how Mark imagined the purpose of Data Teams. He described these teams as groups of grade-level colleagues who teach the same content area getting together to closely examine student work, clarify goals and expectations, and decide where students were in relation

to the course goals. He emphasized the goal of building shared understanding of student learning, “*how do WE know...where our kids are?*”¹

Three interrelated initiatives. District officials viewed all three initiatives as interrelated and mutually reinforcing; Standards-Based Education was intended to help create clear standards and produce assessment data tied to standards; the data focus was intended to offer collaborative structure and support for data conversations; and the equity focus was intended to set the conditions to talk about existing inequities in student outcomes. Most interviewed principals and coaches referred to standards, data, and equity as a single initiative, or as a common “lens” for their work.

Sandersville’s learning improvement strategy suggests that district leaders assumed if its schools invested time and resources in its three overlapping initiatives, student learning would improve. For the past decade, Sandersville, like many districts, has been grappling with a rapid demographic change and a growing achievement gap. These three initiatives represented the district’s strategy to address the achievement gap. Sandersville leaders seemed to assume that one reason for inconsistent achievement was that students experienced inconsistent expectations from class to class due to the sheer number of standards. The district website claimed that prior to Standards-Based Education, teachers “had to sort through more than 300 accepted standards and decide which ones were most important to teach in their classes. This took a tremendous amount of time and lacked consistency class to class.” Sandersville assumed that with fewer standards, teachers would be able to plan more efficiently; and with better planning, instruction and curriculum would be more similar class to class; furthermore, all students would be assessed

¹ Mark’s questions in this quote are similar to DuFour’s (2004) guiding questions for Professional Learning Communities: *What do we want each student to learn? How will we know when each student has learned it? How will we respond when a student experiences difficulty in learning?*

against consistent standards, receiving more effective feedback on their progress. Sandersville also assumed that clearer standards, expectations, and well-aligned assessments would also enable teachers to collaborate with each other.

The following section addresses the coaching model and how the district intended coaches to support these district initiatives.

Student-Centered, Equity-Driven Instructional Coaching in Sandersville

The Sandersville School District Coaches' Handbook asserts that teachers are “the single most important factor affecting student achievement” and that the “district strives to create a sustainable culture of continuous professional learning for every member of the organization” (Sandersville, 2010). In support of these assertions, Sandersville funds a centrally-hired, school-based instructional coach for each of its 32 schools as well as two district “coaches of coaches” to support them. While this research is concerned with secondary level coaches, the cross-content, initiative-supporting model extends across the system.

The Sandersville coaching model. Sandersville has been developing and refining its coaching model for eight years in response to the assessed needs of the district. Danielle White, the district's 10-year Director of Title I/LAP and the administrator who founded and directs the coaching program, explained that while at first coaches in Sandersville worked only on instruction, specifically “Marzano Strategies” (Marzano, Pickering, & Pollock, 2001) with teachers, that approach had led to teacher and union resistance to coaching. Now, “we really come at it more through the students...we're here to talk to you about your students, what's working, what's not...it's much less threatening” (interview, 2/15/12). Whereas at first coaches mostly led whole-school or one-on-one professional development to help teachers implement Marzano's instructional strategies, in the 2011-12 year, coaches were expected to help teachers

analyze student-learning data and then design instructional interventions to meet the assessed needs.

Sandersville built its current coaching model using ideas from both instructional (Knight, 2009b) and student-centered (Sweeney, 2011) approaches to coaching. Some aspects of the Sandersville coaching model originate in Jim Knight's (2009b) tenets of instructional coaching, like the notions of an equal partnership between coach and teacher, fostering space for reflection, letting the teacher set the direction, and then "enrolling the client," or reaching agreement about each partner's role. Ideally, Sandersville coaches, as Rene and Danielle (Title I Director) explained, "partner with teachers to close the achievement gap" (field notes, 4/27/12) following a collaborative inquiry cycle. This process involves gathering pre-assessment data with a teacher, setting a measurable data-based goal for student improvement, devising an instructional intervention, implementing an instructional change, then collecting data to assess the results and determine next steps. The Sandersville coaches' handbook states, quoting Sweeney (2011), "It's not enough to focus...on teaching practice and hope it trickles down to the students." Sandersville asserts that this student-centered coaching can occur in any of the "three venues of coaching," one-on-one, in small groups, or in whole school professional development. In general, coaches in Sandersville work in all three venues to support any content area.

Coaches in Sandersville worked hard to separate their work from the formal evaluation work of principals. While coaches reported meeting with their principals on roughly a weekly basis to discuss general school-wide trends in student data and to plan for school-wide professional development, participants also agreed that Sandersville aimed to build a clear boundary between coaches and their principals. Principals reported that they did not ask coaches which teachers they were supporting and on what topic, and coaches always kept this

information confidential. As one coach commented, “you are sunk as a coach if something gets back to the teacher that you said to the principal” (Jodie, interview, 1/15/12). This separation between coaching and formal leadership appears throughout the district’s publications and emerged in principal and teacher interviews.

Sandersville summarized its expectations for coaches in its Coaching for Learning Standards, a document that coaches used for self-reflection and goal-setting across the year, and that principals use to evaluate them. The domains in these standards reflect the district’s values for coaches’ work (collaboration, data analysis, student achievement data, leading professional development) (Appendix C, for the self-reflection tool).

The coaches’ role in implementing the initiatives. In addition to supporting teachers through data-driven coaching cycles and collaborative teams, the district expected coaches to communicate to the schools the purpose and logistics of its initiatives, as well as provide the intellectual support needed to implement them. Danielle (Title I Director) described the coaches, in general, as the district’s main vehicle for disseminating central office information and professional development since the central office had “cut trainings and other classes” (interview, 2/15/12). Interviews with coaches and principals revealed that coaches were expected to gather, organize, and analyze trend data, facilitate Data Teams or support team leaders, and plan and facilitate Data Days. In terms of equity, Beth, a middle school focal coach, commented that she understood the coach’s role as “help [-ing] uncover some of the misconceptions we bring to the work, how do we help teachers uncover that? Um, how dire is um, just where we’re at with meeting the needs of our black and Latino males, it’s our kids of color, it’s our kids of poverty. What isn’t working for them?” (interview, 10/28/11). Beth and others explained that the coaching process could help teachers confront and interrupt beliefs and practices that were

not supporting student growth. Coaches (and the coaching model) seemed poised to reinforce several crucial aspects of district's improvement agenda: support teachers with collaborative data analysis and interpretation, support teachers in planning and implementation of appropriate instruction, and raise questions of inequitable practice.

However, Standards-Based Education by itself quickly became the highest intensity initiative in 2011-12 in terms of communication, resource needs, and trouble-shooting. As the coordinator of the new teacher mentor program commented during a coach professional development session, "It's permeating the system...it's making us all like new teachers" (field notes, 10/7/11). Coaches at all levels described the initiative as extremely stressful for staff, students, and families. Rene and Eileen, the district coaches, were asked to dedicate a day and a half a week to the Standards-Based Education project, including leading power standard teams and creating rubrics and assessments. School-based coaches reported serving on district Standards-Based Education committees, helping teachers plan and develop assessments, and in some cases creating assessments themselves. Nicole, one of the focal coaches, reported that she formally served as the Renaissance Middle School's "Grade Book Technical Support" person, commenting in an interview that this choice helped reduce teacher stress and give her some "entrée" into classrooms. Beth commented that she was also constantly navigating Grade Book stress; all year she weighed teachers' level of frustration with the grading program against other school goals for professional learning.

Professional Development for Coaches in Sandersville

Sandersville created a system of differentiated professional development support for coaches designed to guide them in their work with teachers. The Sandersville Coaches' Handbook asserted:

In Sandersville we have taken [it] to heart [to] ensure that our coaches have regularly scheduled professional opportunities in whole group, small group, and individual venues...these professional development sessions center around Jim Knight's (2006) suggested topics; improving coaching skills and supporting instruction/student achievement (Sandersville, 2010).

These professional development support opportunities included: bi-monthly *Coaching Academies*, periodic full-day whole-group *National Equity Project Sessions*, monthly *Coach Professional Learning Communities*, and monthly (or bi-monthly) *one-on-one* support. In what follows, I describe these levels of support for coaches (see also Appendix D).

Three-Tiered Support System for Coaches

The first tier of support comprised a bi-monthly, three-hour Coaching Academy by level (elementary or secondary). Rene and Eileen facilitated these sessions, designing them to respond to the coaches' needs they had assessed, and to address district initiatives or emerging priorities. Once or twice a month, coaches met with a small group of colleagues at their level (elementary, middle or high) for 90-minute self-facilitated Coach Professional Learning Community meetings. These sessions varied in topic and coaches were encouraged to organize them to meet their own needs, including book studies, data analysis, trouble-shooting, or addressing a problem of practice. The district coaches tended to attend these sessions to track the needs. Finally, experienced coaches met one-on-one with Rene or Eileen once a month and new coaches met with them twice a month. Any coach could call Rene or Eileen at any time with questions.

Additionally, during the 2011-12 school year, Sandersville coaches (along with interventionists and other specialists) attended six full-day workshops with the National Equity Project, addressing topics including cultural competency in teaching and in coaching, forming coaching partnerships, leading and facilitating small and large group professional development, and attending to adult needs during a change process. The National Equity Project's theory of

action includes attending explicitly to the emotional as well as intellectual aspects of change, and organized their sessions to do this for coaches. For example, during their February workshop, the facilitators engaged the coaches in discussion of some research about the role of “mindset” in adult and student learning (Dweck, 2010), or the notion that some people believe intelligence is predetermined and static, so effort does not matter (fixed mindset), while others believe that intelligence is malleable and so hard work makes people smarter (growth mindset). The NEP facilitators provided the coaches with opportunity to discuss implications for their own work:

- How do I effectively partner with an individual to support their growth and development?
- How do I facilitate and inspire reflective practice? (2/1/12, field notes)

Coaches reported in debriefs after these sessions that they tended to find the content engaging and relevant to their questions and work, particularly since they were asked to apply their learning to their schools.

Opportunities for Discussing Problems of Practice

Across all three main professional development structures (one-one, small group, large group), I observed multiple opportunities for coaches to discuss problems of practice. For example, the district coaches’ one-one sessions with coaches provided school-based problem-solving opportunities. Coaches typically preplanned questions in order to maximize time with the district coaches, sometimes printing out or posting agendas to guide discussion. Coaches raised questions about planning professional development, working with principals, working with challenging teachers, or logistics of district policy. For instance, Lauren, the new coach at Elm Middle School, started one of her one-on-one sessions by commenting, “I was brainstorming a class I could offer on differentiation. I would like to have a list of strategies and a framework for thinking about the professional development I could offer on this topic. I was hoping I could have that today. Feel free to jump in, ask me questions, tell me what to do...” (field notes,

11/30/11). Rene and Lauren discussed and charted possibilities, referring to professional texts and resources in the online coaching shared folder, for 90 minutes.

Additionally, time during Coaching Academies, coach professional learning communities, and National Equity Project sessions was often allocated for coaches to role-play or discuss self-selected dilemmas together using structured protocols. In fact, during the February National Equity Project session, the facilitators asked the coaches to brainstorm a coaching dilemma they were experiencing and then decide if their dilemma was rooted in classroom management, instruction, or working with a high-need population. Coaches sorted themselves by dilemma type and then engaged in protocol-based, structured conversation about what was happening and how to address it. They were prompted to meet in the same groups in March to continue discussion and update each other on their progress (2/3/12; 3/2/12 field notes).

As a whole, the system for support for coaches provided coaches with multiple opportunities to discuss self-identified problems of practice with other coaches.

Tools for Documenting Coaching

There were also several tools in the district that coaches used to document and share their work. Coaches completed and submitted to the Title I department monthly forms indicating how they spent their time (including their own professional development, coaching in all three venues, administrative work, etc.). The Student-Centered Coaching Tool (Appendix E) was one of the most prominent. Coaches submitted these forms to the district office six times a year and they discussed them with other coaches during Coaching Academies. These forms guided coaches through a series of questions for completion during coaching work: *What is the student learning goal for this coaching cycle and what is this goal based on? How will you know students reached success? What instructional practices were determined by the coach and*

teachers to most likely produce the goal? How will the coach and teacher partner to reach the goals? Rene saw the form as a “framework for collaboration” (interview, 5/20/12), and some coaches saw it as “invaluable” in keeping them focused on student learning goals. As middle school coach Nicole explained, “the district doesn’t use it to evaluate in any way, but I also still feel like it’s their strong message to me that, OK, remember this is what we are all about...” (interview, 5/25/12). According to Nicole and other coaches, the tool supported, or mediated, their learning about district’s expectations for coaching.

The Student-Centered Coaching Tool, including differing opinions about it, will be explored in greater detail in Chapter 5, as I explore findings regarding problems coaches encountered while attempting to use data to ground and guide work with teachers.

Coach Responses to their Professional Development

Given these three tiers of regular professional development, opportunities to reflect on problems of practice, and specific tools and resources, coaches reported feeling highly supported. One of the high school coaches, Ed, made this representative comment:

... I’ve been really happy with the professional development we’ve gotten. I like it because it feels more attuned with what the reality is that takes place in our lives. I’ve been very happy with it and anything I need I usually ask for and Rene is really good about coming down and coaching me or giving me the resources I need to read or places I need to go and look up or people I need to talk to. And the coaching community is huge around collaboration. We meet and talk all the time. I could pick up a phone and call one of the coaches and work a problem through.... (interview, Ed, high school coach, 1/25/12).

Ed, like all of his interviewed secondary coach colleagues, reported appreciating Rene’s one-on-one support, including her ability to connect him with resources and other coaches. He also felt supported by the network of coaches that had developed over time. His comments conveyed the availability of robust, practical, collaborative peer support as well as mentorship from Rene.

Summary and Looking Ahead

Given that many coaches enter their roles and receive no support, Sandersville School District provides an important example of the efforts of one mid-sized, urbanizing district to allocate time, resources, and personnel to create a differentiated set of opportunities for its instructional coaches' learning and growth. Sandersville expected its coaches to 1) conduct one-on-one, small group, and large group professional learning opportunities for teachers grounded in student data, and, 2) help implement the district's initiatives aimed at closing the achievement gap (Standards Based Education, data, equity). The coach professional development opportunities were designed to help coaches understand the district initiatives, develop coaching strategies, learn how to work with adult learners, and interact with colleagues, resources, and ideas in order to meet these goals.

These learning initiatives, the coaching model itself, and this professional development for coaches comprise the systems-level context for coach learning in Sandersville. Rogoff (1995) would refer to this larger context as the community plane, or the "culturally organized activity that has as part of its purpose the development of mature participation in the activity by the less experienced people" (p. 142). It also reflects the officially prescribed goals, resources, and values in the setting (Rogoff, 1995). A district-based system of support for teachers, leaders, or coaches aims to guide its learners towards the development of "mature participation" as defined in the setting.

However, there is more to the story of coach learning in Sandersville. First, such a description of the system of support alone does not offer insight regarding what kinds of problems (and successes) coaches actually experienced in their day-to-day work with teachers and the extent to which and how the system of professional development support guided and

supported their work. Second, the description of the system of support alone does not document what else, besides district professional development, may guide coach practice in Sandersville, including what problems of practice coaches come to notice, understand, and handle. It also does not convey how coaches actually learn to participate in coaching practice with teachers or interact with problems of practice. It is possible coaches learn to participate in ways the system does not intend.

Chapters 5 and 6 describe the kinds of problems that coaches actually encountered on the ground at their schools, considering the following questions:

1. What kinds of problems of coaching practice do secondary instructional coaches encounter in their daily coaching work with teachers in a reforming district?

- In what ways, if at all, do these problems become sites of these coaches' learning about coaching practice?
- To what extent are these problems, and the learning about them, similar or different for coaches in different schools?

2. What mediates coaches' learning about how to respond to these problems?

- To what extent and how does the system of support in the district mediate coaches' learning about how to respond to these problems?
- How do conceptual and practical tools, or other facets of the system of support, shape how coaches notice, understand, and handle these problems?
- To what extent do different coaches take up similar or different forms of guidance and tools to address their problems of practice?

First, given the emphasis on *data use* in the coaching model and the district initiatives, it is not surprising that coaches tried to ground their work with teachers in data. Chapter 5 describes what Beth and Nicole, the two focal middle school coaches, learned while attempting to use data in their work with teachers. Second, the coaches also encountered some obstacles when trying to address instructional problems of practice that were related to specific content areas. Chapter 6

describes what Beth and Nicole learned while negotiating problems of instructional change, and what supported and guided their efforts.

Chapter 5. **Navigating Problems of Using Data with Teachers**

As described in Chapter 4, Sandersville expected its instructional coaches to enact *student-centered* coaching (Sweeney, 2011), an approach intended to prompt *data-driven* teacher practice. The language in the district's student-centered coaching model conveyed that coaching involves 1) gathering some student assessment data with a teacher (or group of teachers), 2) analyzing it together, 3) selecting an appropriate instructional strategy, topic, or focus, and then, 4) assessing progress using more student data. This approach to coaching parallels the way the district wanted *teachers* working individually and in collaborative teams; essentially, planning instruction based on student learning data. In order to enact this form of coaching, coaches in this study had to first engage teachers in analysis of student-learning data.

The following chapter explores what happened when two middle school coaches (Beth and Nicole) tried to use student-learning data with teachers in one-on-one and group professional development, what they learned from the problems they encountered, and what guided their responses to these problems. It considers these questions:

- What kinds of problems of data use in coaching practice did secondary instructional coaches encounter in their daily coaching work with teachers? In what ways, if at all, did these problems become sites of these coaches' learning about coaching practice? To what extent were these problems, and the learning about them, similar or different for coaches in different schools?
- What mediated the coaches' learning about how to respond to these problems of data use? To what extent and how did conceptual and practical tools, or other facets of the system of support, shape how coaches noticed, understood, and handled these problems? To what extent did different coaches take up similar or different forms of guidance and tools to address their problems of data use?

While problems of data use in schools are well-documented (Marsh, et al., 2010), scant research currently offers descriptions of these problems in the daily interactive work of coaching, and no research analyzes how coaches handle them, using learning theory. Taken together, the two cases illustrate the experiences of instructional coaches trying to prompt teachers to examine student-learning data in schools where this was not the norm. Both coaches encountered teacher reluctance to examine student-learning data. Taken individually, the two cases show coaches trying different ways to prompt data use for different purposes in different venues (classroom vs. whole school level) in different kinds of school cultures. The two cases also show different ways coaches come to understand and respond to different problems of using student-learning data in schools.

Nicole's case offers an example of how coaches learn to "find, understand, and handle" (Rogoff, 1990) the problem of individual teacher receptivity to using student learning data to guide classroom-level instructional decisions. First, Nicole *found* the problem of teacher resistance to working with her at all, and then, when she did gain access to a teacher's classroom, she *found* he was resistant to using student learning data to drive changes in his practice. This shows that coaches who want to work with teachers to prompt a particular kind of practice, in this case data-based practice, may face the issue of gaining access more than once – once to the classroom and then again to the specific practices. Nicole initially *understood* this as a problem of a teacher's reluctance to setting a goal grounded in student data and to working with her for a long enough period of time to gain post-assessment data. To *handle* the problem, initially, Nicole used a tool appropriated (Wertsch, 1998) from her system of support to focus her work with the teacher, and then through her coaching conversation with the district coach, her *understanding* of the problem was transformed to include a broader look at her own approach and the school

culture. Nicole's case demonstrates a) the multiple levels of access involved in student-centered coaching, b) the importance of tools to focus both coach and teacher on student learning data, and c) the importance of direct feedback from a more experienced coach to help a coach understand and handle problems from different angles and broader perspectives.

Beth's case offers an example of how coaches in restructuring schools may come to find, understand, and handle a problem of prompting data-based reflection among distrusting teachers in the school as a whole. First, Beth *found* the problem of distrust among staff and *understood* it to be a product of the restructuring process. She worried that sharing student-learning data in up-coming professional development would further alienate and demoralize teachers, yet she felt pressured by the district to build the session around data. Beth *handled* the problem with the assistance of a framework for adult learning that she encountered during a district professional development session, prompting her to consider multiple domains of adult learning (Heron, 1999), and to use individual student stories as data. Based on positive teacher feedback and increased collegiality reported during and after the Data Day, Beth's *understanding* of the problem and her new strategies for addressing it were validated. Beth's case demonstrates a) learning from practice can involve coming to district support activities with a larger problem (school culture) and a specific, immediate planning need (up-coming professional development), b) timely conceptual tools with practical implications (adult learning framework) can help address problems, and c) positive feedback from staff can help solidify coach learning from practice.

As described in Chapter 2, in order to analyze and understand how coaches come to find, understand, and handle (Rogoff, 1990) particular problems of data use, I take the concept of learning as guided participation on the interpersonal plane (Rogoff, 1995). In this chapter, I

examine processes and systems of involvement designed to foster coach professional learning about data. I examine what guides (and mediates) Beth and Nicole’s participation in data-based coaching with teachers, considering direct and indirect guidance from the coach of coaches, other professional development, and the mediating role of tools. The two basic processes of mutual bridging of meaning and mutual structuring of participation provide the main lenses for analyzing coach participation with teachers, data, and this particular set of problems. For instance, a coach and teacher working together to make sense of student learning data will “bridge” their individual perceptions or understandings of students and ways of thinking about assessment. Likewise, if the district coaches create a professional development for coaches about planning instruction based on test scores, the district coaches will make decisions that “structure” which aspects of the data and planning process they ask coaches to try. Since guided participation is a mutual, two-way process, coaches are also actively involved in bridging their understandings and structuring their own participation.

In what follows, I present the cases of two coaches (Nicole and Beth) learning while navigating problems of data use at their schools. For each case, I provide some background and context for the problem in general. Then, I present an illustrative vignette showing the problem emerging in the day-to-day work of coaching, considering how each coach came to find, understand, and handle it, including what mediated her learning. I conclude with reflections on data problems as sources of learning.

Nicole: Learning to Navigate a Problem of Prompting Data-Based Practice

Nicole entered coaching with a range of experiences and a firm commitment to data-driven instruction in schools. At the time of this study, Nicole was entering her 4th year as a coach Renaissance; but she had also worked there as an intervention specialist previously.

Nicole described her experiences as an intervention specialist as her most formative, since that was when she learned “to think globally about pockets of which kids are needing what...” (initial interview, 12/16/11). Nicole’s background in math and data analysis primed her to embrace the district’s focus on using data to prompt, guide, and assess professional development work, a goal she defined as “one of my big focuses...to use data in PLCs² and in coaching...” (field notes, 10/7/12).

Nicole’s principal, Mark, also expressed a strong data-driven orientation. He explained that when he met with Nicole each week, they would examine school-wide trends in grades, interim standardized tests, and discipline data. He expected Nicole to plan her coaching based on these trends. Occasionally, based on data, he would also ask a teacher to meet with Nicole, for example:

So, I have a class where a majority of the kids according to their grades are below standard. And when I say majority, I mean like, 80% of the kids are working below standard. So, my initial conversation with the teacher is, wow, I see a lot of your kids are below standard, what can we do? What can we do? And, our superintendent says this frequently. It’s not what the data says, it’s what we do with it. They could be below standard for a variety of reasons, but they are below standard and that’s not acceptable to leave them in that state, so what do we do? So, in that conversation, I will ask, have you had a chance to talk to Nicole to see what we can do, that’s not an evaluative cycle, but that’s a coaching cycle, to say, how’s this working for kids. And, so that’s how it will be offered up (Mark, interview, 2/29/12).

As this quote reveals, Mark felt strongly that his teachers should be working with Nicole in non-evaluative, supportive “coaching cycles” aimed at increasing the number of students who are working at or above standard. Furthermore, Mark’s comments also suggest his desire to link coaching work to measurable (“80% of the kids are working below standard...,” “they are below standard and that’s unacceptable”) improvements in student progress towards the standards,

² PLC refers to “Professional Learning Community,” a strategic collaboration of teachers in small, data-driven teams (DuFour, 2004). In the year of the study, Sandersville had begun implementing a version of PLCs known as “Data Teams” (Love, 2004)

which was also how Nicole understood data-based instruction and coaching, as will be explored below.

Despite this apparent alignment of coach, principal, and district goals for data use, in her daily 1-1 work with teachers, Nicole encountered significant difficulty actually getting teachers to work with her at all and then to analyze data together to plan instruction. This repeating problem proved vexing to Nicole because she supported the district's focus on data-based teaching (and coaching), and saw it as major need.

In what follows, I present a two-part vignette to illustrate and analyze the problem of data use in Nicole's practice. I based this vignette on: observations of two coaching sessions between Nicole and a teacher (Ken) and subsequent debriefing interviews with Nicole; three observations of 1-1 support between Rene and Nicole; and two other 60-minute interviews with Nicole. The vignette below illustrates 1) Nicole's initial attempts to prompt data-driven instruction with a teacher, and 2) her new learning about the nature of the problem while participating in a coaching conversation with the district coach. While the problem of data-resistance in schools itself is well-documented in the literature (Mason, 2002), the lens of guided participation helps us see how Nicole understood and attempted to address this problem in daily work with teachers, mediated by a tool; and furthermore helps us see how direct guidance from the district coach shifted her understanding and, ultimately, her participation in coaching.

Finding, Understanding, and Handling a Problem of Teacher Resistance

Nicole, like many coaches, struggled initially to gain access to classrooms for coaching. Once she gained that access, Nicole understood her problem as one of struggling to balance what teachers wanted to work on through coaching with what analysis of student learning data might suggest they should work on. Nicole commented multiple times during the year that once she

gained access to classrooms, she then would struggle to gain access to “deeper work.” Nicole defined “deeper work” with teachers as looking at student work together to plan instruction. She commented:

So, for me it is about how do I find and make sure that when I meet with people that I am bringing value to them, that I am connecting with what they want, but still connecting it to that data— and that’s a real dance to do that (debriefing interview, 4/2/12).

This quote summarizes how Nicole initially came to *find* and *understand* the problem of data use in coaching with teachers. She described a conflict between “what [teachers] want” and find valuable and her desire to “connect it to data.” Nicole grappled with how to make her coaching work with teachers relevant to what *they* thought they needed and valued, while still starting with data that showed what *students* needed. The following example of Nicole coaching a math teacher, Ken, illustrates one instance of how Nicole came to find, understand, and then handle the issue of balancing teacher interest in coaching at all with prompting him to plan and assess his instruction based on students.

Nicole’s work with Ken originated at a district committee meeting for middle school teachers interested in more strategically supporting English Language Learners. Nicole served all year on the committee along with Ken, a 10th grade geometry teacher in his second year of teaching at Renaissance. By April, the committee had started discussing the potential benefits of creating consistent, school-wide structures to support the way students took notes in class. Recognizing that many English Language Learner students in Sandersville struggled with taking notes in class and then later using those notes as resources to help them study and learn material, the committee decided that if schools, or at least departments, developed and taught some common ways for students to organize and use their notes, English Learners might become more independent.

Ken and Nicole liked this idea and shared it with the math department chair at Renaissance. The chair thought building common expectations for notebook organization in math classes was a great idea, and he said he would even coordinate the department's notebook efforts next year. However, with the state tests fast approaching, he did not want to require the whole department to try anything new now. Ken, however, thought he might like to try establishing some new structure for his own students' note-taking right away. He told Nicole it frustrated him that his students "could never find anything" in their notebooks (all students, not only English Language Learners) and that this put him in the position of constantly having to define terms for students that they had already written "somewhere in their notebooks" (field notes, 4/12/12). This was becoming a particular problem in the context of standards-based grading since students were encouraged to retake tests on concepts as many times as needed in order to prove their proficiency; but in Ken's class, they could never find their notes to help them study. So, Ken asked Nicole to help him plan how to help students organize their notes and how to teach them to do so.

Coming to *find* the problem in Ken's practice. Nicole entered the coaching work with Ken optimistic that even though his question (how to organize student notebooks) did not originate in student data per se (instead, in general student disorganization), given the right coaching strategies, she could still guide him to anchor his instructional choices and goals in data. Nicole gathered some resources on ways to organize student notebooks from the AVID³

³ AVID, or Advancement through Individual Determination, is a national "college readiness system for elementary through higher education that is designed to increase school-wide learning and performance" Secondary schools can choose to become AVID schools and part of the AVID network, receiving material and professional development support in implementing a set of common school-wide academic study skills. The program also includes offering accelerated coursework and elective study skills classes to support students in the "academic middle." (<http://www.avid.org/>)

program, as well as her “Professional Development Goal Tracking Form,” a document she used right away to prompt Ken to set a goal for the coaching. She arrived in Ken’s classroom during the designated time, and they had this exchange right away:

Nicole: Our first goal is to identify one area to work on together. I have this PD Form that will help guide the conversation...

Nicole takes out her adapted version of the district’s Student Centered Coaching form that she calls her “PD Goal Tracking Form” (Appendix F). She grabs a pencil to start filling it in.

Ken: You know...what can I do, at this point in the year? The testing is coming, we have 8th grade promotion issues...as we talk, I want to determine what is realistic for next year, not - I really want to hit this hard next year right away. Let’s talk what’s working/not working for next year....” (field notes 4/12/12).

Following Nicole’s attempt to help Ken articulate a goal for the coaching work, Ken replied that, like the rest of the math department, he had changed his mind about making any changes in his students’ notebooks *this year* because of the state tests and timing.

Using a tool to *handle* the problem of starting with student data. Ken’s sudden resistance to making changes in his practice this year represented one of the manifestations of Nicole’s problem. The following excerpt illustrates how Nicole responded to Ken’s resistance with the goal of fostering a more data-driven approach to his instructional decision-making. The lens of guided participation helps us understand how Nicole and Ken mutually bridged their understandings of coaching, student learning data, and notebook use, as well as Nicole’s attempts to structure the ways in which they participated mediated by her tool:

Nicole points to the column on the Professional Development Goal Tracking tool that read, “Student Learning SMART Goal,” “Standards,” and “Pre-Assessment Quantitative Data by Student.”

Nicole: Here’s what we could do...I need structure. Your goal is student learning. You are looking to help improve performance on math

tests, or learning target⁴ mastery. What is your specific goal for our work together on notebooks this year?

Ken: Does the goal have to be measurable? I think of unmeasurable things.

Nicole: Through systematic use of notebooks with negotiable and nonnegotiable pieces...[writes as she talks]

Nicole: ...in terms of data, data will have to be mastery of learning targets...

Ken: And formatively...can I go to any given student and say where would you look for this information...where would you find...it's a trifecta – notebook, standard, students.

Nicole: You jumped to 'how will you know?'

Ken: I would like to see how frequently someone asks a question that is answered in the notebook. How many times do I say – go to your notebook.

This slice of the conversation demonstrates Nicole's efforts to handle the problem of guiding teachers towards data-based instructional decision-making, while honoring the teacher's goals. Here, Nicole tries to prompt Ken to articulate a quantitative, data-based rationale for his notebook work (asking, "what's your specific goal for our work together?", "in terms of data..."), which Ken questioned ("does the goal have to be measurable?"), showing preference for classroom observational data ("formatively...can I go to any given student and say where would you look for..."), rather than quantitative data tied to "learning targets," or course goals. Nicole understood the district (and the principal, Mark) to be more interested in changes in student progress towards quantifiable learning goals.

Coming to *understand* the problem of classroom-level data-based coaching. Rogoff's (2003) notion of mutual bridging of meanings, or the process of learners "attempting to bridge

their different perspectives using culturally available tools” (p. 285) helps us see the ways in which Ken and Nicole negotiated their understandings of several ideas in this conversation, ultimately leading to changed understandings for both participants. Nicole and Ken each brought to the interaction different expectations and understandings of the coaching. Ken started participating expecting to make plans for how to organize student notebooks next year, while Nicole was expecting to help him make changes this year. Furthermore, Nicole wanted to teach Ken how to develop a long-term habit of making decisions based on data, but Ken understood this coaching in terms of “working on notebooks.” Similarly, Nicole expected to help Ken articulate formative and summative assessments, while Ken wanted to focus on formative assessment and did not believe that changing the way students took notes would influence his students’ test scores. We can understand the initial goal negotiation in this conversation as the process of Ken and Nicole mutually bridging the meaning of coaching, data, goal-setting, and each person’s respective goal. Through this conversation, Nicole learned that Ken struggled to set quantitative student learning goals for his teaching, which were valued in the school and district, relying more on observations of the classroom. Both Nicole’s and Ken’s understandings and participation changed as a result of this bridging. Nicole had new understandings of how to participate in coaching work with Ken, how to use the form, and how teachers think about data. Ken developed a new understanding of participating in coaching (he would have to use data to set a goal for this year).

Using tools to *handle* the problem of classroom-level data-based coaching. Rogoff (2003) also argues that in guided participation, learners make deliberate efforts to structure how they participate in learning. Nicole attempted to use her Professional Development Tracking Tool” to guide and structure her own and Ken’s participation in this interaction. When Ken

wanted to start talking about next year, Nicole was able to use the tool to remind Ken, “your goal is student learning...what is your specific goal for our work together?” As Nicole asked questions from the tool and wrote their co-created ideas on the tool directly, the tool formally shaped the direction of the discussion.

Nicole later explained that her Professional Development Tracking Tool was as helpful to her as it was to the teacher. She commented that she had taken the district’s Student Centered Coaching Tool and adapted it to make it more “user-friendly” for teachers by reducing the number of words. In this sense, Nicole appropriated the tool, or made it her own (Wertsch, 1998). She commented that without the tool with her, she could easily get side-tracked and forget about data entirely. The tool mediated (Wertsch, 1998) Nicole’s participation in coaching work by prompting her to ask various questions intended to prompt data-driven decision making in teachers.

Guided participation helps us see the ways in which Nicole came to find, understand, and start to handle the problem of prompting data-driven teaching in her work with Ken. As they worked together to bridge meanings and structure their participation, mediated by and physical tools like the Professional Development Tracking Tool, Nicole developed new understanding of the problem.

Ken changes his mind, Nicole *finds* the problem again. In our debriefing interview after her second coaching session with Ken two weeks later, Nicole reported that she was proud of her new ability to use her “PD Tracking Tool” to set a data-based goal with a teacher, but was disappointed to find that once again, she had had a relatively brief coaching partnership with a teacher. She had wanted to have an opportunity to help Ken make more changes in his practice, then look at student work with him and plan instruction accordingly. But, Ken had not followed

through with the notebook experiment in his classroom, so Nicole was not able to continue to coach towards data-based instructional practice. Furthermore, the next district deadline for a Student Centered Coaching Tool was fast approaching, and this time, Rene, the district coach, had asked coaches to be sure to include *final* data, data that emerges at the end of some coaching or collaboration, and she had none. Nicole commented to me,

Because one of the things that I am finding is that teachers will go here, they will build a plan. We will put it in place, and then they will be like, OK, we are done, thanks, see you later. I'm like, wait, I want to see the data. I want to see how this works, I want to stay by your side. And they are like, no, thanks" (4/25/12, debrief interview).

The combination of the experience with Ken and the up-coming SCCT deadline prompted her to rediscover the problem again, now seeing it as a problem of producing outcome data in her coaching. She recognized what had happened with Ken as a pattern.

Stretching Nicole's *Understanding of the Problem through Coaching with Rene*

Nicole decided to bring what she saw as the problem of "getting to final data" to Rene in their next scheduled coaching conversation. Rene had been providing this monthly support to Nicole for four years, and so she knew Nicole and her context quite well. The following exchange illustrates how Rene and Nicole, through interaction, came to understand Nicole's problem in a new way, and how Nicole developed a new plan for responding to it. The construct of guided participation helps us understand what and how Nicole learned about the causes of her problem and how to address it.

How Nicole comes to revise her *understanding of the problem.* Rene knocked on Nicole's office door right at 9 a.m. for their scheduled 1-1 on April 25. After pouring Rene a cup of tea, Nicole jumped right in and asked her, "On the Student Centered Coaching form...I don't ever seem to get to final data, why is that? What's stopping me? What could I do to encourage

that?” (transcript, 4/25/12). By raising her question right away, Nicole took an active role in “structuring her participation” in this interaction, guiding the direction of the conversation (Rogoff, 2003). Nicole summed up the experience she had just had coaching Ken, and then added, “but the question is when it comes to [data], you know, teachers tend to resist...how do I make sure they continue to bring the data and not view it as an imposition...?” (transcript, 4/25/12). After listening and taking notes, Rene asked Nicole if she wanted to hear her opinion. Nicole nodded, and Rene offered a set of observations clustered around two themes, school leadership and Nicole’s tendency to enter coaching focused on teacher’s questions or instruction, not student data. First, she offered a reflection about the school culture and administration, reframing Nicole’s problem as one indicative of the larger school culture and leadership:

... if you, as this one individual are pounding your head on something that you are trying to get in, but there is not a school culture or a building leadership that has paved a way for you to have successful partnerships using data— student-centered data— as your venue and your entry point... (1-1 transcript with Rene, 4/25/12).

Here, Rene suggested that after four years at a school, it is not a good sign that Nicole is still “pounding [her] head” as she tries to coach with data as an “entry point,” and wonders if the principal had set the conditions for this to happen. When Nicole did not immediately respond to these reflections about the school’s culture and leadership, Rene offered some additional reflections on Nicole’s approach with Ken, naming it as “teacher-centered,” and reminding her, “your entry point is not the teacher, your entry point is whatever kid in the classroom is not achieving. And it’s not about the teacher. It’s about the kid” (transcript, 4/25/12). Rene continued, this time offering some specific, different language for starting a coaching conversation like, “OK, so who is not getting it? I am here to partner with you. How would interactive notebooks help these kids be successful? Which kids?” (transcript, 4/25/12). This

language offered direct guidance (Billett, 2003) to Nicole regarding her approach in the form of modeling.

In this interaction, Nicole and Rene worked together to bridge their understanding of the particular issue Nicole was raising. Rogoff (2003) asserted that “storytelling,” or listening to and providing accounts of how one participates in culturally valued activities is part of the guided participation process. Rene asked Nicole if she would want to “role play” the way she typically starts a coaching conversation. Nicole responded that she preferred to just “describe what just happened with Ken, because I think it’s telling.” Nicole presented the situation as a problem of her not knowing how to help teachers see data as less of an “imposition.” Nicole then shared the story of her work with Ken, allowing Rene the opportunity to “observe” (second-hand) Nicole’s approach to coaching. Nicole was quite thorough in her retelling, including specific language and strategies (like co-writing the “PD Goal Form”) she had used with Ken, emphasizing his initial excitement about the notebook project. Rene, meanwhile, had envisioned coaching unrolling in a different fashion from how it sounded in Nicole’s narrative; she understood coaching as starting from a student-learning goal (“it’s not about the teacher, it’s about the kid.”). In attempt to model her thinking and approach, Rene commented that she would have said, “OK, so who is not getting it?” I am here to partner with you. How would interactive notebooks help these kids... which kids?” (Whereas Nicole had started the coaching work with, “what are your goals?”) Through offering this different language, Rene guided how Nicole might approach participating in coaching in the future.

Nicole and Rene also negotiated their understandings of the principal, Mark. Rene, informed by her past experiences with Nicole and with Mark, voiced some of her ideas about Mark’s leadership and about how a principal should ideally work with a staff to sponsor the

coach's work. Nicole admitted that "this was the principal she had the least influence on," and that while she respected his style and preference for not proposing too many school goals at once (choosing to focus mostly on Grade Book this year), she ultimately agreed that maybe Mark was partially to blame for the school culture. Through the bridging of meanings in this excerpt, Nicole and Rene both developed new understanding of the factors at play here (Nicole's approach and the school culture).

Making a plan for how Nicole will *handle* the problem now. Throughout the year, Rene and Nicole had "managed collaboratively" the "adjustments and arrangements for activities" (Rogoff, 1995, p. 147) in these one-on-one coaching conversations. Over time, Nicole had learned to participate in a coaching conversation with Rene with an openness to share questions, problems, and vulnerabilities, and also an expectation that she would be making choices and shape the course of the conversation. As this one-on-one conversation continued, Rene gave Nicole the choice of discussing the leadership issues or her approach issues, and Nicole chose the former, further determining the direction of the conversation according to her own interests, needs, and goals (Rogoff, 2003).

Rene and Nicole then planned a conversation that Nicole would hold with Mark (the principal), about 1) working together to gather information about teachers' use of student data, and 2) his role in fostering a data-friendly culture through some additional structure, accountability, and clarity about Nicole's role. In the conversation Rene modeled some of the district's valued coaching strategies: giving Nicole choices, asking her to gather data, using probing and clarifying questions to help her plan her own next steps, asking Nicole to set her own goals and outcomes, asking Nicole what she already knows and has already tried, and asking her how she felt. When needed, Rene provided language that Nicole could use like,

Tell him how you feel about your work at the school and why it is important. Say, ‘I am concerned about the health of our PLCs and their use of data. I want to partner with you to diagnose where they are and make a plan for improving them’ (transcript, 4/25/12).

Through modeling and reinforcing how to approach a coaching conversation with a principal, even offering direct feedback on Nicole’s language, Rene offered Nicole extensive guidance on how to have a respectful conversation with Mark about how they might work towards a better principal-coach partnership.

Guided participation offers several ways of understanding what guided Nicole’s new understanding of and approach to the problem. There were several factors “guiding” this conversation. In a general sense, one source of the *guidance* was the district’s value in data-based professional learning. This value guided both Rene and Nicole. Second, Rene was also guided by all her past experiences with Nicole and with other coaches. Rene commented later in this 1-1 that she had realized that despite four years of working with Nicole on making plans for coaching “things haven’t— they haven’t gone. And it’s not as if we haven’t had these types of strategic, deep, thoughtful planning conversations— and so I just see this theme coming up.” She meant that despite all their planning and efforts, the strategic plans had not “gone,” or succeeded. Nicole was guided by Rene, a skilled, central participant in coaching (Lave & Wenger, 1991), as well as all of her past experiences attempting to coach at this school and serving as an intervention teacher there. Rene’s guidance included telling her to stop participating in teacher-centered ways that led to pursuing only what a teacher wanted, and to start participating with the principal in a way would draw his awareness to the school culture.

Nicole reported later that this conversation with Rene had shifted how she approached coaching teachers. While she did not return to work with Ken (since he seemed not interested in working with her this year), she did start working with another teacher and collecting pre and

post coaching cycle data to reflect on their decision to implement a new approach to fostering student discussion in the classroom.

What Nicole Learned about the Data Problem

Prior to coaching Ken and meeting with Rene, Nicole had thought she was on the road to improving her ability to prompt a shift in how teachers used data to guide their teaching. She had been working hard to appropriate tools from the district's support system, in particular, her version of the Student-Centered Coaching Tool. Mark thought the conditions were set for data-based practice since he had built collaboration time into the schedule and looked at achievement data with Nicole. From the outside, it might have appeared that there was an alignment of coach, school, and district data-use goals.

Nicole's ability to find, understand, and respond to a problem of prompting data-driven instruction developed in the everyday work of coaching Ken, mediated by tools from the setting, through the pressure to produce "data" as evidence of her coaching practice, and, most transformatively, in her conversation with Rene. After meeting with Rene it became clear to Nicole that while she could continue to hone her approach in her work with teachers, data-driven instructional practice at her school would not likely develop without a change in principal sponsorship to "pave the way" for her to engage in data-based conversations with teachers. This experience broadened Nicole's understanding of the problem from purely a focus on her own practice and teacher classroom practice to its larger leadership context, in this case, her principal's as well as her own.

With regard to supporting teachers, Nicole learned that she had been unintentionally approaching coaching from what Rene called a "teacher-centered" approach, and she could do more to use data to prompt the coaching work. She was so preoccupied with getting teachers to

work with her at all that she had not developed a habit of looking at student needs with teachers first. For instance, instead of starting with taking a look at student data with Ken (and others), she had started with an instructional strategy (how to teach organizing a notebook), without a rationale in student data. As she commented at the end of the 1-1, to Rene about the conversation:

you didn't say this in words, but I know you said it— you still have to re-double your efforts to get more people to do one-on-one coaching. You got to still find ways to get into them... So, I mean, I clearly heard that message and that felt— that made me feel like there is still something I can work on. I don't have to wait for Mark. I can still actively work on what been trying to do— get better at enrolling. Find ways to lay this out for people— so now I am re-thinking, OK, what am I going to— who am I going to approach, when and why, who could I get, how could I build on some pieces I have already put in place and somehow get people to go back in again and say, can I get people to look at some data? (field notes, 4/25/12)

Here, Nicole explained her new understandings as a result of the conversation with Rene. Even though they had spent the bulk of the time talking about working with the principal, Nicole was still processing Rene's feedback about her approach with teachers. She commented, "I clearly heard that message..." and she saw this was something she could do before meeting with Mark. She understood that she could keep working on "enrolling," or getting agreement about what the coach and teacher would each work on, and trying to involve data in that effort, potentially with teachers who were more open. In other words, she could still work on how she participated with teachers (and which ones), even before Mark changed his approach.

Beth: Navigating the Role of Student Data in a Distrusting Culture

While Nicole had encountered a problem of individual teacher resistance to her efforts to prompt data-based classroom practice, Beth encountered a problem of framing data for a staff in ways that would not alienate or exacerbate school culture issues. Beth's case illustrates how, given support regarding principles of adult learning, coaches can learn to leverage student-learning data in ways that change the ways teachers collaborate with each other.

Beth, like Nicole, brought considerable experience to her coaching work. She had been an elementary teacher for five years and had coached at two different elementary schools for six years in two different districts. At the time of the study, Beth was in her first year coaching at Thunder Middle School. After only a few months at the school, teachers described her as warm, knowledgeable, non-threatening, and “clearly here for the kids” (teacher interview, 5/25/12). Like Nicole, Beth understood and endorsed the district’s goals around coaching with data, and in fact, initially identified data use in coaching as her own main goal, “I really want to get better at using student data to drive my [coaching] work, and also measure it,” (initial interview 10/28/11). However, as the year progressed, given the nature of the school culture, Beth came to find and understand a different problem of practice; that of healing the divided school culture at Thunder.

The previous year, Thunder had begun state-initiated restructuring due to low-test scores. As part of the restructuring process, the school had been broken into two schools, a Science Technology Engineering and Math (STEM) school and a “traditional” school. Teachers who wanted to work at the STEM Academy had to apply, and within a year, all teachers would be forced to either apply to STEM or leave (see Chapter 3 for more context). According to Beth, all three interviewed teachers, and the two principals, the restructuring process had created a divided school culture, one that had given rise to considerable distrust and lack of community. Mid-year Beth commented she was coming to understand that the staff did not “really like each other” let alone “want to look at student work together” (2/2/12, interview). One teacher commented of Thunder, “it’s all pretty scattered, there’s no real collaboration unless you are in STEM” (Ron, interview, 5/3/12). Similarly, Celia (the assistant principal) also commented that collaborating

around student work would be a goal for the following year. As Beth summed it all up it at the end of the year:

The fact [is] that we just need- they just need to build community here. And if that's all they did next year, is work on cultural competency and becoming a community – so [pause]. As a leader, I am thinking, what is the real work? You know? If a school isn't a community- if it's so divided, and everything is being done compliantly, but not- they don't have a sense of belonging to it- there is not a common theory driving our work- and kids aren't at the heart of it's – it's like, can you really do any school improvement that's going to hold? (5/25/12, interview)

This quote, like many others from across the year, reflects Beth's strong belief that before any other "school improvement" could take hold, the school had to first become less divided and learn to put kids "at the heart of it." It also conveys the *leadership* dimension of her problem of practice. Beth came to understand her problem of practice in terms of the school's theory of change, the focus of the learning agenda, and the school culture. Beth understood the problem as first and foremost a function of leadership rather than teacher learning or classroom practice.

In what follows, I present a two-part vignette illustrating what Beth learned from this problem of trying to use data in professional development in ways that would help, rather than hinder, the development of a stronger school culture. Data for this vignette was drawn from an observation of a National Equity Project session, a debriefing interview with Beth after that session, an observation of Beth leading Data Day at her school, a debriefing interview of that Data Day, Beth's written reflection on the Data Day, and several drafts of Beth's agenda for the Data Day. Additionally, I interviewed Beth's principal, three teachers at her school, and examined Beth's four other interviews from across the year.

The vignette illustrates Beth 1) participating in district-level coach professional development led by the National Equity Project (NEP) designed to guide planning of Data Days

at the schools, and then 2) her subsequent facilitation of a Data Day at Thunder Middle School. Again, guided participation provides a lens for interpreting coach learning.

Beth's Planning for Data Day, Guided by Coach Professional Development

Beth arrived preoccupied at the Sandersville Community Center for the March National Equity Project professional development for coaches. She knew she had to develop a plan for an up-coming Data Day professional development at her own school in about a week, and her principal and vice principal had given her full responsibility for the planning and facilitation. However, after a few moments at the session, Beth recalled why she always likened the NEP sessions to “getting a drink of water” (debrief, 3/2/12). The session, entitled “Coaching for Equity: The Group Dynamic – Planning for and Facilitating Group Meetings,” had been specifically designed to support coaches in planning for these (and future) Data Days. This is an example of how Rene and Eileen, the district coaches, worked hard to meet the coaches’ immediate, pressing needs. Guided by the district’s values of providing meaningful learning experiences for staff around student learning data, Rene and Eileen had worked with the NEP to design practical, timely professional development for the coaches.

The Experiential Learning Cycle becomes a tool for *handling* the problem. Over the course of the day, the facilitators shared several frameworks for thinking about adult learning in large group settings. Beth, and many of her colleagues, found one entitled the “Experiential Learning Cycle” (ELC) (Heron, 1999) the most helpful. Carla, one of the National Equity Project facilitators, explained that this framework always guides their organization’s planning of its professional development. She explained that ideally, for professional learning to be successful and lead to implementation, adults need to experience learning in four domains: imaginal (image-driven), affective, conceptual, and practical. Carla asked the coaches what they

tend to experience in their own professional learning in schools, and most agreed that typical professional development does not address the affect and rarely engages adult creativity or imagination. Then, Carla presented a sample agenda and asked the coaches to respond to it [note that coaches indicated by number were elementary coaches who I did not enroll in the study; Christine is a non-focal middle school coach]:

Carla: I mocked up an agenda that I used once with a staff. It went like this:

Breakfast
Pair-share: what are you excited about in the data?
Data trends, analyze
Grade levels choose a focus
Come together, whole school
Plan next steps

Carla: Talk with your partner: What comes up for you? What discourse would you expect at such a meeting?

Partners talk for about 2 minutes.

Coach 1: I like this agenda, I need and like data.

Coach 2: I wish I had this agenda as a sample for Data Day.

There is a group share after the partner conversations.

Christine: I see this is purely hard data. How could you turn this into a story?

Coach 4: I was thinking when did this occur – was it the first day back?

Carla: How would this agenda make teachers feel?

Christine: Deficits, you would see and feel deficits.

Coach 2: It just depends on timing – teachers like data.

Carla asks the group to notice where the elements of the Experiential Learning Cycle appear.

Coach 5: There is no imaginative, no processing...

Christine: Go back. Can we really do 'next steps' without imagining?

Then, Carla projects a PowerPoint slide asking for participants to talk at their tables. *Table Talk: What would you change in this agenda to give participants a different experience? What are some affective/emotional/imaginal activities you could do?* (field notes, 3/2/12).

The facilitators then charted the coaches' ideas for engaging teacher affect (e.g. writing a letter to a student) and imagination (e.g. pictures). The agenda generated a range of responses (positive and negative) and stimulated discussion of what the Experiential Learning Cycle meant.

The Experiential Learning Cycle and its components (affective, conceptual, imaginal, and practical) became a conceptual and practical tool for supporting the bridging of meanings of coaches' previous experiences in and planning for professional development. When Carla prompted the coaches to reflect on past professional development and to talk about the sample agenda, coaches started taking up the terms right away to talk about their experiences. Furthermore, by inviting comment on its components, Carla problematized the "typical" agenda that schools tend to use to engage teachers with student learning data. The coaches were able to talk about the agenda's progression from student data to goal-setting.

Beth commented after this portion of the session, "When there is such dissonance on a staff, not knowing where we are going as a school, our work has to be grounded in the actual students," conveying her belief that without reference to the students (rather than numbers intended to represent them), her staff, with its level of uncertainty about the future and distrust in the change process, would not respond well to data on Data Day. These conversations helped

Beth “stretch” her thinking about participating in the work of leading data-based professional development and the importance of including “the actual students.”

Learning to *handle* problems of data use in whole group settings. Rogoff (2003) argued that one way more experienced participants in a community may structure and guide the participation of less experienced members is through gradually increasing the amount of responsibility others have for activities. In this case, Carla, an experienced professional development provider, gradually increased the amount of the learning cycle the coaches had to consider and through what kind of task. First, they just thought about the imaginal and affective dimensions while they studied a pre-provided agenda, and received verbal feedback as they offered suggestions.

In the afternoon, Carla asked the coaches to apply the Experimental Learning Cycle on their own, to an agenda of their own creation, expecting them to participate as full members of the community, responsible for their own planning. The coaches spent an hour revising or drafting a Data Day agenda for their own schools – using the framework as a guide. Field notes reflect that Beth took out her own agenda draft, immediately scratching out aspects of it and turning it over to write: affective, imaginal, conceptual – and then adding thoughts under each category. While her original agenda opened with an hour for teachers to read some articles about effective strategies for teaching English Language Learner students, her notes on the back suggested a different approach. She jotted, “Choose one representative student. How do you hope to rewrite that student’s story?” I talked with Beth while she planned, and she explained she had considered asking teachers to bring quantitative data on five students who were at risk of failing, but now she was thinking,

“pick ONE student. The whole day will be seeing the learning with the lens of that one child. I am thinking more about how to bring the affective piece in throughout, due to the

level of discomfort. I hope I can sell this idea to the administration” (field notes, NEP, 3/2/12).

Beth already expected to engage the teachers with data, but the concepts and language in the Experiential Learning Cycle mediated her planning. She commented she felt affirmed in her choices about how to facilitate and address the issues at her school. Furthermore, the tool reminded her of the importance of planning for teachers to have practical “take-aways,” an aspect of adult learning she sometimes forgot.

The session gave coaches the opportunity to participate on two levels: 1) as learners who interacted with some new content, and 2) as apprentices to skilled facilitators. The coaches were participating in professional development as well as learning concrete techniques for their own practices. As Beth commented later, “I always look forward to [NEP sessions] because it’s my learning, and ok, how did they just get me to have that learning? What was the process? They model everything that they are doing and why” (debrief, 3/3/12). The session itself was structured to model what the National Equity Project considered to make successful professional development, involving all four aspects of the Experiential Learning Cycle.

Facilitating Data Day, *Handling and Understanding the Problem of Community*

As she had planned during the NEP session, Beth organized the March Data Day into three parts. She started with the entire staff working together in the library, then offered them the choice of three “break out sessions,” and then gathered them again as a staff at the end of the day. The beginning of the day was purely affective; Beth asked teachers to spend time thinking about, sketching, and discussing one student in particular and his or her strengths and needs. After that portion of the day, Beth offered the teachers a choice of three different sessions on different topics (ELL support, supporting the most challenging boys, and classroom management techniques). The teachers were asked to choose the session that would be most useful to them in

helping the student they had (figuratively) brought to the session. At the end of the day, they came back and reflected on their day and wrote letters to their chosen students.

On my way to observe Beth's break-out session on "supporting our challenging boys," I passed through the Thunder Middle School library. I noticed that all around the room, the staff had posted silhouette cut-outs in the shape of adolescent students. Some of the cut-outs also featured small photographs of actual students. Teachers had written inside the figures notes like, "reads below grade level," "did not pass the [state test]," "loves science," and "likes to skateboard." This was physical evidence of the teachers' work from earlier in the day. As Beth had planned, the teachers had posted their understanding of their one selected student. Beth commented later that, "It felt like our students were truly in the room with us and a part of the conversation" (Beth's written reflections, 3/12). I noted, as did Beth, that the majority of the teachers had selected boys of color. The idea of using actual pictures of students had originated in the National Equity Project session as a way to engage the imaginations and affects of learners.

I found the classroom where Beth had already started setting up for her break-out session. A group of about twelve teachers entered the room, followed by the principal, and all took seats at two long tables. Beth started the session right at 2pm:

I don't know if this is my favorite topic, but it is close to it. We started this conversation at our Data Day back in January. We have a disparity in our discipline data and our students' performance in science and math. Boys represent 75% of our discipline issues. There is a big disparity in student achievement. Boys represent 80% of our failures in math and science classes....how many of you brought a boy with you today?" About 2/3 of the teachers raise their hands.

At the beginning of the year most of the 'students of concern' at this school were boys. I have gotten to know a lot of them. I always want tools in my tool- belt. So we are not in a place of frustration. You will get more tools today (3/16/12, field notes).

In these opening comments, Beth directly referenced hard data (discipline and failure rates) in an effort to create a rationale and emotional urgency for the learning that was about to follow. This use of data was quite different from the use of data in the “typical” agenda for a Data Day (as presented for critique in the National Equity Project session). Guided by that experience, Beth used data, but not in a technical way. She wanted teachers to connect their learning with their own students of concern.

Beth then handed out a note card to each teacher and asked everyone to write on the note card the name of a boy whom they are teaching and everything they knew about them. “Then on the back write how you are responding.” Later in the session Beth instructed the teachers to pair up and talk about their “boy of concern” and what they had tried in terms of supporting him. She invited them to practice a listening protocol where one person speaks at a time and the other listens without responding. This protocol had also been modeled and used in coach professional learning sessions. I overheard one teacher explaining, “I have a student who is a deep scientific thinker, but he won’t write anything down. So, I assessed him verbally. It helped. He sees success. Now he wants to work with others. He will write” (field notes, 3/16/12). The break-out session ended with the teachers engaged in a protocol that supported collective problem solving about the students they had selected.

In the end, it seems the support in the National Equity Project session prepared Beth to participate in the facilitation of a Data Day, and to address her problem of how to use data in large group professional development without alienating the teachers. Likewise, this experience prepared her for subsequent similar occasions, and the positive feedback she received from teachers made it more likely that she would facilitate this way again. Beth found the entire professional development rewarding, as did the staff. She reflected to me, “it was the first time

the teachers had admitted to having classroom problems and the first time I saw them genuinely helping one another” (5/15/12, interview). The teachers ended the day by writing letters to their students and making action plans for themselves. The teachers also decided to keep the student cut-outs posted in the staff room for the rest of the year.

In their session evaluations and interviews, the teachers reported getting concrete strategies for the classroom from this Data Day. As one teacher reflected, “And it wasn’t like, well, look at your data, your boys are performing horrible, so you need something. It was more like, let’s talk about this and figure it out” (5/25/12, Raseel interview). Raseel’s quote reflects exactly what Beth had hoped to do.

What Beth Learned about Using Data in Professional Development

After the experience of facilitating this Data Day, mediated by the Experiential Learning Cycle, Beth learned she could strategically incorporate data into a professional development experience in a way that brought staff together instead of alienating them or putting them on the defensive. It seemed Beth learned that if she attended to adult learning needs, discussions of data use and instructional implications did not have to further damage the community. In her reflection after the session, Beth commented that she would “look to this day as a benchmark for the kind of professional learning experiences I hope to always provide my staff” (written reflection), referencing her decisions to include all aspects of the Experiential Learning Cycle, and to set up opportunities for teachers to share expertise and ideas with each other. As she said, “I’ve always been good at thinking about the affective side of PD and the imagining part, but didn’t have a name for it, and just kind of knew intuitively that you have to get to that first to, till the soil, so that they will be in a space to receive something new” (debrief 3/2/12). Significantly,

Beth's attention to the affective and imaginal dimensions prompted her to bring the *students* into the conversation in an overt, deliberate way.

Ultimately, even given the official sanctioning of the Experiential Learning Cycle (ELC), Beth still did not feel she was “doing” data-driven professional development the way the district envisioned. In the late spring, reflecting on her year, Beth commented, “I very seldom sat down and said [to a teacher], ‘What standards??’ or ‘Where are your kids at, and where do they need to be next and let’s make a plan?’” (interview, 5/25/12). When reflecting on her year, Beth described her successes instead in terms of teachers who seemed revitalized, classrooms where students were listening to each other and the teacher for the first time all year, and students suddenly engaged in group-work. She mused rhetorically, “Now can I bring that down to student data?” (interview, 5/25/12). Despite her focus in professional development on individual students and their stories, a strategy validated and influenced by her interpretation of the Experiential Learning Cycle, Beth felt continuously resentful of the district’s press for her to “prove” her effect on student learning. However, the response she received from teachers after using the Experiential Learning Cycle gave her validation for her approach.

Data Problems as Sites of Learning

Both Beth and Nicole came to find, understand, handle, and then “re-understand” fairly common problems of prompting data-based instruction (Nicole) and data-based reflection as a staff (Beth). Given the focus on data and data-driven coaching, the system of support for coaches seemed to prompt the coaches to come to notice problems of data use at their schools. Furthermore, these problems, when examined through the lens of guided participation, were powerful sites for learning. In each case, the coaches came to *understand* the role of data at their schools and learned ways to *handle* issues of prompting data-based instruction and school-wide

reflection and collaboration. The urgency they felt to solve pressing, self-identified problems of incorporating data in their work with teachers drove them to participate in district professional learning (one-on-one and large group) with specific needs in mind, and then participate in coaching guided by what they learned. While both coaches encountered problems with student data use, both found and understood these problems, including their causes, in different ways, and each handled the problem with different strategies gleaned from the support system. Furthermore, their learning occurred through grappling with problems on their own *and* receiving targeted support.

These two cases offer some important distinctions regarding how coaches learn to use data in their coaching work. Each coach had a different set of learning experiences which prompted her learning and development. There were some important differences in the coaching structure the coach used (one-on-one or whole group), each coach's diagnosis of the problem (resistance to data and working with a coach or a distrusting school culture as a whole), the specific tools that each coach found most helpful (Student-Centered Coaching tool or the Experiential Learning Cycle), and the structure for the actual guidance and support (one-on-one or large group workshop). The coaches also had different beliefs about what constituted data. While Nicole's interpretation of the coaching model and her school's values prompted her to prioritize "measurable," quantitative student learning data and goals, Beth's interpretation of her school culture and the professional development from the National Equity Project contributed to her preference for using student stories and teachers' anecdotal notes in addition to quantitative data (like discipline and grade records).

However, there are perhaps more points of convergence across the two cases. While the two coaches certainly made efforts on their own, both needed significant support to address their

data-oriented problems of coaching practice, particularly in school cultures they perceived as not hospitable to collaborative, data-based instructional planning. The everyday work of coaching provided coaches opportunity to experiment with using data in conversations teachers, mediated by tools (e.g., the Student-Centered Coaching Tool), but both coaches needed access to more direct support and modeling (Billett, 2002) to learn more nuanced ways to engage teachers with data, including more appropriate ways to use a particular tool or how to make conversations about data feel safe. The two cases also illustrate how even data-oriented coaches, engaged in organized professional development in a district that prioritized data use, required significant scaffolding and individual modeling (Nicole) and a learning framework and validation (Beth) in order to arrange productive data-based learning for teachers. The system afforded these opportunities for guiding practice (Billett, 2002). In the final chapter of the dissertation, I consider what these coaches' problems of practice and learning suggest about how districts might build support systems that enable coaches to handle this type of problem.

The next chapter takes up the question of what guides and supports coach participation and learning around a problem not directly prioritized in the system of support: content-area instructional change.

Chapter 6. **Learning from Problems of Instructional Change**

As described in previous chapters, Sandersville School District maintained and trained a cohort of cross-content, generalist instructional coaches. The district expected the coaches to support the district initiatives (Standards-Based Education, data, equity), including leading Data Teams, facilitating staff-wide professional development, and engaging in one-on-one coaching cycles with teachers. Regardless of professional development structure, the district's coaching model guided coaches to 1) examine student data with teachers, 2) set a goal for student learning based on that data, 3) select (together with teachers) and implement appropriate instructional practices to meet the student needs, and 4) reflect on progress. While Chapter 5 explored the problems that emerged at the *beginning* of a coaching cycle (the examination of student learning data to set goals), this chapter explores problems that emerged when coaches actually tried to influence the implementation of various instructional practices *later* in a coaching cycle. I define instruction, as described in chapter 2, as the interaction of what a teacher knows and can do with a particular group of students with particular content and material (Cohen & Ball, 1998). Officially, Sandersville did not recommend a particular set of instructional practices, expecting coaches to draw instead on their past experiences with Marzano strategies (Marzano et al., 2001), or other practices that seemed appropriate to the situation.

This chapter responds to these questions:

- What problems did coaches encounter as they attempted to shift instructional practices at their schools? To what extent, if at all, did these problems constitute sources of learning for coaches? How were these problems and learning processes similar and different for different coaches?
- What guided the coaches' navigation of problems of instructional practice? How (if at all) did the tools and other facets of the system of coach support in Sandersville mediate

how coaches noticed, understood, and handled those problems? What was similar and different in what guided the two coaches' learning about problems of instructional practice change?

Taken together, Beth's and Nicole's experiences constitute a case of two middle school instructional coaches, trained and supported as generalists, attempting to shift instruction in content area classes. Both Beth and Nicole came to *find* and *understand* significant, reoccurring problems of content area instructional change, and both coaches appropriated content-neutral instructional coaching tools and strategies from district professional development to help them *handle* these problems (as they were expected to do). To some extent both coaches were caught in the middle between district expectations for general, facilitative coaching work and school-based instructional needs. However, each case also offers different insights regarding problems of instructional change.

Beth's experiences represent a case of a coach encountering a discrepancy of expectations for her instructional change work. On one hand, her principal expected her to take a directive approach and focus on content-specific instructional practices in the language arts department. On the other hand, Beth's own beliefs about coaching, the beliefs communicated in Sandersville's coaching model, and the training she received, guided her to work from a student-centered, cross-content, facilitative leadership approach. Beth's principal *found* (or defined) the problem for her: she was expected to shift instruction in the language arts department. Beth, however, defined and *understood* the problem differently; through past experience and daily coaching work, she came to *understand* it as a problem of low teacher confidence in themselves and distrust of each other. Beth appropriated ideas from district professional development that guided her to take an approach aiming to build teacher leadership and teacher confidence.

Nicole's experiences constitute a case of a coach who herself *found* and *defined* a problem of ineffective instructional practice in math intervention classes, *understood* it as due to teacher content knowledge, and *handled* it with general coaching tools and direct feedback (which she sought out) from her own professional development. Whereas Beth understood her language arts department's instructional problem as due to low teacher confidence and trust, Nicole *understood* her math intervention class teacher's problem as due to weak content knowledge. While Beth appropriated *an approach* to building teacher confidence from coach professional development, Nicole appropriated *practical tools* to address the content needs she had diagnosed, and with support from Rene, *understood* the related issue of securing teacher investment and interest in addressing the problem. Her case reveals several insights about the relationship between general leadership knowledge and content knowledge for coaches, as well as the complexity of what constitutes a problem of content area instructional practice.

Again, concepts from learning theory help describe and analyze the coaches' learning process from these problems of practice. As described in Chapter 5, the lens of *guided participation* (Rogoff, 2003) helps analyze how coaches learn to find, understand, and handle problems of practice, including the role of their own coaching experiences, particular tools, observed interactions, other people in the school and district community, as well as direct support in formal professional development, in helping coaches develop mature problem-solving ability in their school settings. Furthermore, concepts from Billett's (2002) workplace pedagogy highlights how coach learning can be mediated by *indirect* guidance, generally from informal interactions with coworkers, past experience, and artifacts in the workplace in the course of everyday work.

In what follows, I describe the processes of Beth and Nicole learning from problems of

instructional change at their schools. In each case, I describe the general context of the instructional problem. Then, I present a vignette showing the problem emerging in the daily work of coaching and coming to be understood in professional development. I consider how each coach came to find, understand, and handle the problem, including what guided her learning. I conclude with reflections on instructional problems as sources of learning.

Beth: Navigating a Problem of Literacy Instruction and Confidence

This section of the chapter will present and analyze a vignette illustrating Beth's experiences coming to find, understand, and handle the problem of low language arts teacher confidence in what they understood about instruction and could offer each other as professionals. The vignette that follows is based on: observations of five language arts department meetings at Thunder, five pre-briefing and debriefing interviews with Beth before and after those department meetings, observations of two National Equity Project sessions and subsequent debriefing interviews with Beth, and two semi-structured interviews with Beth. Additionally, I referenced interviews with: Beth's principal (Rachel), assistant principal (Celia), and the language arts department chair (Heather). First, I describe how Beth came to understand the problem of language arts teacher instruction and collective confidence, the kind of professional development that guided her approach to handling the problem, and then describe and analyze an example of Beth facilitating language arts department professional development guided by ideas gleaned from the National Equity Project.

Rachel and Celia, the principal and vice principal at Thunder Middle School, had recruited Beth to coach at the school because of her past experience as an elementary literacy

coach and her understanding of balanced literacy⁵, an approach to teaching reading and writing common at the elementary level. While they did not expect teachers to make a full transition to balanced literacy in one year, Rachel and Celia hoped Beth could prompt “phase one” shifts in how the LA teachers conducted their classes, helping them move from a largely “teacher-centered” approach involving lecturing and then asking students to answer questions out of a single textbook, to an approach involving such features as: students pursuing self-generated inquiry questions through discussion of texts in small groups, teachers guiding students through texts by modeling their own reading and thinking processes in short mini-lessons, and creating opportunities for students to read different texts depending on their independent reading levels. In order to achieve the goals, Celia and Rachel expected Beth to coach teachers individually and to conduct required, monthly, one-hour, after-school professional development sessions focused on literacy issues and practices.

Finding and Understanding a Problem of Teacher Distrust and Low Confidence

Even though this was her first time working in a middle school, Beth arrived at Thunder eager to start coaching and facilitating balanced literacy professional development in the LA department. However, her initial experiences facilitating literacy professional development and approaching teachers to ask them to engage in coaching guided her understanding of the context, and sharpened her conviction that she would have to be cautious about how and when she asserted her own literacy background.

⁵ Balanced literacy involves the development of several, interrelated, assessment-driven instructional approaches designed to “scaffold” students towards independence in reading and producing texts over time (Fountas & Pinnell, 2006).

Beth had several significant experiences early in the year that contributed to her understanding of the department and how to support her teachers. As she began facilitating the language arts department meetings, watching teachers interact in the professional development, and holding conversations with Heather (the language arts department chair) she realized the teachers did not trust each other, and furthermore, did not trust coaches, leading them to interact in passive, compliant ways. As Heather explained to me:

And so there has been a lot of push back with her. So just a lot of mistrust of people and different personalities. ... I always feel bad for Beth because I feel like she probably would have liked to push a lot further. But I try to explain to her, since I've been here, we've never all been on the same page about anything" (interview, 5/23/12).

Here, Heather shared how she tried to help Beth understand the initial resistance to her in the department due, in part, to the mistrust among the teachers of Beth and of each other, and the history of never "being on the same page about anything." Beth started to think that in such a context, any attempt to put people "on the same page," like learning a set of common instructional practices that were new to them, would become quite difficult.

Before facilitating department meeting in February, Beth described her understanding of the LA department this way (my questions are in capital letters):

They've always had, they had someone come in and she's been a consultant here – I call her an insulant – I mean she comes in and does damage every time she steps in. Because she'll say, you guys are lousy teachers. This is what you need to do.... They've just been told, told, told, and they haven't been asked, what do you know, how's it going, what's challenging, so they come to PD time very compliant, but not always curious and like implementation-driven. It's just, they're coming because...it's not optional. But, they, you know, they are not resistant, they are compliant. And, there's not a lot of trust around the table, but we are building that.

WITH EACH OTHER OR WITH YOU?

With each other I would say.

HOW DO YOU KNOW THAT?

Just, communication can be very rough with the team, kind of one-upping each other....just, yeah, just not....comfortable all the time. So, that has been I think a little bit interesting with just having to say, let's take a look at our norms and see, are we doing OK, just like that gentle reminder....but you know, that's uncomfortable to do sometimes (pre-briefing interview with Beth, 2/9/12)

Through her interactions with teachers, Beth learned more about the history of “top-down” coaching and leadership at the school. Beth realized that the schools’ former literacy consultant routinely “insulted” the LA teachers. Furthermore, Beth realized, “They’ve just been told, told, told, and they haven’t been asked, what do you know, how’s it going, what’s challenging, so they come to professional development time very compliant, but not always curious and like implementation-driven.” She came to *understand* the problem as one of low self-efficacy in the department. This information about the department’s stance towards learning shaped her thinking about how to support them. Beth’s initial experiences at Thunder in the everyday work of leading professional development and in informal conversations shaped her understanding of why language arts teachers tended to be, as she noted, compliant but passive in their participation in the department meetings and resistant to classroom coaching. It further convinced her that she might make more progress if she took a more collaborative approach, asking teachers questions like, “What do you know? How’s it going? What’s challenging?”.

Furthermore, Beth felt that these initial experiences aligned with her experiences in her two previous schools, and consequently with the strategies and beliefs she developed working in similar situations. She commented that she believed that when staffs feel suspicious of professional development and have low confidence in themselves and each other, the most important first job of a coach is to guide teachers to trust what they themselves know. As she explained, based on her experiences at these earlier schools:

It’s better if I don’t show up as an expert, and I don’t show up with the answers.

But I know enough to generate the expertise from the room and draw out the expertise in the room using questions, but also being very aware of the possibilities of where I can take them, and enough to know when we are not getting where we need to go...when they need a bump or a nudge...but it always feels like more and more I can always get back to best practice, which I feel really sound about, best practice of teaching and learning... (interview, 10/28/11).

Here, Beth asserted that her past experiences taught her that it can be more effective to not directly offer her own literacy expertise, instead “using questions” to strategically draw out what teachers know. She also explained she felt confident shaping teachers’ responses to her questions, providing a “bump or a nudge,” bringing them back to her own understanding of “best practice.” Beth’s initial experiences at Thunder and her previous experiences in coaching at schools with (what she perceived as) similar cultures led her to these conclusion about how to promote a more receptive culture for teacher learning. She had learned to lead by “generat [-ing] the expertise from the room.”

These initial experiences as well as her past experiences at other schools mediated Beth’s understanding of the school context and nature of the problem of instructional change at Thunder, including historical reasons for the staff resistance to coaching, aligning their practices, and participating in content-focused professional development. Billett (2002) would describe this as learning by “discovery” (p. 32), or through daily participation and interpretation of one’s own observations and experiences (without direct guidance from others in the same role).

Building a Rationale for her Approach to *Handling* the Problem

The ideas Beth gleaned from National Equity Project sessions about how to handle problems of instructional change aligned directly with her past experiences, beliefs, and values, as well as her assessment of the problem at Thunder. In the December session, Beth learned more about the National Equity Project’s values regarding the role of content knowledge and honoring what teachers already know; she also observed a modeled coaching conversation

enacting these values. By attending these coach professional learning sessions, as well as others in Sandersville, Beth learned more about what it meant to take a reflective approach in work with other adults, in order to build confidence and collective trust.

During the December session, the National Equity Project facilitators expressed their contention that coaching can influence instruction, but also emphasized their stance that the reasons teachers teach the way they do has less to do with content knowledge and more to do with beliefs about student potential. The work of a coach, in their view, is mostly about helping teachers (and schools as a whole) address and dismantle their assumptions about what students can do, and develop confidence in their ability to influence student learning through their instruction. Coaches, then can prompt teachers to reexamine what they “know” about students. The facilitator furthermore argued of the education community as a whole:

we know how to teach students to read, we know how to teach ELLs to read. It’s not a lack of good people, ideas, resources....so why are there 9th graders reading at the 6th level? What gets in the way?” (12/1/12, field notes).

The facilitator commented that “we” (meaning the teaching profession) have some common understanding about instructional practices and yet these practices do not materialize. She argued the reasons students do not all experience appropriate, rigorous opportunities to learn comes down to a gap between intentions and actual instructional practices, and that coaches should help teachers examine the gap between their *intentions* (to implement the “best practices” to support all students) and what they actually do in the classroom. She argued that sometimes teachers struggle to implement because of a lack of self- confidence or distrust in a reform process. Other times, teachers (and systems) do not believe in students’ abilities. These messages, including a de-emphasis of content knowledge and instructional practices and an

emphasis on building relationships and confronting beliefs, aligned with Beth's experiences and beliefs about adult learners, providing her some validation for her approaches.

Later in this same December session, one of the National Equity Project facilitators, Barbara, modeled a coaching conversation with a Sandersville coach, Alice. A facilitator from the National Equity Project invited the coaches to gather around Barbara and Alice and get ready to take notes. She said, "take from the conversation what you will, and pay particular attention to the questions and coaching moves." Rogoff's (2003) notion of guided participation helps illuminate this event as an example of how experienced social partners (Barbara in this case) coordinated and communicated "key aspects of how people develop" (p. 285) into the work of coaching. Specifically, the facilitators structured the coaches' participation so that they could observe a coaching conversation as valued in this community.

Barbara began the conversation by asking Alice about her coaching and teaching experiences, and then what she would like some help with, validating the notion that coaching comes from what the "coachee" wants to learn. Alice described a problem she was experiencing with a math teacher, specifically that the teacher did not have strong relationships with the students, and as a result, no real teaching or learning were occurring in the classroom. The coaches watched while Barbara asked a series of prompting questions and validating comments, for example:

Barbara: What do you think is going on for her?

Alice: It's an emotional story...she's closed. She loves kids. It's hard...you hear things from teachers. I hear she is really struggling in the classroom, but...she puts up a wall when we try to talk.

Barbara: Put aside the wall. What would you like to say to her?

- Alice: I probably would like to have a discussion about good teaching practice, how kids learn.
- Barbara: What's your gut telling you to say?
- Alice: Your students are struggling and need support.
- Barbara: Hold onto that. That's your assessment, evidence. What does she see?
- Alice: She thinks it's fine because management is fine.
- Barbara: Have you been in situations like this before? What did you do? (field notes, 12/2/12).

The coaches all reported appreciating the chance to observe Barbara coach Alice in this conversation. Barbara modeled strategies like asking reflective questions like, “what do you think is going on for her?”, “Put aside the wall. What would you say?”. In this conversation, Barbara models the National Equity Project's approach to coaching, ideas about how coaching should go, and some strategies for enacting those ideas. Beth reported after this conversation that her favorite modeled question was, “what does your gut say?” (debrief, 12/1/12). Beth learned more questions to ask teachers, questions that aligned with her belief about coaching (and professional development) as a process of prompting reflection and building teacher confidence. She appreciated Barbara's ability to help build Alice's confidence, and considered this to be her role as a coach.

Guided participation is a mutual process, with learners participating actively in their own learning, at the same time that others attempt to guide their learning for them (Rogoff, 2003). Rogoff (2003) explains that participants often have to adjust or “stretch” their (sometimes conflicting) understandings of “shared endeavors” while they participate. In this case, however, Beth's perspective on the shared endeavor of coaching was fairly complementary to what she observed. Her understanding of coaching was stretched only in the sense that she gained more

questioning strategies; observing this conversation validated what Beth already believed. Beth also resonated with the NEP's bias towards general coaching strategies that start with addressing the teacher's confidence, rather than emphasizing content-area specific instructional practice. She also shared the NEP's contention that teacher beliefs about students should also be addressed through coaching. I explore these two notions in the vignette that follows.

Learning to *Handle* the Problem of Teacher Confidence by Building Teacher Leadership

A vignette illustrates how Beth participated in the work of leading one session of monthly Balanced Literacy Collaboration at Thunder. She called these Balanced Literacy *Collaborations* in order to emphasize her view that teachers would be working with and learning from each other and not just experiencing a traditional training led by an expert. This vignette shows her focus on building relationships among teachers, de-emphasizing her own content knowledge, and honoring and drawing out what the teachers already knew about practice. It furthermore shows her highlighting a teacher who had experienced success with students who traditionally struggle, a more subtle strategy for addressing teacher assumptions about students. Throughout the vignette, I acknowledge the sources of guidance that shaped her participation in the session.

The vignette that follows occurred in late February. Beth had already conducted several sessions focused on the instructional approaches her principal valued, incorporating some video clips, professional reading, and lots of reflection. Beth explained that teachers could describe the balanced literacy approaches they had studied together so far quite well, but that what they said was “really different from what [was] happening in classrooms. So they know how it should be, but it's like in reality the planning and the implementation isn't there to match...” (interview, 2/9/12). Beth thought the teachers knew what the practices were supposed to look like, but suspected something else was holding them back from implementing them.

So, rather than presenting additional information about instructional practices (which her principal had encouraged her to do), guided by her past experiences and messages from the National Equity Project, Beth decided to highlight a teacher in the department (Rhonda), “I want them to observe and learn from one another’s practice, and not having that come from me...and create conversations that happen and continue without me” (Beth, interview, 2/24/12). Beth invited Rhonda to “host” all the teachers in her classroom after school and share how she had been using a practice Rhonda termed “inquiry circles.” Rhonda had learned about this practice at her previous school, one hinging on organizing her students into small groups based on reading level. Beth worked with Rhonda to prepare her for this experience.

Prompting teacher-to-teacher sharing, building up teacher expertise. Beth began the session by welcoming the teachers to Rhonda’s room and inviting them to listen to what their colleague had been doing.

Rhonda came to the front of the room and took a deep breath. She began, “I am not an expert, I do not want to tell you what to do...it’s just good practice. It’s the process of inquiry with students. I am in progress in my classroom, just trying these things out” (field notes, 2/24/12). Rhonda began her presentation by deflecting her own expertise, positioning herself as a learner (“I am in progress”), but insisting that she was working towards “good practice,” which she saw as engaging students in inquiry. Based on Beth’s behind the scenes coaching and preparation, Rhonda then guided the teachers through the process of reading a text and generating questions, in much the same way she had with students. This experience allowed teachers to try out the instructional practices as learners. She also shared some student work and her own reflections on what students had learned. At the end of this part of the session, Rhonda asked if the teachers had any questions. The following excerpt shows the teachers’ responses:

- Heather: Wow!
- Victoria: So, instead of building background, you let them choose...then based on their curiosity you provide resources...?
- Rhonda: Yes. I don't give a list of answers...I am in the background. You have to plan differently. It will derail. Sometimes lessons you think you are planning disappear. We just did an aquarium visit to launch a new unit on oceans and whaling and coastal people...the resources I gather will be driven by their questions.
- Victoria: SO... what do you start off with? Just a topic?
- Rhonda: Well, with state standards, those are my framework.
- Celeste: Does this mean the students are in different places?
- Rhonda: Yes, but they get where they need to go...the standards.
- Beth: So, when you did your planning, what did you know would have to be the main goal for all kids? And, how did you decide?
- Rhonda: Oh, expository writing, it's the standard we are all working on.
- Cindy: Are you using only our school's books?
- Beth: I think that's what overwhelms me. Novels are needed, and how would I find them? But remember, short texts are OK, too. We have leveled short texts..." (field notes, 2/24/12).

This exchange, following Rhonda's presentation, demonstrates how Beth, guided by her past experiences at this school and other schools, and the stance towards adult learners and questioning strategies validated by the National Equity Project, participated in the work of leading literacy professional development. First, in her set up of the session, Beth prompted a teacher to play the role of "expert," despite Rhonda's initial comment about not being an expert. This created a participation structure in which teachers asked another teacher for clarification, not her. The teachers responded positively to Rhonda's work (including one "wow!" from the

department chair), and asked her the logistical questions that her work raised for them (how to locate resources, how to plan for the different avenues students might pursue, the role of the state standards). Beth was able to plant a question about Rhonda's planning process ("What did you know would have to be the main goal for all kids? And how did you decide?"), which prompted her to share the overall focus (expository writing). Beth also expressed a comment as a teacher might ask ("I think that's what overwhelms me...novels are needed"), and from this position of "teacher," she was able to insert a bit of expertise, "But remember, short texts are OK, too, and we have short, leveled texts..."). Her choices regarding how to structure this session allowed her to emphasize *Rhonda's* classroom-tested expertise and successes with the students at Thunder Middle School. Furthermore, in sharing student work, Rhonda was also able to present evidence of the positive influence of her practice on particular students' learning.

After the session, Beth expressed that she was pleased with the changes in the teachers' dynamics during this professional development event. Beth was encouraged that teachers stayed late to talk to Rhonda and viewed the kinds of questions teachers asked as a sign of real engagement and "risk-taking." Based on the teachers' written reflections at the end of the session, Beth found they expressed real admiration for Rhonda's work, including the progress she had made with her students, and wanted to have more sessions like this where they could learn from each other.

In planning and facilitating this session, Beth was guided by concepts and beliefs about instructional change that she had developed while participating as a coach in similar school cultures. Significantly, the National Equity Project gave Beth validation and some language to describe her beliefs. Given her beliefs regarding what contributed to teacher change (teacher

confidence), Beth was able to make planning decisions for this session; decisions were then validated by the teachers' responses.

What Beth Learned about the Language Arts Department Problem

Across the year, Beth tried a range of strategies in the Balanced Literacy Collaborations to increase teacher self-confidence and trust. All of her attempts, like the one highlighted here, demonstrate her facilitative, reflective approach to coaching. She reflected in May that all year she had managed to, "lead with the assumption that they have something to offer...you know, not defining things for them, but having them come up with definitions. And also develop their own themes and understandings without saying, yep, you got it" (5/25/12, debrief). This quote again highlights Beth's approach as one of guiding teachers to their own understandings, starting from what they already knew.

Beth learned to navigate coaching in the context of a discrepancy between her principal's expectations for her work and those in the district's coaching model and National Equity Project support. Beth's own diagnosis of the problem aligned with the information gleaned through her own professional development. Beth learned to trust her own instincts and assessment as she participated in leading professional development at her school in the ways her past experiences and the support structure guided her. She had interpreted the problem in the language arts department as one of trust and confidence rather than one of content knowledge, and responded accordingly. In this instance, when sources of guidance contradicted each other (school and district), Beth's past experiences (which aligned with the district's guidance) seemed to play the strongest mediating role.

Beth found that her strategies did promote more dialogue and trust among the teachers in the department, which she felt was key to future instructional change efforts.

She found further validation from the teachers (one with 10 years' experience at Thunder) who told her, "you've done more in one year than I've ever seen a coach be able to do here..." particularly with respect to "having relationships" (interview, 5/25/12). Feedback like this convinced Beth that while she did not have the success she wanted to have in actually changing classroom practice, she had started to pave the way for future change work. Beth's work with the language arts department offers an example of how a coach worked strategically to shift department culture, build some trust, and highlight existing internal expertise, rather than her own.

Nicole: Addressing Math Intervention Class Instruction

While Beth's principal assigned her the role of supporting change in the language arts department, Nicole identified on her own an instructional problem in the math intervention classes, diagnosed it as a content-knowledge and pedagogy issue, appropriated a tool from a National Equity Project session, and then sought out additional support from Rene. Across experiences with teachers and in her own professional development, Nicole's understanding of the causes of this problem of instructional practice transformed several times, as did her approach. While Nicole and Beth technically had access to the same coach professional development, they had different experiences with and interpretations of it, so the sessions produced different influences on their participation in coaching. While Beth gained validation for her approach and beliefs about teacher learning, Nicole gained specific practical tools that ultimately influenced her thinking about the complexity of teacher practice change.

In what follows, I present some context for the problem, then describe and analyze two short vignettes of Nicole learning about the problem in formal professional development (one with the National Equity Project and one with Rene), as well as her own account of what

happened in her work with the intervention teachers using guided participation as an analytic lens. Data for this vignette was drawn from one observation of Nicole participating in a National Equity Project session and a subsequent debrief of that session, an observation of Nicole's coaching conversation with Rene, and two semi-structured interviews with Nicole from across the year. Her case offers an example of how the content-neutral support in the district helped her diagnose and respond to a problem of instructional practice.

Coming to *Find and Understand* the Problem of Instruction in Math Intervention Classes

Nicole had worked as an intervention specialist at her school prior to becoming a coach there, so she was already in the habit of attending to needs that emerged in intervention classes. Mark (the principal) and the leadership team had identified students who were struggling in either math or reading, or both, and placed all these students in intervention classes that alternated between offering reading and math support on a daily basis. Some of the teachers responsible for these classes were math teachers, while others were reading or science teachers. Nicole worried that the non-math teachers by and large did not have the math pedagogical content knowledge to support the most struggling math students. When she observed instruction in the math intervention classes, she noticed that teachers were “not really teaching” as she defined teaching; instead, they were handing out packets of worksheets for students to do without much instructional support.

Initial focus and coming to *understand* the problem. Based on these observations, Nicole decided she wanted to work with the math intervention teachers during their Data Team meetings on shifting their instruction so that they were “basically putting kids in groups based on their needs; so differentiating a bit more” (interview, 2/2/12). Based on her observations of classroom practice, Nicole concluded that the teachers did not know how to put students in

groups. She thought if the teachers knew more about this kind of general instructional practice (grouping) and its application to math classes, they would be able to implement it, and she set out to design a Data Team (intervention teacher collaborative team) meeting that would support this implementation.

Nicole came to the February National Equity Project training thinking about her plans for the math intervention Data Team. She had already decided what the problem was (intervention class instruction), had theorized about its causes (not knowing how to implement small groups), and in a sense, had already decided on a course of action (teach the teachers how to “put kids in groups based on need.”).

The February National Equity Project training was designed to support coach understanding of “culturally-responsive teaching and coaching practices,” in general. Early in the session, the National Equity Project facilitators presented the “Learning Partnerships Framework,” a framework for assessing the extent to which teachers had formed productive, culturally sensitive, learning-focused relationships with students who have had a “history of failure or negative experiences in schools,” aiming to “directly improve a student’s academic skills” (National Equity Project Seminar Handout, 2012, p. 154). The three levels of the framework included *rapport*, or developing mutual understanding between a teacher and student; *alliance*, or the identification of a clear, meaningful goal with and for the student, and a plan together for how to address it; and finally *cognitive insight*, or the teacher’s ability to understand how a particular student is thinking and how s/he “uses this information to help the student correct misconceptions and use the new learning strategies effectively to self-correct and learn more independently” (p. 154). The coaches read about this framework and then watched a video

of a teacher working one-on-one with a second grader and analyzed what they had seen using these notions.

This session and its activities guided Nicole's thinking about her math intervention teachers. Even right after the NEP session, she started revising her plan for the upcoming math intervention team meeting to include time for them to wrestle with the concepts of *rapport*, *alliance*, and *cognitive insight* and self-assess their own relationships with their students. In her original plan, she had intended to include a section on "best practices in math instruction," but after interacting with the "Learning Partnerships Framework," she decided to focus on the student-teacher relationship and aim for each teacher to complete a plan of action for better understanding and supporting one particular struggling student of their choice. This framework had mediated her planning process to include attention to the depth and quality of the student-teacher relationship.

Using the "Learning Partnerships Framework" to diagnose a problem of content knowledge. During our follow-up interview a week later, Nicole reported that the Learning Partnership Framework's notions of *rapport*, *alliance*, and *cognitive insight* had helped her understand the teachers better. She did incorporate the framework into her work with the math intervention teachers, and it had surfaced their precise area of struggle, in Nicole's opinion:

I gave them this [framework] and asked them, what ideas are you pulling that you will use to build better *rapport* with that student that you have identified...and then what are you going to do to actually set some goals with that student...what are you going to do to have the right expectations but still stay warm? And this is where it fell apart. The cognitive insight; they don't know how to understand student thinking in math. With me, it helped me diagnose what the missing piece was and then I...hope to figure out how we can move forward with that (interview, 2/17/12).

The Learning Partnership Framework served as a tool that mediated how Nicole planned and facilitated her meeting with the math intervention teachers. The tool helped her to re-diagnose

the problem of content-area instructional practice. She realized that while teachers could successfully talk about building rapport with students and could even set goals with them, “it fell apart” when Nicole (mediated by the Learning Partnerships Framework) pressed the teachers to think about *cognitive insight*, or their ability to probe and promote student thinking in math. She realized, “the teachers don’t know how to formatively assess students’ math knowledge. Walls went up. It’s not unwillingness, I just have to be careful so it doesn’t feel like one more thing” (field notes, 2/15/12). Nicole realized that when pressed to think about assessing their students’ math knowledge, they became overwhelmed. Her quote suggests that she believed firmly this was “not unwillingness,” but a lack of understanding, and a genuine desire to learn more. The Learning Partnerships Tool mediated how Nicole conducted this meeting, prompting her to shift from a focus on instructional practice and content to a focus on relationships with students. Ultimately, however, the experience led her to diagnose a content-specific need, teacher understanding of how to pre-assess student understanding in mathematics. Suddenly she saw that just telling the teachers to put students into groups would not be sufficient.

Actively Seeking Direct Guidance from the District Coach

Nicole decided to ask Rene to help her think about this problem of how to plan and facilitate math intervention teacher Data Teams. Specifically, her new diagnosis of the problem was prompting her to wonder how teachers develop understanding of student thinking in math, how they could learn to assess it in class, and how they could keep track of student thinking and learning. In asking Rene for help, Nicole took an active role in seeking out guidance afforded to her in her workplace (Billett, 2003). The coaching conversation with Rene guided her to again revise her understanding of the problem and her approach. The description and analysis of the coaching conversation below shows the process of a coach coming to consider other aspects of

teacher learning besides content knowledge and instructional practice, including helping teachers build urgency for change and making a commitment to following through on changes.

Coming to a new *understanding* of the problem. Guided participation involves learning partners mutually bridging their understandings of a problem or endeavor (Rogoff, 2003), and through this process, each participant develops a new understanding. The following excerpt shows an example of Nicole and Rene engaged in this mutual bridging process, guiding each other to a different understanding of the causes of the problem of instructional change with the math intervention teachers.

Nicole wanted feedback on what she had tried so far with the math intervention Data Team, and she wanted guidance about how to proceed. She explained the details of the last Data Team session, including her use of the Learning Partnership Framework. She also explained that she thought it would help the teachers if they had a way to keep track of and share with each other what they were learning about their students' math skills, and had offered them a tracking form. However, as Nicole explained, the teachers did not like the tracking form. The following excerpt shows Nicole and Rene bridging their understandings of the problem of the tracking form, and the intervention work as a whole:

Nicole: but, then they are not buying in. I shared the tracking form with them and they just saw it as being more work. So...I do have a really strong agenda for them, and I can't...I know that I have to be flexible and also go with what they want, but I have to temper that with the fact that these are our struggling students and these are the students we have to make a difference with now – so I am feeling some urgency.

Rene: How do you channel your passion and urgency and empower them to feel the same?

Nicole: Um. That's what's interesting. I think it's there for them. It's not that it's not. When we did that work in the morning it was pretty clear that they weren't writing off any of their kids, they were

looking to work with all their students, they just did not know how. I have to help, I think I have to help them remember they have that same passion.

Rene: Do you think the tracking form...um...do you think because they didn't have any buy-in or creation of it that that's why they are not really into – not embracing it?"

Nicole: That's the other thing. I am not really tied to that particular form. It doesn't have to be that. But I do want them sharing *something* when we meet (2/15/12, field notes).

This excerpt shows Rene and Nicole bridging their understandings of the teachers' reactions to the "tracking form" that Nicole had shared with them, but also their understandings of the teachers' larger investment in the math intervention work. Nicole began the interaction by sharing her concern that the teachers did not "buy in" to using the particular tracking form she had created, and also sharing her urgency for the teachers to change their practices on behalf of the most struggling students – as well as her desire to not overwhelm them. Rene responded with her interpretation, that the teachers did not share Nicole's passion and urgency in general, and around the tool in particular – since they had not created it. Rene seemed to be assuming that this was a problem of teacher beliefs, while Nicole saw it as a problem of teachers who were already overwhelmed and also lacking appropriate content knowledge, "they just don't know how..." (field notes, 2/15/12) to work with all the students. By the end of the interaction, bridging her understanding with Rene's, Nicole decided she had to reconnect teachers with their passion in addition to addressing content knowledge and teachers' levels of feeling overwhelmed. Rene gained a new understanding of Nicole's analysis process and also what she had done so far.

Providing a new starting place for *handling* the problem. Shortly after the above exchange, Rene suggested that they look together at a document that had been posted on the

coaches' shared online resource folder called the "Enrollment Conversation" document (see appendix G). Diane Sweeney, a consultant who had worked with the coaches in previous years, had created this document to support coaches as they planned initial conversations with teachers or teams of teachers, in order to gain some agreement about the goals and what the teachers would commit to trying out. The document itself served as a "workplace artifact," a tool intended to provide informal guidance (Billett, 2003) to coaches as they conducted their daily work. In this case, Nicole commented later that she had needed to be reminded of the tool and its usefulness in this situation and needed specific guidance from Rene on how to use and adapt it. The tool ultimately mediated Nicole and Rene's joint-planning process for Nicole's next meeting with the math intervention teachers. The tool alone might have been insufficient.

The following section of the conversation illustrates Rene and Nicole appropriating the tool for their own purposes, or what Wertsch (1998) would call, "making it one's own" (p. 53). Here, Nicole's participation was guided by her past experiences with the math intervention teachers, by Rene, and by the Enrollment Conversation tool. The first question on the "Enrollment Tool" is, "What do you hope students will learn as a result of our coaching work?" Nicole decided this question was insufficient for this situation because there was so much urgent student need in the math intervention classes.

- Rene: So you might say, "you all have a common vision that these students are at risk of not achieving in math, there is a sense of urgency for us to come together regarding some strategies for how we are going to get these students the skills they need to be successful. So, what kind of strategies do you think that we need to focus on for our work together?" Maybe something like that?
- Nicole: I actually think...I gave them that focus – understanding how their students think about math and helping students develop three ways to know math. The question really is, "how do you as intervention teachers with the time and opportunity you have to work with these

students, how are you really going to help your students know math?" (field notes, 2/15/12).

Here, Rene offers some direct guidance, in the form of modeling a possible question incorporating Nicole's concern about focusing the teachers on the urgent needs of the students. Rene's example question provided some framing based on Nicole's earlier comments that the teachers were already "bought in" to the student learning issues ("you all have a common vision that these students are at risk of not achieving in math..."), and modeled a way for Nicole to ask teachers to contribute their own goals ("what kinds of strategies do you think that we need to focus on..."). Rene's comment reflected her value and belief in offering teachers choice of instructional strategy once there is common understanding of student learning needs. Nicole then clarified that she already "gave them that focus," clarifying that instructional strategies were not a choice ("understanding how their students think about math and responding accordingly"), and offered a new question, "how are you really going to help your students know math?" The resulting question showed Nicole's changing understanding of how to work with the math intervention teachers and how to enroll them.

As the conversation continued, Rene offered more direct guidance (Billett, 2002) to Nicole concerning the nature of her questions. She also learned more about how Nicole was thinking about the enrollment process, including Nicole's tendency to ask questions that described the instructional work itself ("cognitive questions") rather than questions that explicitly address the commitments teachers are making to learning and changing practice. Rene offered her some language (again she was modeling) intended to communicate the reason they should collaborate with each other in service of these students ("it's going to be so imperative for us to work together..."). In the next two comments, Nicole shows her appropriation of the basic idea in the "Enrollment Conversation" tool ("what do you hope students will learn...") and

Rene's suggestions. Rene validated Nicole's final version of the first question, and helped her start to plan the next one:

Nicole: Right. So, given – to me this is my given – given that we have – this class – the reason the students have this class is that many of them have to improve the ways they know math, they have to improve their knowledge of math. So, you're right, so the question is “how are we going to do that as a Data Team that they've agreed to,” and then, “how are we going to do that as a partnership with me working with you um directly in your class – using your class time...”

Rene: So, there you go, that's your transition to the next question. Right here. We can do this through these two structures, these are our structures...the Data Team...so here is your enrollment piece, over here [points to the Enrollment Conversation document]... what does it mean to be a Data Team? What's the commitment? (2/15/12, field notes).

Here, Nicole expressed her final version of the first “enrollment” question, one that involves the rationale for the collaboration work (“given that we have this class...”), the urgency of the student need (“many of them have to improve the ways they know math, they have to improve their knowledge of math”), and the commitment teachers will make to participating in the Data Team and in one-on-one coaching (“how are we going to do that as a partnership...”). Rene validated (“So, there you go...”), and then used the Enrollment Conversation document to prompt Nicole to move on to the next question. While Nicole was initially focused on the content of the collaboration with the math teachers (the ways students know math), Rene, working with the Enrollment Conversation document, was able to shift Nicole's understanding of “enrollment” to include getting teachers to commit to how to work together.

What Nicole Learned about the Math Intervention Teacher Problem

Nicole actively sought out technical support for how to facilitate the learning of the math intervention teachers. She was eager to take up some tools (Learning Partnership Framework)

and appropriate others (Enrollment Conversation), applying them to her interaction with this problem. Over the course of these experiences, Nicole's understanding of the problem of math instruction in the intervention classes expanded. At first, she thought the teachers just needed to know how to put students in groups to provide more differentiated instruction. However, mediated by tools and guided by Rene, Nicole came to understand the problem of teacher instructional change as comprised of more parts than just knowledge of instructional practice. Using the Learning Partnership tool to guide her planning and facilitation, Nicole learned the full extent of the teachers' content knowledge gaps, including their limited understanding of how students learn math and how to formatively assess it. Then, while adapting the Enrollment Conversation tool with Rene, she realized how explicit she had to be when setting goals and agreements at the beginning of any coaching work with teachers. She learned she had to consider not only pedagogy and content knowledge, but also teacher motivation and urgency for helping struggling students. This case also offered a detailed example of one coach's process for planning, shaping, revising, and re-planning, mediated by a tool and guided by an experienced coach, a relatively brief opening question for a team meeting. Nicole's process suggests that there is significant complexity in learning to coach for instructional change.

Nicole reported later that the enrollment conversation with the math intervention Data Team did go well, and her work with that team led to some productive one-on-one coaching work with some of the teachers. For instance, she was able to coach one special education science teacher (who was teaching a math intervention class) in his classroom. After "enrolling" him, she guided his analysis of student work, offered specific suggestions for planning for differentiation in a new unit of study, "and he is kind of building his confidence in terms of basing it on his kids and what they need and not on what somebody else is handing him"

(interview, 5/25/12). Nicole experienced some success in this coaching process because she helped the special education teacher to make decisions based on student need rather than a pre-made packet or program. She developed a new way of participating in coaching with teachers that involved understanding what the teacher knew and understood, setting clear agreements with the teacher at the beginning of coaching, and ultimately shifting instruction towards differentiation based on students.

Content-Area Instructional Problems as Sources of Learning

As also explored in Chapter 5, reoccurring problems of coaching practice did seem to prompt significant learning for the focal coaches. Having specific problems of practice related to instructional change focused Nicole and Beth's engagement in their own professional development. The two coaches also took up general approaches and practical tools to guide their daily problem-solving work with teachers. Again, there was evidence that coaches learned from encountering problems, working with others to try to understand them, trying some new techniques, receiving feedback, and reflecting on what they were experiencing. Professional development, daily practice, and coach background in coaching and content-area teaching, contributed to learning from coaching problems.

Beth and Nicole learned about the complexity of prompting changes in instructional practices in their contexts. The two coaches understood and addressed these problems of instructional change in different ways. Nicole viewed her problem as one of teacher learning and classroom practice, while Beth attended to both leadership dimensions (school culture, teacher relationships with each other) and teacher learning and classroom practice dimensions. Furthermore, as previous research has suggested, developing understanding of the needs of adult learners is critical to successful coaching (Marsh, et al., 2008). For instance, Beth learned about

ways to foster trust and honor what teachers already knew and Nicole learned about how to help teachers commit to coaching work. These approaches and strategies emerged directly from the system of support for coaches.

Beth and Nicole also learned that the issues of instructional change in specific subject areas (literacy and math) were not solely or even mainly content-specific or content-embedded. As generic coaches, armed with general coaching strategies yet sensitivity to the content-specific context for their work, they were able to fashion approaches that advanced their teachers' learning about instruction in a particular content area. Beth, for instance, sensed that directive, content-focused professional development for the language arts teachers, given the teachers' past experiences with such an approach and their current state of morale, would not be successful. While she maintained a content area focus for her work (she still focused on balanced literacy approaches and drew attention to Rhonda's already strong literacy practices), she conducted professional learning opportunities, guided by strategies from the system of support, which addressed the department climate. Nicole learned that influencing math intervention teachers' ability to differentiate their instruction required her to step back and also attend to their relationships with students, their ability to assess student need, as well as their commitment to working together and with these students. She learned to consider these aspects of content area instructional change before addressing the instructional practice itself.

Chapter 7. **Conclusions and Future Directions**

The current study aimed to build our understanding of the dynamics of coach learning in the context of practice. Education reforms that aim to foster rigorous, ambitious classroom instructional opportunities for all students place significant learning demands on educators at all levels of school systems (Gallucci, 2008; Stein & Coburn, 2008). As pressure increases for districts to raise standards for all educators in their systems, researchers continue to probe how to improve the quality of professional development offered to teachers and leaders (Suppovitz, 2006; Hubbard et al., 2006). Instructional coaches, as well as other teacher leaders, are often entrusted with facilitating teacher learning (Taylor, 2008), ultimately influencing the instructional core (the interaction among teachers, students, and content) (City et al., 2011). Yet, the learning processes of coaches and teacher leaders themselves have been largely unexplored.

Research interest in coaching has increased in the past decade. While some studies present mixed outcomes for coaching as a reform strategy (Garet et al., 2008) recent quantitative studies have started to demonstrate a positive effect of some forms of coaching on student learning outcomes (Biancarosa et al., 2010; Matsumara et al., 2010) and teacher practice (Sailors & Price, 2010). These findings, regarding literacy coaching in particular, offer encouragement to districts pursuing coaching as a strategy. Yet, descriptive research continues to document the complexity of the coaching role, problems coaches face, and variation across and within coaching models (Atteberry & Bryk, 2011; Bean et al., 2010). We do not know how coaches learn to navigate this complexity or address these problems. Given the empirically documented potential *and* complexity of the coaching role, researchers and district leaders, and those who

support leadership work, have much to learn about *how* coaches learn to navigate the challenges they inevitably encounter in daily practice.

Responding to this gap in the research, the current case study used sociocultural learning theory to examine how two middle school instructional coaches learned from problems of their daily practice and what mediated their learning. The study was conducted in a mid-sized, diverse district with a commitment to maintaining and developing a cadre of cross-content, “student-centered,” instructional coaches in all its schools. Sandersville expected its coaches to support the district initiatives and engage in routine coaching cycles with individuals and groups of teachers based on analysis of trends in student learning data. Sandersville also provided extensive professional development to its coaches, including one-on-one, small group, and large group sessions on a regular basis. Sandersville’s commitment to coaching and professional development for coaching made it an ideal site for this study of coach learning.

In order to understand the kinds of problems that coaches encountered in their work, how these problems became sites for learning, and what mediated that learning, I analyzed the experiences of two middle school instructional coaches (Beth and Nicole) in their work with individual and teams of teachers at their two schools. I conducted multiple semi-structured interviews with each coach, observed each coach engaged in coaching, and debriefed these coaching experiences with them. I also observed the coaches interacting in coach professional development and interviewed them regarding the influence of that professional development on their thinking and practice. Other interviews at the schools with teachers and principals, with other coaches, and with district leaders served as triangulation and built my understanding of the Sandersville community. These qualitative case study methods helped me start to understand the

kinds of problems that coaches themselves encountered and how they came to understand and handle them, including what mediated that learning.

Taking a sociocultural view of learning and development as guided participation in particular settings (Rogoff, 2003), findings suggest that each coach came to find, understand, and handle vexing problems of practice as she attempted to coach individual and groups of teachers, and that her learning from problems was mediated by a variety of factors. One set of problems concerned focusing teachers' attention and decision-making on *student learning data*. Nicole grappled with how to entice teachers to work with her and ground that work in quantifiable student data, while Beth struggled to share student learning data with her entire staff in ways that would prompt reflection rather than defensiveness. Another set of problems concerned *prompting instructional change* in particular content areas. Nicole struggled with how to prompt differentiated instruction in math intervention classes taught by teachers with variable math content knowledge. Beth struggled while working to build teacher leadership and collective trust in the language arts department while her principal pressured her to focus on literacy instruction.

This study provides insight regarding the kinds of factors that may mediate coach learning from problems of practice. Taking the two coaches' learning experiences together, findings illustrate some trends in coach learning processes. Both focal coaches' learning from problems of practice was mediated by an iterative combination of: 1) participation in the daily work of coaching teachers, 2) self-directed interactions with the district coach and in large-group professional development, 3) modeling from experienced coaches; 4) guided participation with practical and conceptual tools, and 5) the coaches' past experiences in coaching and the coaches' own values and goals. Coaches came to find, understand, and handle particular problems as they moved back and forth between daily experience and formal professional development.

In what follows, I present some reflections drawn from this study of coach learning from problems of practice, detailing its contributions to research and practice as well as its limitations. First, I explore what guided participation (Rogoff, 2003) contributes to the field as a lens on coach learning from problems of practice. In this section, I also describe in greater detail the specific forms of mediation found in this study and their influence on coach learning. Then, I identify some limitations to taking a sociocultural frame, including what that view ignores. I then describe how this study extends the field's understanding of instructional coaching, including some possible implications for district leaders and those who support leadership work and development. I conclude with unanswered questions and directions for future research.

Guided Participation as a Useful Framework to Study Coach Learning from Problems of Practice

Conceptually, the current study offers coaching research a promising lens for examining how coaches learn from their daily problems of practice. There is a tradition of bringing sociocultural learning theory to bear on studies of *teacher* learning from problems of practice, particularly in math education (Horn, 2007; Horn & Little, 2010). There is also emerging research that uses sociocultural learning theory to examine how district central office leaders support principal instructional leadership development through mutual engagement in joint work (specific activities of value to community members) (Honig, 2012; Honig & Rainey, in-press). However, there is not currently a parallel tradition for studying coach or teacher leader learning from problems of practice.

First, as a whole, sociocultural learning theory provides a useful lens for studying coach learning since it assumes and draws attention to the situated nature of learning in particular contexts. Beth and Nicole did not learn to address problems in a vacuum. Coaches came to notice, understand, and handle particular problems through social interactions with other

coaches, teachers, and tools in a setting with a particular set of values and goals; messages analyzed on the “community plane” (Rogoff, 1995) shaped what coaches perceived as problematic and why. Consistent with previous research in educational leadership, coaches in this study did not spontaneously “find” objective problems with clear diagnoses and prognoses (Spillane & Coldren, 2011); they came to understand their experiences as problematic through interactions in their contexts over time. For instance, both Nicole and Beth articulated a pressing need to tie their coaching work to student-learning gains. The repeated focus on data in all Title I Department communications and in the coach professional development sessions, as well as the press to document their progress in “Student-Centered Coaching Tools,” seemed to prompt each coach to prioritize student-learning data. Not surprisingly, coaches came to notice the ways teachers used (or did not use) data use in their practices as problematic.

More specifically, Rogoff’s (1990) notion of guided participation on the interpersonal plane helped illuminate the process of coaches learning from problems in their practice. Taking Rogoff’s (1990) notion of development as coming to find, understand, and handle particular problems in a setting, and her assertion that guided participation “involves collaboration and shared understanding in routine problem solving activities” (p. 191), we can see coaches as learners attempting to enact the work of coaching, guided and supported by formal and unintended attempts to direct their problem solving participation in particular ways. If we assume that guided participation is always happening, this lens prompts researchers to consider, at all times, who or what is guiding the ways people are participating in their work, including the coaches’ own past experiences and perceptions.

What Mediated Coach Learning from Problems of Practice?

Given these general reflections on sociocultural learning theory and guided participation as helpful lenses for understanding coach learning from practice, this study also offers some themes regarding how coach learning was mediated, complementing and extending other studies regarding learning from problems in work practice (Billet, 2002; Horn, 2010; Honig, 2012), given particular guidance (Donaldson, 2008; Leithwood & Steinbach, 1992a). Findings suggest that coach learning occurred through the interplay of the following sources of mediation, but I explore each, one at a time: *daily participation in coaching work with teachers; self-directed interactions with a district coach or in group professional learning; modeling of experienced practice; guided interactions with particular conceptual and practical tools; and coaches' own past experiences in coaching, values, and goals*. This study offers an emerging theory regarding professional learning on the job for coaches.

Daily participation in coaching work with teachers. Billett (2002) argued that workers learn in the context of the daily interactions in their jobs, finding informal guidance in their observations of colleagues, interactions with workplace artifacts, and through their own interpretations of their work. Similarly, Rogoff (1995) argued that guided participation is always happening, even when learners are working alone. In this view, even when working with a teacher one-on-one, coaches are guided by their own past participation in similar activities. Data from this study suggests that coaches' own daily trial-and-error participation in coaching mediated how they came to understand problems.

The everyday practice of coaching, outside of other formal support, did constitute a source of learning for Beth and Nicole as they came to find and started to address particular problems while interacting with teachers, leaders, and tools. For instance, even before asked for

help from Rene, Nicole reported she had multiple frustrating experiences trying to prompt teachers to “see the value” in working with her and in using student learning data at all. Given these problematic encounters, she designed her “PD Tracking Form” to mediate her interactions with teachers, keeping them grounded in student data. Other interview data suggested Nicole tried other strategies as well, including dropping in on students of concern in classrooms and offering “lunch-time learning” opportunities for teachers to come and watch videos on differentiation with her and then discuss implications for practice. All of these efforts to gain access to classrooms to engage teachers in coaching reflected Beth’s on-going, trial-and-error, or “experiential” learning (Billet, 2002) from problems of practice. Nicole developed an initial understanding of the problem based on these experiences and efforts. She concluded initially that the struggle to get teachers to look at data with her occurred because they did not see the value in working with her, and endeavored to handle this problem accordingly.

However, as Billet (2002) and researchers outside of sociocultural theory (Donaldson, 2008) have also noted, trying to learn only from trial-and-error experiences in daily practice without help from more experienced colleagues can become frustrating, or lead to ineffective problem-solving practices. Such learning has also been described as random and episodic (Donaldson, 2008). The next sections explore what else, outside of daily problem-solving efforts, mediated coach learning from problems.

Self-directed interactions with a district coach or in group professional learning.

Rogoff (2003) argued that learners, even as young children, are active in their efforts to bridge understandings and structure their own participation in community activity. In other words, guided participation is not a one-way process of more experienced participants attempting to direct the learning of less experienced participants; all participants come to activities with their

own goals and understandings regarding what they are learning, however vague. Focusing on problems or questions of particular meaning to the learner also plays an important role in principal learning (Honig, 2012). Findings from this study suggest that in order to learn from problems of practice, Beth and Nicole both actively asked for guidance and support during professional development to clarify their understandings and ways of handling these problems. Specifically, both came to professional development with problems that mattered to them and ideas about how to address them.

Asking for help with particular problems often occurred in one-on-one professional development. Nicole consistently brought specific problems and questions to her one-on-one sessions with Rene, the district coach. For instance, Nicole asked regarding her problem of data use, “Why don’t I ever get to final data [in my coaching cycles]? What’s stopping me?” and regarding her problem of instructional change, “How do I enroll the teachers in the Data Team meetings so they are committed to making change?” Beth, similarly, came to the National Equity Project sessions with her questions about school culture, norms among teachers, and how to plan Data Days and language arts teacher professional development. She did not always publically raise the questions in the sessions, but debriefing interviews revealed the sessions helped her understand the problems differently and plan ways to handle them. Both coaches’ understandings of their problems, as developed in daily practice, enabled and constrained how they interacted in professional development.

However, after coaches raised particular problems of practice that mattered to them, they bridged their understandings (Rogoff, 2003) with those of their colleagues, forcing them to “stretch” their understandings of the problems, their causes, and their possible solutions. For instance, each time Nicole worked with Rene, each of them left the coaching conversation with a

changed understanding of the nature of the problem of practice and how to address it, considering other causes besides the ones they originally assumed or assessed. For instance, as described in Chapter 5, through work with Rene, Nicole's understanding of the problem of getting teachers to value working with her "stretched" considerably. She came to understand the problem to include her overall approach to coaching (too teacher-centered) and to include her principal's sponsorship.

Observing modeling of experienced coaching practice. Rogoff (1990, 1995, 2003) and others (Billet, 2002) have described the importance of learners observing skilled practice as part of guided participation. While not using the term "modeling," Rogoff (2003) explored the ways in which children in different cultures are provided access to observing how adults interact in cultural activities, and how these observations shape their own participation. The practice of "modeling," or demonstrating mature participation in an activity, also appears in research on principal learning in assistance relationships, including the importance of metacognitive strategies for helping learners "see" the thinking behind what is being demonstrated (Honig, 2012). Through observing demonstrations of experienced participation (sometimes intended to instruct and sometimes not), coupled with metacognitive strategies for helping learners to "see" what has been demonstrated, learners gained access to how skilled participants are expected to interact in a community.

The importance of modeling experienced practice as a mediator of coach learning from problems of practice appears throughout all cases in this study. Beth and Nicole reported appreciating the modeling of effective professional development they observed in the National Equity Project sessions, prompting Beth to take "two and three column notes" on what she observed, including what was happening, how it made her feel, and how it was conducted.

Observing a model of how to plan and facilitate a professional development agenda that included all aspects of the “Experiential Learning Cycle” helped Beth understand how to design and facilitate professional development well-suited to her school. Furthermore, Rene frequently modeled for Nicole ways to initiate coaching conversations, ways to orient teachers towards their students’ needs, and ways to talk with her principal. Rene offered Nicole specific language to use with teachers to prompt them to examine what the data said like, “Who in this class is struggling? What problem would this notebook solve? For which students?”

Observing modeled coaching or facilitation practice in one-on-one or group settings seemed to mediate how coaches understood and responded to particular problems of practice in their work. This confirms, as other research from outside sociocultural theory also suggests (Knapp et al., 2010), emerging leaders benefit from observing leadership actions that are relevant to their specific problems of practice.

Guided interactions with particular conceptual and practical tools. Sociocultural learning theorists emphasize the role of conceptual and practical tools in mediating learning and action (Vygotsky, 1978; Wertsch, 1989; Rogoff, 2003). Tools can also be seen as a form of indirect guidance regarding workplace practice (Billett, 2002) or as reifications of practice (Wenger, 1998). However, as Rogoff (2003) commented regarding tools, learning to use them often requires particular forms of guidance from those more experienced with using them. She wrote, “cognitive development occurs as people learn to use cultural tools for thinking...with the help of others more experienced with such tools and cultural institutions” (p. 237). While Rogoff was describing people learning to use conceptual tools like literacy and math, similar notions of tools illuminate the process of learning the thinking involved in coaching.

Tools of various kinds (the coaching model itself, the Student Centered Coaching Tool, the Experiential Learning Cycle, The Enrollment Conversation Tool) played a mediating role in coach learning in this study, and findings suggest that coaches needed additional guidance from more skilled participants in order to use them well. This finding goes beyond the notion of modeling; coaches needed more than to watch someone use a tool to solve a problem, they needed to participate in some guided interaction with the tool and a skilled user. Nicole's work with Rene in both of the one-on-one conversations in her two cases reflects this guided interaction with tools. For instance, while preparing to work with the math intervention teachers on their instruction (Chapter 6), Nicole collaborated with Rene to revise the language in the "Enrollment Conversation" tool (essentially a list of questions for starting a coaching cycle, but also a whole way of thinking about engaging adults in professional learning). It may not have been sufficient for Nicole to just find the tool and try to use it on her own, or for Rene to just model how to use it. The two worked together to make sense of the tool, revise it, think aloud about it, and contextualize it in the specific problem of math intervention teacher instruction.

This theme suggests that practical and conceptual tools that reflect ways to participate in coaching are necessary mediators of coach learning and development, but not sufficient on their own without interaction with others.

Coaches' own past experiences, values, and goals. Finally, findings suggest that a coach's own experiences, values, and goals also mediate what that coach learns. This theme is closely related to the first one regarding the everyday work of coaching as an important mediator of coach learning, but extends it to include the values and goals a coach brings to her daily participation. Herrenkohl and Mertl (2010) would call this the learners' "ways of being," or the "interests, motivations, emotional commitments, and personal and social values about what is

worth learning and how or why one ought to put certain knowledge and skills into practice” (p. 7).

Both coaches’ interests, motivations, and values as well as their past experiences in coaching mediated how they came to find, understand, and handle particular problems of practice. Beth’s previous experiences in schools with cultures similar to Thunder’s had fostered her commitment to developing collaborative norms and trust before working on instruction, a commitment that mediated how she addressed the problem of influencing literacy instruction, even given conflicting pressure from her principal. Her earlier experiences also mediated how she prompted teacher interaction with data, including focusing teachers’ attention on students’ stories. Nicole’s background as an intervention specialist and her personal commitment to data use to drive decisions about how to place students in classes, assess their progress, and plan their instruction drove her understanding of and approach to problem solving in her school.

Learning from Problems of Practice: An Iterative Process. Ideas from sociocultural learning theory help clarify what mediated coach learning from problems of practice. Although I separated the themes presented here for clarity, all forms of mediation appeared to work together to foster coach learning from problems. Findings suggest that learning in the context of problems of practice occurred as coaches moved back and forth between everyday work (with informal guidance) and bringing specific questions to professional development where they received direct guidance. Coaches learned through daily trial-and-error in the participation in the work of coaching, generating questions to bring to professional development, learning some general principles, then returning to practice to try out some new tools or strategies. Learning to understand and address a problem was a back and forth process from practice to formal guidance, and from general ideas to specific incidences, similar to what Horn (2010) noted in

teacher learning from problems of practice. In the formal professional development itself, coaches learned new ways to understand their problems and to develop new ways to handle them when they observed modeled coaching practice and interacted with skilled coaches who helped them appropriate tools in their own contexts.

Limitations to the Study's Framing

The notion of learning from problems of coaching practice provided a particular lens for this study that prevented some kinds of analyses and interpretations. In this section, I explore two large limits in the conceptualization, analysis, and data. One limitation concerns using participant-identified problems of practice as a unit of analysis and another concerns what the particular venues for guided participation prompted me to observe (and not observe). I then propose another way this study could have been framed, borrowing ideas from organizational learning theory.

Since I wanted to understand what mediated coaches' learning from problems, I focused my observation and analysis on their practice with teachers (or groups) whom they selected due to their "problematic" nature. One clear limit here is that I did not have the opportunity to observe what coaches considered to be "successful" coaching with teachers. Other researchers have begun to comment that "successes of practice" may be a more productive focus for research on learning in schools (Prawat, 1993) and leadership learning literature (Schechter, 2011) in particular. An overreliance on problems as a source for learning may have limited my ability to observe the coaches engaged in other coaching work that they did not consider problematic, even if these interactions were brief or even isolated. For instance, if I had asked the coaches to allow me to follow them around for a day and observe all of what they did and then asked them what had been most successful and why, or drew some of those conclusions myself, I might have

gained a very different perspective on what guided coach learning and work. Future research might use “successes of practice” as an alternate observational and analytic lens. These successes may constitute the result of encountering a problem and successfully solving it, and such a view would allow a researcher to note the result of the problem-solving efforts.

Second, there are lots of questions about Beth’s and Nicole’s learning that cannot be answered by asking what mediated their approaches to problems of practice. This study noticeably ignored many individual characteristics of the coaches, including the level of their expertise in various areas, as well as their long-term professional identity development as an aspect of their learning, an aspect of development that other researchers have found factor prominently into coach learning and development (Chval et al., 2010) and which plays a role in sociocultural learning theory (Hicks, 1996). It is possible that Nicole’s learning, for instance, would be best interpreted as the process of her transition from an intervention specialist or teacher identity to a firmer coach identity. Beth, furthermore, was participating in a principal preparation program, and the learning from that program was not involved in data collection or analysis, nor was her approaching shift in identity from coach to principal. Questions of how the coaches defined themselves (and how others defined them) including the full range of their formative professional experiences, starting with and extending beyond teaching, were not explored given a focus on learning as guided participation.

Furthermore, other branches of sociocultural learning theory conceptualize learning as occurring in communities of practice as learners move from peripheral to central participation (Wenger, 1998). The coaches in this study were members of multiple learning communities: their middle school coach professional learning community, the district-wide coach/teacher leader community, and their school communities, among others. Contextual factors discussed in

Chapter 3 prevented my observations of the coach professional learning communities (CPLCs). However, analysis of the ways coaches participated in this community may have shed light on how coaches also learned from and with their peers as a community.

I could have considered the coaches' schools as communities of practice where they learned particular ways to participate as educators. Logically, the coaches spent more time at their schools than in any other community, and I do not have significant data on their interactions with, for instance, their principals, the school leadership teams, or various content area departments (outside their problems of practice). This lack of observations of interactions at the school level is a significant limitation in the study. School-level communities of practice may have had noticeable influence on the coaches' learning. Other researchers have studied the intersections of communities of practice (such as a representative of a district community interacting with a school community) as sites of learning in reforming districts (Hubbard et al., 2006). I could have chosen to seek out and analyze such intersections in this study.

Sociocultural learning theory does not adequately address issues of power that may have been at play at the district and school levels. One unanswered question concerns how pressure to implement Standards-Based Education may have influenced coach learning and behavior. Sandersville was one of the first districts in the region to take a Standards-Based grading approach throughout the system, and some data suggests that competing interest groups on all sides of this issue (parents, students, the teacher's union, principals, coaches) played a dominant role in district conversations about resources and decisions all year. Such pressures may have influenced the ways in which Beth, Nicole, and Rene interacted with each other and the teachers. Another political question concerns the role of coaching in the district. Coaching had a complicated relationship with the teachers' union in the Sandersville, and Rene and some

coaches felt pressure to “prove” the impact of coaching to justify its existence. Teachers may have resisted coaching based on union alliances or discontent with other district decisions. Considering how different actors within the system may have strategized to exert influence on policy implementation (e.g. Malen, 2006) may have offered a different interpretation of the ways these coaches interacted.

Another puzzle concerns the relationships between the district office and the schools. Rene reported several times during data collection that she used information she gained from her on-on-ones with the coaches to inform her conversations with district officials. Rene’s interactions with district office personnel, including her supervisor, Danielle (Director of Title I), may have influenced district decisions regarding how to support the coaches, adjust or monitor the district initiatives, and how to communicate priorities with the schools. These comments suggest that “the district office,” was in some senses, learning (Argyris & Schon, 1978), from the coaches, just as the coaches were learning from their own professional development and practice. My framing did not allow me to consider what and how the district central office as an organization or the individual schools were “learning” through the process of supporting its coaches, what the mechanisms for sharing this information were, and how it informed the responses made by central office leaders (if at all) and how these, in turn, influenced coach learning. Ideas from organizational learning theory (e.g. Leithwood & Louis, 1998) could have provided a different framework for considering the information flows (Mitchell & Sackney, 1998) between and among levels of the system, Rene as a boundary broker in the system (Swinnerton, 2007) and what Sandersville was “learning” as an organization supporting several high-stakes initiatives and a fairly expensive coaching model.

These approaches, however, would not have allowed for a close analysis of coach learning from daily problems of practice, including what guided coach participation in this navigation process. Given that a researcher cannot hold all the levels of complexity and possible influences in view at once, I argue that problems of practice and guided participation are productive concepts that direct attention to both the micro-level interactions (Little, 2003) among teachers and coaches as well as the macro-level context surrounding the interactions (Herrenkohl & Mertl, 2010). By placing the coaches' self-identified problems of coaching practice in the foreground, I was able to observe and analyze the aspects of guidance and context that mattered to the learners themselves, while looking for patterns and distinctions across cases. For instance, if I had focused on the political dimensions of the Standards-Based Education initiative, I might have overemphasized its role in coach learning. In fact, the initiative seemed to play a dominant role in the fall, but faded in importance as the year progressed. Other research has probed the complicated positioning of teacher leaders in reforming districts (Leander & Osborne, 2008), and the current study was more concerned with elaborating how coaches made sense of their own jobs, including the interactions that supported their learning.

Extending the Knowledge-Base on Coaching

Despite its limitations, findings from this study offer several contributions to the current literature base on coaching and coach learning. One contribution is an elaboration of the assertions in the literature concerning the problematic nature of coaching. Another contribution concerns how coaches may learn particular practices associated with mature coaching practice. The third set of contributions concern implications for those concerned with the development of coaches and leaders.

Clarifying the Problematic Nature of Coaching

First, while much literature has explored the problematic nature of coaching, the cases in this study extend our understanding by illustrating the processes through which two coaches learned to navigate these problems. Such an approach conceptualizes coaches as learners rather than “static entities” as Gallucci et al. (2010) point out many studies currently do. As described in Chapter 1, we know that coaches tend to encounter problems of establishing legitimacy (Portin et al., 2009), navigating power and positioning (Rainville & Jones, 2008), and pushing their peers in an egalitarian profession (Ippolito, 2010), particularly in the current press for higher standards of practice and student learning and in schools with firm norms of privacy and autonomy (Lortie, 1975). This study offers a more fine-grained look at the process of encountering and learning from such problems, including what guides how coaches come to navigate them.

For instance, Beth’s experiences at Thunder facilitating balanced literacy professional development (see Chapter 6) could be viewed as an example of a coach struggling to establish her own legitimacy and the legitimacy of balanced literacy at the middle school level while feeling reluctant to “push” her colleagues to implement the practices. However, after following Beth’s participation leading this department across the year, including listening to her own interpretations of the department’s interactions, the school’s history, as well as the conceptual tools (regarding adult learning and the purpose of coaching) that she gleaned from professional development, we can see the ways in which a coach came to find, understand, and respond to this problem as an issue of low teacher trust in each other, while still addressing the content area concerns. She learned to consider the teachers’ stance as a result of years of professional

development perceived to be top-down in nature. Her approach allowed her to anticipate potential teacher defensiveness and plan for the importance of teacher leadership and internal expertise.

Coach Learning about Particular Coaching Practices

We know there is wide variation in what coaches do day-to-day, regardless of their district's model of coaching (Deussen et al., 2010). Furthermore, as Walpole et al. (2010) noted, recent research on coaching has started to shift from treating all coaching as a single, generic “add-on,” to attending to the specific coaching practices that seem to increase teacher learning and, ultimately student achievement. For instance, empirical evidence now suggests that collaborating with grade-level teams, engaging in one-on-one classroom coaching (Bean et al., 2010), collaborating with formal leaders (Walpole et al, 2010) and balancing reflective and directive coaching (Ippolito, 2010), seem to predict changes in teacher practice. The current study contributes to this conversation about coaching practices by offering analysis of the struggles coaches faced as they attempted to enact such practices – and how they learned from those struggles.

For instance, recent research highlights that there is wide variation in the amount of time coaches actually spend engaged in one-on-one coaching (Atteberry & Bryk, 2011) and yet this practice seems predictive of improved student learning (Bean et al., 2010). Findings from this study reveal the ways in which two coaches struggled to gain access to classrooms for one-on-one coaching, offering more nuance to the puzzle, including what may help coaches learn to navigate this issue. Rene's guidance to Nicole prompted her to enter coaching conversations “through the student,” by asking teachers “to partner with her to figure out what was going on” with certain students. Nicole appreciated the modeling and the guided support with tools like the

Enrollment Conversation form, and the Student-Centered Coaching Tool. While this finding about her learning is based on Nicole's own self-report, future research could follow coaches into their work in the classrooms to see how such modeling and guided support helped them actually enact classroom coaching.

While there is a long tradition of studying problem-finding, framing, and solving in the work of educational leaders (principals, in particular) (Copland, 2002), we have no similar tradition in the coaching literature. This study provides evidence that problem finding, understanding, and solving are interrelated and play a crucial role in the work of a coach. How the coaches came to understand the particular problems at their school directly influenced their interpretations of support they received, what kind of support they sought, and how they addressed the problems.

Implications for Understanding how Districts can Support Coach Development

This study also contributes to our understanding of what may constitute helpful professional development for coaches and other middle-level leaders. Perhaps most obviously, this study confirms previous research and conceptual arguments depicting coaches as learners who can benefit from strategic support in order to perform their work (Gallucci et al., 2010). It is unlikely that Beth and Nicole would have handled the problems they encountered as they did without the validation, tools, and specific feedback they encountered through their professional development. The current study offers several insights regarding supporting coaches in the context of reforming districts in three main areas: *clarifying the messages in the system regarding the coaching model and its purpose; building coach capacity to implement district initiatives; and the content and structure of coach professional development.*

Clarifying messages in the system regarding the coaching model and its purpose, while maintaining flexibility. As Rogoff (2003) and others have argued, development occurs as learners are guided towards local ideals for mature thought and action. The construct of guidance used in this study prompted me to consider the messages in the community that defined coaching and what kinds of problems of coaching practice mattered. Findings from this study suggest that there were some contradictory messages in the system regarding the role of the coach and the coaching model, between at least one coach and one principal. Much research on coaching suggests that the principal's understanding of the coach's role, and how he or she communicates this role to staff, mediates the influence of coaching (Matsumura, Sartoris, Bickel, & Garnier, 2009).

Yet, Beth's and Nicole's experiences trying to influence instructional practice revealed the complexity of working across content areas in secondary schools as generalist instructional coaches. We know from previous research that content area affiliation and modes of thinking have a mediating effect on teacher learning (Grossman, Stodolsky, & Knapp, 2004). While both coaches experienced some success in shifting teacher collaborative norms and teacher confidence, both reported struggling to exert noticeable change in content-area instructional practice. Furthermore, Beth's case in particular reveals some conflict with her principal who wanted her to work specifically on literacy instruction. Beth's problem of instructional practice stemmed in part from her different understanding of its causes and solutions than that of her principal.

Beth and Nicole were trained in a coaching model that emphasized teacher affect, reflection, and collaboration rather than content-based instructional change. Findings suggest they were expected to facilitate collaborative teams and focus teachers on data, not model

content-area instructional practices. Accordingly, their professional development generally emphasized the affective side of teacher learning and collaboration (Finkelstein, 2011), frameworks for adult learning (Heron, 1999), and the use of student-learning data (Marsh et al., 2010; Love, 2004), rather than how to prompt content-area specific instructional change as in literacy (S. Gibson, 2006) or math (West & Staub, 2003) coaching. Given this training, both coaches made decisions that revealed their sensitivity to their contexts, their positions and roles in them, and how to address the content issues they faced. Furthermore, the two cases also suggest that blindly following a content coaching approach, without sensitivity to context and adult learning needs, may be unsuccessful. The day-to-day work of coaching is likely not reducible to a single model and requires awareness to multiple approaches.

This research extends other studies that have found that success of instructional reform in a system depends on attention to both the *technical* (as in, implementation of content area-specific reform instructional practices) and the *normative* or *cultural* (collaboration, emotion, values) aspects of change (Hubbard et al., 2006). The current study suggests that district leaders might consider clarifying for those at all levels of the system: Who is responsible for what aspects of change? Who and what in the system will address the normative *and* technical sides? Are instructional coaches expected to create collaborative, inquiry-based collaborations around student learning data to the exclusion of technical content-area work? Are content-area specialists only expected to support technical changes in instructional practice? Or, are both sets of coaches (if both exist) expected to fill both kinds of roles? How will their professional development coordinate and communicate all these aspects of their learning? To what extent is flexibility built into the coaching model, permitting coaches to make their own judgment calls about their approach? What kinds of content knowledge to different coaches bring to coaching?

Building coach capacity to implement district initiatives. Research has suggested that coaches or teacher leaders, in general, frequently serve (or attempt to serve) as “conduits” between district initiatives and school-based practice (Portin et al., 2009). The coaches in this study were expected to help implement several initiatives, and they encountered particular problems, in particular, around prompting data-based instructional practice. Findings offer some insights regarding supporting coaches as mediators of data-based practice and as mediators of district initiatives in general.

First, given the press for data-based instructional decision-making and data-based reflection in districts, Beth’s and Nicole’s experiences extend current insights about the difficulty of expecting *coaches* to play a mediating role in focusing school cultures and individual teachers’ practices on student learning data (Marsh, et al., 2010). Even in the context of a district with at least structures in place for examining student learning data (Data Teams, Data Days), both coaches encountered problems of misalignment among district, school, and teacher understandings of what counts as data, how data can ground practice, and why looking at data is important. Their experiences trying to prompt data-based instruction and collaboration suggest that coaches may need additional support understanding how teachers learn to engage student learning data.

First, Nicole’s experiences attempting to coach Ken suggest that assessment-driven instruction may require some teachers to make a dramatic shift in their stance towards teaching and learning, from a focus on content to a focus on understanding students. Ken’s resistance to Nicole’s attempts to prompt him to set a goal anchored in student-learning data may very well be traced to Nicole’s choice of coaching strategies or to Ken’s trepidation regarding the up-coming state tests. On the other hand, it may also reflect a larger school-wide (or at least department-

wide) trend where teachers plan instruction based on (newly clarified) learning targets rather than on an analysis of student learning in relation to those learning targets. As informal teacher leaders not responsible for evaluating teachers, coaches may be quite well-positioned to engage teachers in close analysis of their own classroom learning data, but Nicole, for one, needed more support to work against existing norms in the department.

These findings suggest that districts cannot assume that coaches can readily mediate between existing instructional practice and those prioritized in the district's initiatives. Coaches benefited from opportunities to discuss problems that mattered to them in the context of the reform efforts. Central office leaders responsible for coach development might enlist a range of coaches, teachers, and principals in focus groups or through online surveys to inform their understanding of the kinds of problems coaches are experiencing in the day-to-day work of supporting teachers in implementing key initiatives. Such insights might help guide the direction of future professional learning for the coaches and their principals.

The content and structure of coach professional development. Coaches in Sandersville encountered problems of practice throughout their coaching work. They sought support as they attempted to gain access to classrooms, assess classroom practice, assess school culture, focus teachers on student learning data, secure teacher commitment to studying data together, and change instructional practice. Insights from this study provide some suggestions regarding the content and structure of professional learning for coaching.

Content of coaches' professional learning. This study confirms previous research regarding the importance of coaches learning about how to support adult professional learning processes (Marsh et al., 2008, 2010) including developing team facilitation and collaboration skills (Lowenhaupt & McKinney, 2007; Donaldson, 2008), communication skills (McCrary,

2011), and sensitivity to the emotional and relational dynamics of adult learning (Finkelstein, 2011). For instance, I observed Beth using Heron's Experiential Learning Cycle (1999) to inform her planning of professional development around student data, including attention to affective, imagination, practical, and conceptual aspects of her agenda. I also observed coaches working with numerous practical tools for mediating the interpersonal side of the coaching process (enrolling a teacher, setting a data-based goal, assessing teacher relationships with students). However, I also argue that it is difficult to separate adult professional learning needs from teacher learning about particular initiatives or instructional changes.

Even in content-neutral coaching initiatives, coaches are still responsible for helping teachers learn particular instructional practices (in this case data-based instruction). This set of findings suggests that districts might consider, when training their coaches, how to provide the resources and expertise needed to help coaches learn about coaching and adult learning in general *and* in the context of their specific district initiatives and goals. As others have noted, the work of teaching adults differs markedly from the work of teaching students (Gibson, 2005), and coaches have much to learn about how to create conditions that support as well as push their peers' practices in particular directions. As described earlier, the coaches in this study learned a fair amount about *general* coaching practices, adult learning, and promoting collaborative school culture, but struggled to influence their colleagues' practice in the direction the specific initiatives prioritized. For instance, even though she was successful in shifting her school's collaborative culture, Beth needed additional support engendering data-based instructional practice while also attending to the norms at her school. District leaders may consider interweaving coach professional learning so they are considering adult learning in specific contexts and with respect to specific content.

Structure of coaches' professional learning. District leaders seeking to support leadership learning have much to gain from considering Sandersville's professional development model for coaching. While not formally designed as "problem-based learning" in the sense that Barrows (1996) describes, or even as opportunities for self-identified, group problem solving like Donaldson (2008) describes, professional development for coaches in Sandersville did offer multiple, on-going occasions for coaches to engage in discussion of relevant, personally meaningful problems of practice and receive feedback on their thinking and efforts. Findings suggest that such a model and such conditions for collaborative problem solving were valuable and helpful to coaches. Coaches appeared to rely on these opportunities to ask questions, interact with other coaches, interact with conceptual tools for thinking and practical tools for specific strategies, and receive guidance on how to use these tools. The three-tiered model (whole group, small group, one-on-one) was furthermore intended to mirror and model what coaches are expected to do in their work with teachers at their schools, as is also found in literature on systems of support for leader learning (Knapp et al., 2010).

Findings strongly suggest that districts may consider the importance of mentor or experienced, locally successful coaches. In this study, the district coach of secondary coaches, Rene, provided individualized, tailored support to help coaches contextualize their learning, provide another perspective on their problems, and validate their experiences. She also modeled valued coaching processes and offered interactive guidance on the use of tools. She also communicated school-level trends and emerging needs to the district office.

Additionally, districts might consider expanding the role of mentor coaches in their systems to increase opportunities for modeling skilled practice. Coaches in Sandersville benefited from observing coaching practice modeled, though this modeling generally occurred in

simulations, role plays, or one-on-ones with the coach, rather than with teachers. Extending this finding, districts might consider creating opportunities for a skilled central office coach, or other “mentor coaches” to model coaching with teachers “live” (in their classrooms or team meetings). Districts have developed such “studio” learning opportunities to support teaching practice (Gallucci, 2008), and these opportunities may also support the development of coach practice.

The findings also suggest the importance of districts also providing regular, whole-group (cross-level) support to coaches. Such structures allowed coaches to build their networks with each other, engage with coaching-related content, learn about district initiatives, and build some internal accountability with each other (Elmore, 2003). These functions parallel the findings in literature on systems designed to support leadership throughout a system, and on building instructional capacity in reforming districts (Knapp et al., 2010). Whole-group professional development experiences allowed coaches the chance to talk with each other formally and informally about the problems at their schools, possibly strengthening their ability to support each other. Additionally, this whole-group structure provided a venue for communicating district priorities, like the changes in the Standards-Based Education initiative, which coaches were expected to communicate to their schools. As coaches talked with each other about their Student-Centered Coaching Tool data, they built additional accountability to each other and their coaching processes.

Finally, while not directly observed or analyzed, small-group learning settings also seemed helpful to coaches in Sandersville. Districts may consider creating self-facilitated professional learning communities for coaches so that they might practice facilitation skills, build their collective problem solving practices, strengthen their networks, and practice the kinds

of strategies they are helping teachers enact. Like teachers, coaches may need support, initially, in enacting data-based inquiry in these professional learning communities.

Directions for Future Research

We still have much to learn about coach practice and coach learning in reforming districts. This study's findings as well as its limitations have surfaced new questions and illuminated several possible next steps for research and research designs.

First, findings and themes from this study suggest that when initiating a study of coaching, a researcher might more carefully consider issues of access. One limitation in this study was my limited access to observing coaching practice in Sandersville. Future studies of coaching might employ different screening procedures to select districts where coaches and teachers are more open to having a researcher present to observe coaching. One possibility might be to conduct a pilot study in a prospective district, observing coaching and coach learning for a year prior to the actual data collection.

More generally, we need more case studies of different kinds of coaches learning from practice in different kinds of school and district settings with different kinds of support. This research presented cases of two coaches of relatively similar experience levels working in the same coaching model in the same district. We do not know the extent to which the problems they encountered are typical of middle school coaching, or if they were a product of their experiences in a particular district at a particular time. Future case study research may probe different kinds of problems encountered by: new coaches, coaches with varied teaching backgrounds, content-focused coaches, cognitive coaches, as well as elementary and high school coaches. Furthermore, future research might follow the same coaches over several years to examine how their abilities to find, understand, and handle problems changes. We might also examine differences in how

coaches navigate problems of practice given different support arrangements (for instance, no formal support, support provided by a peer learning community, or support from a university program). Such a literature base surrounding coach learning from problems of practice would help build the theory initiated here regarding how coaches learn from practice. This collection of cases would also advance our ability to develop helpful structures, content, and pedagogies to support coaches.

We have much to learn about the connections between coaching, teacher, and student learning. Research has begun documenting how coaches enact different kinds of work depending on school context, coaching model, and individual strengths. Given the wide variation in what coaches actually do, it is difficult to examine the impact of coaching on student learning. Atteberry and Bryk (2013) described the pathway from coaching to student learning through teacher practice as a complex “causal chain.” We do not yet know if *coaches’* learning to address certain kinds of problems of practice leads to changes in how they work with teachers, or if these changes then lead to changes in teacher practice or student learning. Future correlational studies might try to operationalize aspects of coach learning from problems of practice (ability to navigate problems of access to classrooms, ability to understand and navigate problems of data use) and examine the relationship between these abilities and changes in classroom practice and student learning.

Future conceptual work might further illuminate the nature of coaching content knowledge. This work might entail detailing, based on previous empirical studies, the intertwined practices, understandings of content and instruction, and understandings of adult learners, that coaches in different contexts seem to develop over time. Such conceptual work would help ground future empirical studies of coach effectiveness and coach learning.

Finally, another direction for research concerns the role of the principal in coach learning. Previous research has documented the importance of principal sponsorship in the work of coaching (Matsumara et al., 2009) but we do not know what sponsorship looks like in practice. We also do not know how relationships between principals and teachers and principals and coaches influence coach learning from problems of practice. There is some evidence here to suggest that both Beth and Nicole may have had different understandings of their actual and intended roles at their schools than did their principals. This study did not examine, however, how the principals at Renaissance and Thunder interacted with their coaches, the teachers at the school, or how they influenced coach learning. We need more empirical description of coach-principal relationships, documenting how coaches and leaders work together in ways that support each other's learning from practice. Future conceptual work might build some theory regarding a supportive coach-principal relationship, drawing on concepts like guided participation.

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Appendix A: Sample Observation Guides

Observation Guides for Group Professional Development

Physical Components

- Where does this event take place (which building, where in that building)?
- How is the space designed for interaction (seating arrangement, tables, chairs, positions of each)? What kind of interaction?
- Who is here in this event and what brings them together?
- How do people arrange themselves?
- What is the stated topic of the session? How is it displayed or communicated?

District Coach's Interactions with Coaches:

- How does the district coach communicate (verbally & nonverbally) with her colleagues? Is the tone formal or informal and in what ways?
- What seems to be the district coach's relationship with her colleagues?
- How do colleagues communicate with the district coach? Formal/informal? In what ways? Verbal, nonverbal communication? How do coaches communicate with each other in the coach's presence?
- What norms of behavior and conversation seem to operate in this event?
- What role does emotion appear to play in the district coach's interactions? (are emotions expressed, how?)

Coaches' Interactions with Each Other:

- What are the coaches talking about?
- How are they talking about it? Are there protocols for conversation, and when and how do they break them?
- What kinds of coaching problems are presented and how are they presented?
- How do coaches describe their own learning and dilemmas, including their volitional commitments to coaching, instruction, and the district?
- How, if at all, do coaches express their own emotions?

- How is coaching defined in this community?

Observation Guides for Coaching

Physical Components

- Where is this coaching session taking place (which building, where in that building)?
- How is the space designed for interaction (seating arrangement, tables, chairs, positions of each)? What kind of interaction?
- Who is here in this event and what brings them together? Who decided?
- How do people arrange themselves?
- What is the stated topic of the session? How is it displayed or communicated?

Coach's Interactions with Teacher:

- How does the teacher leader communicate (verbally & nonverbally) with the teacher? Is the tone formal or informal and in what ways?
- What seems to be the coach's relationship with this teacher?
- How does the teacher communicate with the coach? Formally/informally? In what ways? Verbal, nonverbal communication? What role does emotion play in the interactions?
- What norms seem to operate in this event?
- How do the coach and teacher select the agenda, topics, and plan?
- If in a classroom, how does the coach interact with students? With the teacher?
- How is the coach interacting that is similar/different to interactions in the PD?

Role of Teaching and Learning in the Coaching Session

- How (if at all) is "instruction" discussed or represented in this conversation?
- How is student learning discussed or represented?
- How is the teacher's learning described by the coach? How does the teacher describe it?
- What role does emotion seem to play in learning conversations?

Beliefs, Roles, Attitudes, Motivations

- How do the teacher and coach talk about student potential?

- How do teachers seem to receive the ideas the coach shares about teaching and learning? What beliefs about students and teaching are hidden in their language?

Appendix B: Sample Interview Protocols

District Coach Interview Protocol

1. Tell me a little about your professional background. (Probes: How long have you been working in education? What have been your different roles and positions in education? In what kinds of settings have you worked?)
2. Tell me about your work with the instructional coaches in the past few years. (Probes: Give me an example of a day this past week when you supported a coach. Tell me what you did, said, etc.)
3. In your opinion, what are the district's goals for the instructional coaching program at the secondary level? How have these goals changed over time?
4. In your opinion, what are the principals' goals for the instructional coaches at their sites? How have these goals changed over time? Please do not name individual principals or their schools by name.
5. Ideally, what would the work of an instructional coach look like at one of the high or middle schools in a typical day?
6. Imagine I am a new secondary coach in the district. Tell me what I would expect to experience in my up-coming professional development sessions.
7. Many people argue that instructional coaches experience lots of challenges in their work with teachers at the secondary level. Do you think this statement is true in your district? If so, please give me an example of a problem you have recently heard a coach describe or that you have observed. (Probes: Who was there? How did the coach feel about it? What did s/he want to accomplish? What did the coach do? Is this a typical problem? Why or why not?)
8. I understand that part of your role is to facilitate the professional development for coaches. What are some of your goals for that professional development? Please give me an example of a time in a session when you felt the goals were being met.
9. Describe a challenging time for you in a coach support session. (Probes: What was said? What was the nature of the problem? What were you feeling? What were you hoping? What were you thinking about? Is this a typical problem? Why or Why Not?)
10. What would be the most ideal learning outcomes for your coaches this year?
11. Please describe in general the kinds of support you receive in your work.
12. What else would you like to share about instructional coaching and coach learning in your district?

Debriefing Interview Protocol

Thank you for allowing me to observe that session (or conversation). I am going to ask you a few questions to get your perspective on what just happened.

1. What were your goals for this professional development session? Give me an example of a time in the session when you felt you met/did not meet those goals?

I will now ask you a few questions about specific moments from that session. (Sample emergent interview questions)

2. What was it like for you during that meeting when...
What were you thinking about at that moment?
What were you thinking about?
What were you feeling?
What did you think the others were feeling?
3. I noticed you responded to [person's comment] by...
What were you feeling at that moment?
What were you thinking about?
What guided your response?
4. Was there anything that happened today that you think marks a change or shift for a particular coach or group of coaches? Please tell me about that moment and why it represents a shift.
5. If I could have stopped time and talked to you when [...] happened, what would you have said you were thinking about? What would you have said you were feeling?
6. What do you hope the coaches will think about or do now as a result of the session? (Probe: What, if anything, do you honestly think will change as a result of the session? For whom?) How will you know?
7. What do you think influenced what happened during that session that I might not have noticed as an outsider?
8. To what extent was that event typical of your work with that group of coaches (or individual coach)? How was it the same or different?
9. What, if anything, surprised you about what just happened? What, if anything, did not surprise you?

Appendix C: Sandersville Instructional Coaching Self-Reflection Rubric, K-12

This document includes the standards for coaching in Sandersville (pseudonym).

2010-2011 Sandersville Instructional Coaching Self-Reflection Rubric K-12

A. Communication and Building Relationships		Goals
Rubric	<p><i>Leader:</i> Genuinely cares for and supports adults grounded in trust and skillful conversational techniques</p> <p><i>Practitioner:</i> Effectively builds relationships and utilizes conversational techniques with adults</p> <p><i>Apprentice:</i> Adequately builds relationships and continues to develop a tool box of conversational techniques</p> <p><i>Novice:</i> Beginning to learn how to develop effective collegial relationships with adults and facilitate professional conversations</p>	
Indicators	<ol style="list-style-type: none"> 1. Establishes and maintains trusting relationships with colleagues in order to allow for rigorous conversation, reflection, and inquiry around teaching practices while maintaining a non-evaluative role 2. Effectively incorporates a variety of conversational approaches such as questioning strategies, paraphrasing and problem solving techniques, and non verbal cues to encourage reflective dialogue among colleagues 3. Practices listening and learning to develop effective relationships with colleagues, which enables the coach to manage conflict and work through resistance to effect change with positive outcomes 	
B. Collaborating		Goals
Rubric	<p><i>Leader:</i> Masterfully creates a safe and respectful collaborative environment which rigorously reflects on teaching and learning</p> <p><i>Practitioner:</i> Frequently collaborates with colleagues in a respectful manner which focuses on teaching and learning</p> <p><i>Apprentice:</i> Adequately facilitates or participates in collaboration with colleagues focused on teaching and learning</p> <p><i>Novice:</i> Beginning to learn how to facilitate and collaborate with colleagues focused on teaching and learning</p>	
Indicators	<ol style="list-style-type: none"> 1. Creates structures and processes for collaborative work that promotes an atmosphere of trust and collegiality focused on teacher and/or student learning 2. Builds and honors the shared expertise of all 3. Collaborates effectively with colleagues by honoring norms, protocols, and desired outcomes of the group 	
C. Credible Instructional Leader		Goals

Rubric	<p><i>Leader:</i> Successfully leads adults to higher levels of knowledge using all three coaching venues: 1;1, small group, and whole group, through broad and deep reflection around research based curriculum, instruction, and assessment</p> <p><i>Practitioner:</i> Clearly knows the research based curriculum, instruction, and assessment and effectively organizes professional development to support adult understanding</p> <p><i>Apprentice:</i> Adequately facilitates adult learning around research based curriculum, instruction, and assessment</p> <p><i>Novice:</i> Beginning to learn about research based curriculum, instruction, and assessment and how to facilitate adult learning</p>	
Indicators	<ol style="list-style-type: none"> 1. Serves as a change agent who promotes and fosters a professional learning culture grounded in adult learning theory and cutting edge research based instructional strategies and assessment 2. Partners with building leaders to support teacher learning and improve student achievement 3. Demonstrates fidelity in developing and providing standards based instruction when partnering with teachers 4. Actively supports, promotes, and leads reflective practice among teachers regarding district initiatives 5. Knowledgeable about adult learning theory 	
D. Professional Development		Goals
Rubric	<p><i>Leader:</i> Effectively maximizes adult learning through differentiated data driven professional development which translates as improved student achievement</p> <p><i>Practitioner:</i> Consistently plans and paces differentiated professional development driven by relevant data</p> <p><i>Apprentice:</i> Moderately plans and paces professional development</p> <p><i>Novice:</i> Beginning to learn how to effectively plan adult professional development</p>	
Indicators	<ol style="list-style-type: none"> 1. Skillfully and confidently facilitates each of the three coaching venues- 1:1, small group, and whole group 2. Effectively utilizes the three coaching stances to differentiate and individualize job embedded professional development: coaching, collaboration, and consulting 3. Uses a variety of research based strategies to differentiate professional development opportunities based on disaggregated student data and adult learning priorities 4. Utilizes adult learning theory, appropriate elements of standards based lesson planning, and the ten essential elements, when designing professional development opportunities 5. Provides leadership which gives added value to the coaching cohorts learning 	
E. Data Analysis and Student Achievement		Goals

Rubric	<p><i>Leader:</i> Purposefully uses data analysis to collaborate with teachers in designing meaningful, differentiated and standards based instruction in order to maximize student achievement</p> <p><i>Practitioner:</i> Regularly uses data analysis when coaching teachers to improve student achievement</p> <p><i>Apprentice:</i> Occasionally uses data analysis to inform coaching work</p> <p><i>Novice:</i> Beginning to learn how to integrate data analysis when coaching teachers to improve student achievement</p>	
Indicators	<ol style="list-style-type: none"> 1. Uses data (teacher & student) to inform all coaching and professional development decisions 2. Assists teachers in analyzing student data and designing differentiated instructional programs to meet the needs of ALL students 3. Collaborates with teachers to create and utilize progress monitoring (formative assessment) tools in order to sustain continuous improvement in student achievement 	
F. Lifelong Learner		Goals
Rubric	<p><i>Leader:</i> Exemplifies professional growth and personal integrity with colleagues and others through a consistent professional pursuit for excellence</p> <p><i>Practitioner:</i> Responsibly demonstrates personal professional growth and integrity with colleagues</p> <p><i>Apprentice:</i> Adequately focuses on personal professional growth and respectful discourse with colleagues</p> <p><i>Novice:</i> Inconsistently focuses on personal professional growth and needs to set goals for improvement</p>	
Indicators	<ol style="list-style-type: none"> 1. Consistently seeks out and takes advantage of opportunities for new learning, rather than taking the stance of an “expert” 2. Viewed as a co-learner by all-coaching colleagues, staff, administrators, etc. 3. Deep reflection (verbal and written) leads to action 4. Reflects and collaborates with other coaches in order to refine coaching skills 	
G. Effective Time Manager		Goals
Rubric	<p><i>Leader:</i> Exemplifies high levels of professionalism in time management and commitment to the organization</p> <p><i>Practitioner:</i> Regularly demonstrates effective time management and commitment to the organization</p> <p><i>Apprentice:</i> Adequately manages time and shows a commitment to the organization</p> <p><i>Novice:</i> Inconsistently manages time and needs to set goals to improve commitment to the organization</p>	

Indicators	<ol style="list-style-type: none"><li data-bbox="331 233 1084 380">1. Develops and implements an effective schedule to use time in a highly productive manner which balances and prioritizes their own coaching professional learning, their staff's learning and individual teacher professional development to positively impact student achievement<li data-bbox="331 390 1084 449">2. Consistently shows commitment to the organization through punctuality, preparedness, organization, and responsibility	
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Appendix D: Summary of the Support from the Coach of Coaches

This is an internal document from Sandersville's Coaching Handbook. All names are pseudonyms.

Support from the Coach of Coaches (C2)

Each building coach in Sandersville will have a designated coach themselves. For elementary coaches this is Eileen Daniels and at Secondary Rene Wheeler.

- 1. Once a month a C2 will meet with a building team or individual Instructional Coaches (IC) (approx. 1-1.5 hours)**
- 2. Guiding questions may be used as a springboard for discussion**
- 3. The C2 will document her coaching work**
- 4. Additional support will be available based on needs and experience**

Whole Group

- Assist with planning up-coming whole group professional development opportunities
- Model or Co-present
- Create surveys to gather data
- Analyze data results and plan for next steps
- Provide resources for up coming trainings
- Observe whole group coaching (video or in person) and provide requested area feedback

Small Group

- Dilemma and problem solving
- Role playing
- Observe small group coaching (video or in person) and provide requested area feedback
- Co-plan small group coaching opportunities including format, resources, protocols, guiding questions, goals etc.
- Model or co-facilitate
- Co-observe another coach facilitating a small group and debrief
- Analyze data results together and plan for next steps

One on One

- Dilemma and problem solving
- Role playing
- Observe 1:1 coaching (video or in person) and provide requested area feedback
- Data analysis and next steps
- Model or co-facilitate (conversation or cycle)
- Design forms or guiding questions for 1:1 support

General Coaching Support

- Assist with developing professional goals
- Support coach with schedule/ time management
- Explore/attend professional learning opportunities together
- The C2 will act as a mirror to assist ICs in reflecting on coaching roles

Appendix E: Student-Centered Coaching Tool

Student-Centered Coaching Tool for *Individual or Small Group Coaching Cycles*,
Title I LAP ~ TFL Department

Click here to enter text.

<p>What is the <i>student learning goal</i> for this coaching cycle? What data is this goal based on?</p> <p><i>If there is a student learning behavioral goal, identify it as an additional goal.</i></p>	<p>How will you know students reached success? What will be the observable criteria or <i>student success (look fors)</i> in achieving the learning goal?</p>	<p>What <i>instructional practices</i> were determined by the coach and teacher(s) to most likely produce the desired student learning goal? (Optional)</p>	<p>How will <i>the coach and teacher(s) partner</i> to reach the desired student learning goal?</p>	<p>What impact did this coaching partnership have on your professional growth?</p>	<p>What is the evidence that students accomplished the desired learning goal?</p>
<p>Student Learning Goal(s)</p> <p>Click here to enter text.</p> <p>Standard(s):</p> <p>Click here to enter text.</p> <p>Pre Assessment Quantitative Data (Rubric, %, Raw Score, etc)</p> <p>Click here to enter text.</p> <p>Number of Focus Students</p> <p>Click here to enter text.</p>	<p>Student Success Look Fors</p> <p>Click here to enter text.</p>	<p>Instructional Practices</p> <p>Click here to enter text.</p>	<p>Highlight Experiences</p> <p>Teacher Observation by Coach</p> <p>Observation of other classrooms</p> <p>Demonstration Teaching w/a prebrief, lesson, and debrief</p> <p>Co-Teaching with a prebrief, lesson, and debrief</p> <p>Collaborative Planning</p> <p>Analysis of student work</p> <p>Text or video based discussion</p> <p>Collaborative team work</p>	<p>Capture both the Teacher(s) Reflection and the Coach's.</p> <p>Click here to enter text.</p>	<p>Post-Assessment or Progress Monitoring Quantitative Data</p> <p>Click here to enter text.</p>

			Other: Click here to enter text.		
IC Abstract (Write a brief summary describing and reflecting on the context of this coaching partnership and its impact on student achievement.) Click here to enter text.					

Appendix F: Professional Development Tracking Form

This document captures Nicole's revision of the Student-Centered Coaching Tool.

Student Learning SMART Goal:	Student Success Look-fors:	Strategies to Improve Learning
Standard(s):		
Pre-Assessment Quantitative Data by Student (Rubric, %, Raw Score, etc.)		

Appendix G: Enrollment Conversation Tools

Enrollment Conversation Questions (Original Tool)

(Adapted from the work of Diane Sweeney in the Sandersville Public Schools)

1. What do you hope students will learn as a result of our coaching work?
2. Is there any student work or data that could help us decide on a focus that would make the most impact with students?
3. How would you like to interact during our time in the classroom (co-teach, model, observe)?
4. I suggest a weekly planning session for 30-45 minutes, what time works for you?
5. It is also important for me to be in your classroom for 1-3 times per week, what time is best for you based on your goal for students?
6. How would you like to communicate between our planning sessions? (meetings, emails, other)
7. Do you have any other concerns about the coaching?
8. Is there anything you want me to be sure to do as your coach?

Nicole's Revised Enrollment Questions for the Data Team

1. How will we help students understand the 3 ways we know math?
2. What's the right data? How can we make bringing data a fluid part of one's practice?
3. How would you like to interact during our time in the classroom? (co-teach, model, observe)
4. I suggest a weekly planning session for 30-45 minutes, what time works for you?
5. It is also important for me to be in your classroom for 1-3 times per week, what time is best for you based on your goal for students?
6. How would you like to communicate between our planning sessions? (meetings, emails, other)
7. Do you have any other concerns about the coaching?
8. Is there anything you want me to be sure to do as your coach?

