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School leadership and management from a distributed perspective: A 2016 retrospective and prospective

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Abstract

Over the past twenty years distributed leadership has framed theoretical, empirical, and development work in education. In this article, we take stock of some work using a distributed perspective. We first discuss our motivations for developing this perspective and highlight some lessons learned from work in this area. Second, we make suggestions regarding fruitful directions for future research and practice-based work using a distributed perspective. We hope that this article serves as a useful contribution to the ongoing research and development work on school leadership and management from a distributed perspective.

Over the past twenty years an expanding body of theoretical, empirical, and development work has emerged under the rubric of 'distributed leadership'. Several books, journal special issues, and edited volumes have been devoted to this subject. In a recent analysis of journal citations (Wang and Bowers, 2016), *Distributed Leadership* (Spillane, 2006) was the sixth most cited book in the educational administration literature (just behind Paulo Friere's *Pedagogy of the Oppressed* [1970]).

Although distributed leadership has become part of the school leadership discourse, usages vary. Some work treats distributed leadership as synonymous with shared or democratic leadership (Mayrowetz, 2008). Others see it as a desirable model of leadership that a school system or school might adopt. Still others attempt to measure how distributed leadership (often framed as shared leadership) impacts organizational outcomes (Harris, 2009). Although such variability is inevitable and potentially generative, we need to be explicit about what we mean when we claim to use a distributed perspective. Otherwise we simply talk past one another even though we use similar words. Loose constructs contribute to fuzzy diagnostic work and a false sense of consensus among researchers and practitioners (Spillane, 2015).

Our work on a distributed perspective has focused on developing a framework for researchers studying school leadership and management and school leaders engaged in diagnostics and design work (Gronn, 2000; Spillane, 2006; Spillane et al., 2001, 2004; Spillane and Diamond (2007)).[1] For us, a distributed perspective is a conceptual framework for researchers studying, or practitioners and policy-makers diagnosing, school leadership and management. We focus on this usage here.[2]

In this article, we focus on a critical component of a distributed perspective – the practice of leading and managing teaching and learning in schools and school systems. We are committed to work that improves all students' learning opportunities – especially students who by virtue of race, class, gender, sexual orientation, or first language, have traditionally been disenfranchised by school systems. Our commitment reflects our own biographies and school experiences as African American (Diamond) and gay, first generation high school (Spillane).

Our article is organized as follows. First, looking retrospectively, we discuss our practical and intellectual motivations for developing a distributed perspective, and highlight some lessons learned from research using this perspective. Second, looking prospectively, we make suggestions regarding fruitful directions for research and practice-based work using a distributed perspective. Most research work, diagnostic instruments, and professional development modules mentioned here are freely available at www.distributedleadership.org.

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Retrospective

Origins and motivations

In developing a distributed perspective, we sought to build a conceptual framework for researching the practice of leading and managing focused on teaching and learning. We wanted a framework that captured the social nature of human practice because it is not what people 'do' that matters, but how they do so 'together' (Everett Hughes, cited in Becker, 1986: 187). We were unsatisfied with traditional approaches to studying school leadership, which tended to:

1. focus exclusively on people in leadership positions (e.g. head teachers)
2. emphasize the traits and characteristics of those people in leadership positions
3. less often study leadership exercised by people who did not hold traditional leadership positions (e.g. teacher leaders)
4. examine leadership with particular organizational contexts as a backdrop (e.g. contingency theory)
5. focus on leaders' thinking (cognitive perspectives) or how their thinking was influenced by educational organizations (institutional theory).

Collectively, previous work attended to the role of individuals, contexts, and cognition in leadership practice. However, it generally failed to link these core pieces together, and examine them in interaction, in practice. To develop a more integrated approach, we turned to work on distributed cognition, sociocultural activity theory, and micro and organizational sociology. These perspectives highlighted 'how thinking and action emerge through social interaction . . . in specific contexts using tools and resources that enable and/or constrain thinking and action' (Diamond, 2015). Further, we used the distributed metaphor to develop an integrated framework for studying leadership practice that accounted for individual(s), cognition, and context simultaneously. In doing this, we shifted the unit of analysis to leadership activity itself rather than focusing on leaders, their thinking and actions, or the leadership context in isolation. Our question became: how is leadership practice accomplished?

For us, leadership practice anchors a distributed perspective. Leadership practice – not the people leading or the context in which leadership activity occurs – is the focus of the analysis. A practice orientation focuses on how leadership actually gets done on the ground, what people actually do together (and with what resources), how they do it, and why they do it. A distributed perspective frames leadership practice as a product of the interactions of leaders, followers, and their situation, acknowledging that people can move in and out of leadership roles regardless of position (Spillane et al., 2001, 2004). Thus, attention to interactions, rather than fixating on individual actions, is essential.

Further, the situation, including the materials that facilitate people's interactions, the organizational structures that shape their interactions, and the cultural context in which they are embedded, are constitutive of leadership practice. Aspects of the situation are the medium for social interactions framing and focusing how people engage with each other. For us, taking a distributed perspective means examining leadership practice and how it is accomplished by people interacting with each other and their situation in schools, school systems, and communities. Of note, our framing allows for attention to aspects of the broader institutional sector (e.g. policy, social stratification, research) as these get pulled into micro interactions in the daily practice inside schools.

Three lessons from research using the distributed perspective

A growing body of empirical research draws on the distributed perspective. In this section, we highlight three general themes from this work. Specifically, we focus on how leadership practice is stretched over people, how school subject matter shapes leadership practice, and how processes of authority and legitimacy influence the link between the policy environment and instruction.

Lesson 1: Leadership practice is 'stretched over' people

Leadership is 'stretched over' people. We define leadership as 'activities tied to the core work of the organization that are designed by organizational members . . . or that are understood by organizational members as intended to influence their motivation, knowledge, affect, or practices' (Spillane, 2006: 11–12).' When we take leadership activity as the unit of analysis, we find multiple people participate in leading and managing. For example, a study of 120 US school districts found that between three and seven positional leaders typically carry out leadership activities (Camburn et al., 2003). Other work highlights that leadership responsibility extends to those with no formal leadership positions inside schools as well as people outside schools.

Recent work also highlights the prevalence of coperformance even in the work of the school principal. In one study of 42 principals in one US school district, they reported that they coperformed 47 percent of their administrative and instructional activities with at least one other person, and 37 percent of the time that other person was a classroom teacher with no formal leadership designation (Spillane et al., 2007). Therefore, the accomplishment of leadership activity is stretched over people, even when the school principal is involved.

Taking a distributed perspective is about more than acknowledging that *leadership* is distributed; it pushes us to interrogate *how* it is distributed. For instance, research suggests that leadership practice varies depending on the school type (public, private, charter, Catholic, etc.), school size (Portin et al., 2003), subject matter (Spillane, 2005), instructional dimension (Diamond, 2007, 2012), and the organizational positon of those who are leading. Teacher leaders, curriculum specialists, school-level administrators,

and district officials all tend to play somewhat distinct roles in carrying out leadership activities.

Although multiple people are involved in leadership, the distributed perspective highlights interdependencies across seemingly disparate activities by grounding the analysis in leadership practice. Building on work in sociology and organizational studies (Malone and Crowston, 1994; March and Simon, 1958; Thompson, 1967), research has examined interdependencies across people's action in carrying out leadership activities.

For example, Spillane et al. (2003a) identify three types of distribution: collaborated, collective, and coordinated. *Collaborated* distribution occurs when two or more people work together in the same time and place on a particular activity (e.g. facilitating a faculty meeting). Copracticing here is similar to basketball as players carefully watch one another, ready to interact by passing to teammates or working to set a teammate up to shoot. *Collective* distribution captures how practice is stretched over two or more people who work separately but interdependently (e.g. supervising classroom instruction). Copracticing here is more like cricket, with a batsman performing alone but their actions in interaction with that of the bowler generating the practice. The major difference with the cricket analogy is that in organizations individuals often copractice without being able to observe their 'coplayers' at all times. Finally, *coordinated* distribution refers to situations where interdependent tasks are coperformed in a particular sequence. The interdependency here is like a relay race. Each of these situations captures how leadership is stretched over people but in different ways (see Spillane, 2006).

Other work has outlined additional ways of framing how leadership is distributed. For instance, Peter Gronn (2003) identifies a three-stage process of distribution leading to institutionalized, coperformed practices focusing on the types of distribution and their origins. Whereas spontaneous collaboration captures impromptu interactions often intended to redress particular challenges, intuitive understanding denotes relations that develop over time among people as they come to trust one another, and the design or adaptation of organizational structures can also create opportunities for people to coperform (Gronn, 2003). Studying schools in the UK, MacBeath et al. (2004) identified six types of leadership distribution: formal, pragmatic, strategic, incremental, opportunistic, and cultural.

Lesson 2: The subject matters in leadership practice

Our distributed perspective emphasizes the link between leadership and teaching practice. We see teaching as a complex multifaceted activity involving several subjects (e.g. mathematics, science, and language arts) and aspects or dimensions (e.g. content, pedagogy, and grouping). Work taking a distributed perspective has examined relations between leadership practice and the practice of teaching. Some work shows, for example, that instructional systems (i.e. a shared, systematic approach to instruction) are critical to leadership for instruction because they offer school leaders opportunities to help teachers learn to

improve their instruction (Neumerski, 2014; Halverson, 2003). The principal, instructional coaches, and teacher leaders in this study had the kinds of knowledge needed to help teachers improve: knowledge of specific content, how to teach that content, and how to help teachers learn to improve.

Several studies document considerable variation in the practice of leadership in primary schools by school subject (Burch and Spillane, 2003; Hayton and Spillane, 2008). For example, with respect to followership, school leaders and teachers were more likely to seek out others for advice and information about instruction in English language arts than either mathematics or science. In one study of 14 US elementary schools, leaders and teachers sought out on average three to four staff members for advice about English language arts, two to three individuals in mathematics, and one to two individuals in science (Hopkins and Spillane, 2014).

Research also suggests that leadership arrangements in terms of formal positions and organizational routines differ depending on the school subject. Elementary schools are more likely to have a formal leader for English language arts than for either mathematics or science. Leadership for language arts in primary schools was also more widely dispersed, involving formal and informal leaders, than mathematics leadership practice, which was more centralized in a handful of school staff.

A complex mix of norms, cultural–cognitive beliefs, and regulations contribute to differences in leadership arrangements by school subject. An analysis of school administrators and teacher leaders' cognitive scripts, for example, found that they were more likely to think of expertise for language arts as residing with their school staff members whereas expertise for mathematics resided in experts beyond the schoolhouse (Burch and Spillane, 2003). At the same time, the norms and beliefs that guide teachers' interactions about instruction seem to favor talking about English language arts over mathematics (Hayton and Spillane, 2008; Spillane, 2005).

Formal school organizational arrangements also shape leadership practice. A recent study found that the presence of subject-specific school leadership positions shapes leadership practice arrangements. For instance, English language arts (ELA) facilitators are the most prominent advice seekers, providers, and brokers in their schools (Hopkins and Spillane, 2014). Likewise when two of the 14 schools in the study introduced the position of full-time mathematics coach, interaction patterns about mathematics in these two schools became more like those of ELA.

Lesson 3: Authority and legitimacy matter for distributed leadership practice

Grounded in rational choice/bureaucratic models of educational change, current US educational policies emphasize market forces (particularly accountability and choice) as key change mechanisms. This changing policy environment emphasizes tighter links among the various levels of the educational system and a reordering of the loosely coupled arrangement identified by institutional theorists.

Acknowledging a changing institutional environment, some scholars taking a distributed perspective have studied relations between policy, school leadership, and teaching practice.

Although some have argued that the distributed perspective undertheorizes power (Hartley, 2009: 147), avoids political questions (Flessa, 2009), and endorses the maintenance of administrative power (Lumby, 2013), the relationships of power and authority to leadership practice have been central to work using the distributed perspective (Diamond, 2013).[3] We have defined leadership using theories of authority and influence grounded in Weberian notions of legitimacy. As Diamond (2013: 90) writes:

> At the root of Weberian understanding of organizations are issues of power, authority, and legitimacy (Weber, 1968). For Weber, authority depends to some extent on the belief in the legitimacy of a leader's power by subordinates. As Weber (1968) writes, 'every genuine form of domination implies a minimum of voluntary compliance' (p. 212).

Because leadership practice is rooted in influence relations, we have examined the conditions under which teachers notice and heed leaders' directives, as well as how school leaders seek to convince teachers of the legitimacy of particular ideas about instruction. For example, using work on various forms of capital as a theoretical foundation (Bourdieu, 1986), Spillane et al. (2003b) argued that principals' cultural capital was more important than their positional authority for influencing teachers' responses to principals' requests.

A related line of work, using a microsociological approach to analyze interactions in the performance of organizational routines (e.g. faculty meetings) over several years, identifies the 'social tactics' that school leaders use as they negotiate with teachers about the meanings and merits of government-mandated teaching policies (Spillane and Anderson, in press[4]). Again, school leaders rely on more than formal positional authority, appealing to shared values and invoking a shared ingroup identity, among other things.

Other work explores how federal, state, and local government accountability policies influence relations among school leadership practice and classroom instruction (Diamond, 2012; Hallett, 2010). Using the constructs of coupling and recoupling, this research explores relations among policy, leadership practice, and instruction in the everyday work of schools. 'Coupling captures how organizations are made up of interdependent elements that are more or less responsive to, and more or less distinctive from, each other' (Spillane et al., 2011: 589). The term 'elements' refers to an array of components such as organizational actors, hierarchical levels in a school system, organizational subunits, and educational policy and teaching practice.

This work captures how conflicts emerge when administrators seek to impose tighter control over teachers' instructional practices (Hallett, 2007, 2010), how principals and teachers mediate relations between policy and practice (Spillane et al., 2002), how stratified institutional resources constrain and enable particular responses (Diamond and Spillane, 2004), how recoupling varies by instructional dimension (Diamond, 2012), and how school leaders use organizational routines as coupling mechanisms between policy, leadership, and teaching (Spillane et al., 2011).

Attending to the dynamic interplay between policymakers, school leaders, and teachers from the vantage point of school leadership practice, this work shows how macro policy discourses and texts (Ball, 1994) get pulled into and negotiated in everyday leadership practice. Moreover, it captures how the situation, including policies legislated far from the schoolhouse, are constitutive of leadership practice.

Selective development work

Conceptual tools and empirical findings are often lost in translation from research to policy and practice, and work on distributed leadership has not been immune. Still, there have been some relatively 'faithful' translations. Modules to support school leadership teams learning about taking a distributed perspective to diagnose and design work have been developed and have been used in the US and elsewhere (http://www.distributedleadership.org/materials.html).

The Annenberg Distributed Leadership Project (also discussed by Harris and DeFlaminis elsewhere in this issue), designed by John DeFlaminis and his colleagues at the University of Pennsylvania, puts a distributed leadership perspective into practice in an ambitious in-service professional development program for teams of school leaders. This effort includes ongoing support in the form of coaching for leadership teams (DeFlaminis and Abdul-Jabbar, 2016). This professional development program is anchored in the practice of leading and consistent with the distributed perspective as outlined above; moreover, it reflects the designers' deep appreciation for and extensive experience as practitioners of school and school system leadership. Further, the work has been subjected to rigorous evaluation and study (Supovitz and Riggan, 2012).

Some recent books are intended to engage school leaders in the actual work of diagnosis and design using a distributed framework and providing tools to engage in that work (McBeth, 2008; Spillane and Coldren, 2011). In addition, in our various research projects on system and school leadership we provide ongoing feedback to schools intended to engage leaders in diagnosis and design efforts (Pustejovsky et al., 2009). For instance, Diamond (drawing on Lewis and Diamond, 2015) has recently been engaged in several Midwest US school districts in professional development work that emphasizes using diagnosis and design work around organizational routines to create more equitable districts, schools, and classrooms.

Prospective

We developed a distributed perspective as a conceptual tool for research and diagnostic work to frame leadership practice. Fifteen years on and counting, it seems wise to think about future directions. Below, we identify three areas that,

in our opinion, merit attention for those taking a distributed perspective moving forward: the development of study operations, framing situation in terms of educational infrastructure, and studying power asymmetries in leadership practice.

Developing and refining study operations

Moving from a conceptual framework to empirical observation of a phenomenon requires the development of study operations. We need both a framework – conceptual, analytical, or practical – and study operations and measures for 'seeing' that phenomenon in the world.

Conceptual work needs to be accompanied by the development of study operations, measures, and research instrumentation as this will ultimately determine the contribution of research taking a distributed perspective. Fortunately, new operations, measures, and instruments consistent with the distributed perspective outlined above are being developed. With respect to research instruments, work involving the adaptation of standard Social Network Analysis (SNA) and practice logs have shown considerable promise. Using SNA approaches, we have designed, piloted, and validated instruments for identifying both formal and informal sources of leadership in schools and school systems (Pitts and Spillane, 2009; Pustejovsky and Spillane, 2009). Similarly, we have designed and piloted practice logs for collecting data on leadership and management in schools and used them with both administrators and teacher leaders (Camburn et al., 2010; Spillane and Zuberi, 2009). We have used these instruments successfully, together with qualitative interviews and observation, in several studies across numerous schools and school districts. Practitioners have also used data from these instruments for diagnostic and professional development purposes.

A related challenge involves operationalizing core constructs when using a distributed framework and examining different measures of these constructs (Spillane et al., 2009, 2010). Though work is still ongoing, using our SNA data we have developed several measures that capture variation between schools in leadership arrangements. Using SNA data, for example, we have developed a measure of formal–informal organizational congruence in order to gauge the extent to which 'designed' formal leadership arrangements (e.g. head teacher, math lead teacher) reflect 'the lived' organization as captured in the actual advice seeking interactions among staff (Spillane and Healey, 2010). Our measure taps into considerable variation between schools, with formally designated leaders figuring much more prominently in some schools than others. For example, whereas only 9 percent of the advice interactions about mathematics teaching among staff were directed toward formal school leaders in one school, 90 percent were in another school in the same local school system.

Others have developed the Comprehensive Assessment of Leadership for Learning (CALL) built on the distributed framework (Halverson et al., 2014). CALL provides formative feedback to school leaders, using a 360 survey format rooted in the distributed framework. More specifically, it attends to leadership as it is stretched across social actors in schools, focused on leadership practices associated with positive educational outcomes. It also asks about specific routines that are tied to instructional practices and provides formative feedback regarding potential areas of organizational improvement.

Conceptualizing situation as educational infrastructure

From a distributed perspective, the situation is both constitutive of, and constituted in, leadership practice. In other words, to borrow from Giddens, the situation is 'both the medium and the outcome' of practice.[5] Acknowledging that situation both defines and is (re)defined by everyday practice could include everything and thus define little. We have recently used the construct of educational infrastructure to bring better operational clarity to this idea (Hopkins and Spillane, 2015; Spillane, 2013; Spillane and Coldren, 2011).

Though in its infancy, 'educational infrastructure' – structures that are designed to support, maintain, and/or improve instructional quality – helps us sharpen our conceptualization of situation. Educational infrastructure enables (and often constrains) classroom instruction and the quality of teaching and learning. It includes standards that specify what students should learn and sometimes teaching approaches, curricular materials and textbooks, and formative and summative student assessments. These components guide teachers' classroom practice and also can enable its improvement by providing a common language for teacher interactions about teaching and common artifacts around which teachers and school leaders can negotiate the meaning of quality instruction. There are other less obvious components of the educational infrastructure, including organizational routines (e.g. grade level meetings, teacher hiring, lesson study), formal positions, tools of various sorts (e.g. teacher supervision rubrics), and a set of norms and cultural–cognitive beliefs that inform practice. Educational infrastructure is important because it can influence teaching practice and structure interactions among school staff about teaching and learning.

Several recent studies document how the educational infrastructure fundamentally shapes everyday practice related to teaching and its improvement (Hopkins and Spillane, 2015; Spillane et al., 2015). At the same time, this work documents how educational infrastructure is designed and redesigned to promote particular approaches to teaching and its improvement (Spillane et al., 2016).

Studying the implications of status asymmetries in leadership practice

We have argued that the distributed perspective provides theoretical leverage for studying authority, influence, and legitimacy. While some work shows how school leaders' race and gender shapes how they construct their roles (Loder and Spillane, 2006) and how the racial composition of schools is related to leadership and instructional practice

(Diamond, 2007; Diamond et al., 2004), future work should examine the role of social status in leadership practice (Diamond, 2013). Social interaction is at the core of the distributed perspective but we need to know more about how the characteristics of those who are interacting (e.g. race, class, gender, etc.) shape how they interact.

Recent work demonstrates that categories like race and gender are identified almost immediately when people come into contact and can activate widely held stereotypes about group members (Ridgeway, 2011). The fact that some groups (e.g. whites and men) are generally seen as more competent and intelligent than other groups (e.g. blacks and women),[6] influences how members of these categories interact with each other. Ridgeway has found that in social interaction, higher-status people are expected to contribute more, given more opportunities to speak, and have what they say valued more than people in lower-status groups.

Therefore, we can expect such dynamics to play out as leadership practice unfolds in schools. For example, how might collaborated distribution – say, the coperformance of leadership in a mathematics team meeting – be influenced by the gender and race of those leading? How might actors from privileged categories wield undue authority in decision-making? Attending to these issues using some of the methodological directions discussed above could help us gain new insights about leadership practice.

Conclusion

The distributed perspective has emerged as an important framework for thinking about educational practice. In this article, we have retrospectively outlined the motivation for developing our version of the distributed leadership framework, discussed the theoretical foundations we drew upon, and highlighted three sets of findings related to research using this perspective.

With this retrospective as a backdrop, we have looked ahead to discuss some ideas regarding the future direction of research and practice-based efforts, focusing on the development of study operations, the examination of educational infrastructure, and the implications of status asymmetries in leadership practice. We hope that our discussion makes a useful contribution to the ongoing research and development work on school leadership and management from a distributed perspective.

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Notes

1. Both leadership and management are important in studying and developing organizations. For readability purposes, however, we will only use 'leadership' after this point, but readers should keep in mind we mean both leadership and management.
2. For reviews of the multiple uses of distributed leadership see Diamond (2012) and Mayrowetz (2008).
3. For a more complete response to critiques regarding distributed leadership and power see Diamond (2013).
4. Spillane JP and Anderson L (in press) Negotiating policy meanings in school administrative practice: Practice, professionalism, and high stakes accountability in a shifting policy environment.
5. Giddens A (1979) *Central Problems in Social Theory*. London and Basingstoke: The Macmillan Press Ltd, 69.
6. Bobo L, Charles CZ, Krysan M and Simmons AD (2012) The real record on racial attitudes. In: Marsden PV (eds) *Social Trends in American Life: Findings from the General Social Survey*. Princeton: Princeton University Press, 38–83.

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