

A Distributed Perspective on School Leadership: Leadership Practice As *Stretched Over* People and Place¹

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Over the past five years or more, distributed leadership has garnered considerable attention from researchers, educators and policymakers in the US and other countries including Australia, New Zealand, and the United Kingdom. Though the notion of distributed leadership is popular, a cursory examination of its usage suggests that it means different things to different people. Scholars and practitioners often use shared leadership, democratic leadership and distributed leadership interchangeably, suggesting that, at least for some, distributed leadership may be no more than a new label for a familiar phenomena. No doubt the popularity of distributed leadership has something to do with the ease with which people can appropriate it to cover familiar approaches to leadership.

Our goal in this paper is to discuss our notion of distributed leadership as it has evolved and continues to evolve based on our ongoing investigation of school leadership as part of the Distributed Leadership Study (Spillane, Halverson, Diamond, 1999, 2001, 2004). To build theory about leadership as a distributed practice, researchers in the Distributed Leadership Study have worked since 1998 with empirical data and social theory to flesh out the construct of distributed leadership. Our aim is not to offer a definitive definition of distributed leadership. Our own understanding of distributed leadership has evolved and will continue to evolve as we continue to analyze our data, as one might expect it would in a theory-building program of research. Further, our goal is not to argue that our understanding of distributed leadership is somehow superior to other understandings. Our goal is simply to continue to build theory and communicate our evolving understanding of this framework.

Below, we discuss our ideas about leadership as a distributed practice, singling out one dimension of leadership distribution - the ways in which leadership is *stretched over* people and place – . Specifically, we focus on how leadership practice takes shape in the interaction of people – both leaders and followers - and their situation, including the material artifacts, tools, and organizational structures. We attempt to make school leadership as a distributed practice more transparent. Our distributed leadership framework argues that leadership activity is *distributed* in the interactive web of leaders, followers, and situation, which form the appropriate unit of analysis

for studying leadership practice. A distributed view of leadership shifts our concern from the individual leader to the web of leaders, followers, and situation that give form to leadership activity.

Our paper is organized as follows. We begin with a brief discussion of the theoretical anchors for our empirical work and then discuss the distributed leadership framework as outlined in a number of papers written over the past five years (Spillane, Halverson, & Diamond, 1999; 2001; 2004). Here we draw on our own work as part of the Distributed Leadership Study (Spillane, Halverson, & Diamond, 1999; 2001; 2004) and on the work of Australian scholar Peter Gronn (2000) who takes a similar perspective on distributed leadership. We then provide a brief description of our research methodology. Next we take a closer look at what it means to argue that leadership practice is distributed in the interactive web of people and place; that is, we attempt to unpack and make more transparent what we mean when we say that leadership is stretched over people and their situation. For the purpose of analysis, our discussion considers three dimensions of distributed leadership separately. First, we explore what it means to argue that practice is stretched over leaders. Second, we examine how leadership practice is stretched over leaders and followers. Third, we consider how leadership is stretched over the leaders, followers and situation. We conclude with a discussion of our next steps in this ongoing effort to build theory and generate hypotheses about leadership as a distributed practice.

Theoretical Anchors

Frameworks for studying leadership tend to focus chiefly on either individual agency or the role of macro-structure in shaping what leaders do. Most efforts to take account of relations between individuals and their situations – the social influence approach – focus on the individual rather than practice as the unit of analysis and treat the social situation as an influence on individual practice. In this way, the social situation (i.e., others and what they do) is cast as an independent variable that influences what the target individual does – the dependent variable (Rogoff, 1998). We believe that new conceptual tools are necessary for investigating leadership practice. Investigations

of work practices in general require the development of new conceptual frameworks, ‘frameworks built out of concepts that speak directly to practice,’ (Pickering 1992, p. 7).

Work in distributed cognition and sociocultural activity theories have proven fruitful in understanding human activity in complex and emergent situations. While neither distributed cognition nor sociocultural activity theory form a single consolidated conceptual framework, they do offer some important conceptual tools for investigating practice and form the intellectual roots of our work on distributed leadership. We appropriate several conceptual ideas or tools from this work. It is not possible in this paper to treat these ideas in the sort of detail they merit - we have attempted to do that elsewhere (Spillane, Halverson, & Diamond, 1999; 2004).

Based on the work of Vygotsky, practice or activity—rather than the individual— becomes the basic unit of analysis. This is similar to John Dewey’s argument that the unit of analysis should shift from the individual to the event (Dewey & Bentley, 1949). Building on Vygotsky, Leont’ev (1981) defined an activity as “a system with its own structure, its own internal transformations, and its own development ... “ (p. 46). Recent work by scholars at the Laboratory of Comparative Human Cognition extends this notion arguing that cultural practices – learned systems of practice - should be treated as the unit of analysis.

It is imperative to investigate practice in its ‘natural habitat’ (Leont’ev 1981, Hutchins 1995b). Practice cannot be understood purely as a function of the mental capacity of the individual because practice is enabled (and constrained) by the situation in which it takes place (Resnick 1991). Situation includes both other people and the sociocultural context. Recent investigations in distributed cognition and sociocultural activity theory have focused on ways in which cognition is distributed across or “stretched over” material and cultural artifacts (Rogoff 1990). Artifacts include language, notational systems, tools of various sorts, and buildings (Gagliardi 1990). For example, Hutchins (1995a) documents how the task of landing a plane can be best understood within a framework that includes the manufactured tools and social context of the cockpit that situate a pilot’s activity. These features of the environment are not, argues Hutchins, merely “aides” to the pilot’s cognition, rather they are best understood as essential features of a composite

which has the cockpit as the basic unit of analysis. Social situation then becomes an integral *constituting* component of, not just backdrop or container for, practice. Cognition is distributed *situationally* in the physical environment, that is, through the environments' material and cultural artifacts; cognition is also distributed *socially* through other people in collaborative efforts to complete tasks (Latour 1987; Pea 1996). Individual, interpersonal, and cultural elements constitute each other. Hence, Rogoff argues for attention to three planes of analysis (as distinct from levels of analysis) – individual, interpersonal, and community/institutional – to stress that there are no boundaries between these entities (Rogoff, 1995).

Culture is both the medium and outcome of practice (Giddens, 1979; 1984?). Culture constitutes practice, providing the rules and resources upon which it is based; however, culture is also created, reproduced, and potentially transformed by practice. The cultural and institutional properties that enable practice exist only as they are “instantiated in activity” or remembered as rules of conduct or “rights to resources” (Whittington 1992, p. 696). Taken together this work presses us to move beyond an exclusive focus on the individual to see activity as a product of what the actor knows, believes, and does in and through particular social, cultural, and material contexts. Such a perspective does not mean that the individual is somehow irrelevant in an investigation of human practice.

A Distributed Framework for Investigating School Leadership Practice

In this section we overview the distributed leadership perspective that we used and continue to use in framing our investigations of leadership practice. This framework has been developed in a number of papers in much greater depth than will be possible here (see Spillane, Halverson, & Diamond, 1999, 2004). For us, the distributed leadership framework that we have developed (and continue to develop) is not a conceptual straightjacket to be applied indefinitely until the final piece of data is gathered or analyzed. Rather, in the theory building tradition, our distributed leadership framework has evolved and continues to evolve as we engage in a dialogue between the theoretical ideas and the evidence we gather in our research.

At one level, a distributed perspective on leadership moves us beyond seeing leadership as synonymous with the work of the principal or head teacher and therefore involves a recognition that the work of leadership involves multiple individuals including teacher leaders. These ideas are not new; scholars have argued for moving beyond those at the top of organizations in order to understand leadership (Katz and Kahn 1966, Barnard 1968). Savvy critics have argued for attention to the shifting coalitions of decision-makers in organizations in order to understand leadership (Cyert and March, 1963; March and Olsen, 1984). A distributed perspective urges us to focus on others in the school who, by virtue of formal position or informal role, take on leadership responsibilities. Hence, we might examine who is responsible for those leadership functions that are essential for leading improvement in instruction, such as constructing and selling an instructional vision, building norms of trust and collaboration, and supporting teacher development (Heller & Firestone 1995). This is what I term the “leader plus perspective” and, though important, it focuses too narrowly on who does what and fails to capture and describe the complexity of leadership as a distributed practice (Spillane, in progress). Most discussions on distributed leadership end here and, from our perspective, end prematurely.

We argue that a distributed perspective on leadership means more than acknowledging that multiple individuals lead ---though that is an important aspect---in the enactment of leadership functions and tasks (Heller and Firestone 1995). A distributed perspective presses us to consider the enactment of leadership tasks as potentially stretched over the practice of two or more leaders, followers, and their situation. It also involves understanding how leadership practice is stretched over the work of various school leaders and exploring the practice generated in the interactions among these people.³ In this view, leadership practice might be ‘in-between’ (Salomon and Perkins 1998) the practice of two or more leaders. Hence, a distributed perspective on leadership practice involves more than developing additive models that capture the ‘amount’ of leadership or that are inclusive of the work of all leaders in a school. A distributed perspective also involves more than mapping which leaders are responsible for what leadership functions.

Our perspective on distributed leadership centers on practice – “the leadership practice view” (Spillane, in progress). For us, the appropriate unit of analysis is not just leaders and leadership functions or tasks but leadership practice. Our concern with leadership as practice is not novel; scholars have viewed leadership as behavior or act for some time (Carter 1953; Hemphill, 1949a; Shuttle, 1956). Work in this tradition, however, tends to equate behavior with the act of an individual leader: “By leadership behavior we generally mean the particular acts in which a leader engages in the course of directing and coordinating the work of his group members” (Fiedler, 1967). We find this individual focus problematic. Similarly, we find that institutional theory as a framework - with its focus on populations of organizations and stress on the emergence of dominant organizational forms rather than the leadership practices that may be particular to individual organizations (Whittington 1992) – not especially helpful on its own in studying leadership practice.

Instead, and consistent with the theoretical anchors discussed in the previous section, we argue that leadership practice is constituted---defined or constructed---in the interaction of leaders, followers, and their situation (Gronn, 2000; Spillane, Halverson, & Diamond, 1999; 2001; 2004). Leadership activity involves three essential constituting or defining elements - leaders, followers², and situation. And, from our distributed perspective, practice is a co-production of all three. Leadership does not reside in any one of these elements; each is a prerequisite for leadership activity. Hence, the distributed leadership frame shifts the level of analysis from the individual actor or group of actors to the web of leaders, followers, and situation that give activity its form. By situation we mean more than tangible material aspects of the context – we mean the sociocultural context (including artifacts) that can embody the stable practices---the ‘crystallized operations’ (Leont’ev 1978) or the ‘reifications of practices’ (Wenger 2000)--- in work such as leadership. It is important to keep in mind that these stable practices are inventions, and frequently they wear out, and are redesigned or re-invented over time. As integral

constituting elements of human activity, structures and artifacts of various sorts are not just sources of ideas and guidance for action but vehicles of thought (Perkins 1993). Hence, the introduction of new tools or artifacts does not merely make the work of leaders more efficient but can transform the nature of the leadership activity.

What we mean by situation and its relation to practice, require some unpacking at this point. In our view, situation or context does not simply ‘affect’ what school leaders do as some sort of independent variable(s); it is constitutive of leadership practice. The situation offers particulars (e.g. tools of various kinds, organizational structures, routines, language) that contribute to defining leadership practice as an interaction with people. Prior research has established the importance of situation to leadership. Contingency theorists, for example, argue that the most effective or appropriate organizational structure depends on the nature of the work being undertaken by the organization and the environmental demands the organization has to negotiate (Fiedler 1973, Lawrence and Lorch 1986). Work on schools illuminates how the circumstances of leadership influence what leaders do as well as the effects of what they do on followers (Bossert *et al.* 1982, Murphy 1991). This work finds, for example, that in order to lead effectively, leaders must adapt their behaviors to the characteristics of their staff. Schools with more mature and stable staffs are likely to have principals with more indirect leadership styles compared with schools with younger and less stable staffs (Cohen *et al.* 1977, Dwyer *et al.* 1983). While we agree that such aspects of the situation are important in studies of school leadership and its effects, our treatment of situation differs in three respects - the positioning of situation vis-à-vis leadership activity, the relations between situation and leadership, and the aspects of the situation that are critical (for a more detailed analysis of these differences see Spillane, Halverson, & Diamond, 2004).

In our distributed perspective, we argue that situation is not external to leadership activity but is one of its constituting elements. We mean by ‘situated’ that leadership activity is, to varying degrees, distributed or stretched over various facets of the situation, including tools, language, and organizational structure. This differs from contingency theory where situation is treated chiefly as

something that is outside and working independently to influence a leader's behavior or mediate the effects of that behavior on others. In this way, situation, as manifested in organizational size and staff characteristics among other factors, is treated as something impacting leadership practice from outside the practice. Situation is detached from practice and works to influence leadership activity by impacting it from outside the practice. For our distributed perspective, situation or context does not simply 'affect' what school leaders do as some sort of independent or interdependent variable; it defines leadership practice in interaction with leaders and followers.

A second difference concerns the somewhat deterministic treatment of situation in contingency theory. Our distributed perspective suggests that aspects of the situation enable or constrain leadership activity, while that activity can also transform aspects of the situation over time. As argued earlier, in our framework situation is both constitutive of and constituted in leadership activity. While contingency theory tends to focus chiefly on the effects of situation on broad leadership styles and organizational forms, we are concerned with day-to-day leadership activity, not just broad styles of leadership or organizational structures and roles.

A core challenge involves analyzing leadership practice in actual schools while still treating the broader institutional and sociocultural system. Balancing attention to day-to-day leadership practice with the broader situation is critical. To do so, we find the communities of practice perspective, generally recognized as a core line of work in sociocultural activity theory, especially helpful. By communities of practice we mean the groups of people who have mutual relationships on a joint enterprise. These communities are emergent and may or may not follow formal institutional boundaries and/or definitions (Brown & Duguid, 1991). Two key mechanisms critical to interactions among communities of practice are boundary practices (Wenger, 1998) and boundary objects (Star & Griesemer, 1989; Star, 1989; Wenger, 1998). A boundary *practice* is a routine that sustains connections between communities of practice and provides an ongoing forum for mutual engagement (Wenger, 1998). A boundary *object* is an artifact that inhabits several intersecting communities of practice and serves to coordinate the perspectives of various constituencies for some purpose (Star & Griesemer, 1989; Star, 1989; Wenger, 1998). The

communities of practice perspective helps us situate our analysis of instances of leadership practice in the broader context and presses us to put these instances of practice in a temporal context.

A Word on Methodology

This paper is based on data from the Distributed Leadership Project, a 5-year longitudinal study of elementary school leadership funded by the National Science Foundation and the Spencer Foundation. The research team conducted the 6-month pilot phase during the winter and spring of 1999. The first full year of data collection commenced in September 1999 and involved eight Chicago elementary schools as intensive case sites (an additional five schools served as interview only sites).

Research Site and Sample Selection.

We used a theoretical sampling strategy (Glaser, 1978; Glaser & Strauss, 1970), selecting schools based on five dimensions as summarized in Table 1. All eight schools are elementary schools located within the Chicago Public School District. All schools are high poverty with a minimum of 60% of students receiving free or reduced lunches. We selected schools that varied in terms of student demographics, including four schools that were predominantly African-American, two that were predominantly Hispanic, and two that were mixed racially. Six out of eight schools had shown signs of improving mathematics, science, or literacy instruction based upon their scores on standardized tests and other measures of academic productivity.¹ Two of the eight had managed no change in instruction. We also varied schools in terms of the duration of their change efforts. Two of eight schools had been involved in instructional change efforts in the past 1-3 years. Two schools had been involved in reforms over past 4-6 years. Four schools had been involved in reforms over the past 7-9 years.

Data Collection

Research methodologies included observations, structured and semi-structured interviews, and videotaping leadership practice. Researchers spent the equivalent of 3-4 days

per week per school over a 10-week period for each project year and during the pilot phase. Leadership events observed in these schools included grade level meetings, faculty meetings, school improvement planning meetings, professional development workshops, and supervisions of teaching practice. In addition, we observed a number of other events where leaders discussed subject matter including homeroom conversations between teachers, lunchroom conversations, grade level meetings, and subject specific workshops and meetings.

Our interview questions with school leaders addressed four core issues about the practice of leadership:

1. The key goals or macro functions leaders work on (e.g., building a school vision, promoting teacher professional development, improving test scores, etc.);
2. Day-to-day tasks they perform to attain these goals (i.e., the micro tasks, e.g., observing classrooms, forming breakfast clubs, facilitating grade level meetings, etc.) and the subject matter focus of the task, if any;
3. How they enact the micro tasks, that is, their practice as leaders (and how and whether these tasks are co-enacted); and
4. What tools and material resources (including designed artifacts, memos, protocols, and organizational structures) the respondents identified as important in the execution of macro and micro tasks.

We also shadowed school leaders on multiple occasions, following them into classrooms and meeting rooms. We then conducted post-observation interviews with these leaders about the observed practice. Observation protocols focused on the nature and substance of the leadership task and leaders' perceptions of its importance.

Data Analysis.

Data collection and data analysis (ongoing) were closely integrated, allowing researchers to check out patterns and working hypotheses as they emerged from data analysis, and refine data

collection strategies as the study progressed (Miles & Huberman, 1994). We developed coding categories based on the theoretical framework described above and initial analyses of our observation and interview data.

For the purpose of this paper, we report on patterns from our data analysis but focus mostly (with one exception) on analyzing representative excerpts from leadership practice in one school in an effort to unpack what we mean by stretched over people and place. Our goal here is to identify and illustrate the ways in which leadership is stretched over leaders, followers, and their situation.

Distributed Leadership Practice: People & Place

Overview

Some will find the distinction between leaders and followers problematic. Indeed, some scholars question the very usefulness of the leadership construct, arguing that we should study social influence which is how leadership is frequently defined and simply call it social influence (Calder, 1977; Pandey, 1976; Lacomski, 19??). While acknowledging these admonishments, we find that leadership is something that is alive and well for the people in the schools in our study. Teachers and administrators talk about leadership; it is something real for them and hence, in our opinion, worthy of investigation. Some scholars also wonder about the wisdom of the leader-follower distinction when one defines leadership as a social influence relationship because leaders influence followers and followers influence leaders (Gronn, 1994). While we agree that the distinction is imperfect, and think the follower label is problematic, we find the distinction an important one to maintain. Specifically, our empirical data suggests that both teachers and administrators construct others as leaders in particular leadership activities. Sometimes those who are constructed into the role of leader by others in the situation have positions in the organization that are ordinarily associated with leadership (e.g., principal, Literacy Coordinator, grade level lead teacher), while other times those who are constructed as leaders are teachers with no formal leadership position; teachers are often constructed into leadership roles by others. Of course, having a position such as principal or reading specialists does not mean that one is always a leader.

Further, depending on the particular situation, some individuals who have formal administrative positions may be cast in the role of follower. In our work, there is evidence of individuals who move between the roles of leader and follower. Hence, we believe that blurring the leader-follower distinction would be problematic.

Central to our notion of distributed leadership is the argument that leadership practice is *stretched over* leaders, followers, and their situation. The remainder of this paper is devoted to unpacking further what it might mean for leadership to be *stretched over* leaders, followers, and situation. Such a view presses us to investigate the ways in which leadership practice takes shape or gets defined in the *interactions* of leaders, followers, and the situation – tools, organizational structures, and other artifacts. These interacting components must be understood together, as a system of practice.

In earlier work, we analyze the ways in which the practices of particular leaders in the execution of particular tasks are interdependent (Spillane, Diamond, & Jita, 2000). We drew on the writings of organizational theorists to help us characterize how leadership might be stretched over people and place (March & Simon, 1958; Thompson, 1967; Malone et al., 1999). Thompson's work, along with the work of Malone and his associates on interdependencies, was especially influential in this work. Thompson (1967) argues that interdependencies between activities can be viewed in three ways: reciprocal interdependencies, pooled interdependencies, and sequential interdependencies. Reciprocal interdependencies are where each activity requires inputs from the other-- such as in basketball where players must interact with each other: passing to teammates when they stop dribbling, working to set one another up to shoot. Pooled interdependencies are where the activities share or produce common resources but are otherwise independent such as in baseball where the batter and pitcher perform alone but their practice has collective effects. Sequential interdependencies are situations in which some activities depend on the completion of others before beginning, such as relay in track or swimming. More recently, reasserting and extending Thompson's work, Malone and colleagues define three types of dependencies that arise from *the resources* that are tied to multiple activities – flow, sharing, and fit (Malone & Crowston,

1994; Malone, et al., 1999). Flow dependencies arise whenever one activity produces a resource that is used by another activity. Sharing dependencies occur when multiple activities use the same resource. Fit dependencies arise when multiple activities together produce a single resource.

Using this work, researchers in the Distributed Leadership Study have identified three ways in which leadership practice might be stretched over two or more leaders (Spillane, Diamond, Sherer, & Coldren, in press). Collaborated distribution denotes where one leader's practice becomes the basis for another leader's practice and visa-versa; the practice takes place in their interaction among leaders and there is a reciprocal interdependency. Collective distribution refers to two or more leaders who work separately but interdependently in pursuit of a shared goal and their interdependent activities generate leadership practice. Coordinated distribution denotes leadership practice in which different leadership tasks that must be performed in a particular sequence for the execution of some leadership function – the interdependency among tasks and the leadership practices responsible for executing these tasks is sequential. Each of these three types of distributions suggests different interdependencies among the practices of school leaders that have implications for thinking about and investigating how leadership expertise might be distributed.

Peter Gronn takes a similar approach in developing a two dimensional taxonomy of distributed leadership structures, differentiating arrangements by the mode of conjoint agency (co-performance or collective performance) and the size of the concertively acting group (Gronn, 2003). Among other things, Gronn unpacks examples of co-performance with intuitive working relations, co-performance with institutionalized practices, collective performance with intuitive working relations, and collective performance with institutionalized practices. More recently, Gronn and Hamilton (2004) characterize multiple ways of talking that two leaders might engage in: paralleling, positioning, anticipating, pooling, and retrieving. When two leaders parallel, they approach an issue from the same perspective; in essence they can finish each other's sentences. Positioning is when they work together to bring everyone in the collaborative group to a common understanding. Anticipating happens when leaders work together to ensure the message they are about to send is clear, while pooling is how they collectively solve complex problems. Retrieving is done when

confronted with “collective forgetting” (p. 26). Gronn and Hamilton also characterize ways in which leaders share role space: complimentary, overlap, and duplication. When two individuals work in complimentary, their work is separate and distinct, but it blends. They describe the overlap characterization to be when two individuals work primarily in their own domains but for some of the time they substitute for one another. Finally, in a duplication shared role space, the two leaders not only substitute for one another but actually duplicate the work of one another. Gronn and Hamilton’s work focuses on a system of dual authority.

In this paper, we continue to report on our ongoing analysis. We extend our earlier analysis by focusing on how leadership practice is stretched over people - multiple leaders and followers and we examine how leadership is stretched over the situation – tools, artifacts, and organizational structures. For readability purposes we treat these two issues separately though they are closely intertwined.

Leadership Practice as Stretched Over People

Studying leadership as a distributed practice involves unpacking the idea of distribution by exploring relations among the practices of people engaged in the leadership practice - multiple leaders and followers. Leadership practice might be said to be “in between” (Salomon & Perkins, 1996) the practice of two or more leaders and followers. Specifically, we unpack leadership practice as stretched over leaders by analyzing interdependencies in and between what two or more leaders do. From a distributed perspective, leadership is not simply something that is done to followers; followers co-produce leadership practice in the interaction with leaders. Hence, we also examine how leadership is stretched over both leaders and followers.

Collaborated Distribution. We use the term collaborated to denote that the people – leaders and followers have to work simultaneously with each other on the leadership activity. In this way, the leadership activity is stretched over the group. In an effort to unpack this idea we use examples from a Literacy Committee meeting at Adams School, a high poverty K-8 school on Chicago’s Southside that serves approximately 1100 students. The students are 97% African-

American; 97% of them are low income, and the school has a relatively high mobility rate, somewhere in the neighborhood of 35%. The school is housed in two adjacent buildings. The Principal and one Assistant Principal are housed in the south building, with grades 4-8 as well as state funded Pre-K classrooms. The Literacy Coordinator and a second Assistant Principal are housed in the north building with grades K-3. In parallel form, there are two math teachers housed in each building: a first and third grade teacher in the north building and a sixth and eighth grade teacher in the south building.

In this first example, we examine leadership practice as it unfolds in the interactions among four leaders and followers as they discuss strategies for literacy teaching. The leaders involved in this meeting are the Principal, the Literacy Coordinator, the African-American Heritage Coordinator (AAHC), and a Teacher Leader. The Teacher Leader is a third grade teacher who is considered a leader by both administrators and teachers for literacy instruction. At Adams, the Literacy Coordinator regularly asks this particular teacher to try out new approaches to literacy teaching. In addition, her colleagues go to her for help and support, and she teaches reading and writing to two third grade classrooms while her teammate teaches mathematics. In addition, her leadership status is clear in her presentation at this meeting. When she speaks, she stands up, her voice is loud and commanding, and she has brought props with her to more effectively communicate her ideas. She is not informally talking about what she does in her classroom, off the cuff as the other teachers are; she has thought about this presentation and she knows what she wants to say. In addition to these four leaders, there were 15 teachers present representing grades 1 to 8. We analyze two excerpts from our fieldnotes for the same Literacy Committee meeting.

The Literacy Committee was established by the Principal and her leadership team in an effort to involve teachers from every grade in the decision making and dissemination of information around literacy practice at Adams. At least one teacher from each grade level serves on the Literacy Committee. The Literacy Coordinator or the Principal typically run the Literacy Committee meetings, and the AAHC as well as the Assistant Principals are also in attendance. These meetings typically occur once every five week cycle. Literacy Committee meetings take place after school,

1. **Principal:** we're going to quickly move through the agenda... we would like to focus in, in
2. particular, on grades 2-8 although we know there are some first grade teachers here that have
3. things to contribute. We'd like to look at the Ten Week assessment results, then we will move
4. into Chapter 6 of the book "Strategies that Work." Some of you have done successful things
5. so we will have time for sharing. We've found that the things we learn best we learn through
6. sharing. We are ensuring we move in the right direction; ensure that the students are successful
7. on that ten week assessment. Ms. (Literacy Coordinator), will present the ten week assessment
8. results."
9. **Literacy Coordinator:** First I would like to say congratulations to grade levels—all grade
10. levels made some improvements from the five week assessment to the ten week assessment
11. which is a reflection of your time and commitment to getting students to learn...Third through
12. fifth: need to work on abilities to write descriptive words... probably lacking in vocabulary,
13. ability to pick out details from the story. They did a good job identifying the problem and
14. solution of the story...which leads me to middle school: problem and solution didn't
15. always match...This is truly a concern. They had a little trouble determining the important
16. information in the story. The questions missed were mostly vocabulary questions... I have
17. a packet with lessons on teaching vocabulary—I'll pass it around and if you want me to make
18. you a copy, put your name on the green sticky note...
19. (When the Literacy Coordinator finishes up Principal indicates to AAHC, who takes the floor.)
20. **African-American Heritage Coordinator:** "Real quick, I did this real quick, Ms. (LC)
21. asked me to do Chapter 6 and I did it quickly... (hands out a packet she put together.)
22. "The whole chapter deals with three ways to make connections."
23. (she goes through the handout)"
24. Get sticky notes and cut them in half (for students to use as they annotate the text)..."
25. **Teacher1:** "Get them at Sam's—I just did. They're cheaper there."
26. **AAHC:** (Gives an example from her life to apply these strategies.)
27. **Teacher2:** "Can I give an example? (We read Shiloh—not the novel, just part of it. She
28. (student in my class) knows how the dog felt. Kicks it just like Shiloh got kicked. (Example
29. of student whose parent abuses their dog.) Sounder—both stories involve characters with dogs.
30. brought in the article from the Sun Times about the dog fighting. They didn't know an abused
31. animal but it's in the world—not a dog fight but still a dog being mistreated."
32. **AAHC:** "Expose them to as many different genres. Last thing...the children must know
33. which connection you're making."
34. **Teacher3:** "Excuse me, I don't have the sheet with the graphic."
35. **AAHC:** "The last chapter talks about how important it is when children are actually able to relat
36. to the text. If you haven't started, start...Get your little snippets; they'll be your best friend."
37. **Teacher4:** "Last year we had ____ which asked for prior knowledge. I'll make copies for the
38. different grades. It worked well."
39. **Teacher5:** "We need to make sure they understand what it means to connect. What we mean
40. by these words."
41. **Principal:** Teacher modeling. Only after the teacher models, then we move to the next phase.
42. Guided practice, scaffolding, finally independent. (The) application of strategy in independent
43. situations. Don't just jump to the strategy. The framework is still: Model, guided practice,
44. independent, **then** strategy."
45. **Teacher1:** "I can give an example of that. I tell the kids, "Take out a piece of paper, I'm going
46. to read aloud. If you have questions, responses, write them down. I know you (motions to
47. LC who is nodding her head) told us to do this and of course you are absolutely right..."
48. **Literacy Coordinator:** Talk about a meta-cognitive process. That's it when you hear that
- phrase. .

(Fieldnotes, 11.06.00)

In this particular meeting, as is typical, the Principal sets the tone and agenda for the meeting, makes clear her intent is to invite teachers to share (line 1 – 7), and turns the floor over to another leader. The Literacy Coordinator begins by praising the teachers (lines 9-11). She does this regularly - simultaneously massaging ego and pushing for more. Her tactic here is typical—she compliments her teachers and then tells them what to do better. We see this as she lays out specific literacy issues the teachers need to address in their classrooms (lines 11- 16). She also offers a resource for teachers and argues that this will help them address one of the problems identified in the assessment results (Line 17).

The Principal then indicates to the AAHC that she has the floor. Analyzing this earlier part of the meeting, we might conclude that the leadership practice is distributed only in that there are multiple leaders taking responsibility for leading the meeting by dividing up responsibility for different sections of the meeting – a person plus perspective on distributed leadership. However, that is not entirely accurate, because while the Literacy Coordinator talks, the Principal plays the role of affirming the importance of her message by listening attentively and nodding her head; indeed, the Principal sees her presence as sending a very important message. This sort of interaction is typical between the Literacy Coordinator and Principal in meetings, habitual behavior that has evolved over 15 years of working together.

The Literacy Coordinator had asked the AAHC to prepare some professional development for the teachers around a book that the Literacy Coordinator and the Principal have purchased for each teacher. Again we see another powerful characteristic of the Literacy Coordinator—she is very adept at empowering members of the faculty. The AAHC shares the resource she has created (the chapter outline) (lines 20-24) as well as her personal experience (referenced line 26). In this part of the meeting, the AAHC informally opened up the floor to other teachers to share their classroom practice, as it relates to the components of the chapter that she has outlined for them (line 20).

Teachers then begin to offer examples from their practice using the ideas presented by the AAHC to frame these. A fifth grade teacher (Teacher2) gives a specific example from her

classroom practice where she helped her students make connections between their lives and the texts they read in class (lines 27-31). Teacher 4 identifies and offers to share a resource she found helpful from last year (lines 37-38) while Teacher 5 points out the need to be clear with students (lines 39-40).

Here we see that the leadership practice is stretched over leaders and followers, as classroom teachers offer examples from their own practice to make concrete the ideas that the AAHC has discussed. The knowledge or expertise about literacy practice that is important in this part of the meeting is stretched over teachers (who use knowledge from their practice) and the AAHC (who presents ideas she has gleaned from a book). The knowledge about literacy instruction is generated in and through the interactions of teachers and leaders.

After some of this sharing takes place, the Principal reminds the teachers of the school's framework for teaching (Line 32). She is connecting the concrete examples the teachers are sharing to the framework for teaching she expects all teachers to use in their teaching. This is something that the Principal does constantly across an array of leadership activities, reminding teachers of the school's expectations for literacy instruction; she always keeps the big picture center stage. Immediately after the Principal lays out this teaching expectation, a teacher picks up on it and connects it to her practice where she used a strategy the Literacy Coordinator shared with the teachers. And the Literacy Coordinator uses this teacher's example as an opportunity to teach others an important idea. In this interaction leadership practice is stretched over literacy coordinator, principal, and teacher in that the practice is defined in their interactions; the Principal's statement about modeling prompts the teacher to offer an example from her practice which in turn is used by the Literacy Coordinator to convey the concept of meta-cognition, which she has been working to incorporate into the literacy practice at Adams. Later in the meeting, we again see leadership practice stretched over the Literacy Coordinator and another leader.

Exhibit 2

1. **Teacher Leader:** (Stands up holding laminated posters, shows these as she speaks)
2. “We were having lots of difficulty with graphic organizers. In this exercise, everyone
3. gets a job. One gets to write the author... trying to get them to work together and
4. come up with answers. This activity really worked well.”
5. (The Teacher Leader goes on to share the activity—the students, in groups, used their
6. graphic organizers to write their own test questions about what they had read.)
7. **Teacher Leader:** “Ms. (LC) went to a meeting for ISAT.¹ Use the graphic organizer to
8. pull information from that for questions. For the top group, they are really willing to
9. push further. They really, really caught on well. I almost did cartwheels down
10. the hall. I was really, really excited about these tasks.”
11. **Literacy Coordinator:** “Choices.”
12. **Teacher Leader:** “Choices. They had choices. I can go home tonight and go through
13. these papers and type up a great test.”
14. **Principal:** “There’s a move underway—whether or not it takes place next year—but
15. ISAT may be tested at all grade levels. Paul Vallas¹ is pushing for this...”
16. **LC:** “I was at an ISAT meeting where they were explaining how best to teach
17. students to do well on the ISAT. They said that the committee writes the test by
18. sitting down, reading the story, placing it in a graphic organizer, and writing
19. questions from that. They write one correct answer, one ridiculous answer, and one
20. or two answers that are in the story but are not correct... (I am going to) require
21. children to write their own questions. We’ll do this the way we do it in church
22. (laughs). I don’t want anyone to say they didn’t hear later. Turn to your neighbor
23. and say, ‘3-5 questions...’”

(fieldnotes, 11.06.00)

The Teacher Leader has tried out a teaching strategy the Literacy Coordinator brought back from an ISAT preparation meeting. It worked well in her classroom (line 10), so she shares this success with the Literacy Committee. Building on the success in the Teacher Leader’s classroom, the Literacy Coordinator then assigns the other teachers to this task. And using humor while connecting to an element from their outside lives, she evokes the choral talk of church to ensure all of the teachers have heard and internalized her request (lines 20-22). In between spaces, the Principal has given the teachers another reason to follow this line of thinking—the district is on the way toward moving to making these tests even more important, so her expectation is that the teachers step up and make it a priority too. (lines 14-15)

Two other important things happen at this meeting (that are not in the exhibit): the Principal opens up the floor for teachers to share their classroom practice, and the Literacy Coordinator offers up a vote for the focus of the ten week assessment. The teachers decide to focus on making connections for the next assessment (building off of the work they have done with the chapter from *Strategies that Work* during this meeting), and they are given time to work in small groups around their next task. As the meeting ends, the Literacy Coordinator reminds teachers of the expectation and the Principal thanks the teachers for coming.

The leadership practice in this literacy committee is collaborated in that it takes shape in the interactions between the four leaders, and in the interactions between the leaders and followers. The leadership practice represented by this activity is not simply a function of the principal's actions or the Literacy Coordinator's actions. Individual leaders act but they do so in a situation that is defined in part by the actions of others – leaders and followers – and therefore the actions of individual leaders are interdependent. It is in these interactions that leadership practice is constituted. As Feldman & Rafaeli put it, “Individuals act, but they do so in a context created by the actions of the other participants” (Feldman and Rafaeli, 2002).

This meeting is representative of how the Literacy Coordinator and the Principal interact with each other as well as how they interact with other informal leaders to lead improvement efforts at Adams. Typically in leadership activities connected to literacy, as we've seen in this example, the Principal presses the big picture; she moves the meeting forward at critical points and, in many respects, is insistent about what teachers should do in their classrooms. The Literacy Coordinator points out specific areas of need and concern, offers resources and strategies, encourages others to talk (in fact assigns them to talk in some cases), and builds on the key points raised by practitioners to move the staff forward in their efforts to improve literacy teaching across the subject areas. At times their actions parallel one another, exhibiting overlapping role space (Gronn & Hamilton, 2004): both leaders move the meeting along, praise and encourage their staff, present specific expectations of the teachers, and invite teacher input and sharing.

The leadership expertise is stretched over leaders and followers. The Principal depends on the Literacy Coordinator literacy expertise, as well as convincing manner and wealth of information and resources, while the Literacy Coordinator depends on the Principal's broader vision of the school and the district, as well as her positional authority. The Literacy Coordinator also depends on the AAHC to fulfill an informational role. She does not want to be the only voice that shares professional development information (personal communication, 2002), and this is seen in her efforts to empower teachers and the AAHC to move into leadership roles. And the expertise is also stretched over teachers, whose knowledge about literacy instruction plays a central role in the activity. Both the Literacy Coordinator and the Principal depend on the followers to take the macro ideas (how to improve ISAT test performance, how to improve vocabulary, interactive reading within the texts, etc.), make sense of them within the context of their own practice, and share that sense-making in the meeting.

In part, collaborated leadership involves a "reciprocal" interdependency where the practice takes shape in the interactions among people. We argue that the leadership practice in leadership activities related to literacy depended on the interplay between multiple people, some leaders, some followers. In reciprocal interdependencies, individuals play off one another, with the actions of person A enabling the actions of person B and vice-versa. The Literacy Coordinator depended on the Teacher Leader and other teachers who shared examples from their classroom in order to move forward ideas for literacy lessons. As teachers share ideas, they accomplish several things: they give other teachers ideas, they show to weaker teachers that these tasks are possible to do, and they make the big picture ideas concrete and clear. Less directly, they show how their own sense-making takes place as they take the big ideas and make their own connection to them. The Literacy Coordinator also depended in part on the AAHC's social capital to convey professional development strategies: The AAHC is a veteran sixth grade reading teacher at Adams who is well connected to the 4-8 grade teachers and is viewed as a senior teacher and leader by the faculty. The Principal depends on the Literacy Coordinator's literacy knowledge and affect while the Literacy

Coordinator depends on the Principal's knowledge of district policies, and her positional and symbolic power.

Leadership Practice and Curricular Domains. But structures and practices are part of a broader socio-cultural context. Before moving on, it is important to point out that, as noted in our earlier section in theoretical anchors, these cultural practices are learned systems of activity, and the practices that are learned may differ depending on the situation. We are especially struck by how leadership practices differ depending on the curricular domain.

Mathematics leadership practice, for example, looks different from literacy leadership practice at Adams. To illustrate these subject matter differences, we use two excerpts from a math professional development meeting that are representative of mathematics meeting at Adams. This meeting is a meeting for K-3 math teachers. The meeting is led by two teachers (a first grade teacher and a third grade teacher) who act as Math Leader #1 and Math Leader #2. Typical of mathematics leadership activities at Adams, there are no positional leaders present at this meeting. The leaders in these mathematics activities are any one of four classroom teachers who comprise the Math Team.

Exhibit 3

1. **Math Leader #1:** "So you could have your students draw a picture of how the boy can
2. fix it. So the children drew pictures of how he can fix it. One specific child says that he
3. can cut the circle and make the sides an octagon. But all the children have their own
4. example. Each child has his own pattern. Now another teacher did it differently. They
5. (the book) usually give you two examples. He read the story through... He wanted them
6. to come up with their own ways. These examples give you an idea of some of the
7. questions you might want to ask, or some of the responses that you might want to
8. anticipate from the children."

9. **Teacher #1:** "What grade level does this work for?"

10. **Math Leader #1:** "I think they do more second and third grade. This is book 1."

11. **Math Leader #2:** "I've got book 2 downstairs."

12. **Math Leader #1:** "These are really nice. (indicates the book she was just talking about)
13. They give you some nice ideal things that you can do. And it doesn't involve worksheets.
14. The children get to write and explain and do problem solving."

15. **Math Leader #2:** "Which is good because on the open-ended part on the ISAT..." (She
16. goes on to explain how this relates to the test questions.)
17. She then shows another book with games in it:
18. "Pentominoes challenge
19. "Geometry for Primary Grades, Gd. 1
20. "Lots of your activities for today came out of this book (referring to the folder of
21. activities that each attending teacher received.) It may not be just geometry...
22. "Linking Math to Literature"--holds up another book. Problem solving with cutouts--you
23. have a couple of those in your folder too. There are a couple of other books that (names
24. another teacher) had that are teacher resource materials... And a lot of the trade books
25. that deal with geometry in one way or another."

The majority of the talk at this meeting, indeed in all mathematics leadership activities, is done by the two math leaders (83%). Some teachers talk (four out of the 17 teachers present), but in this meeting their talk is limited to asking questions or offering resources, as we see in Exhibit 3, line 9 and Exhibit 4, lines 9-12. Math Leader #1 and #2 play off of each other as they offer curricular support for their teachers (lines 10-25); the leadership practice unfolds in the interactions

among these two leaders. They each offer a resource (lines 10 and 11), Math Leader #1 gives a specific detail about why the books are useful (lines 12-14); the children do problem solving—something the students at Adams need more competence at (as measured by their standardized test performance), and Math Leader #2 builds district context (lines 15-16) pointing out how it relates to the standardized testing that concerns teachers and leaders at Adams. The math leaders make nearly identical moves, offering concrete examples of what teachers can do in their classrooms: they suggest specific strategies and resources for the teachers. They distinguish themselves from one another in one way—in terms of their differentiated expertise. Math Leader #1 is technically savvy, and presents the teachers with computer activities to use in their classroom. Math Leader #2 is particularly knowledgeable about the National Council of Teachers of Mathematics standards and shares this expertise with teachers (See Exhibit 4, lines 6, 8).

Exhibit 4

1. **Math Leader #1:** "...Now in their grade when they do the cut and paste they work
2. with the nets. Then cut them and fold them to make a solid figure. Then it gets to the
3. point when they look at the net flat, they can just see what it would fold like. They
4. need to know that because when they take the ISAT they need to know what the shape
5. flat will fold into."
6. **Leader #2:** "This is one that matches up with the NCTM new standards."
7. Teachers start muttering.
8. **Leader #2:** "Yes, that's right, the NEW standards. The 2000 NCTM standards..." And
9. the meeting, questions that teachers pose:
Teacher1: "Would you suggest a box that was closed, without a lid?"
10. **Teacher2:** "What grade level is this program for?"
11. **Teacher3:** "I'm wondering if there's anything special you've seen for special needs
12. kids."

In leadership activities for mathematics (as captured in Exhibits 3 and 4) leadership practice is stretched over the two leaders. Further, there is a sense in which followers, by virtue of

participating rarely or in the manner in which they do, also define the leadership practice. The leaders cannot act as they desire because the actions or inactions of others limits some actions.

Our main purpose in including these leadership activities for mathematics is to underscore how leadership practices looks different between these two curricular domains. Contrasting Exhibits 1 and 2 with Exhibits 3 and 4, we are able to identify some key differences in the leadership practice.

In the math meeting, the mathematics leaders, all full-time classroom teachers, dominate the conversation. They spending the majority of the meeting sharing resources that they have found (for example, Exhibit 3, lines 10-25). The math teachers work off of each other. In essence, they work the ball up the court—one shoots the first time, the next shoots the second time. As the leaders talk, the followers listen and ask clarifying questions (Exhibit 4, lines 9-12). Using the actual resources, the leaders' talk centers on how to use these resources while teachers' talk centers around asking questions about the material presented or questions about other possible sources for resources. Ideas or strategies for teaching mathematics come entirely from the leaders and rely chiefly on external expertise as represented in books or other programs. Leadership activities for language arts are different, with more of a balance between leaders' and teachers' talk and with teachers and leaders offering ideas and strategies about how to teach literacy

Leadership is stretched across the two math leaders in ways different from the literacy leaders. While the leaders in the literacy meeting depended on teachers to contribute classroom examples to the leadership activity, (the AAHC and the Teacher Leader), the math leaders carry out this role themselves. Both leaders in math and literacy set the agenda, set expectations for teachers, and invite teachers into the conversation. In literacy the Literacy Coordinator offers resources to the teachers; in math the math leaders take on this role.

Another difference is the type of resource the teachers receive in the meetings. In the literacy meeting, the AAHC passes out an outline of a chapter from a literacy resource that the teachers all own. This is developed by the AAHC to guide them in their use of the book. In the math meeting, the math leaders have compiled a folder for each teacher with activities they can

immediately implement in the classroom. In the leadership practice evident in the mathematics meeting, there is no sense that ideas gleaned from books need to be figured out and made sense of with and through actual classroom experiences (as was the case in literacy). Teachers are handed packaged lessons to take back with them and implement in their classrooms. The math leaders pass out ready to use lessons while the literacy leaders pass out articles or books that talk about literacy teaching. What is important about this is that the materials artifacts used, though similar at one level, are very different at another level. They invite different sorts of participation and types of interaction among leaders and teachers. In this way, the material artifacts contribute to defining leadership practice. These differences are characteristic of literacy and math leadership activities in this school.

Let us now turn briefly to two other ways in which leadership might be distributed – coordinated distribution and collective distribution. We discuss both only briefly, however, we think they are critical in order to ensure that investigations of leadership practice do not simply focus on micro analysis of day-to-day practice.

Coordinated Distribution. A second way in which leadership practice can be stretched over people involves what we term “coordinated leadership” in which people work separately or together on different leadership tasks that are arranged sequentially. We use the term coordinated to underscore that the leadership practice is stretched over the different leadership activities that must be performed in a particular sequence for the enactment of leadership practice. This involves a second type of interdependency; that is, a sequential or flow interdependency. In this case, leadership practice depends upon the completion of prior tasks. In this situation, multiple interdependent tasks, arranged sequentially, are critical to the enactment of leadership practice.

Consider the literacy examples from Adams school described earlier. These excerpts are taken from a meeting that is one component of the Five Week Assessment cycle which involves a number of interdependent activities, each dependent on resources produced through the completion of prior activities. In the early 1990’s the Principal and the Literacy Coordinator implemented a Five Week Assessment cycle to respond to their questions, “Are the students learning? How do

you know?” The cycle is as follows: (see Figure 1) Literacy Coordinator selects/creates reading and writing assessments for grades 1-8; her assistant copies and distributes assessments. The Literacy Coordinator is also providing resources and support for individual teachers. The Principal is simultaneously monitoring teaching practice; teachers give assessments and return them to the Literacy Coordinator; the Literacy Coordinator and her assistant score student assessments and then compile and analyze the data to identify patterns; the Literacy Coordinator and the Principal meet to discuss the results (as we will see in the Collective Distribution model): the Literacy Coordinator reports this analysis to the Principal who also uses the information she has gathered through her classroom visits to interpret and make sense of the data. The Literacy Coordinator then reports the findings from the Five Week Assessment to the teachers. Further, she compiles resources and strategies that might enable teachers to change their teaching so as to address some of the areas in need of remediation identified through the five week assessment. She shares these with teachers, usually working with a lead teacher and the African American Heritage Teacher. Through meetings such as the Literacy Committee Meeting described earlier, or targeted grade level meetings, teachers work with school leaders make sense of data and create instructional strategies. The cycle starts again.

Figure 1: Sequential Interdependency

Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
Create assessment	Copy and Distribute	Administer Assessment	Score, compile, analyze results	Meet to share information	Report data to teachers, compile resources	Receive & interpret results; strategize	Communicate information
Literacy Coordinator	LC's assistant	Teachers	LC and assistant	LC and Principal	LC	LC, Principal, Teachers	Teachers

The Five Week Assessment, which school leaders and teachers at Adams identify as a key leadership activity for instruction especially in literacy, involves a number of interdependent sequenced components. This example highlights how leadership can be stretched temporally over sequenced and coordinated tasks, illuminating how the enactment of certain leadership tasks depends upon resources generated from prior tasks.

Collective Distribution. Leadership practice can also be stretched across the practice of two or more leaders who work separately but interdependently in pursuit of a common goal. As organizational theorists have long recognized, interdependence is not confined to here and now interactions, the immediate actions of people. In this situation, there is a “pooled” interdependency, in which actions of two or more leaders generate leadership practice.

Consider the job of monitoring literacy instructional improvement. This leadership activity is stretched over the Principal and the Literacy Coordinator. The Principal implemented the Five Week Assessment cycle (discussed in the literacy vignettes (Exhibit 1 and 2) to monitor student performance as well as the instructional focus in the classrooms. At one point in the cycle, three things are happening simultaneously. The Literacy Coordinator is deciding, based on the results of the last assessment and what she knows about literacy practice and the needs of her students, what to put on the next reading and writing assessments. At the same time, the Principal is monitoring teaching practice. This particular Principal consistently walks her buildings and checks in on classrooms. She is looking for particular components of practice (as shared with teachers in meetings such as the Literacy Committee meeting). An 8th grade teacher tells the story of when she walked out of her room one day and discovered the Principal standing outside of her classroom, just listening to her teach (personal communication 6.19.02). As this teacher put it, “you never knew when she would walk into your classroom, or when she was listening outside of your door.”

The Literacy Coordinator and Principal pool their knowledge in interpreting

students' achievement results from the Five Week Assessment. The Principal brings first hand accounts of what she sees happening in particular classrooms, while the Literacy Coordinator brings literacy expertise, informal communication she has had with teachers, and first hand experience with the data—she and her assistant score and compile all of the assessments, grades 1-8.

Leadership practice, in this case, is stretched across several players who engage in monitoring instruction through separate but complimentary activities. This example illuminates how two leaders, working separately but interdependently, construct a leadership practice. In this way, leadership practice is stretched across the separate but interdependent work of these leaders and involves a “pooled” interdependency, in which independent activities produce leadership practice; their interdependent practices are compliment one another (Spillane, Halverson, & Diamond, 1999).

Leadership Practice As Stretched Over People and Place

Material artifacts and tools (e.g., teacher observation protocols) are one important part of the situation. Leaders not only typically work with others, they also work with tools, organizational structures and routines of various sorts. The excerpts from meetings at Adams, for example, are awash with tools and artifacts. Further, references to things like the Five Week Assessment, the Literacy Committee and Literacy Committee Meeting all point to the importance of organizational structures and routines or procedures to leadership practice. By organizational routine here we mean “a repetitive, recognizable pattern of interdependent actions, involving multiple actors” (Feldman and Rafaeli, 2002). The Five Week Assessment at Adams is an example of an organizational routine as is the School Improvement Planning Process (SIP).

A distributed perspective necessitates understanding how leadership practice is stretched over aspects of the situation such as tools, structures, and routines that enable and constrain that practice. In this view, the Principal of Adams and other school leaders, like

the rest of us, do not work directly on the world: they work with tools, organizational routines, and structures. The challenge from our perspective is to not only identify those aspects of the situation over which leadership practice is stretched, but to try and unpack how practice is stretched over tools. We take a small step in that direction in this section.

As we argued earlier, in our view situation is both constitutive of and constituted in leadership activity. Situation is both the medium and outcome of leadership activity. Situation as instantiated in day-to-day leadership practice in organizational structures, routines, tools and the likes are the means through which people act (provide the rules and resources) while situation is also created, reproduced, and transformed through leadership activity. To help tease out this idea we are drawing on the work of Feldman and Rafaeli whose distinction between two aspects of organizational routines– an ostensive aspect and a performative aspect – is especially helpful. As they define it, the ostensive aspect “is the ideal or schematic form of a routine ... the routine in principle” (2002, p. ?). In contrast, the performative aspect refers to the routine in practice in particular places and time. Our outline of the sequenced steps of the Five Week Assessment is an example of the performative aspect of that routine, while our discussion of the leadership practice in the literacy committee meeting gets at the performative aspect of the Five Week Assessment routine. While Feldman and Rafaeli confine their discussion to organizational routines, we argue that the ostensive and performative distinction can also be applied to other aspects of the situation including organizational structures (e.g., Literacy Committee Meeting) and tools. Practice (the performative aspects of routines, structures, and tools) creates and recreates the ostensive aspect while at the same time the ostensive aspect constrains and enables practice.

In an effort to unpack how leadership is stretched over people and place, we have focused on particular instances of practice at particular time points. Central to our ongoing analysis, however, is a longitudinal analysis of these practices over time as well as situating these practices in time. The leadership activities at Adams school must be situated in the

sociocultural and historical context of that school, school district and state. In the earlier analysis we see evidence of this broader socio-cultural context as represented in state and school district assessments, NCTM standards, among other things in day-to-day leadership practice. We consider two examples by way of illustrating this relationship.

Breakfast Clubs & Five Week Assessment at Adams. When the Principal came to Adams in the late 1980's, the school's test scores were low and the school community was divided. Staff in the two buildings in which the school is housed, (grades K-3 and grades 4-8) rarely interacted; the buildings functioned as two separate faculties. A 7th grade science remembered, "It used to be in the school each teacher was like an island ..." The lack of interaction among staff was also prevalent within each building. The Principal recalled,

It was very strange...There may be four classes at a grade level and they did not even talk. They did not have a clue at what was going on in each other's classrooms, they just basically closed the door... I could not see how kids could move from one grade level to the other, and not have a common core of knowledge. They would go to the next grade and everybody would know something different.

Another major problem for the Principal when she arrived was the reliance on external works shops and experts for teacher development. In an effort to address these problems The Principal with her leadership team and teachers began to build some new organizational routines including the Breakfast Club and Five Week Assessment. These organizational routines were constructed over time through leadership practice and in turn the routines themselves transformed leadership practice at Adams.

Working with her leadership team, especially the literacy coordinator (LC) the Five Week Assessment cycle and the Breakfast Club took shape. The Principal initiated the Breakfast Club in 1995 as a monthly meeting designed to give teachers an opportunity to consider research on

teaching practice and build a professional community around improving instruction.³ The principal explained “We began to believe in the importance of professional community when we realized that, it wasn’t taking classes, but that it was when teachers started talking about their teaching that the scores started improving.” The Breakfast Club routine took form in and through leadership practice that was defined in the interactions of the principal, the LC, teacher leaders, and teachers – providing incentives for teachers to attend, identifying and procuring relevant and interesting research articles, facilitating a conversation among teachers about instruction. These leadership practices contributed to initiating and institutionalizing the Breakfast Club routine at Adams Elementary.

Implementing these two routines contributed to changing the professional climate among the faculty, opening up classroom practice, allowing teachers to get to know each other and share expertise across the grade levels and the two buildings. It has created one faculty that works more closely together instead of two faculties largely at odds with one another. They are working on common goals, and while the ages and abilities of their students span a great divide, they see—through these meetings around literacy theory—how much in common they really have.

Over time the Breakfast Club contributed to transforming Adams from a school in which teachers rarely spoke with each other about practice to one in which conversations about practice became the norm. As an organizational structure, the Breakfast Club afforded sustained and ongoing interactions among teachers and administrators about instruction. New tools in the form of research articles about instructional practice and teachers’ accounts of their own practice became acceptable ways of arguing about teaching in discussions among teachers and leaders. According to the staff at this school, over time this opportunity for dialogue contributed to breaking down the school’s “egg-carton” structure, creating new structures that supported peer communication and information sharing, arrangements that in turn contributed to defining leadership practice. A cadre

³ Breakfast Club is a monthly gathering in which the teachers voluntarily arrive before school to discuss an article—typically about literacy instruction. The Principal buys breakfast for the teachers (out of her pocket), and the LC typically identifies a teacher to guide the discussion. While the Principal and LC are in

of lead teachers emerged in the school and the principal increasingly distributed leadership among other administrators and lead teachers. Leadership activity transformed the organizational structure, routines, and tools and these tools, structures, and routines enabled new leadership practices; they enabled teachers and leaders to engage each other in discussions about mathematics and language arts in new ways. In this way, the situation contributed to transforming leadership activity at Adams Elementary.

Organizational structures, routines, and tools shape leadership practice but they are also shaped by it. Consider the earlier excerpts from Adams school. The literacy leadership uses various tools to accomplish their work. In the literacy committee meeting, the LC uses the data from the five-week assessments to share current status with the teachers. She uses vocabulary resources to guide their practice. The AAHC, upon the LC's request, outlines a relevant chapter and shares this as a learning tool with the faculty. In the Five Week Assessment cycle, the LC creates student assessments to better understand the current state of their understanding and their needs. And of course, the Five Week Assessment routine it self enables (and constrains) leadership practice at Adams defining the schedule, the every day tasks of school leaders and teachers (See Figure 1 above).

Organizational structures, routines, and tools are shaped in and by practice. The most striking example is the contracts between how organizational routines and tools are used in mathematics leadership activities compared with literacy leadership activities. In the math meeting we considered earlier, the two math leaders used a variety of tools but as we discussed earlier these tools were used in distinctly different ways compared to the literacy leadership activities. Also, identical tools (e.g., student achievement data) figure differently in leadership practice in some schools in our study compared with other schools, illuminating how leadership practice shapes tools.

attendance at the Breakfast Clubs, they tend to take a more back seat role, allowing the teachers to discuss literacy teaching practice.

Writing Folders at Hillside School. A second example from Hillside School illustrates how a school leader can appropriate a tool designed for classroom writing instruction and build a routine around it designed for monitoring instruction, a key leadership activity. Believing that the ability to write and communicate clearly was critical to the success of Mexican-American students, Principal Miller has spearheaded improvement efforts in writing instruction at Hillside over the past decade. At the core of this effort to lead change in teaching was Mrs. Miller's monthly review of students' writing folders: from October through April, every teacher submitted monthly a folder that contained one composition written by each student in the class. Mrs. Miller read each student's work and provided the teachers and students with written feedback. She explained:

I can tell a lot of what's happening in the classroom by just reading folders and providing feedback to teachers. I can see people who maybe need to work a little on certain things.... It forced teachers to actually teach writing as a subject and not just as a homework assignment and encouraged them to use the writing as an integrated thing, not as a stand-alone (Interview, 04/06/00).

By looking at students' writing Mrs. Miller to see what was happening in writing instruction at Hillside school. Moreover, she provided written feedback to both students and teachers about their work. She praised students and pointed out areas of their writing that needed more work. Based on her analysis of their students' writing, she provided each teacher with specific guidance about their teaching of writing, identifying skills they should cover and commenting on their grading of students' work, among other things

Hillside teachers reported that the school principal's practice of reviewing writing folders was especially influential on their teaching. Ms. Crawford, for example, described how the writing folder review practice changed her approach to writing instruction,

I switch my whole day around so they get almost an hour to work on [writing].
... I have received notes from Mrs. Miller. We have to turn in compositions

monthly.... But that is what I've had to change in my approach this year is giving them more time to think, more time to work, more time to review the process. You know, review the criteria. You have to have this, this, and this.

(Interview with K.C., 05/09/00).

Mrs. Miller's feedback on the writing folders prompted Ms. Crawford to increase the amount of time she devoted to writing instruction and to what she covered in writing instruction. Other Hillside teachers offered similar accounts.

Mrs. Miller's monthly writing folders review, an important leadership practice for writing teaching at Hillside, was not simply a function of Mrs. Miller's skill and expertise, though that was very important. Rather, this leadership practice took shape in the interaction of Mrs. Miller and the writing folder - a key leadership tool. While the writing folder was a tool developed to support classroom teaching and learning, Mrs. Miller appropriated this tool remaking it through her actions as a leadership tool and building a routine around it. The writing folder shaped the leadership practice in this instance in a number of ways. First, the writing folder grounded this leadership practice in classroom teaching and learning; it focused leadership practice on what students were learning (or not learning) about writing. Second, by focusing on classroom teaching and learning the writing folders enabled Mrs. Miller to offer very concrete and timely guidance to teachers about their on-going efforts to teach writing. Third, the writing folder enabled Mrs. Miller to provide feedback to both students and teachers simultaneously. In this way Mrs. Miller was working to motivate and engage both teachers and students in the improvement of writing instruction at Hillside. Often efforts to lead change in classroom teaching focus exclusively on the teacher and in the process fail to take into account the fact that students together with teachers co-produced classroom teaching.

The writing folder, as appropriated by Mrs. Miller as a leadership tool, was not simply an aid in the leadership practice reflected in the monthly writing folder review activity. Rather, the

writing folder in interaction with Mrs. Miller fundamentally shaped the leadership practice for writing teaching at Hillside. If Mrs. Miller had used a different tool, such as a series of model lessons on the writing process, then the leadership practice for writing at Hillside would have looked different. Leadership tools in interaction with leaders and followers define leadership practice.

We have uncovered many examples of this dynamic. Moreover, we have documented similarities as well as considerable differences in how the same tools (e.g., student test score data, district probation policies) are used in different schools in our study depending on the participation structures in these schools.

While tools and other aspects of the situation shape leadership activity, they are also shaped and reshaped through such activity. Organizational structures and tools are bundles of possibilities that shape leadership practice under certain circumstances, but that can also be reshaped by that practice. Tools and structures can, after all, be made and remade.

Finally, examining tools, material artifacts, organizational routines and structures illuminates how these aspects of the situation serve as boundary objects, embedded in boundary practices, enabling conversations among different communities of practice – school district, school leadership, and teaching practice among others.

Conclusion

Pressing on what a distributed perspective on leadership practice might entail, we explored how leadership activity is stretched over leaders, followers, and their situation. We argue that combined properties of a group of leaders and followers working to enact a particular task leads to leadership practice that is more than the sum of each individual's practice. Consequently, to understand the knowledge needed for leadership practice in these situations, one has to move beyond an analysis of individual knowledge and consider what these leaders know and do together. The interplay between the actions of multiple people is essential to understanding how leadership is

stretched over leaders and followers. We identified and elaborated on three ways in which leadership might be stretched over leaders – collaborated leadership, collective leadership, coordinated leadership – and considered how the interdependencies among leaders practices differ in each case. From this perspective, a multiplicative rather than an additive model seems most appropriate for understanding the interactions among two or more leaders in carrying out a particular leadership task. Our analyses also suggests that in attempting to understand school leadership as a distributed practice we need to also take into account how leadership might be stretched over the situation especially tools of various sorts.

Our distributed leadership perspective suggests that leadership activity at the level of the school, rather than at the level of an individual leader, is the appropriate unit for thinking about leadership and its improvement. Specifically, we need to analyze those key leadership practices in our school examining what functions these activities are designed to address and who takes responsibility for which activities. We can then begin to analyze the ways in which leadership practice for these activities is stretched over leaders, followers, and their situation – collaborated, collective, and coordinated. At another level, we can begin to examine how aspects of the situation – tools, material artifacts, organizational structures and routines – defined leadership practice identifying how different aspects of the situation enable or constrain leadership practice.

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i. The academic productivity measure uses Iowa Tests of Basic Skills (ITBS) scores to determine the academic gain for students spending the entire year at individual schools. This measure is used to determine the productivity of schools over time. We also used other academic productivity measures including level of academic press based on survey data from the Consortium for Chicago School Research. The academic press measure gauged the extent to which students felt that their teachers pushed them to reach high levels of academic performance.