American Educational Research Journal December 2010, Vol. 47, No. 4, pp. 919–963 DOI: 10.3102/0002831210371497 © 2010 AERA. http://aerj.aera.net

Instructional Coaching: Building Theory About the Role and Organizational Support for Professional Learning

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Instructional coach initiatives aimed at teachers' professional development are expanding in reforming school districts across the United States. This study addresses the lack of research regarding the professional development of instructional coaches. Drawing on sociocultural learning theory, specifically a model called the Vygotsky Space, the authors use a case approach to examine the learning experiences of a single secondary literacy coach. Hypotheses suggest that (a) coaches are not unproblematic conduits of reform ideas but are also learners of new content and pedagogy; (b) as coaches' conceptual development about instruction grows, their ability to coach also matures; and (c) professional development that supports coaches is best aligned around a workplace pedagogy that addresses the learning needs of multiple system actors.

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KEYWORDS: teacher education/development, learning processes/strategies, professional development, educational reform, case studies

 \mathbf{H} igh-quality instruction that improves learning outcomes for all students is the stated aim of many school district reform efforts. Because quality instruction is connected to improved student learning outcomes (Darling-Hammond, 2000; Gamoran, Porter, Smithson, & White, 1997; Sanders & Horn, 1998; Westbury, 1993), change efforts stretching over the past two decades have focused on the improvement of teaching practice (Elmore, 2004). Research over this period has established that this is no small task: ambitious content standards, and the transformative changes in instructional practice that are associated with them, require substantial professional learning on the part of teachers (Cohen & Hill, 2000; Desimone, Porter, Garet, Yoon, & Birman, 2002; Hubbard, Mehan, & Stein, 2006; Thompson & Zeuli, 1999), and the pressure on teachers has intensified under contemporary accountability policies (Finnigan & Gross, 2007; Valli & Buese, 2007). Further, reports spanning over a decade suggest that substantial change in instructional practice is difficult to achieve on a wide scale (Hubbard et al., 2006; Knapp, 1997; Spillane & Zeuli, 1999; Supovitz, 2006). Recent attention has turned to the role of school districts and educational leaders in creating the supports necessary for teachers to sustain engagement with challenging new ideas about their practice.

Embedded professional development supported by an instructional "coach" is one promising, but as yet under-researched, strategy for addressing this need (Taylor, 2008). Although instructional coaching roles are expanding rapidly in school districts across the United States and literature based on practical experience is abundant (e.g., Casey, 2006; Toll, 2006; West & Staub, 2003), there is surprisingly little peer-reviewed research that (1) defines the parameters of the role, (2) describes and contextualizes the work of instructional coaching, or (3) explains how individuals learn to be coaches and are supported to refine their practice over time.

We know that teachers who take on the role of coach are viewed as sharing leadership for instructional reform with central office leaders and principals (Taylor, 2008), and there is some evidence that coaches can act as mediators between district-directed reform efforts and classroom practice (Hubbard et al., 2006; Swinnerton, 2007). Well-known case data illustrate that when reforms keep support for professional learning as a central strategy, chances improve for achieving reform goals (Elmore & Burney, 1997; Firestone & Martinez, 2007; Stein & D'Amico, 2002; Togneri & Anderson, 2003). Research on high-profile cases of system-wide instructional improvement (such as former Community School District Two in New York City, Boston, and San Diego)—where instructional coaching figured prominently—suggests that coaching can support reform goals (e.g., Hubbard et al., 2006; Stein & D'Amico, 2002). And although there is a literature that dates back several

decades on peer coaching as a support for individual teachers' professional learning (Costa & Garmston, 1994; Joyce & Showers, 1982; Showers, 1985), empirical studies have yet to catch up with the recent proliferation of the role in the context of district-wide instructional reform efforts. There is a decided lack of attention in the research literature to how coaches gain the skills necessary to be effective in these relatively new instructional support roles.

This article draws on empirical data from a longitudinal study of three reforming school districts and their partnership with a university-based, third-party organization. For the analysis presented in this article, we asked, How (and what) do instructional coaches learn in the context of district instructional reform? And what organizational structures and policies support them in that process? We draw on sociocultural theories of learning and the in-depth treatment of a single case to examine these questions and the nature of professional learning for coaches—thus, extending what is currently understood about instructional coaching and its enactment in practice. Our rationale for the use of a theoretical model to analyze a single case of coach professional learning is described in more depth in the sections following.

We challenge the notion that people who enter the role of coach are established experts, well prepared to support the learning of others. We argue that, especially in reforming contexts, coaches are also learners and that we know little about their professional learning processes. Further, our theoretical treatment of the data contributes to contemporary discussions of instructional reform as learning (Hubbard et al., 2006; Stein & Coburn, 2008) by showing how individual learning processes can become resources for collective learning and organizational change (Boreham & Morgan, 2004). The case analysis raises multiple issues for future research on the use of instructional coaching as a reform strategy.

We begin with a review of research regarding instructional coaching and coaches' professional learning. We then describe our theoretical framework, including a conceptual model called the Vygotsky Space (Gavelek & Raphael, 1996; Harré, 1984) that has proved useful for the analysis of professional learning as social practice that occurs within organizational contexts (Gallucci, 2008; Peck, Gallucci, Sloan, & Lippencott, 2009). We use the Vygotsky Space to analyze an empirical case that is described in detail with interview, observational, and archival data. Final sections of the article summarize our findings about coach learning and discuss the implications regarding organizational support for coaches' professional development in reform contexts.

The Possibilities and Challenges Associated With Instructional Coaching

With the advent of standards-based reform, notions of leadership as part of a broader system of organizational capacity aimed at systemic improvement have increasingly included teachers as instructional leaders (Smylie,

Conley, & Marks, 2002). For example, leadership has recently been described as distributed (or stretched) over people and various school-level situations, and as instructional—focused on improvement in the core of the profession, teaching, and learning (City, Elmore, Fiarman, & Teitel, 2009; Elmore, 1995; Spillane, Halverson, & Diamond, 2004). It is within this contemporary era of reform that the role of instructional coach has surfaced as a popular means of sharing leadership within schools (Taylor, 2008). Coaches in this view are essentially teacher leaders; many continue as part-time teachers as they take on coaching responsibilities (e.g., see Mangin & Stoelinga, 2008b).

What Is Instructional Coaching?

The term *coaching* is used in a variety of ways, but in education, most authors describe the role as inherently multifaceted and ambiguous (Blachowicz, Fogelberg, & Obrochta, 2005; Coggins, Stoddard, & Cutler, 2003; Learning Point Associates, 2004; Showers, 1985; Smith, 2006; Tung, Ouimette, & Feldman, 2004). For the purposes of this study, we focus on instructional coaching as a non-supervisory role—that is, instructional coaches do not typically have positional authority to evaluate other adults; thus, they do not work from a position of supervisory power and must use expertise and relationships to exert influence (Taylor, 2008). Instructional coaching is content-based (e.g., math coaching or literacy coaching) and intended to support teachers in meeting the aims of schoolor district-based instructional reform (Mangin & Stoelinga, 2008b; Neufeld & Roper, 2003). We further define instructional coaching as embedded and situated work that includes observations of classroom teaching, demonstrations of model practices, and cycles that include pre- and post-conferences with practitioners (Neufeld & Roper, 2002).² Descriptive literature suggests that instructional coaches are expected to (a) enroll teachers to be coached: (b) identify appropriate interventions for teacher learning; (c) model teaching; (d) gather data in classrooms; and (e) engage teachers in dialogue about classroom and other data (Knight, 2006). In addition, coaching requires skills in communication, relationship building, change management, and leadership for teacher professional development (Knight, 2006). These skills and activities add up to a tall order for professionals who are placed in what have been described as ambiguous and contextually dependent roles (Poglinco et al., 2003).

In practice, coaching roles often involve a delicate balance between peer coaching or mentoring responsibilities and whole-school improvement or system-wide professional development (Knight, 2004). The balancing act may depend on how districts position the coach, either as district-level or school-based personnel, and on how districts envision using the coach position within their reform efforts (Norton, 2001). Coaches are sometimes

referred to as "change agents" (Learning Point Associates, 2004; Tung et al., 2004), implying that the teacher leaders who take these positions are pivotal in the creation of change through professional development. Change coaches may support the development of leadership or collaboration skills (Neufeld & Roper, 2003), or they may filter new information from outside the school (such as research or achievement data), something referred to in the literature as "knowledge management" (Coggins et al., 2003, p. 16). Coaches also enter school systems through contractual arrangements with third-party organizations that provide support for structural change in schools (Marzolf, 2006) or for content-specific pedagogical change (Gallucci, Boatright, Lysne, & Swinnerton, 2006; Marsh et al., 2005). Despite the expansion of instructional coach roles and recent calls for attention to the qualifications and professional preparation of coaches (Marsh et al., 2008), there is a limited empirical literature that examines instructional coaches' professional learning.

Professional Learning for Coaches

Acknowledging the lack of attention to the subject of coaches' learning overall, there are literatures that provide guidance about the professional development of coaches. For example, practical guides have long made the suggestion that coaching should be coupled with the study of instruction, observations of model coaching, and opportunities for practice with feedback from expert others (Joyce & Showers, 1982; Showers & Joyce, 1996). Recent reports on coaching initiatives describe phased-in learning and ongoing training as important for coaches' success (Brown, Stroh, Fouts, & Baker, 2005; Gallucci & Swanson, 2008; Knight, 2006; Marsh et al., 2008; Shanklin, 2007; Smith, 2009).

Other case reports describe the challenges of coaching, thus implying the need for professional development and organizational support. Some suggest that practitioners can be ill prepared for the facilitation skills that are associated with coaching (Coggins et al., 2003; Lowenhaupt & McKinney, 2007; Neufeld & Roper, 2002; Tung et al., 2004). For example, working one-on-one with teachers and guiding conversations about teachers' instructional practice is described as challenging, especially for new instructional coaches (Neufeld & Roper, 2002). Likewise, there is a small but related literature on coaches' sensemaking about dimensions of the role (Gibson, 2005; Tung et al., 2004; Lowenhaupt & McKinney, 2007). Lowenhaupt and McKinney describe coach learning in terms of building relationships and report that "interactions with teachers are in fact necessary for mediating coaches' expectations and responsibilities of their jobs" (p. 24). Unfortunately, recent research suggests that building relationships is but one aspect of what coaches do to effectively support teacher learning, especially in a reform context (Neuman & Cunningham, 2009). The domains

of coach knowledge are described as encompassing inquiry, data analysis, and instruction, among others (Coggins, 2005). New reports have called for professional development that helps coaches learn how to support adult learners (Marsh et al., 2008).

Taken together, empirical studies are extremely limited and focus only peripherally on the learning of coaches or on structural supports for their work (Gibson, 2005). The literature tends to treat coaches as static entities that enter the position with expertise and skill. Coaches' content and pedagogical expertise are assumed as preconditions for the job. There is an emphasis in the research on interpersonal skills, but there are few studies of structural supports that might assist coaches, for example, in overcoming cultural norms that work against peer critique. Coaches are often left to overcome such obstacles on their own and to define their role as they learn to do it (Lord, Cress, & Miller, 2008; Marsh et al., 2008). It is this gap in the research on the professional learning of instructional coaches that we take up in this article.

Using Theory to Analyze Coach Learning in Practice

To analyze the professional development of coaches in district and school reform contexts, we draw on sociocultural theories of learning. These theories suggest that effective organizational supports can mediate professional learning as situated social practice. In this section, we outline our theoretical stance and describe the theoretical model used in our analysis.

We use the term *practice* throughout this article in two ways. First, we use it in the practical and colloquial sense to refer to the content and pedagogy of what coaches *do* as they interact in instructional settings with teachers. Second, we use the term in a theoretical sense to refer to social practice. Drawing on Wenger (1998), we characterize practice as occurring "in a historical and social context that gives structure and meaning to what we do" (p. 47). Wenger notes that inherent in practice is the social negotiation of meaning and, therefore, practice should be understood as a process of learning.

Some researchers also include organizations in discussions of socially organized (work) practices (e.g., Suchman, Blomberg, Orr, & Trigg, 1999). Studies in this vein bring *working*, *learning*, and processes of *innovation* into relationship with one another to demonstrate their interdependency in organizational contexts (Brown & Duguid, 1991). Ideas about social practice are pertinent to our study of coaches' learning because they focus our analysis on learning as it occurs in the context of work—not as a separate activity—and as it is embedded in a collective, in this case the district's organizational structures that interact with individual processes. The situated

nature of instructional coaching makes these theories particularly useful for this study.

The Relationship Between Individual Learning and Organizational Support

For this article, we draw on Vygotskian socio historical notions of development that describe learning and change as the internalization and transformation of cultural tools that occur as individuals participate in social practice (Herrenkohl & Wertsch, 1999; Vygotsky, 1978). For Vygotsky, human thinking develops through the mediation of others (Moll, 2001). Although Vygotsky's writing likewise implies that individual development contributes to collective (cultural) change, this aspect of his framework has not been as extensively developed (Engestrom, 1999). Vygotskian theory is helpful for investigating the reciprocal relationship between individual coach learning and organizational support for professional development.

To look closely at the relationship between individual change and organizational support, we adopt a conceptual framework developed by Harré (1984) and elaborated and labeled the Vygotsky Space by Gavelek and his colleagues (Gavelek & Raphael, 1996; McVee, Dunsmore, & Gavelek, 2005). Although the framework was originally developed to characterize how individual development is achieved through participation in social processes (Harré, 1984, 1986; Harré, Clarke, & De Carlo, 1985), in this article, we extend it to describe coaches' learning as it occurs through participation in professional development activities and how that learning sets the conditions for the learning of others. We then connect these learning processes to sources of organizational support that are available in district and school settings (Gallucci, 2008; Peck et al., 2009). Consistent with Vygotskian theory, our discussion focuses on the interplay between collective and individual spheres such as public learning opportunities and individual practices to highlight the role of the organization in professional learning. The Vygotsky Space serves as a heuristic for our discussion of how these spheres interact.

The Vygotsky Space represents learning in terms of relationships between collective and individual actions and between public and private settings (see Figure 1). Interactions between these dimensions are conceptualized as four phases of a process through which social practices are internalized by individuals, transformed in the context of activity, and then externalized (shared) in ways that others may adopt. The process is cyclical and evolutionary, in the sense that learning and change operate in a cumulative and reciprocal way at both individual and collective levels. The Vygotsky Space does not suggest that learning processes are linear (that is, the learner may be functioning at any given time in any of the quadrants). As the metaphor is used by Harré (1984), *space* locates individuals in relation to their sociocultural context (e.g., individual/collective and public/private), and we use *time* here to acknowledge the historical nature of development.

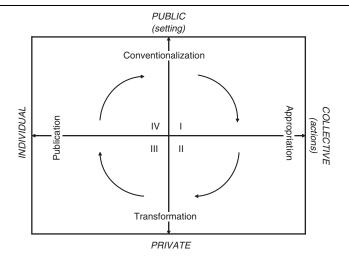


Figure 1. The Vygotsky Space.

Source. Adapted from Gavelek & Raphael, 1996; Harré, 1984; McVee, Dunsmore, & Gavelek, 2005.

The iterative stages of the learning process as depicted by McVee et al. (2005) include the following:

- Individual *appropriation* of particular ways of thinking through interaction with others
- Individual transformation and ownership of that thinking in the context of one's own work
- Publication of new learning through talk or action
- The process whereby those public acts become *conventionalized* in the practice of that individual and/or in the work of others

Harré's discussion of appropriation as internalization contrasts with interpretations of appropriation as the *use* of cultural tools and the process of making them one's own in the context of talk or action—Harré describes such transformation as a process that follows appropriation (Herrenkohl & Wertsch, 1999; Rogoff, 1995). Harré's distinction is useful here because it helps us "see" the ways that new ideas about practice are taken up and discussed by individuals and groups of practitioners and then later transformed and integrated into practice. Our use of the Vygotsky Space helps us separate these aspects of learning as we observed them in context and to connect them to organizational influences.

We might have adapted other analytic frameworks, such as depictions of instruction as interactions between teacher, learner, content, and the

environment (Cohen, Raudenbush, & Ball, 2003), to consider instructional relations among coaches (as teachers), teachers (as learners), and content. Knapp, Copland, and Talbert (2003) adopt this model in their framing of professional learning in context. However, although interactions between coaches, teachers, and content are present in our analysis, our purpose is to connect aspects of *coaches*' learning—a subject about which little is currently known—to forms of organizational support. We also describe how individual coach learning can give shape to district reform, leading to the normalization (or conventionalization) of particular practices. The Vygotsky Space model proves especially useful for these purposes given its depiction of individual/collective and public/private dimensions of development.

Collective and public events take place here in the context of district instructional reform. For example, professional development sessions can introduce new ideas about instruction pertinent to coaching (Quadrant I). In some cases, the new concepts or practices discussed at these collective events may be taken up and interpreted privately through processes of negotiation by individual coaches—a process the Vygotsky Space refers to as appropriation (Quadrant I to Quadrant II). We take private here not in the colloquial sense of the term (that is, private as alone). Even when individuals appropriate concepts, the process is inherently social and involves cultural tools and shared experiences (Wenger, 1998; Wertsch, 1998). In the movement between Quadrant II and Quadrant III, the Vygotsky Space focuses our attention on how instructional coaches can transform new concepts in the context of their work. Here, "practice serves as the worldly experience" through which coaches try out and make meaning of new ideas and learning becomes apparent in coaches' actions (Smagorinsky, Cook, & Johnson, 2003, p. 1408).

If the transformed practices are demonstrated or made *public* by coaches—such as in demonstration lessons arranged for groups of educators—there is potential for individuals' learning to become a resource for the learning of others (Quadrant III to Quadrant IV). Movement from Quadrant IV back to Quadrant I is referred to in the Vygotsky Space as *conventionalization*, a process that we interpret here as the creation of conditions (practices, policies, procedures) that stem from individual learning and support collective change, which can be observed by changes in what is considered normalized practice.

Study Design

To investigate our questions regarding coaches' learning, we draw on data from a 4-year qualitative case study of the partnerships between a third-party support provider and two urban, and one rural/suburban,

school districts. Portions of the data collected for that study are utilized for this analysis.

The Overarching Study

In the fall of 2004, we initiated a qualitative, comparative case study of instructional reform efforts in one urban school district located near Seattle and, in the fall of 2005, extended research activities into two additional school districts (one in Washington and one in California), all of which partnered with the same support organization (Gallucci & Boatright, 2007; Gallucci & Swanson, 2008; Van Lare, Yoon, & Gallucci, 2008). One of the benefits of qualitative study designs is the flexibility to pursue relevant lines of inquiry as they emerge (Wolcott, 1990). As we studied how districts "learned" to improve instruction in the context of their external partnerships, our data collection and analysis revealed a problem—that of understanding and supporting coaches' learning—that was both pertinent to the practice of our study participants and noticeably under-researched. Initial reading of the data collected for the larger research project had also prompted our thinking about the Vygotsky Space as a potentially useful heuristic. We developed a focused case study of one coach's professional learning activities and the organizational supports that appeared to support his learning using this analytic model.

A Case of Coach Learning

We analyzed the experiences of one coach (called Dan in this article) because he was the focal coach at one middle school research site and we had a robust account of his experiences from December 2006 through February 2008. The fact that we had 14 months of observational data about his learning and that he was articulate about the meaning of these experiences made his case an instrumental one (Stake, 1995) for examining the broader problem of how coaches learn to do their work. The deep analysis of a single case allowed rich detail and nuance that might have been lost if we had generalized across multiple or comparative cases. Our purpose was to develop hypotheses based on Dan's in-depth case that would lead to future research regarding coaches' learning.

We had multiple opportunities to observe Dan's district make organizational changes aimed at supporting coaches' (and others') professional development as described below. Dan's case, therefore, maximized our potential to discuss coach learning, as well as the organizational contexts pertinent to his experience. We did not consider that his case was typical of all cases of coach learning. As Stake (1995) explained, "Good instrumental case study does not depend on being able to defend the typicality" of the case (p. 4). The single case is important primarily in terms of what can be learned from it that may inform a larger problem (Wolcott, 2005).

The Context

We chose Dan's information-rich case from data collected in the Ridgeview School District in Ridgeview, Washington (all names used in this article are pseudonyms). The district had invested in a variety of professional development structures in the context of their reform activity; therefore, it provided a relevant context for exploring our questions regarding organizational support for coaches' learning (see the Appendix, available as supplementary material for this article in the online version of the journal).

Ridgeview is a small but growing bedroom community outside of Seattle. The district serves a population of approximately 52,000, which is increasing as residents move further out of Seattle in search of affordable housing. Ridgeview is a primarily White, middle- and working-class community, but it houses significant pockets of poverty and increasing ethnic diversity. The district also serves students from a Native American reservation. The majority of students in Ridgeview are White (74%); other racial groups represented in the district include Hispanic/Latino students (8%), Native American students (8%–9%), Asian students (7%), and African American students (2%). In 2006–2007, 34% of Ridgeview's 11,800 students qualified for free and reduced-price lunch.

Ridgeview Junior High was the study's middle school of focus in the school district. It was selected using a purposeful "intensity sampling" strategy (Mertens, 1998) that ensured that research sites had strong ties to the instructional improvement work promoted by the district and supported by the third-party organization. One of three middle-level schools in the district, Ridgeview served 957 students in grades eight and nine at the time of this study. The school's student population mirrored that of the district in terms of race and ethnicity, but approximately 18.9% of the student population received free and reduced-price lunch during 2006–2007. Within the school, the English department was recognized for its participation in district-driven reform efforts.

Literacy Coaching and Instructional Reform in Ridgeview

Literacy coaches existed in Ridgeview School District (in elementary schools only) even before the district launched a major instructional reform with the goal of improving student outcomes in reading and writing in 2004–2005. With the reform initiative, Ridgeview prioritized professional development aimed at school leaders, instructional coaches, and lead teachers. Relevant to this case, during 2006–2007, when our research began in Ridgeview, the district selected *studio classrooms* as school-based sites for professional learning related to literacy instruction (the teachers in these classrooms were called *studio teachers*). The studio sessions provided an opportunity for participants to learn in their school and classroom contexts under the guidance of an external consultant. The sessions included

observations of lesson planning (that is, a lesson that the studio teacher, the literacy coach, and the consultant jointly selected), demonstration lessons and debrief sessions, and discussions about professional literature. Teachers, coaches, and principals participated in the sessions for one-half to a whole school day. The goal of this approach was to help teachers and coaches (both studio teachers and others) incorporate what they observed in these settings into their own practice. For most schools, "studio days," as they were referred to in the district, occurred 3 to 4 times per school year.

Also in the fall of 2006, Ridgeview expanded what had been an elementary school coaching model to their middle-level schools by assigning lead teachers as part-time coaches (the configuration looked slightly different at each school). At Ridgeview Junior High, two lead teachers were selected as half-time literacy coaches; they also continued half-time as language arts teachers. Dan, our focal coach, had been a teacher for 14 years (9 in Ridgeview) and had served as the chair of the English department at Ridgeview. His principal identified him as a leader who had been an active participant in prior professional development activities at the school. In this article, our case example focuses on Dan's early learning as a coach at Ridgeview Junior High.

Data Collection

The analysis for this article stems from four interviews with Dan, four interviews with teachers at Ridgeview Junior High, two interviews with the Ridgeview principal, and three interviews with the external consultant who worked closely with Dan. In all cases, we asked school participants to describe their work and to reflect on their professional learning experiences (that is, what they thought they were learning and how they were learning it).

We also observed 41 events that included Dan's participation, such as professional development sessions at the school, department meetings, coaching activities and coach professional development sessions, classroom teaching, and district-level instructional leadership sessions that occurred for a period of 2 years. For this article, we focused primarily on events at Ridgeview Junior High. Handwritten field notes in the form of running narrative were gathered at all events. An attempt was made to record what occurred as well as who participated and in what ways. Multiple artifacts, such as instructional memos, calendars, professional development plans, and instructional materials, were collected.

Data from the broader study of district reform efforts in Ridgeview School District were used to build contextual understanding of Dan's case. Other relevant data collected in the district over a 3-year period included six interviews with three central office leaders, as well as observations of district-level professional development events. We used these data to learn

about the district's reform goals and professional development plans, which informed our understanding of (1) what the district expected Dan to learn and (2) the factors that supported Dan's learning.

Data Analysis

We brought ideas regarding social practice and social theories of learning to our analyses for this article. Our aim was to generate hypotheses and questions about the nature of coaches' learning and how district or school organizational structures may support coaches' professional development from the viewpoint of one developing instructional coach. Therefore, *what* Dan learned about instructional coaching practice was relevant, as well as the process of *how* he learned and how he was supported in that learning.

Steps taken for this analysis included (1) an initial reading and open coding of all the relevant data (Emerson, Fretz, & Shaw, 1995), during which we noted instances of "learning" on the part of individuals (the focus here was on Dan's learning), aspects of participation in learning events, or evidence of support for professional learning; (2) the development of a code list based on our initial reading of the data and constructs derived from the Vygotsky Space; (3) focused coding of all the data; and finally, (4) the development of hypotheses regarding support for the professional learning of coaches drawn from our analysis of Dan's experiences. All interview data were coded using HyperRESEARCH (2004), a qualitative data analysis program. Observational data and documents were hand-coded. The data types informed one another in this analysis; for example, Dan described his learning in interviews, but our observational record of his participation in a variety of professional activities verified how his coaching practice changed over time. As a final step in our analysis, we provided an earlier version of this article to Dan and to his supervisor (an assistant superintendent) and asked them to check the validity of our findings and hypotheses (Merriam, 1998).

Instructional Coach Learning: An Illustrative Case

Drawing on our theoretical framework, we define *learning* as changes in how Dan participates in the work of teaching and of coaching, evidenced in his thinking (voiced to us in interview data and in observations of his conversations) and in his actions (noted in our observations) (Lave, 1993). We analyze Dan's learning with respect to a set of beliefs and practices about secondary literacy instruction that was promoted by Ridgeview School District and taught by the third-party consultants hired to work with principals, instructional coaches, and studio teachers. Specifically, coaches and teachers were expected to develop students' abilities to "make meaning" of texts (to develop their own theories about the ideas in the texts) and to express their thinking in talk and writing. Pedagogical practices such as

(1) encouraging student thinking through, for example, open-ended questioning, (2) using a workshop model for planning instruction (Calkins, 2001), and (3) analyzing student writing to set teaching goals were promoted by district leaders and external consultants. Learning about practices such as these formed the content of both district- and school-level professional development sessions and the goals for instructional coaches' work with secondary classroom teachers. Thus, our analysis of what counts as learning is teleologic, that is, focused on Dan's development in response to the goals of the district instructional reform.

We begin our analysis with a description of Dan's teaching as we observed it early in the study. This background snapshot serves as a baseline for the analysis of change over time. Following the snapshot, we develop the case by describing and analyzing instances of (1) Dan's appropriation of new ideas and practices presented at professional development events and (2) Dan's transformation and publication of those ideas in the context of his work. Using the Vygotsky Space as an organizer, the case narrative focuses on a particular example of Dan's learning related to the district's reform goals. In addition, Table 1 provides data beyond the examples mentioned in the narrative. The table displays in chronological order the (1) dates and names of professional learning events observed, (2) analytic codes for each example, and (3) instructional ideas and practices that Dan was exposed to that later showed up in his teaching or coaching practice. For example, a code of "introduced" indicated that an idea was introduced at a professional development event and a code of "transformation" indicated that the idea showed up in Dan's work. The table supports the case analysis following.

Inside Dan's Language Arts Classroom: A Background Snapshot

We first observed Dan as a teacher in December 2006. There were 28 students in his first period, eighth-grade classroom when we visited. Dan had the room arranged in table groups. He began the class by referring to the ongoing student projects—writing essays on three short stories (from their textbook) about the topic of "mood." Dan had provided the students with a model for writing essays that he called the "house diagram," which was intended to help his students organize their ideas (see Figure 2). Dan's use of the house diagram was directive—both the topic (mood) and the specific theme were provided for students. Students were told to write to a teacher-selected prompt.

Following a brief discussion that day about the three stories, Dan asked the students to draw the house diagram in their writing notebooks. He then read a prompt for the essay assignment and provided the students with a thesis statement for the prompt. He wrote the thesis statement in the "attic" of the house (the thesis statement was, "Writers create mood in various ways. This can be seen in 'Tell Tale Heart,' 'A Glow in the Dark,' and 'The

 ${\it Table \ 1}$ Dan's Learning of Instructional Ideas and Practices in Teaching and in Coaching

			•	
Date	Event	Code	Teaching	Coaching
11/09/2006	Waiver day	Publication	Presenting lesson to all teachers in school on finding "topic" and "main idea" in text ^a	
12/06/2006	Studio	Introduction	Workshop structure (e.g., mini-lessons) Supporting student meaning making Student responses in journals Using student data: "We will give students a chance to show us bow they are arriving at ideas, hopefully ihrough their uriting. At the end, we are going to gather up their work, look at what the kids are doing and plan for Friday."	Modeling instruction Supporting teachers' use of data
		Appropriation	Student responses in journals. Dan: 'T like the idea that they are not writing to a prompt. They're writing to a quote that they chose."	
12/08/2006	Studio	Introduction Appropriation	Students' writing to "make meaning". Student responses in journals	Supporting teachers in allowing students to "make meaning"
01/11/2007	Studio	Introduction	Building student talk Gradual release of responsibility Allowing students to be independent in making meaning of text	Modeling thinking aloud during lessons
01/12/2007	Studio	Introduction	Gradual release of responsibility Students' creating and revising theories about text	Scaffolding teacher thinking about changes in teaching practice
		Appropriation	Students' creating and revising theories about text	

Date	Event	Code	Teaching	Coaching
1/17/2007	Coaching session	Introduction		Talking with teacher about weaknesses in lessons Identifying teachers' next steps
		Appropriation		Identifying teachers' next steps
1/18/2007	Leadership meeting	Appropriation	Ownership in student writing	
02/02/2007	Classroom	Transformation	Read aloud (not "chunking" text): Dan:	
	teaching (Dan's		"I'm going to do a read aloud, but I'm not going to stop."	
	classroom)		Using students' response journals	
02/07/2007	Coaching	Transformation		Prelesson discussion with teacher (not
	teachers (Ted's			setting learning expectations for teacher)
	classroom)			
02/08/2007	Dept.	Publication	Shared reading	Modeling instruction
	meeting		Use of reading notebooks to build	Thinking aloud
			discussion	Engaging teachers in reform practices. Dan: "OK. The first time I stop, I like to do a think aloud not to bave them [students] talk, but to point out things I'm noticing in the language and fiction."

(continued)

Table 1 (continued)

Table 1 (continued)

Date	Event	Code	Teaching	Coaching
2/14/2007	Coaching session	Introduction		Identifying weaknesses in teachers' practice Identifying teachers' next steps
2/22/2007	Studio	Appropriation Introduction	Identifying teaching purpose	Identifying weaknesses in lessons Supporting teachers in identifying purpose
		Appropriation	Using student data (analyzing students' response journals); Allowing student ownership of theories about text	
2/23/2007	Studio	Introduction	Using student data (response journals)	Supporting teachers in analyzing what student needs
		Appropriation	Extending upon and using student data	
4/16/2007	Coaching teachers (Ted's classroom)	Transformation		Modeling lesson for teacher (Dan repeats lesson structure and teaching method from own classroom)
05/09/2007	Classroom teaching	Transformation	Identifying lesson purpose with students	
	(Dan's classroom)		Using open-ended questions to guide discussion of text Allowing students to be independent in making meaning of text Making thinking public (thinking aloud about text)	
			Gradual release of responsibility	

(continued)

Table 1 (continued)

			(
Date	Event	Code	Teaching	Coaching
9/29/2007	Waiver day	Publication		Supporting school-level leaders in scaffolding teacher learning (coaching school-level leadership on setting purpose for professional
10/04/2007	Coaching teachers	Transformation		"Entrance points" to conversations "Entrance points" to conversations with teachers about practice Supporting teachers in identifying purpose Identifying reachers, next stens
10/05/2007	Coaching teachers	Transformation	Use of open-ended questions in lesson planning Using purpose in lesson planning	Building student talk Side-by-side teaching and coaching Supporting teacher in allowing students to make meaning
11/06/2007	Coaching session	Transformation		Identifying teacher needs Entrance points to conversations with teachers about practice
12/06/2007	Building- level coaching session	Publication	"Spying" on self as reader ^b	Thinking aloud for teachers

Table 1 (continued)

Date	Event	Code	Teaching	Coaching
02/11/2008	Coaching teachers (Ted's classroom)	Transformation	Identifying lesson purpose throughout lesson: Dan: "Do people want to be ruled or want to participate in their government?" Open-ended questioning: Dan: "What is something you noticed?"	Identifying student needs. Dan: "Tm thinking that your kids can think within the context of the novel. The question I bave is: can they recognized discuss ideas that arise in the novel in a more global sense?" Identifying teacher needs Supporting teacher in identifying student needs. Dan (to Ted): "It may mean you need to reframe. Instead of questions—"What do you wonder?"—you can create an atmosphere where it is safe to question."
2/20/2008	Building- level coaching session	Publication		Supporting school-level leaders (coaches) in scaffolding teacher learning; Supporting school-level leaders in identifying teacher needs

^aPublication of existing practice and concepts before professional development and accompanying learning and change.

^bConsultants used a phrase, "spying on yourself as a reader," to support teachers and coaches in identifying reading habits, skills, and needs.

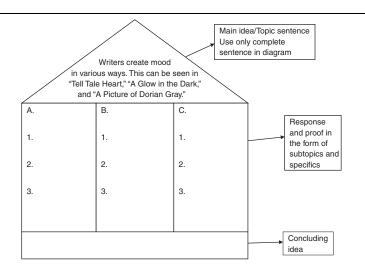


Figure 2. "House diagram" for organizing student writing (developed by Ridgeview Junior High teachers).

Picture of Dorian Gray""). He explained to the students that writers select subtopics (which he described as "three legs of a stool") for their theses. Dan then told the students to fill in their house diagram with quotations to show "narrative voice" in "Tell Tale Heart." One student asked if he wanted "exact quotes" and Dan replied, "Yes."

Noting the direction of the district's reform work in literacy (especially the push to develop original student thinking), this example typified our early observations of Dan's teaching. Dan provided the writing structure for his students rather than encouraging them to make open-ended meaning of the stories. His discussion points tended to be informational ("yes, exact quotes"), procedural ("you can fill in these boxes"), and directive ("Chelsea, what would you fill in for 'Tell Tale Heart'?"), leading students to find correct answers rather than to write from quotations they found provocative. Several aspects of Dan's instructional work changed over the course of the next several months. For example, the use of a tight structure for student writing (such as the house diagram) and the teacher-developed prompt and thesis statement began to fade from his practice.

A Public, Collective Learning Opportunity (Quadrant I)

In December 2006, Ridgeview Junior High also had its first studio session. In this section, drawing now on the Vygotsky Space model, we describe the studio session as a public setting with collective participation

(see Figure 1) that provided an opportunity for individuals such as Dan to appropriate new ideas. The goals of the studio work were to provide professional development experiences in literacy instruction (as modeled by an external consultant) at the school level and to provide teachers with opportunities to incorporate new pedagogical strategies into their practice.

All of the teachers in the Ridgeview English department were released three times during 2006–2007 to participate in one of two half-day studio sessions that occurred on 2 consecutive days; Dan participated in these sessions as a coach. Leslie (the external consultant) demonstrated a variety of instructional strategies over the course of the year related to the district goals for secondary literacy instruction. These included (1) the use of the workshop model; (2) supporting students to make meaning of text; (3) building student talk; (4) the strategy of gradual release of responsibility for learning (Pearson & Gallagher, 1983); (5) the use of student data for instructional planning; and (6) identifying a specific teaching purpose (see Table 1 under the code "introduction").

The studio teacher for one session that year was Ted, and we observed as Leslie led a group of 10 participants through a lesson she planned to demonstrate in Ted's classroom. The lesson focused on supporting students to make meaning of texts. Leslie explained to the group that she would conduct a shared reading with the students using the short story "Homework." As Leslie walked teachers through the lesson plan she had created for the demonstration, she stopped intermittently to explain the thinking behind her instructional moves:

We want kids to be able to write well about their reading, and summarization is a piece of that. But that's complicated. We will give students a chance to show us how they are arriving at ideas, hopefully through their writing. At the end, we are going to gather up their work, look at what the kids are doing and plan for Friday.

Throughout this studio session, Leslie modeled new instructional practices such as student partner talk, student conferences, and written responses to texts, while simultaneously talking about her instructional thinking. ⁷ She introduced the notion that students would "arrive at ideas" and that teachers would look at student writing to plan their next instructional steps.

Following Leslie's demonstration lesson, Ted and Dan talked together:

Dan: I like the idea that they are not writing to a prompt. They're writing to a quote that they chose.

Ted: Like Kasey. He wrote a page today, which is more than he's done in a week, because he chose the quote.

During a whole-group discussion following this exchange, Dan spoke up about a key idea that he had taken from watching the demonstration

lesson—that students were using their own quotations as writing prompts. "It seemed more authentic," he commented. Leslie responded by adding, "It's important to make meaning, and a teacher prompt takes away a step of invention [from the students]." At the end of this studio session, Dan reiterated to the group, "I really like students' choosing lines that they find."

Dan (thinking as a teacher) seemed to fixate on the idea that students should engage their own ideas about their reading. This was a different pedagogical idea from the practice we had observed a few days earlier when students in his classroom summarized information using Dan's house structure. The studio also gave Dan food for thought about how to be a literacy coach, including how to model lessons for other teachers. However, in his conversation with Ted described above, we see that Dan's coaching strategies at this point were tied to his thinking as a teacher ("I like the idea that they are not writing to a prompt. They're writing to a quote that they chose."). The pedagogical idea of writing to a student-selected quote was new for both Ted (the teacher) and Dan (the novice coach).

Dan spoke up as a teacher leader in the studio discussion, and we can hypothesize that as a new coach he wanted to take a lead role in affirming the work of the consultant, noting for his peers that student meaning-making is important. However, coaching skills such as co-planning, modeling, coteaching, or providing teacher feedback were not evidenced at this point in our observations of his work. Over time, Dan was introduced to more ideas about instructional coaching (see Table 1). We follow his development in response to ideas about both teaching and coaching in the next sections.

Taking Up Ideas From the Learning Opportunity (Quadrant II—Appropriation)

In Quadrant II of the Vygotsky Space framework, we moved metaphorically to the "space" where Dan considered (internalized) new ideas appropriated from the public sphere in the more private (though social) domain of his work as a teacher and as a novice coach. Appropriation here indicated the process of thinking about and discussing new ideas—that is, mulling them over in terms of one's current repertoire. In some cases, Dan's appropriation was clearly related to his work as a teacher, and, in fewer examples, he was appropriating ideas about coaching (refer to Table 1). Generally speaking, Dan's consideration of these new ideas was made in reference to classroom-based practice.

For example, Dan said of the studio sessions in general, "They've given me good ideas." In February 2007, 2 months after the first studio session described above, he recalled,

[The first studio is] where I got the whole idea of grabbing a line [from a text] and having [students] write to it. Having them write in smaller pieces and letting them write in first person is something that's been

taboo for us for a long time. But it got the students to express themselves more authentically and relate to the text better.

In this quotation and others, we saw Dan considering new pedagogical practices demonstrated by the consultant *in terms of his own teaching*. Dan was intrigued by the notion that students could choose a line of text and write about it in their reading response journals, that students should (and could) engage in independent thinking about text (creating and changing their own theories about what was important in the texts), and that teachers could use student writing to plan their next pedagogical steps (see Table 1). These instructional strategies were very different from the more directive methods that Dan had used prior to his participation in the district-supported professional development activities (such as the school-based studio sessions). The idea that teachers should analyze student work to plan was also new to Dan: "So, we're forced to think for each kid what they need as a next step."

What Dan was considering about teaching was also related to *his development as a coach*. Dan explained, "So [studio work] gave me a lot of things to do with my kids and, as such, it also gave me things to bring into the two classes that I'm coaching now." He commented, "In that sense, the studio classroom serves as a really good model and I guess, as a coach, I serve to carry that work out [to teachers]." That is, the studio session was a model for Dan in terms of his own teaching, but Dan also felt responsible to make sense of and model the new ideas and practices for the teachers he coached. In an interview, Dan described this challenge as "thinking with two heads":

In one head, you're thinking about: What are you going to do for your kids and what is the next step for your kids? With the other head, not so much what are you going to do for this other teacher's kids, but what are you doing to do for that teacher to help them get to where they need to be? And, it's not always the same thing. It's hardly ever the same thing. So, yeah, very difficult.

Given his reference to two heads (and the fact that Dan was still working 50% of the time as a teacher), one can surmise that even as he talked about coaching, Dan was thinking like a teacher. His reference to coaching was about translating ideas that were new to him for other teachers. But, in this quotation, we also heard Dan saying, "It's not always the same thing." He had appropriated the idea that coaching was not the same task as learning new practices as a teacher, but rather how to influence another adult's practice.

During the winter of 2007, we found other examples of coaching behaviors that Dan appropriated from his professional development experiences (e.g., from coaches' meetings, from district leadership seminars, and from the studio sessions) (see Table 1). He talked about (1) helping a teacher

identify the purpose of a lesson; (2) modeling a lesson from his own teaching for another teacher; and (3) analyzing aspects of other teachers' work to identify next learning steps for those teachers. As we continued to observe, some of these ideas began to show up in Dan's practice.

Learning on the Job (Quadrant III—Transformation)

As Dan worked with individual teachers in classroom contexts, we observed a parallel learning process. Like wheels turning independently on a car but headed in the same direction, Dan's learning as a teacher and as a coach appeared to be occurring simultaneously in response to the district's reform goals. Rogoff (1994) noted that "learning is a process of transforming participation in shared sociocultural endeavors" (p. 210), and in this case, we contend that the district reform context provided a shared endeavor around literacy instruction. Dan was a participant as both a teacher and a novice instructional coach in that dynamic context.

The concept of transformation is essential to demonstrating the interdependence of social and individual processes in human development. Using the Vygotsky Space model, we consider transformation in terms of a dialectic, as described by Vygotsky (1978): "The dialectical approach, while admitting the influence of nature on man, asserts that man, in turn, affects nature and creates through his changes in nature new natural conditions for his existence" (pp. 60-61). In other words, the ideas that Dan was exposed to in the studio sessions and other professional development activities mediated (changed) his teaching and coaching practices and, simultaneously, Dan's use of the ideas was unique to his work (thus changing the ideas themselves in a novel context). Important for our purposes here, Dan's learning also impacted the broader reform endeavor, albeit in the contexts in which he worked. In this section of the article, we analyze how transformation occurred relative to Dan's work as a teacher and as an instructional coach, and in the section following (Quadrant IV), we describe how Dan's learning was made public in other school settings.

Transformation in Dan's teaching practice. Several broad ideas related to literacy instruction were introduced to district leaders, principals, instructional coaches, and participating teachers as early as 2005. Here and elsewhere, we have mentioned several of the instructional ideas that were introduced as part of Ridgeview School District's reform in literacy (see Swanson, 2007, and Van Lare et al., 2008). Dan appropriated aspects of these ideas. As he began to make use of them, we observed changes in his teaching practice. Dan was selective in his adoption of the ideas and worked them haltingly into his repertoire with respect to the district's goals.

Dan began to use, for example, some of the technical elements that he had observed in the studio sessions. For example, in April 2007, we

observed Dan model a lesson on poetry in Ted's classroom. The following vignette was constructed from our field notes (D = Dan; S = students):

[Dan handed out the poem, "Gettysburg," to the students and gave them some background on Gettysburg (the Civil War battlefield in Pennsylvania). He told them that 8,000 men had died in 10 minutes at Gettysburg and that that was eight times the population of their school.]

- D: When you are listening, ask yourself, is this poem really about Gettysburg? [Dan reads the poem aloud.]
- D: Talk to your partner: Is there a rhyme scheme? Are there any words that stuck out? Circle them.

[After the turn-and-talk, Dan continues.]

- D: Okay, so what was one thing people noticed about the structure? Did it rhyme? S [in a chorus]: No.
- D: What about stanzas?

In this lesson, we saw evidence of practices we did not see in our earlier observations of Dan's teaching (see background snapshot). He asked students to talk to partners, a technical strategy intended to support student thinking that was demonstrated in numerous professional development sessions. However, Dan's transformation and use of the tools he was learning were not always consistent with his or the district's intended purposes around literacy instruction. Instead of asking open-ended questions to encourage discussion, he first focused the students on the structure of the poem by asking short-answer questions about rhyme and stanza. This example demonstrates that transformation is a process in which individuals, such as Dan, construct new knowledge in interaction with the external world and with their previous understandings (John-Steiner & Mahn, 1996).

Table 1 displays other examples from our data of changes in Dan's teaching practice. We saw Dan make use of practices such as reading aloud, reading response notebooks for student writing, identifying purpose in lesson planning, and making his thinking public for students. We saw evidence of transformation both of his practice (making use of these strategies) and of tools themselves. For example, in February 2007, Dan announced that he was going to read a text aloud, but he said, "I'm not going to stop [during the reading]"—a clear misuse of the practice as described by Calkins (2001). But, in May of that year, Dan used the read aloud technique again, and this time he planned to "chunk" the text (that is, read a short section, stop, and ask open-ended questions of students). This time, Dan's use of the strategy was closer to its textbook descriptions (and more consistent with the goal of support for student thinking).

Transformation in Dan's coaching practice. We also witnessed evidence of transformation over time in Dan's work as a coach. The school district had promoted many ideas about instructional coaching in their

professional development work (see Table 1 for examples). In particular, the idea of "gradual release" was adapted for coaching: (1) Coaches were to demonstrate or model instructional practices for teachers (to); (2) as trust was built, they were to coach "side by side" with a teacher; and (3) then they were to stand by and observe the teacher's practice, diagnosing and considering questions regarding the teacher's next learning steps (see Swanson, 2007, for further description). We saw Dan's coaching transform as he adopted these and other practices.

In the example above (the Gettysburg lesson), Dan's coaching was tied to his teaching. He told Ted that he was demonstrating a lesson he had conducted in his own classroom ("So what we're going to do is start with something I do with my kids"). We did not see evidence of joint planning between Dan and Ted or the use of student work to identify a teaching purpose tied to Ted's students. However, we did see Dan modeling a lesson for Ted as described above. Instructional modeling in a teacher's classroom was a new practice for Dan as were the teaching practices he was modeling. This is important because it demonstrates the difficulty of coaching in a reform environment—Dan was learning how to teach using reform practices at the same time he was learning how to coach his peers.

A year later (in February 2008), we returned to watch Dan coaching Ted, after the two had participated in several more studio sessions together. This time, Dan and Ted had preplanned a lesson for a seventh-grade language arts/social studies block period. Evidence from their planning documents suggested that (1) they had identified a number of open-ended questions that would help students relate a nonfiction social studies text to a novel they were reading in language arts (and selected one focus question), and (2) they had used a lesson planning template to chunk the nonfiction text into segments to facilitate students' construction of meaning related to the content of the text. These preplanning techniques had been demonstrated by the external consultant during the intervening studio sessions. Dan followed up in an e-mail with Ted prior to the lesson, raising some questions about connecting the nonfiction text with the novel. The e-mail message demonstrated the goal of instruction that Dan was working on with Ted (that is, a strong focus on students' thinking):

I'm thinking that your kids can think within the context of the novel. The question I have is: can they recognize/discuss ideas that arise in the novel in a more global sense? Can they develop theories in response to a larger question and then do the research in other readings to test those theories/adjust their thinking/build on what each other has to say?

Dan offered in his note to "do some more planning around this with you, even come in and do some side-by-side [coaching]." In this e-mail and in Dan's preplanning, we noted that Dan diagnosed students' learning

needs specific to Ted's classroom ("I'm thinking that your kids can think within the context of the novel. . . .").

We observed the actual lesson days later. The text for the first part of that lesson was *The Lord of the Flies*, and the focus question that Dan and Ted selected to guide the lesson was, "Do people want to be ruled or want to participate in their government?" Students wrote about that question in their reading response journals and then switched journals with a partner. Ted led a whole-group discussion about the students' responses and then Dan took over the teaching. For the second part of the lesson, Dan and Ted wanted students to connect their thoughts about the focal question with themes from a nonfiction piece the class had read earlier in the year on the Whiskey Rebellion (Dan said, "We're going to look at a piece from your text-book that I know you have looked at once already"). During the lesson, Dan asked open-ended questions ("What is something you noticed?" and "So, what are people thinking is happening?"), encouraging interpretation and meaning-making from the students rather than asking structural questions as he had with the earlier Gettysburg lesson.

We asked Ted during the lesson to describe what he was observing as he watched Dan teach his students. Ted said that he was "trying to catch Dan's teaching 'moves' and verbal cues. Like going back to the 'big question' often in the lesson and pushing them to ask questions, holding them to accountable talk."8 Ted seemed to know what he was looking for in this lesson likely the preplanning between himself and Dan focused his observation of the demonstration lesson. There was evidence here that what Dan was learning regarding teaching was increasingly infused in his coaching work (now Dan was asking open-ended questions with regularity during his demonstrations). But, in this new example, Dan had modeled a lesson after diagnosing needs specific to Ted's students, rather than transporting a lesson directly from his own classroom—evidence of his changing abilities as an instructional coach. Although Dan had offered in his e-mail to coach sideby-side as Ted taught (with in the adapted gradual release model), we did not see him do that here. The district's goal was that coaches use the side-by-side technique, considered a next step in gradually releasing new practices to the teachers.

In Table 1, we provide other examples of transformation (change) in Dan's coaching practice. For example, in October 2007, Dan did coach *side-by-side* in another teacher's classroom. Dan "jumped in" during instruction and later talked to the teacher about her next pedagogical steps while her students partner-talked. This was the first time we had observed Dan "coach in" while another teacher was working. Over the next several months, we observed as Dan adopted other coaching skills such as the increasingly sophisticated diagnosis of students' needs in order to plan instruction with teachers (see Table 1). Dan's learning (evidence in his

changing practices) increasingly became a resource for the learning of others in the school and other district contexts.

Making Coaches' Learning Visible for Others (Quadrant IV—Publication)

One of the critical dimensions of the Harré model was that of the relationship between the public and private spheres in terms of development. Harré (1984) described human realization (or cognition) as "displayed" in the public sphere. For our purposes in connecting professional learning to sources of organizational support, publication was the metaphorical space in which Dan's transformed practices were displayed in settings where they could become a resource for the learning of others in the school or district. Theoretically, these displays (observed in talk or action) could occur at multiple and fairly continuous points in time as Dan engaged in professional development activities. We coded many examples of publication related to Dan's development. In one example, Dan led a meeting with some coaches and teachers and, in that context, he described a pedagogical strategy called "spying on yourself as a reader" to teach the conscious analysis of reading strategies. As a coach, Dan talked at school leadership team meetings about establishing purpose for professional development sessions, and he led other coaches in diagnosing teachers' learning needs (see Table 1).

In one instance at his school (February 2007), Dan, with support from his principal, organized a full-day professional development session. Dan led the professional development session, which was attended by all 14 teachers within the English department. Here, Dan demonstrated specific *teaching* practices using *coaching* strategies he had learned throughout the year. He modeled a lesson intended to support students in making meaning of texts (here, the teachers played the role of the students). Dan surveyed the teachers to hear what they were currently covering in their classes (demonstrating his understanding about diagnosing teachers' learning needs) and then addressed the whole group:

This has been our practice, right? The read aloud, the shared reading, so they can hear us and think with us and they hear proficient reading. . . . I'm going to model a lesson. Jim and Stuart have seen it—I taught it in their classroom—and we saw Leslie do something like this [in a studio session].

Dan was explicit in naming what he was promoting as collective literacy practices in the department: read aloud and shared reading. He continued by underscoring his understanding about the use of these practices: "so they [students] can hear us [reading and thinking for them]." Dan's statement, "We saw Leslie do something like this," makes an explicit connection to the studio sessions.

Next, Dan handed out the text "Northern Lights" by Sigmund Wilson and explained that he was modeling a shared reading. After reading the first paragraph, he stopped and spoke to the group:

- D: OK. The first time I stop, I like to do a think aloud . . . not to have them [students] talk, but to point out things I'm noticing in the language and fiction. [Dan continues to read, stopping after chosen passages.]
- D: This is where I would have a turn-and-talk and ask kids to talk about the description. Turn to your neighbor and point out the description that stands out to you.
- [Teachers turn to each other and discuss descriptions within the text. After a short pause, Dan asks to hear what someone picked. A teacher points out a connection between a description in the text and a memory of her hometown.]
- D: Kids will always do that. Make those connections. The trick is not letting them go all over.

The model lesson continued in this format. Dan walked the group through the text and explicated his instructional decisions, displaying what he had learned about teaching and also displaying his learning about coaching (e.g., modeling, thinking out loud for teachers, engaging them as learners around the reform practices). Throughout the lesson, he attempted to connect the model lesson to what teachers would encounter in their own instruction ("Kids will do that. . . . The trick is not letting them go all over Ithat is, keeping them on topicl"). Teachers in the group later built off of Dan's model lesson to suggest ways to incorporate the new practices into their curriculum ("This would work very well with 'Single Room With a View") or to question future steps for instruction ("And then what?"). In a later interview, one teacher discussed her experiences in Dan's professional development sessions. Her description highlights the public-private dimensions of Dan's development and how his learning could be a resource for others in the school:

So, [he'll] definitely model [in professional development sessions] what he's doing in his classroom. And, it definitely makes me think about what I'm going to do in my classroom or what my next approach might be, definitely gives me ideas about how I want to approach things in my classroom.

This teacher made the claim that Dan's demonstration of "what he's doing in his classroom" impacted her thinking about how "to approach things" in her own classroom.

Although we could see, using the Vygotsky Space as an analytic tool, that Dan's practice had changed across dimensions of both teaching and coaching, our analysis to this point has primarily addressed our first research question: How (and what) do instructional coaches learn in the context of

district instructional reform? In what follows, we revisit Dan's case to address our second research question: What supports coaches in that process?

Organizational Support for Professional Learning: The Conventionalization Process

We used the Vygotsky Space model to analyze aspects of a relatively new social practice in education (that of instructional coaching). Our examples highlighted the unevenness of development as it occurs in the context of practice. The theoretical model helped us delineate aspects of Dan's learning process across spatial dimensions that are relational, not linear. For instance, although the publication example of Dan at his department meeting had potential effects on others in his school, it occurred earlier in time than our example of transformation in Dan's coaching practice. We know that learning new knowledge is effortful and interpretive and not constructed uniformly (Billett, 2002). Table 1 displays coded examples of Dan's learning (based on the Vygotsky Space model) in chronological order demonstrating this unevenness and the dynamism of the reform context. Given the caveat about uneven development, however, one can see from the table that over time and especially following our storyline about student meaningmaking, Dan's practices were changing in the direction of the district reform goals.

The Vygotsky Space labels the movement from Quadrant IV (publication of new learning through talk or action) back to Quadrant I (new opportunities for learning) as "conventionalization." In conventionalization, practices that have been appropriated and transformed become normalized for a group. The logic of this step in the developmental process is socio-historical (Vygotsky, 1978). Learning processes are iterative—that is, as new learning is made public (or externalized), it becomes a potential resource for continued cycles of development. The process is prospective in that individual learning becomes a potential resource for the group (for example, we demonstrated that Dan's learning became a resource for the learning of other teachers in his department, beyond Ted) and retrospective in that learning cycles are supported by resources available at the time. In other words, how Dan's development was supported by organizational structures (practices, procedures, and policies) is as important as what his learning contributes to others. Our intent here is to build theory by adapting the Vygotsky Space to show how individual actions and organizational structures in both public and private spheres interact to facilitate professional learning. We discuss how organizational supports can set the stage for the conventionalization of new ideas about coaching, teaching, and student learning—such as the district's goal that students make meaning of texts by talking, writing, and thinking about what they read. In the next sections, drawing on our case data, we describe the organizational conditions that supported dimensions of Dan's learning.

Establishing and Communicating a Shared Vision

District leaders in Ridgeview orchestrated the instructional reform by coordinating activities and people around a shared purpose (to improve literacy instruction throughout the district). They connected the reform goals across many professional development structures (event types) designed to build the capacity of district leaders, principals, coaches, and lead teachers around literacy instruction (see the Appendix in the online version of this journal). In this article, we described the structures that were pertinent to Dan's case such as studio sessions and coaches' training days. Ridgeview developed other structures that aimed to support professional learning around the district's reform goals, such as the "instructional practice" seminars attended by teams from each school or the school-based waiver days (the professional development structures are described in the Appendix). One of the external consultants working in the district discussed the district's ongoing attempt to align the professional development activities around a shared vision for literacy instruction:

The other piece was—[the superintendent's] question [to building leaders] throughout the year—how do you align everything you do? So, this year, [district leaders] have been more intentional about saying, "Okay, this is your [identified] end-of-the-year focus. Then, let's look at your PD. Is it aligned across waiver days? All right, is the work that coaches are doing aligned with your focus? And, is your studio work . . . aligned?

Leaders recognized that such coordination was not perfectly achieved in all schools. The superintendent told us, "The other learning piece is how closely connected the coaching needs to be to the studio work. Some schools have done that well; some schools have not." As a result, the quotation above suggests that district leaders became more explicit about alignment. Continued insistence on developing shared visions and language for literacy instruction was one of the foundations of Ridgeview's organizational support for professional learning. The professional development structures were put in place to support individual development in relation to the collective push for instructional change.

Relative to setting a collective *direction* for change, leaders in Ridgeview took up the challenge to *support* the ongoing appropriation and transformation of practice at the individual level—for example, for instructional coaches and classroom teachers. One dimension of that challenge was district responsiveness to what teachers and coaches were learning, as an assistant superintendent described:

Our literacy coaches are involved in that [shaping district priorities] and [how] they are working and [what they are] noticing and observing in the buildings—what questions the teachers are asking, what

teachers are taking on [informs our decisions about] what do we think comes next in learning about balanced literacy?

A second dimension of the challenge was to engage staff members as learners. Ridgeview leaders used formal structures (e.g., staff meetings, studio sessions, coaches' meetings) to carry messages and talk about their vision, but they also worked to build relationships and school cultures that focused on professional learning. Building relationships meant identifying the strengths, needs, and interests of staff members to spark innovation. Another central office leader told us that there was more to the strategy than establishing the vision and developing professional learning opportunities:

It seems like in the first couple of years of [the superintendent] being here, the district has done a lot of the obvious things. By that, I mean putting in place the really powerful professional development structures, bringing in the content, establishing that in the district. Yes, there is going to be an instructional focus. Yes, it's going to be literacy. Yes, there are certain practices that need to be in common. . . . But there is the more complex work in terms of drawing in the middle category of teachers, the ones who have been sort of watching. And, it really becomes an issue of hearts and minds because the ability to mandate or direct is not something that is going to result in their engagement.

The effort to engage the "hearts and minds" of staff members and push them forward was aided by the investment in professional development that was close to their practice, although as the quotes suggest, the district's effort in that regard was not finished.

Developing Systems of Support for Coaches' Learning

In Ridgeview School District, professional learning opportunities were designed to be ongoing, content focused, and situated in practice; activities such as studio sessions and coaching cycles were established in every school. Instructional coaches also participated in district-wide leadership seminars (referred to as "instructional practice" seminars), summer school sessions that were infused with professional learning opportunities, and school-based "waiver days" where teachers were released for full-day professional development (see the online Appendix for brief descriptions). Because these events were aligned around the improvement of literacy instruction, including (for example) demonstrations of teaching practice with Ridgeview children, they formed a system of support for coaches as learners.

Among the most visible organizational supports for Dan's learning were the studio sessions that gathered teachers, coaches, and principals together with consultants and often central office administrators. Ridgeview leaders invested substantial resources to release participating studio teachers during regular school hours and to contract with external consultants. By investing

in the studio model, Ridgeview's leadership provided the opportunity for coaches such as Dan to learn new techniques and to practice those techniques under the guidance of an expert consultant. Research on coaching, although limited, has converged on the finding that a lack of time inhibits the effectiveness of coaching, including time to observe in classrooms, time to debrief with teachers, or time to collaborate with others (Marsh et al., 2008; Neufeld & Roper, 2003; Poglinco et al., 2003; Smith, 2006). In Ridgeview, support for activities such as studio work created platforms for instructional coaches to develop skills and be seen as leaders by their peers. The activities built shared norms for participation in the reform efforts and provided opportunities for teachers and others to own the reform through their individual efforts to make sense of new practices.

Dan's development as a coach was also supported by monthly (role-alike) coaches' meetings in which the focus was on coach development. As Dan described for us,

One day you come together just as coaches and that helps more with the coaching part. The other day you come together with building leaders and that's pushing the work of the literacy with your kids further. But most of the modeling that we've seen there isn't about coaching, it's about how you teach the kids, how you do a read aloud. And, not how do you coach a teacher doing a read aloud?

This quote highlights a dilemma for instructional coaches—how to separate learning to coach from learning to teach with new pedagogies. Coaches discussed instruction, their work with teachers, and how to develop their coaching practice (in addition to their pedagogical and content knowledge). The ongoing meetings supported coaches as learners in the reform environment and implied the district's recognition of the learning demands of the relatively new role.

Support for New Cycles of Learning

Part of the systemic strategy for orchestrating the reform in Ridgeview was creating opportunities to push the effort forward. In the Quadrant IV example described earlier, we showed Dan leading an all-day department meeting in his school. Traditionally, in junior high schools, department meetings or teacher-release days were venues for administrative business or for individual teacher planning. In the example we described, Dan's department meeting was used as an opportunity for collective professional development; this was a use of department time that was becoming normal to teachers throughout the school district. Events such as staff meetings were used to communicate the district's vision for teaching and learning and release days (called "waiver days") were viewed as opportunities to work with more teachers across a school. The department meeting set conditions for broader reach than Dan could achieve with individual coaching cycles and, thus, was

a site for the display of his learning as well as for group participation in the district's reform.

Though it is beyond the purview of this article to discuss how Dan's learning was normalized in individual teachers' practice, the department meeting gives us a glimpse of how Dan's coaching and other elements of the district's vision for teaching and learning were becoming conventionalized. The nature and content of the traditional structure of the department meeting were changing. Dan's presentation of the model lesson and teachers' questions showed that language and assumptions about literacy instruction at the school were being made public. By engaging in this conversation, the English teachers were constructing a stance toward professional learning that included (1) working with a coach and (2) public questioning of new ideas about instructional practice. In the department meeting, we observed that some elements of practice were becoming conventionalized (for example, participating in a model lesson), while other practices were still puzzles to the group (such as how to follow up on students' analyses of text). Dan laid groundwork to extend the teachers' visions of what students would be able to do in the future ("[We want to] expand the breadth of modes of responses they have for fiction"). The enterprises of coaching, teaching, and learning were in the process of changing in the English department at Ridgeview Junior High, and this process reflected a systemic effort to coordinate professional learning experiences in relation to the vision for literacy reform.

Conclusion

Taking a reform-as-learning stance, we situated this study between what we know about the challenges of teachers' professional development in a standards-based environment and the expansion of instructional coaching as a means to address those learning challenges. Earlier reports suggested that coaches find their roles ambiguous, ill defined, and lacking in support, and we wondered, How do individuals learn to be instructional coaches, and how are they supported to refine their practice, especially in the context of instructional reform? We examined the professional learning of a novice literacy coach who also worked part-time as a junior high school English teacher. Using a single case design, we explored some of the conditions that might support coach learning, such as a strong district vision and a systemic approach to professional development. Given the financial investment that school districts are making in coaching initiatives and the lack of relevant research that defines how coaches learn to be effective in their roles, this in-depth examination of one illustrative case is informative for practical and theoretical reasons. In what follows, we propose two practical implications for a line of research on the professional development of instructional coaches. We then reason from Dan's case to theory. We revise the Vygotsky Space model to summarize our findings about organizational support for professional learning. Finally, we generate hypothetical propositions that emanate from the theory and relate to the problem of systemic support for professional learning.

First, we consider some practical implications that can be drawn from this study. For example, in reform contexts coaches are often learning new content and pedagogy at the same time as the teachers they are expected to coach. This was the case for Dan. As noted in our introduction, instructional coaches have previously been considered mediators or conduits of reform ideas (Hubbard et al., 2006; Swinnerton, 2007), but this metaphor may not fit the challenges or the reality of the work—individuals hired as coaches may be beginners and learners themselves in reforming schools and districts (Marsh, McCombs, & Martorell, 2009). The metaphor of conduit reflects a transmission model of professional learning, that is, coaches as carriers of reform ideas from one "place" to another (district to classroom). Our analysis describes a more complicated picture—that of a sociocultural learning process on the part of the coaches themselves, within a dynamic reform context.

We saw that as Dan appropriated and transformed ideas about instruction within the context of his own teaching, he grew in his ability to coach other teachers. We hypothesized that Dan's conceptual understanding about literacy instruction informed his ability to diagnose teachers' learning needs in relation to the instructional ideas promoted by his district. Coaching, it seemed, was more than replicating what the district advocated or what an external expert modeled. Dan had to appropriate these ideas, transform them in the context of his own work, and then share his new practices with others in ways that could lead to continued learning cycles. He had to make sense of new ideas about instruction prior to, and sometimes in the context of, exploring them with other teachers.

We suspect, based on other reports, that the "learning on the job" qualities of Dan's work are not unlike the experiences of other coaches, who are ostensibly hired as experts (Lord et al., 2008; Marsh et al., 2008). Future research could explore questions regarding how reform demands to learn new instructional content and pedagogy impact coaching effectiveness. How are coaches making sense of new skills and knowledge about instruction as they also learn how to support teacher growth in a reforming school or district? And, how do these learning demands further complicate the effectiveness of instructional coaching as a professional development strategy for teachers?

Second, our analysis raised questions regarding the conditions that are necessary to adequately support coaches' professional learning. Dan's case suggested, for example, that professional development structures that are coordinated to meet the learning needs of multiple actors can facilitate both teacher and coach learning in terms of reform goals. Currently,

most professional development events in reform settings are aimed at teachers, but we propose that a coordinated professional development *system* may be necessary to support the group of instructional leaders (such as coaches, specialists, or principals) who surround the classroom teacher. In Ridgeview's approach, for example, Dan's development was stretched over multiple opportunities to learn, implying that a successful instructional coaching strategy involved more than just hiring competent individuals into the role. On-the-job learning opportunities in this case were distributed across district- and school-level events, aligned around a well-communicated purpose, and supportive of both mixed and rolealike groups.

Others have suggested that supportive organizational contexts are related to the effectiveness of reform initiatives that include teacher leadership positions such as coaches (see Mangin & Stoelinga, 2008a). Researchers in that volume report, for example, that coach expertise is related to their effectiveness (Manno & Firestone, 2008) and that professional development for teacher leaders is critical though costly (Mangin, 2008). We add from Dan's case that coach expertise is nonstatic and involves continuous learning, and we note that the field could benefit from understanding more about dimensions of organizational support that can enhance opportunities for coach learning. However, as identified earlier in the article, there is a paucity of research on the professional development of instructional coaches (and others in instructional leadership roles) and Dan's case implies the need for further development of this line of research.

Turning to the theoretical implications of this article, we suggest that the use of the Vygotsky Space contributes to contemporary thinking about organizational support for professional development by drawing attention to functional aspects of the learning process. The model represents learning as a matter of relations between individual and collective dimensions of a sociocultural process. Adapting the Vygotsky Space and using Ridgeview School District as the example, Figure 3 illustrates the way that individual and collective actions interacted across public and private organizational settings to support Dan's learning. Given what we know about Dan's experience and the district context, the figure suggests a way of seeing Ridgeview's professional development efforts as coordinated across people, settings, and specific events.

Ridgeview School District set a district-wide vision that provided consistent guidance for change over time across individuals and groups of individuals (the right and left sides of Figure 3). The collective vision and the actions of individuals such as Dan interacted across public settings (such as the studio sessions) and the more private settings of teachers' classrooms. We hypothesize that individual and collective aspects of learning are always

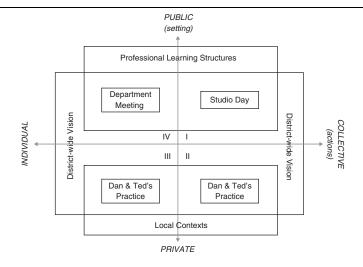


Figure 3. Using the Vygotsky Space to analyze organizational support for learning in Ridgeview School District.

at play in reforming districts, even when they are not consciously considered in professional development designs.

The ideas that professional development should engage multiple actors in collaborative endeavors or that coordinated professional development activities can deepen participants' understanding are not new ones (e.g., Coburn & Russell, 2008; Wei, Darling-Hammond, Andree, Richardson, & Orphanos, 2009). Although prior treatments of professional development in educational settings have recommended work-embedded and continuous learning experiences (e.g., Garet, Porter, Desimone, Birman, & Yoon, 2001), they do not as often make connections between individual development, collective change, and efforts to innovate (Brown & Duguid, 1991). The Vygotsky Space makes these relations visible by delineating processes of appropriation, transformation, publication, and conventionalization. Organizations no doubt vary in their capacity to support these aspects of development and to align professional support across individual and collective dimensions of learning.

Working in the related field of adult vocational learning, Billett's (2002) research explores the relationship between individual and collective aspects of workplace learning. He proposes a *workplace pedagogy* that connects individual interests and values (agency) with workplace goals (structure) and suggests that the greater the relatedness between these, the deeper the commitment to learning on the part of practitioners. Billett describes three planes of workplace pedagogy (that is, scaffolds for professional

learning) that include (1) participation in work activities as an opportunity for learning, including access to all aspects of transforming work demands and organizational goals; (2) guided learning in practice including modeling, coaching, and scaffolding to supplement what the work itself affords in terms of learning opportunities; and (3) the provision of problem-solving scenarios to extend learning to novel situations. We can recognize Ridgeview's efforts to build momentum around instructional reform in Billett's model (especially if one considers the studio session as an opportunity to engage in problem solving). Figure 3 demonstrates how workplace goals (vision), opportunities for modeling and coaching, and practice-based experiences in classroom contexts began to align in Ridgeview around what Billett calls workplace pedagogy. However, research in reforming schools and districts that documents organizational support (or, pedagogy) for workplace learning is necessary to make these connections more directly useful to the field.

Our portrayal of Dan's story did not describe all aspects of coaching practice. Our questions focused us on opportunities for Dan to learn how to coach, given the specific demands of his district's literacy reform. Although the case is instructive about coaches' learning and related supports, it does not attempt to prescribe, nor is it generalizable in the traditional sense of the term (Donmoyer, 1990). The problem of developing system-wide support for the classroom-based goals of instructional reform that continue to be at the forefront of educational challenges in the United States begs deeper conceptualization. We suspect that successful systems of support for professional learning address the dynamics between individual and collective dimensions of learning. For example, drawing on our adaptation of the Vygotsky Space, opportunities for publication can be hypothesized to enhance learning for both individuals and the collective. Dan seemed to learn when he was invited to publicize his emerging ideas about teaching and coaching and his publication created opportunities for the learning of others in his school. Research is needed to investigate how systems of support can promote processes of learning, such as appropriation, transformation, and publication, and how those supports interact across public and private spheres of action to facilitate individual learning and collective goals for change.

Coaching initiatives as a means to achieve instructional improvement are increasingly common. This case demonstrates that the intricacies of learning as a sociocultural process and the relationship between individual and collective dimensions of that process are important, though not well understood at this point. Instructional coaching is viewed as a support for teacher development, but research is needed to help district and school leaders understand coaching as part of a system of support for professional learning.

Notes

The authors thank Mark Windschitl, Nathalie Gehrke, Anneke Markholt, and Gail Miller for their suggestions on an earlier version of this article. They also greatly benefited from the comments of three anonymous reviewers and the editor. Lastly, they wish to thank the Center for Educational Leadership for their support of this research.

¹Embedded professional development is situated in the context of practice. Here, we use the term to mean professional learning activities that occur at school sites and are focused on problems of instructional practice that are generated by classroom teachers and their colleagues or coaches. "Embedded" coaching has been defined by Stein and D'Amico (2002) as occurring in real time (in the classroom with the teachers' own students).

²Coaching cycles are designed to give ongoing support (ideally on consecutive days) as teachers develop aspects of their teacher practice. In essence, coaching cycles include a pre-conference with a teacher, a demonstration of teaching with students (either modeled by the coach or an observation of the teacher by the coach), followed by a post-conference debriefing session. See Casey (2006) for descriptions of coaching cycles.

³Organizations, in this view, are systems of practices. Gherardi (2000) defines practice as "both our production of the world and the result of this process. . . . Practice is a system of activities in which knowing is not separate from doing" (p. 215). Boreham and Morgan (2004) remind us that well-known social theorists (e.g., Garfinkel, Bourdieu, Giddens) make central the idea that social order is constituted by the enactment of social practices. For a recent explication of the connections between these theoretical viewpoints in educational settings, see the August 2008 issue of *American Journal of Education*.

⁴See Gredler (2007) and McVee, Gavelek, and Dunsmore (2007) for a critique and author response to McVee, Dunsmore, and Gavelek (2005).

The university-based external support provider operates on a fee-for-service basis in approximately 55 school districts in 10 states. The directors describe the goal of their work as the elimination of the achievement gap through the improvement of instruction. The organization asserts that such improvement will occur at scale when district and building leaders understand what powerful instruction looks like—so they can lead and guide professional development and target and align resources for long-range capacity building. The organization draws on Brandt (1998) to define "powerful instruction" as instruction that engages students in learning environments that enable all students to be taught and, with effort, to master cognitively demanding curricula. The provider intervenes in school districts at multiple levels of the system, providing support, for example, for leadership development and instructional coaching by contracting with a number of nationally recognized consultants.

⁶A series of pedagogical methods was introduced in the professional learning events at Ridgeview Junior High and is referred to in this article. Writing workshop (Calkins, 2001) refers to lessons constructed in three sections: mini-lessons, independent reading/writing, and time for group sharing. Other pedagogical strategies introduced were (1) using readers' notebook to support comprehension (Angelillo, 2003); (2) building student talk to support comprehension (Nystrand & Gamoran, 1991); and (3) "gradual release" of responsibility for learning, which entailed teachers structuring lessons to present skills to students (e.g., read aloud), practice skills with students (e.g., shared reading), and eventually relinquish responsibility to students (e.g., independent work) (Pearson & Gallagher, 1983). Later in the article, we refer to read aloud, in which the teacher reads text to students, modeling proficient reading. Students construct meaning through conversations about the text and are immersed in a variety of genre, language patterns, vocabulary, and rich literature beyond what they can read independently (Casey, 2006). In shared reading, teachers' read a text with students, modeling meaning-making skills and supporting students in using reading strategies (Casey, 2006).

⁷In studio sessions, teaching practices were defined as follows: "Student partner talk" meant asking students to turn to partners to discuss a shared text to generate new ideas; "student conferences" referred to teachers' conferencing with individual students about reading; and "written responses" included asking students to pick specific lines or words

from a text to write about in reading journals, encouraging students to build and explore their own ideas.

⁸Accountable talk is one of the Principles of Learning described by the Institute for Learning at the University of Pittsburgh. It is defined as "using evidence that is appropriate to the discipline and that follows established norms of good reasoning." (For further explanation, see http://ifl.lrdc.pitt.edu/ifl/index.php?section=pol.)

References

- Angelillo, J. (2003). Writing about reading: From book talk to literary essays, Grades 3-8. Portsmouth, NH: Heinemann.
- Billett, S. (2002). Toward a workplace pedagogy: Guidance, participation, and engagement. *Adult Education Quarterly*, 53, 27–43.
- Blachowicz, C.L.Z., Fogelberg, E., & Obrochta, C. (2005). Literacy coaching for change. *Educational Leadership*, 62(6), 55–58.
- Boreham, N., & Morgan, C. (2004). A sociocultural analysis of organizational learning. *Oxford Review of Education*, *30*, 307–325.
- Brandt, R. (1998). *Powerful learning*. Alexandria, VA: Association for Supervision & Curriculum Development.
- Brown, C. J., Stroh, H. R., Fouts, J. T., & Baker, D. B. (2005). *Learning to change: School coaching for systemic reform.* Seattle, WA: Fouts & Associates.
- Brown, J. S., & Duguid, P. (1991). Organizational learning and communities of practice: Toward a unified view of working, learning and innovation. *Organizational Science*, *2*, 40–57.
- Calkins, L. (2001). The art of teaching reading. New York: Longman.
- Casey, K. (2006). Literacy coaching: The essentials. Portsmouth, NH: Heinemann.
- City, E. A., Elmore, R. F., Fiarman, S. E., & Teitel, L. (2009). *Instructional rounds in education: A network approach to improving teaching and learning*. Cambridge, MA: Harvard Education Press.
- Coburn, C. E., & Russell, J. L. (2008). District policy and teachers' social networks. *Educational Evaluation and Policy Analysis*, 30(3), 203–235.
- Coggins, C. T. (2005). *Coaching as a districtwide reform strategy*. Doctoral dissertation, Stanford University, Stanford, CA.
- Coggins, C. T., Stoddard, P., & Cutler, E. (2003). *Improving instructional capacity through school-based reform coaches*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Cohen, D. K., & Hill, H. C. (2000). Instructional policy and classroom performance: The mathematics reform in California. *Teachers College Record*, 102, 294–343.
- Cohen, D. K., Raudenbush, S. W., & Ball, D. L. (2003). Resources, instruction, and research. *Educational Evaluation and Policy Analysis*, 25, 119–142.
- Costa, A. L., & Garmston, R. J. (1994). Cognitive coaching: A foundation for renaissance schools. Norwood, MA: Christopher-Gordon.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives*, 8(1), 1–44.
- Desimone, L. M., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers- instruction: Results from a three-year longitudinal study. *Educational Evaluation and Policy Analysis*, 24, 81–112.
- Donmoyer, R. (1990). Generalizability and the single-case study. In E. W. Eisner & A. Peshkin (Eds.), *Qualitative inquiry in education: The continuing debate* (pp. 175–200). New York: Teachers College Press.
- Elmore, R. F. (1995). Structural reform and educational practice. *Educational Researcher*, 24, 23–26.

- Elmore, R. F. (2004). School reform from the inside out: Policy, practice, and performance. Cambridge, MA: Harvard Education Press.
- Elmore, R. F., & Burney, D. (1997). *Investing in teacher learning: Staff development and instructional improvement in Community School District #2, New York City.*New York: National Commission on Teaching and America's Future.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). Processing fieldnotes: Coding and memoing. In *Writing ethnographic fieldnotes* (pp. 142–168). Chicago: University of Chicago Press.
- Engestrom, Y. (1999). Activity theory and individual and social transformation. In Y. Engestrom, R. Miettinen & R. Punamaki (Eds.), *Perspectives on activity theory* (pp. 19–38). Cambridge, UK: Cambridge University Press.
- Finnigan, K. S., & Gross, B. (2007). Do accountability policy sanctions influence teacher motivation? Lessons from Chicago's low-performing schools. *American Educational Research Journal*, 44, 594–629.
- Firestone, W. A., & Martinez, C. M. (2007). Districts, teacher leaders, and distributed leadership: Changing instructional practice. *Leadership and Policy in Schools*, 6(1), 3–35.
- Gallucci, C. (2008). Using sociocultural theory to link professional learning to organizational support in the context of school district instructional reform. *American Journal of Education*, 114, 541–581.
- Gallucci, C., & Boatright, E. E. (2007). Gaining traction through professional coaching: A partnership between the Center for Educational Leadership and Highline School District (Interim Report No. 2). Seattle: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 15, 2008, from http://depts.washington.edu/uwcel/resources/papers.html
- Gallucci, C., Boatright, E. E., Lysne, D., & Swinnerton, J. (2006). *The pedagogy of third-party support for instructional improvement: A partnership between CEL and Highline School District*. Seattle: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 15, 2008, from http://depts.washington.edu/uwcel/resources/papers.html
- Gallucci, C., & Swanson, J. (2008). Aiming high: Leadership for district-wide instructional improvement: A partnership between the Center for Educational Leadership and Norwalk-La Mirada Unified School District, Interim research report and case summary. Seattle: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 15, 2008, from http://depts.washington.edu/uwcel/resources/papers.html
- Gamoran, A., Porter, A. C., Smithson, J., & White, P. A. (1997). Upgrading high school mathematics instruction: Improving learning opportunities for low-achieving, low-income youth. *Educational Evaluation and Policy Analysis*, 19, 325–338.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38, 915–945.
- Gavelek, J. R., & Raphael, T. E. (1996). Changing talk about text: New roles for teachers and students. *Language Arts*, 73(3), 182–192.
- Gherardi, S. (2000). Practice–based theorizing on learning and knowing in organizations. *Organization*, 7(2), 211–223.
- Gibson, S. A. (2005). Developing knowledge of coaching. *Issues in Teacher Education*, 14(2), 63–74.
- Gredler, M. E. (2007). Of cabbages and kings: Concepts and inferences curiously attributed to Lev Vygotsky (Commentary on McVee, Dunsmore, and Gavelek, 2005). *Review of Educational Research*, 77, 233–238.

- Harré, R. (1984). *Personal being: A theory for individual psychology*. Cambridge, MA: Harvard University Press.
- Harré, R. (1986). Social sources of mental content and order. In J. Margolis, P. T. Manicas, R. Harré & P. F. Secord (Eds.), Psychology: Designing the discipline (pp. 91–127). Malden, MA: Blackwell.
- Harré, R., Clarke, D., & De Carlo, N. (1985). *Motives and mechanisms: An introduction to the psychology of action*. London: Methuen.
- Herrenkohl, L. R., & Wertsch, J. V. (1999). The use of cultural tools: Mastery and appropriation. In I. E. Sigel (Ed.), *The development of mental representation: Theories and applications* (pp. 415–435). Mahwah, NJ: Lawrence Erlbaum.
- Hubbard, L., Mehan, H., & Stein, M. K. (2006). Reform as learning: School reform, organizational culture, and community politics in San Diego. New York: Routledge.
- HyperRESEARCH (Version 2.6.1) [Computer software]. Randolph, MA: Researchware, Inc. John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, *31*, 191–206.
- Joyce, B., & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1), 4–10.
- Knapp, M. S. (1997). Between systemic reforms and the mathematics and science classroom: The dynamics of innovation, implementation, and professional learning. *Review of Educational Research*, 2, 227–266.
- Knapp, M. S., Copland, M. A., & Talbert, J. E. (2003). Leading for learning: Reflective tools for school and district leaders. Seattle: University of Washington, Center for the Study of Teaching and Policy.
- Knight, J. (2004). Instructional coaches make progress through partnership: Intensive support can improve teaching. *Journal of Staff Development*, 25(2), 32–37.
- Knight, J. (2006, April). Instructional coaching. *The School Administrator*, 63(4), 36–40.
 Lave, J. (1993). The practice of learning. In S. Chaiklin & J. Lave (Eds.), *Understanding practice* (pp. 3–32). New York: Cambridge University Press.
- Learning Point Associates. (2004). Reading First coaching: A guide for coaches and Reading First leaders. Naperville, IL: Author.
- Lord, B., Cress, K., & Miller, B. (2008). Teacher leadership in support of large-scale mathematics and science education reform. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 10–35). New York: Teachers College Press.
- Lowenhaupt, R., & McKinney, S. (2007). Coaching in context: The role of relationships in the work of three literacy coaches. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Mangin, M. M. (2008). The influence of organizational design on instructional teacher leadership. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 77–98). New York: Teachers College Press.
- Mangin, M. M., & Stoelinga, S. R. (2008a). *Effective teacher leadership: Using research to inform and reform.* New York: Teachers College Press.
- Mangin, M. M., & Stoelinga, S. R. (2008b). Teacher leadership: What it is and why it matters. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 10–35). New York: Teachers College Press.
- Manno, C. M., & Firestone, W. A. (2008). Content is the subject: How teacher leaders with different subject knowledge interact with teachers. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 36–54). New York: Teachers College Press.

- Marsh, J. A., Kerr, K. A., Ikemoto, G. S., Darilek, H., Suttorp, M., Zimmer, R. W., & Barney, H. (2005). *The role of districts in fostering instructional improvement*. Santa Monica, CA: RAND.
- Marsh, J. A., McCombs, J. S., Lockwood, J. R., Martorell, F., Gershwin, D., Naftel, S., et al. (2008). Supporting literacy across the sunshine state: A study of Florida middle school reading coaches. Santa Monica, CA: RAND.
- Marsh, J. A., McCombs, J. S., & Martorell, F. (2009). How instructional coaches support data-driven decision making: Policy implementation and effects in Florida middle schools. *Educational Policy*. Retrieved November 11, 2009, from http://epx.sagepub.com/cgi/content/abstract/0895904809341467v1
- Marzolf, E. A. (2006). *Contours and consequences of school-change coaching within a whole-school reform context*. Unpublished doctoral dissertation, University of Washington.
- McVee, M. B., Dunsmore, K., & Gavelek, J. R. (2005). Schema theory revisited. *Review of Educational Research*, 75, 531–566.
- McVee, M. B., Gavelek, J. R., & Dunsmore, K. L. (2007). Considerations of the social, individual, and embodied: A response to comments on "Schema Theory Revisited." *Review of Educational Research*, 77, 245–248.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Mertens, D. M. (1998). Research methods in education and psychology: Integrating diversity with quantitative & qualitative approaches. Thousand Oaks, CA: Sage.
- Moll, L. C. (2001). Through the mediation of others: Vygotskian research on teaching. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed., pp. 111–129). Washington, DC: American Educational Research Association.
- Neufeld, B., & Roper, D. (2002). Off to a good start: Year I of collaborative coaching and learning in the Effective Practice schools. Boston: Education Matters, Inc.
- Neufeld, B., & Roper, D. (2003). Coaching: A strategy for developing instructional capacity: Promises & practicalities. Boston: Education Matters, Inc.
- Neuman, S. B., & Cunningham, L. (2009). The impact of professional development and coaching on early language and literacy instructional practices. *American Journal of Education*, 46, 532–566.
- Norton, J. (2001). A storybook breakthrough. *Journal of Staff Development*, 22, 22–25.
 Nystrand, M., & Gamoran, A. (1991). Instructional discourse, student engagement, and literature achievement. *Research in the Teaching of English*, 25(3), 261–290.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8, 317–344.
- Peck, C., Gallucci, C., Sloan, T., & Lippencott, A. (2009). Organizational learning and program renewal in teacher education: A sociocultural perspective on learning, innovation, and change. *Educational Research Review*, 4, 16–25.
- Poglinco, S. M., Bach, A. J., Hovde, K., Rosenblum, S., Saunders, M., & Supovitz, J. A. (2003). The heart of the matter: The coaching model in America's Choice schools.
 Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania.
- Rogoff, B. (1994). Developing understanding of the idea of community of learners. *Mind, Culture, & Society, 1,* 209–220.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. In J. Wertsch, P. Del Rio, & A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 139–164). Cambridge, MA: Cambridge University Press.

- Sanders, W., & Horn, P. (1998). Research findings from the Tennessee Value-Added Assessment System (TVAAS) database: Implications for educational evaluation and research. *Journal of Personnel Evaluation in Education*, 12, 247–256.
- Shanklin, N. L. (2007). What supports do literacy coaches need from administrators in order to succeed? Denver, CO: Literacy Coaching Clearinghouse.
- Showers, B. (1985, April). Teachers coaching teachers. *Educational Leadership*, 42, 43–48.
- Showers, B., & Joyce, B. (1996). The evolution of peer coaching. *Educational Leadership*, 53(6), 12–16.
- Smagorinsky, P., Cook, L. S., & Johnson, T. S. (2003). The twisting path of concept development in learning to teach. *Teachers College Record*, 105, 1399–1436.
- Smith, A. T. (2006). *The middle school literacy coach: Roles, contexts, and connections to teaching.* Unpublished doctoral dissertation, University of Washington.
- Smith, A. T. (2009, March). Considering literacy coaching responsibilities in terms of teacher change. *Literacy Coaching Clearinghouse*. Available from http://www.literacycoachingonline.org/briefs/coaching_trajectory_a_smith.pdf
- Smylie, M. A., Conley, S., & Marks, H. M. (2002). Exploring new approaches to teacher leadership for school improvement. *Yearbook of the National Society for the Study of Education*, 101(1), 162–188.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Toward a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies*, 36(1), 3–34.
- Spillane, J. P., & Zeuli, J. S. (1999). Reform and teaching: Exploring patterns of practice in the context of national and state mathematics reforms. *Educational Evaluation and Policy Analysis*, 21, 1–28.
- Stake, R. E. (1995). The art of case study research. Thousand Oaks, CA: Sage.
- Stein, M. K., & Coburn, C. E. (2008). Architectures for learning: A comparative analysis of two urban districts. *American Journal of Education*, 114, 583–626.
- Stein, M. K., & D'Amico, L. (2002). Inquiry at the crossroads of policy and learning: A study of a district-wide literacy initiative. *Teachers College Record*, 104, 1313– 1344.
- Suchman, L., Blomberg, J., Orr, J. E., & Trigg, R. (1999). Reconstructing technologies as social practice. *American Behavioral Scientist*, 43, 392–408.
- Supovitz, J. A. (2006). *The case for district-based reform: Leading, building and sustaining school improvement*. Cambridge, MA: Harvard Education Press.
- Swanson, J. (2007). Learning at every level: A partnership between the Center for Educational leadership and Ridgeview School District, interim research report and case summary. Seattle: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 15, 2008, from http://depts.washington.edu/uwcel/resources/papers.html
- Swinnerton, J. (2007). Brokers and boundary crossers in an urban school district: Understanding central office coaches as instructional leaders. *Journal of School Leadership*, 17(2), 195–221.
- Taylor, J. E. (2008). Instructional coaching: The state of the art. In M. M. Mangin & S. R. Stoelinga (Eds.), *Effective teacher leadership: Using research to inform and reform* (pp. 10–35). New York: Teachers College Press.
- Thompson, C. L., & Zeuli, J. S. (1999). The frame and the tapestry: Standards-based reform and professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook of policy and practice* (pp. 341–375). San Francisco: Jossey-Bass.
- Toll, C. A. (2006). *The literacy coach's desk reference: Processes and perspectives for effective coaching.* Urbana, IL: National Council of Teachers of English.

- Togneri, W., & Anderson, S. L. (2003). Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools. Washington, DC: The Learning First Alliance and the Association for Supervision and Curriculum Development.
- Tung, R., Ouimette, M., & Feldman, J. (2004). *The challenge of coaching: Providing cohesion among multiple reform agendas*. Boston: Center for Collaborative Education.
- Valli, L., & Buese, D. (2007). The changing roles of teachers in an era of high-stakes accountability. *American Educational Research Journal*, 44, 519–558.
- Van Lare, M., Yoon, I., & Gallucci, C. (2008). *Orchestrating leadership in district-wide reform: A report for Marysville School District*. Seattle: Center for the Study of Teaching and Policy, University of Washington. Retrieved March 15, 2008, from http://depts.washington.edu/uwcel/resources/papers.html
- Vygotsky, L. S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wei, R. C., Darling-Hammond, L., Andree, A., Richardson, N., & Orphanos, S. (2009, February). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad: Technical report.* Dallas, TX: National Staff Development Council. Available from www.nsdc.org/stateproflearning.cfm
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York: Cambridge University Press.
- Wertsch, J. (1998). Mind as action. New York: Oxford University Press.
- West, L., & Staub, F. (2003). Content focused coaching: Transforming mathematics lessons. Portsmouth, NH: Heinemann.
- Westbury, I. (1993). American and Japanese achievement again: A response to Baker. *Educational Researcher*, 22(3), 21–25.
- Wolcott, H. F. (1990). Writing up qualitative research (Qualitative research methods, Vol. 20). Newbury Park, CA: Sage.
- Wolcott, H. F. (2005). The art of fieldwork. Lanham, MD: Altamira Press.

Manuscript received March 5, 2009 Final revision received February 2, 2010 Accepted March 13, 2010