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## OP-ED

# Leading instruction: the distribution of leadership for instruction

JAMES P. SPILLANE, JOHN B. DIAMOND and  
LOYISO JITA

The past decade has witnessed extraordinary efforts to improve the quality of instruction in US classrooms, with raised expectations for students' academic work leading to increased expectations for teachers' instructional practice, expectations that imply substantial change for existing classroom instruction. To achieve these ambitious goals, national and state standards have been deployed, and many states have built new assessment systems aligned with these standards. These initiatives represent an extraordinary marshalling of incentives and resources in the cause of more intellectually rigorous pedagogy. Still, because of the magnitude of changes envisioned by reformers, most local educators will have to learn a great deal to grasp

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the substance of the reforms and their entailments for practice. For a majority of teachers, much of the learning essential for successful implementation of recent instructional reforms will have to be initiated and supported at the school level. It is difficult to imagine how state and district staff, given their limited resources and distance from classrooms, would ever be able to motivate and support this sort of teacher learning on their own.

We bring an analysis of school leadership to bear on two core challenges in the implementation of recent instructional reforms—the challenge of *going to scale* and the challenge of *going to substance*. ‘Going to scale’ essentially involves improving the dissemination of recent reforms beyond the handful of schools and classrooms that usually ‘take’ to instructional innovation. ‘Going to substance’ involves ensuring that reforms are enacted in ways consistent with their ‘spirit’. It involves ensuring that the changes local administrators and teachers undertake in response to reform involve a transformation of the core rather than the margins of practice. The school, and school leadership in particular, will be crucial in addressing the challenge of going to scale and going to substance. Schools that cultivate certain in-school conditions, including shared visions for instruction, norms of collaboration, and collective responsibility for students’ academic success, create incentives and opportunities for teachers to improve, and thereby aid the implementation process (Louis *et al.* 1995, Newman and Wehlage 1995). School leadership is recognized as important in promoting these conditions.

### The challenge

While there is an extensive literature about *what* school structures, programmes, and processes are necessary for instructional change, researchers know much less about *how* school leaders enact these changes. As a recent review of the literature concluded (Heck and Hallinger 1999), detailed accounts of how school leaders develop and maintain those conditions that enable instructional innovation are lacking, and this gap in the knowledge-base needs to be examined. One key challenge, then, involves making the ‘black box’ of school-leadership *practice* more transparent through in-depth investigations of how leaders enact those tasks thought critical for instructional innovation.

A second challenge involves moving beyond the pre-occupation with the work of those in formal leadership positions, typically the principal or director. Concentrating on measuring the effects of school principals, the leadership literature has contributed to the belief that the principal is a synonym for school leadership. The leadership literature, regardless of tradition, has focused mostly on individuals in formal school-leadership positions. For example, the leadership-traits approach defines leadership chiefly as a function of individual personality, ability, traits, and style—the focus on the venerable ‘great man’ theories of leadership drawn from 18th and 19th century historians continues unabated (Burns 1978). Even the cognitive tradition of leadership research, which represents a major

advance because of its attention to leaders' thinking, continues the tradition of seeing leadership chiefly in terms of individuals. As a result, researchers have often ignored other sources of leadership in schools, a problematic omission because others also play important roles in leading instruction (Heller and Firestone 1995). If leadership in schools involves a range of these actors, then the pre-occupation in the literature with the work of individual leaders has limitations.

While there is an expanding literature on teacher leadership, the work focuses chiefly on the role of teacher as leader, and usually does not attempt to understand simultaneously the work of other leaders such as the principal and assistant principal. The focus in the literature on the work of those occupying particular formal or informal roles rather than the composite of leadership practice in a school means that understandings of school-leadership practice are not comprehensive. We argue that, in order to understand *school* leadership, it is necessary not only to understand the practice of each of those who lead, but also to understand the relations among these leading practices.

### **Responding to the challenge: a distributed perspective on leadership**

If the challenges of scale and substance are to be solved at the school level, researchers need to reconsider their conceptions of school leadership. We argue for such a re-conceptualization in this paper by articulating a distributed perspective on leadership. The Distributed Leadership Project, a 4-year study of leadership practice, takes the school-leadership activity rather than the principal as the unit of analysis. Our central argument is this: school leadership is best understood as a distributed practice, *stretched over* the school's social and situational contexts. It is not simply a function of what a school principal, or any other individual leader—assistant principal, teacher leader—does.

#### *Multiple leaders leading*

We define school leadership as the identification, acquisition, allocation, coordination, and use of the social, material, and cultural resources necessary to establish the conditions for the possibility of innovation in teaching and learning. The distributed leadership framework incorporates the practice of those multiple individuals in a school who work at mobilizing and guiding school staff in the instructional innovation process. A distributed perspective presses us to identify and explore the enactment of the leadership tasks performed by these formal and informal leaders. Aside from the principal, other potential school leaders include, for example, assistant principals, curriculum specialists, and reading teachers. Furthermore, teachers, either individually or collectively, take on leadership responsibilities, including mentoring and supervizing peers and providing professional development.

Our on-going research in 13 Chicago elementary schools suggest that the work of leading instruction is distributed among multiple leaders. A teacher captured the situation:

I've changed tremendously in the way that I teach reading. . . . I had to pull things out of everywhere. I went to every teacher that I could possibly think of in this school that could help me. I got information from the Reading Recovery teachers, from the reading specialists (Interview, 5 November 1999).

For this teacher and others in our study, leadership for instruction involved multiple people, those in formal leadership positions and those who took on informal leadership responsibilities.

### *Material artifacts and leadership*

Few studies of school leadership pay sustained attention to the tools and material artifacts that are part and parcel of leading instruction. And, when tools and artifacts do figure in accounts of school leadership, they are typically treated as context, part of the backdrop for leaders' work. A cursory examination of the work of leadership, however, suggests that tools of various sorts—student test scores, teacher observation protocols, curricular frameworks—figure prominently in the work of school leaders. In our study, teachers' accounts of where they turn to for leadership underscore the importance of material artifacts:

What I do is look in the book. We have a book that lines up everything from language arts to math, so I know, depending on what I am doing how to match it up. I look at what they [students] need to know for the test. For example, the science was state goal 12, academic standard B, frameworks 4-7 and then I can go to the book and look that up. State goal 12 is having working knowledge of the fundamental concepts and principles of the life, physical and earth space sciences and their connections. Academic standard B is understanding the effects of organisms on the environment . . . (Interview, 1 June 2000).

I did a lot of reading on professional books. I was on the Internet all the time. I joined a first-grade newsletter on the Internet where people share different ideas and how to teach different things . . . (Interview, 16 March 1999).

Teachers identified material artifacts, including, but not limited to, state and district standards, student tests and test scores, textbooks and other printed materials, as well as the internet and other technology-based tools, as sources they turned to for guidance and direction in their teaching practice. When asked about their classroom instruction, teachers typically identified two-to-six sources—individuals and artifacts—they turned to for instructional leadership.

Similarly, our observations and interviews with school leaders illuminate how material artifacts and tools of various sorts are ubiquitous in the practice of leading instruction. School leaders' actions are mediated by an array of artifacts, including forms of various sorts, observation protocols,

meeting agendas, student tests and test scores, as well as a variety of tools for representing these scores, and curricular materials. From a distributed perspective, tools and materials artifacts are not simply a backdrop for leadership work, but a core element of that work. Hence, leadership for instruction is distributed not just among individuals, but also in material artifacts such as student tests, curriculum guides, and various sorts of protocols. Consequently, we are currently investigating how artifacts and tools are used in leading instruction in elementary schools.

Material artifacts and tools are not simply accessories or aides that leaders use to execute a particular task. Material artifacts and tools are constituting components of leadership practice—they help define that practice—and are not simply devices that allow individuals to execute a task in some *a priori* determined fashion. Tools influence leadership tasks: how leaders approach these tasks, and how they set about enacting them. Consider, for example, teacher evaluation. Many local school systems in the US mandate that school leaders use a particular teacher supervision form when undertaking summative evaluations of teaching practice. Understanding the practice of teacher evaluation involves exploring the mediational properties of these evaluation protocols; that is, how leaders use these forms to mediate their practice as evaluators of teaching. Consider for a moment two different evaluation protocols that illuminate the importance of the tool in understanding leadership practice. 'Protocol A' is a checklist of generic teaching processes of the sort identified by the 'process-product' research tradition, including items such as wait-time and teachers' use of praise. In contrast, 'protocol B' is subject-matter specific, including, for example, items on mathematics teaching such as 'how the classroom task represented doing mathematics', and 'how students were required to justify their mathematical ideas'. Teacher evaluation is constituted in the interaction of these observation protocols, the school principal, and teachers.

The observation forms are a defining element of the practice of observing teachers. The form or protocol is not simply an accessory or aide the leader uses to execute the evaluation task in an *a priori* manner. Furthermore, because evaluation tools can *represent* teaching and the nature of what it means to be competent in teaching in different ways (as our two examples illuminate), changing the protocol may contribute to changes in the practice of evaluating teaching. Considering the artifacts apart from practice may offer insights into the intentions of the artifact designers, but considering the artifacts as they enable and constrain leadership practice provides a lens into leadership as a distributed practice in schools.

This is a rather particular way of thinking about a situation, one that differs substantially from previous scholarship on leadership in which situation or context is treated chiefly as an independent variable that influences what leaders do and the impact of what they do. In our scheme, situation is a constituting element of leadership because it offers particulars—tools of various kinds, among other things—that afford and constrain leadership practice.

*Leadership practice as stretched over multiple leaders*

Our account to this point has focused on arguing that multiple individuals and material artifacts must be considered when documenting leadership in elementary schools. However, what are the relations among the leading practices of the multiple leaders that teachers in our ongoing study reported as important sources of leadership? For us, analysing leadership as a distributed practice involves more than developing models that capture the amount of leading in an organization or that factor in and map the leadership responsibilities and practices of all leaders in a school. Studying leadership as a distributed practice also involves exploring relations among leadership practices. Understanding how leaders in a school work together, as well as separately, to execute leadership functions and tasks is an important aspect of leadership distribution.

Previous work suggests that different leaders in a school can practice independently, in parallel, to execute a particular function or task—and duplicate each other's work (Heller and Firestone 1995). Or leaders might divide-up responsibility for the execution of different leadership tasks. However, based on our analyses, we want to consider another perspective on relations among leadership activities in a school: leadership *stretched over* the practice to two or more leaders. Each of these are plausible scenarios and not mutually exclusive of each other. One might find examples of all three in a school.

Regarding leadership distribution, we are exploring how leadership practice is *stretched over* multiple individuals and tools. We use 'stretched over' to highlight the fact that the distribution of leadership involves a consideration of how leadership tasks are co-enacted by two or more leaders working together or independently. We consider two examples below as a sort of 'existence proof' of what we mean by leadership practice being stretched over leaders. Specifically, we focus on the interdependencies among leaders' practices and leadership activities, using our data to identify and articulate two patterns that help illuminate what we mean by leadership being stretched over people.

We use the term *collective leading* to characterize an occasion when two or more leaders work together to co-enact a particular leadership task. We found many examples of this collective leading across the schools in our study, especially in situations in which principals, assistant principals, and teachers worked together to facilitate meetings and workshops. For example, at a professional development meeting at Parkside Elementary School,<sup>1</sup> the principal and two leaders collectively led a major segment of a 2-hour workshop on 'project-based' learning. The principal kept the meeting on task and on schedule, pressing the group to move from one agenda item to the next. Teacher 1 (Ms Johnson) led the discussion, and Teacher 2 (Mr Jones), by defining terms and interpreting ideas, clarified teachers' contributions and records the discussion. It was not simply that these leaders 'divided up' the practice of leading the meeting. Because Teacher 2 engaged in the clarification of the teachers' comments, Teacher 1 was able to continue the discussion while the group maintained some shared understanding. These three leaders worked together, playing distinct roles,

to co-construct the leading of the meeting: the facilitation of the meeting was stretched over the practices of these three leaders as they worked the meeting together, and the collective leading was dependent on the practice of each actor. The interdependency among these leaders revolved around the facilitation roles they assumed.

A similar sort of interdependency revolves around different knowledge or expertise. For example, in another of our schools, the principal and the language-arts co-ordinator met with individual teachers for what they called a 'strategy meeting'. Together, they discussed the teacher's instructional plans in mathematics and language arts for a block of the year. The principal was knowledgeable about her district's accountability measures concerning mathematics and literacy, and also drew on her background as a mathematics-science co-ordinator at her former school. The language-arts co-ordinator knew the literacy content and instructional strategies and was familiar with the reading series she recently ordered for the school. Using their respective knowledge, these leaders together executed this leadership task.

In the above examples, the collective leading depended on the interplay among multiple actors. There is a *reciprocal* relationship between the practice of these leaders, each requiring input from the others. In this 'reciprocal interdependency' (Malone *et al.* 1999), individuals play off one another, with the practice of person A contributing to and enabling the practice of person B, and vice versa. The collective leading of the meeting results from the interaction of these multiple leaders.

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, targeting either different elements of the instructional unit (students, materials, teacher) or the same element(s). For example, at Carson Elementary School, the school's administration uses standardized test scores and a breakdown of student performance in particular skill areas to focus instructional improvement efforts on specific student learning needs. This strategy involves several interdependent activities, each building on resources produced through the completion of prior activities. First, the tests must be administered to students, requiring scheduling and co-ordination. Ms Roland, the school counsellor, takes responsibility for the logistics of the testing process. Secondly, Ms Roland, Dr Johnson (the school principal), and Ms Brown (the assistant principal) analyse and interpret student test results. Ms Roland's knowledge and skill is in psychometrics, Dr Johnson understands the schools' overall instructional programme, and Ms Brown, a former elementary school teacher, is familiar with classroom practice. Together they work on interpreting the results. Thirdly, based on this analysis, instructional priorities are established, these priorities are disseminated to teachers, professional development is organized to support these priorities, and their implementation monitored throughout the school. This example suggests a sequential or flow interdependency in which leadership practice depends upon the completion of prior tasks (Malone *et al.* 1999), and it illuminates how leadership activities can depend upon resources generated from prior leadership activities.



Multiple, interdependent steps are required for the execution of the leadership task. Leadership practice is stretched over activities over time.

In the above scenarios, the group performing the task has cognitive properties that exceed those of any one member—‘the cognitive properties of groups are produced by an interaction between structures internal to individuals and structures external to individuals’ (Hutchins 1991: 306). We contend that the collective cognitive properties of a group of leaders working together to enact a particular task leads to the evolution of a leadership practice that is potentially 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. School leaders’ knowledge and expertise may be best explored at the collective level rather than exclusively at the individual leader level.

### *The subject matters*

A final observation: investigating instructional leadership has to be in fundamental ways about the activity being led—teaching and learning. That is a more complex task than the existing literature suggests, because instruction is a vast, complex, and multi-dimensional practice, including the questions teachers’ pose for students, the materials teachers’ use, the ways students’ interact with each other and the teacher, and classroom management. Furthermore, subject matter is an important context for teachers’ practice (Stodolsky 1988). However, researchers know relatively little about school leadership as a practice of leading instruction in particular school subjects or about relations between leadership practice and dimensions of instruction.

Our ongoing analyses suggest that the manner in which leadership practice is distributed varies among subject areas. Patterns of distribution vary depending on the subject matter—mathematics, science, and language arts. For example, the extent to which leadership was distributed in our sites tended to vary by school subject. While leadership for instruction was distributed across two or more leaders in all schools, there were fewer leaders for mathematics instruction compared to language-arts instruction, and fewer still for science instruction compared to the other two subjects. Leadership for literacy instruction was typically stretched over a principal and/or assistant principal, a language-arts co-ordinator or specialist, grade-level lead teachers, and a school’s external partners. Regarding mathematics instruction, leadership was typically spread over the principal and/or assistant principal (although not always), a lead mathematics teacher (who often taught full-time), and classroom teachers, while leadership for science was typically confined to two or more classroom teachers, few of whom had any official designations (e.g. science resource teacher or co-ordinator). While leadership was distributed across multiple leaders, the range of distribution was much greater in language arts than in both mathematics and science.

## Discussion

Our distributed view underscores that leadership activity is *distributed* in the interactive web of actors, artifacts, and situation. Prior research has established the importance of the leadership situation, arguing that what leaders do as well as the effects of what they do depend on followers (Murphy 1991). Our distributed perspective points to a different view of relations between situation and leadership practice. In contending that leadership is a situated practice, we mean that situation or context does not simply 'effect' what school leaders do, but that it is *constitutive* of leadership practice. In this scheme, situation is not viewed as an independent variable that influences leadership practice; instead, situation is best understood as a fundamental constituting component of leadership practice. Leadership practices are to varying degrees stretched over aspects of the situation. Because situations offer particulars—e.g. tools of various kinds, organizational structures—that are constitutive of leadership practice, as these particulars vary from one situation to the next, so too will leadership practice.

School leadership, consequently, is not simply a function of what an individual leader knows and does. Rather, it is constituted in the dynamic interaction of multiple leaders (and followers) and their situation around particular leadership tasks (Spillane *et al.* 2001). If leadership is a distributed practice, then investigations of leadership that focus exclusively on the work of individual positional leaders are unlikely to generate comprehensive understandings of the practice of school leadership. It is essential to go beyond a consideration of the roles, strategies, and traits of those individuals who occupy formal leadership positions to consider how the *practice* of leadership is stretched over leaders, followers, and the material and symbolic artifacts in the situation. The situation of leaders' practice—material artifacts, tools, etc.—is not simply an appendage, but rather a defining element of that practice. Leadership practice emerges in and through the interaction of leaders, followers, and situation in the execution of leadership tasks.

The distributed framework offers considerable leverage for studying leadership as a school-wide rather than an individual practice. Our frame suggests that leadership activity is the appropriate level of analysis in studying leadership practice. Focusing either exclusively on one or more formal leaders or on teacher leaders is unlikely to generate robust insights into school leadership. Furthermore, our distributed frame suggests that the tools leaders use should be central, not peripheral, in the study of leadership. Forms, curricular documents, tools for representing test-score data, and other material artifacts have rarely received systematic and in-depth attention in studies of leadership. We contend that systematic attention to these artifacts is essential in studying how leadership practice unfolds in schools.

Taking the distributed perspective seriously also suggests a need for more complex approaches to studying the expertise of leaders. From the distributed perspective we have developed here, expertise is not simply a function of a leader's thinking and mental schemata. Viewing skill and

expertise exclusively as a function of individual traits, styles, and schemata obscures how what leaders do is also a function of their situation. Leadership expertise extends beyond the mind of an individual leader. We are not suggesting that the knowledge and skill of an individual are unimportant—they clearly are. Studies of leadership expertise, therefore, must investigate how and the extent to which the expertise essential for the execution of particular leadership tasks are stretched over different leaders as well as the tools with which they work.

This distributed perspective is also essential as a practical matter, because educational leaders who cannot engage others in leading will not be very successful. They will not be able to spread and mobilize the expertise necessary for instructional improvement in their organizations, and, thus, are unlikely to be very effective. It is highly unlikely that a principal practising solo can improve instruction in his or her school. To improve educational leadership, therefore, it is essential to understand how the practice of leadership is stretched over the work of multiple leaders in an organization. Furthermore, educators may also need to rethink their approaches to education for leaders. The distributed perspective suggests that focusing exclusively or primarily on building the knowledge of an individual formal leader to improve school leadership may not be the best use of resources. If expertise is distributed, then the school rather than the individual leader may be the most appropriate unit for developing leadership expertise.

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### Notes

1. All names are pseudonyms.

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