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## Taking a Distributed Perspective to the School Principal's Workday

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Focusing on the school principal's day-to-day work, we examine who leads curriculum and instruction- and administration-related activities when the school principal is not leading but participating in the activity. We also explore the prevalence of coperformance of management and leadership activities in the school principal's workday. Looking across a range of administration-related and curriculum and instruction-related activities school principals participate in, we show that who takes responsibility for leading and managing the schoolhouse varies considerably from activity to activity and from one school to the next.

## INTRODUCTION

Recent work suggests that viewing school leadership from a distributed perspective has the potential to provide new and useful insight into how management and leadership unfolds in the daily life of schools. Writing about school leadership and management from a distributed perspective has identified numerous individuals—both positional and informal leaders—in the school across whom the work of leadership and management can

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be distributed (Camburn, Rowan, & Taylor, 2003; Heller & Firestone, 1995; Spillane, 2006). While there have been advances in articulating a distributed conceptual framework of school leadership (Gronn, 2000; Spillane, 2006), the empirical research base in this area is less developed. Most empirical work has involved small samples of schools and work on larger samples has tended to focus on the designed organization as reflected in formal leadership/management *positions* as distinct from informal leaders who might not appear on a formal organization chart.

In this article, we take a distributed perspective to examine how school principals in one midsized urban school district in the United States tackled the challenge of managing and leading their schools. We examine the distribution of leadership across people from the perspective of the school principal's workday. This is important in that some commentators propose or construe a distributed perspective on leadership as downplaying the school principal's role in managing and leading the schoolhouse. We do not subscribe to this view. As an analytical framework for studying the practice of leading and managing schools, a distributed perspective is not intended to negate or undermine the role of the school principal, but rather to extend our understanding of how leading and managing practice involves more than the actions of the school principal. We believe that school principals' workdays can provide an informative window through which to view school leadership and management practice. In the research reported here, we take a distributed perspective to investigate the workday of the school principal.

At the outset it is important to say something about what we mean by leadership and management—leading and managing. We turn here to the distinction Cuban draws between managing and leading, "maintaining what is rather than moving to what can be" (1988, p. xxi). Managing refers to efforts to maintain current arrangements whereas leading refers to moving to new arrangements. In this way leadership or management can refer to the administration, instructional, and political aspects of the school principal's work. (It is important to note, as Cuban points out, that leading or leadership can sometimes be about preserving the status quo in the face of pressure for change.) Hence, leading and managing or leadership and management can be used to refer to both administration-type activities (e.g., budgeting, personnel) or to instruction and curriculum-type activities (e.g., what is taught, how it is taught). The current organization of schools presses a "managerial imperative" (Cuban, 1988).

In this article, we refer to management and leadership or managing and leading activities throughout because we do not know if the activities school principals reported participating in were intended (or indeed understood) by organizational members to manage or maintain existing arrangements or to lead change in existing arrangements. Although leadership has consumed the bulk of the writing in education over the past decade or so, we believe that management is also critical; it is difficult to lead without managing. Based

on earlier work, we believe that while the distinction between leadership and management is helpful analytically, in the daily work of schools the same activities or organizational routines can involve both leadership and management. In practice, leading and managing happen in tandem and are often intertwined; pulling them apart is difficult. We do know, based on the principals' reports, whether the activity was administration-focused or instruction and curriculum-focused. We focus chiefly on those activities that school principals identified as having to do with administration and curriculum and instruction.

One additional distinction is important. When we refer to school principals or others leading an administration or curriculum and instruction activity we do *not* mean that this was an activity designed or understood by organizational members to bring about change in existing arrangements; it could have been about maintaining existing arrangements or changing them or both together. Instead, when we refer to the principal or someone else leading an activity we mean that they had responsibility (either alone or with someone else) for the performance or execution of the activity. In this way, we attempt to distinguish between leaders and followers in a particular situation.

We begin by describing the study on which this article is based, and then turn to an outline of the core elements of a distributed perspective. Turning our attention to findings, we examine which school actors perform leadership and management work when the school principal is present but not leading the work. Next, we analyze the prevalence of coperformance of leadership and management activities when the school principal is in a leadership role, identifying the coperformers by position. Comparing and contrasting different types of leadership/management activities, our results suggest that the distribution of responsibility for the work in which school principals participate varies considerably depending on the activity at hand. Our results indicate that the coperformance of leading and managing activities, as measured from the perspective of the school principal's practice, is commonplace in elementary, middle, and high schools in the district studied.

#### DATA AND METHODS

We draw on data from a mixed-method longitudinal study funded by the Institute for Education Sciences, designed to evaluate a leadership development program called the National Institute for School Leadership (NISL). The research was conducted in a midsized urban school district in the Southeastern United States that we will call Cloverville. This evaluation study involves a randomized treatment design in which half of Cloverville's school

Cloverville is a pseudonym, as are all other names used in the article to refer to participants, their schools, and their town.

principals were assigned to participate in NISL in the first year of the study and the other half were assigned to a control group.

#### Data Collection and Instruments

Baseline data for the study were collected from 52 school principals in the Spring of 2005. The sample included elementary, middle, high, and special schools. The mixed-methods research design included experience sampling method (ESM) logs, an end-of-day principal log (EOD), a principal questionnaire, a school staff questionnaire, observations of school principals and of the NISL treatment, in-depth interviews with school principals, and school principals' responses to open-ended scenarios.

This article reports on data collected in Spring 2005 from the ESM log. Experience sampling is a technique in which respondents complete an instrument at multiple randomly selected times during the day after being alerted by researchers. One of the strengths of ESM instruments is that they capture behavior and affect in real time as they occur in a natural setting. For the ESM log used for this study, principals were beeped at random intervals throughout the school day, alerting them to fill out a brief questionnaire (see the Appendix) programmed on a handheld computer (PDA). Among other things, principals reported on where they were and what they were working on. The principals reported which of the following four types of activities they were engaged in: administrative (i.e., managing school personnel), curriculum and instruction (i.e., observing classroom instruction), professional growth (i.e., participating in a professional development session), and fostering relationships (i.e., interacting socially). Table 1 displays the various types of activities in which principals reported participating. The principals also reported whether they were leading or coleading the activity and with whom they were co-leading-administrators, teacher leaders, specialists, regular classroom teachers, etc. If they were not leading the activity, school principals reported on who was leading. The random samples of principal practice yield representative estimates of the percentage of time the principals in the study spend leading alone and leading with co-leaders for the days of the study.

In this study principals were beeped approximately fifteen times a day for six consecutive days. Forty-two participating principals provided data for multiple school days. Overall, these 42 principals filled out the ESM log 66% of the time they were beeped.<sup>2</sup> According to the principals' self-reports in

<sup>&</sup>lt;sup>2</sup> Response rates were calculated for principals who participated for a majority (i.e., 4 days) of the sampling period. Nonresponses seem to have occurred mostly after the principals' school days had ended, when the principals were not participating in school-related activities (e.g., on their lunch breaks), or when they were in meetings where they presumably could not be interrupted. The percentage of beeps where there was no response is fairly constant at around 30% between the hours of 9 a.m. and 3 p.m. The earlier the hour before 9 a.m., or the later the hour after 3 p.m., the higher was the nonresponse rate. We are exploring the nonresponse issue in ongoing work.

**TABLE 1** Activities Principal was Engaged in According to ESM.

Activity	Number of Times	Percent of Times
All	2066	100.0
Administrative	1309	63.4
Managing budgets, resources	144	7.0
Managing personnel	324	15.7
Managing schedules	54	2.6
Managing campus	115	5.6
Managing students	423	20.5
Engaging in school improvement planning	66	3.2
Other	183	8.9
Instruction and Curriculum	458	22.2
Providing student instruction	21	1.0
Reviewing student classroom work	21	1.0
Reviewing lesson plans	7	0.3
Reviewing instructional materials, textbooks	23	1.1
Planning curricula	49	2.4
Discussing teaching practices, curricula	82	4.0
Observing classroom instruction	136	6.6
Modeling a lesson	13	0.6
Planning, implementing professional development	27	1.3
Reviewing data	33	1.6
Preparing, implementing standardized tests	19	0.9
Other	27	1.3
Professional Growth	120	5.8
Formal professional development session	65	3.1
Working with professional development materials	6	0.3
Receiving coaching, training	11	0.5
Studying effective practices	25	1.2
Other	13	0.6
Fostering Relationships	179	8.7
Interacting socially	85	4.1
Other	94	4.6

end-of-day (EOD) logs completed at the same time as the ESM log, 73% of their days were "typical days." We suspect that there are seasonal patterns in school principals' work practices and we are currently exploring these patterns using EOD data from our 52 school principals taken from different time points (e.g., fall, winter, spring) in the school year.

## Log Validity

Self-report data collection methods like the ESM, which reduce the amount of lag time between the performance and subsequent reporting of a behavior, have been found to be quite accurate. While much of the early empirical work on principal practice used structured observations, self-report annual surveys have gained increasing use in the field. However, studies have uncovered inaccuracies in annual survey reports of complex behaviors like principal practice, mainly because it is hard for people to remember such behaviors

after a long period of time has elapsed (Hilton, 1989; Lemmens, Knibbe, & Tan, 1988; Lemmens, Tan & Knibbe, 1992; Camburn & Han, 2006). When respondents provide a report of a behavior soon after they engage in it, their reports tend to be more accurate. Data collection instruments that are completed once per day or even more frequently have been shown to reduce reporting inaccuracy associated with recall difficulty. Among these kinds of data collection methods, the experience sampling method used for this study is thought to be one of the most accurate because it eliminates bias associated with retrospective recall (Schwartz & Stone, 1998; Stone & Shiffman, 1994).

The validity of ESM instruments has been established in studies spanning a variety of disciplines. For example, Robinson (1985) found that reports of activities from an ESM instrument correlated highly with data from concurrently conducted observations of those activities. ESM reports have been found to correlate well with a number of biological markers and other self-reports of behaviors, to reliably discriminate between key populations, and to reliably discriminate between different kinds of events in peoples' lives (Stone et al., 1998).

In this study, we validated principals' responses to the ESM instrument against observation data. During the spring of 2005, a researcher "shadowed" five principals by following them throughout the school day and keeping a narrative record of everything principals did. On the days on which they were shadowed, principals completed the ESM instrument when they were beeped at random times. When principals were beeped, the researcher independently filled out a portion of the same ESM questionnaire that the principal filled out. Table 2 shows the rates of agreement between principals and the observer on ESM items asking whether the principal is leading the activity, and with whom the principal is co-leading. As Table 2 illustrates, principals' and the observer's answers to the ESM instrument were very consistent with each other, with agreement rates ranging from 73% to 95%. While our validation data are limited to five elementary school principals, our data suggest that principals' ESM reports are quite accurate.

## ANALYTICAL FRAMEWORK: A DISTRIBUTED PERSPECTIVE

The distributed perspective offers an analytical framework for thinking about and analyzing school leadership and management (Spillane, 2006). It involves two aspects: the *leader-plus* and the *practice* aspects.

The leader-plus aspect recognizes that leading and managing schools can involve multiple individuals, not just those at the top of the organization or those with formal leadership designations. School leadership and management do not reside exclusively in the actions of the school principal nor in the actions of other formally designated leadership and management positions that are commonplace in schools. From a distributed

**TABLE 2** Percent Agreement between ESM and Shadower Data.

ESM Item	Number of Agreements <sup>1</sup>	Percent Agreement
Are you LEADING this activity? (yes/no)	50 / 53	94
Indicate who is CO-LEADING this activity with you		
Leading alone <sup>2</sup>	16 / 22	73
Student(s)	20 / 22	91
Teacher leader(s)	21 / 22	95
Classroom teacher(s)	19 / 22	86
Principal(s)	21 / 22	95
Subject area specialist	21 / 22	95
Other professional staff	18 / 22	82
Nonteaching staff	18 / 22	82
District staff	20 / 22	91
Parent(s)	$22 / 22^3$	100
Community member(s)	$22 / 22^3$	100
Other	20 / 22	91

<sup>&</sup>lt;sup>1</sup>Agreement occurred when the same answer was recorded in the ESM for both the principal and the observer (i.e. both recorded yes or both recorded no).

perspective, school leadership and management potentially involve more than the work of individuals in formal leadership/management positions principal, assistant principal, and specialists. Individuals who are not formally designated leaders may also take responsibility for organizational routines and provide leadership and management. If school administrators do not have a monopoly on leadership and management work, then it behooves us to examine who takes on this work. Prior work, using various research methodologies, examines the leader-plus aspect by analyzing individuals with formally designated leadership/management positions, who perform key organizational routines (e.g., faculty meetings, grade level meetings), who take responsibility for key organizational functions (e.g., building a vision, monitoring instruction), and who school staff turn to for guidance about different aspects of the core work of schooling (Camburn, Rowan, & Taylor, 2004; Heller & Firestone, 1995; Spillane, 2006). In this article we take a different approach, analyzing who has responsibility for those activities school principals engage in during their workday.

The practice aspect of the distributed framework foregrounds the day-to-day work of leadership and management. It refers to what is done in a particular *time* and *place* to act in response to what Bourdieu terms "the urgency of practice" (1981, p. 310). The urgency of practice limits reflection and the weighing of options, reinforcing the importance of individual dispositions to act in one way rather than another in particular situations, what Bourdieu terms "habitus" (1994). We exercise these dispositions to act in one

<sup>&</sup>lt;sup>2</sup>In relation to leading alone, all six disagreements concerned administrative matters. In five of the six cases, the principal attributed co-leadership to another person, while the shadower thought that the principal was leading alone.

<sup>&</sup>lt;sup>3</sup>Perfect agreement occurred for these items because neither principals nor the observer recorded parents or community members as co-leaders.

way or another in particular situations and these dispositions may not be at the level of conscious decisions (Bourdieu, 1994; Foucault, 1975). Habitus underscores that how we engage in the world is in part a function of our own past and the pasts of the groups and institutions to which we belong (see Parker, 2000). Something happens, people act, but only in relation to others. Hence, getting to *interactions* is critical.

A distributed perspective then frames practice as a product of the interactions of school leaders, followers, and their situations (Spillane, 2006). Practice takes shape at the intersection of these three elements. This latter point is especially important and one that is frequently glossed over in discussions and studies taking a distributed perspective. Rather than viewing leadership practice through a narrow psychological lens where it is equated chiefly with the actions of an individual and cast as the product of an individual's knowledge and skill, the distributed perspective draws attention to the interactions of people and their situations. Such an acknowledgement does not suggest that individual knowledge and actions are irrelevant to understanding practice; it suggests that they are insufficient in that they fail to adequately capture the nature and urgency of practice. The leadership practice aspect moves the focus from an exclusive concern with the actions of individual leaders to an analysis of the interactions among leaders, followers, and their situations. Our research approach reflects this conception of practice by capturing management and leadership in schools through principals' interactions with others in particular places and times during a school day.

In the results section below we begin with the leader-plus aspect of a distributed perspective by identifying who is performing or executing those activities that the school principal is participating in, but may or may not be responsible for the execution of; that is, whom does the school principal report is performing or executing the activity. We then turn our attention to the practice aspect: specifically, we examine those situations that involve the school principal coperforming or co-executing activities with one or more others. Our focus in this analysis is entirely on those who have responsibility for executing the activity—the leader(s) of the activity; we do not analyze the follower dimension in this article.

## RESULTS

In this section we take up two research questions motivated by the leaderplus and practice aspects of the distributed perspective:

- To what extent is responsibility for administration and curriculum spread across multiple individuals in schools?
- To what extent do administration- and curriculum and instruction-related activities involve coperforming with one or more other individuals?

In examining these questions, we provide evidence supporting three assertions about the practice of leading and managing schools. First, we show that the school principal's work in leading and managing schools involves multiple individuals—some with formally designated leadership positions, others lacking such positions. Second, we show that the coperformance of leading and managing activities, as measured from the perspective of the school principal's practice, is relatively commonplace, though it varies from one school to the next. Third, going beyond the distribution of responsibility, we examine how distributed practice unfolds in schools and show that the mix of school actors who are involved in the coperformance of different leadership and management activities varies from activity to activity. We remind the reader that our focus in this article comes exclusively from the vantage point of the school principal's workday.

## The Distribution of Responsibility for Leading and Managing

Various studies have shown that school administrators do not have a monopoly on leadership and management work (Camburn, Rowan, & Taylor, 2003; Heller & Firestone, 1995). Research that has focused on the designed organization as represented in formally designated leadership positions indicates that a range of school staff take responsibility for leadership and management work including principals, assistant principals, subject area specialists, mentor teachers, and other professional staff (e.g., family outreach personnel). A recent study of more than one hundred U.S. elementary schools estimated that the responsibility for leadership and management functions was typically distributed across three to seven formally designated leadership positions per elementary school (Camburn, Rowan, & Taylor, 2003).

By casting nets that go beyond the designed organization and focusing on the lived organization, some studies show that individuals with no formal leadership position—mostly classroom teachers—also take responsibility for school leadership and management (Heller & Firestone, 1995; Spillane 2006; Spillane, Diamond, & Jita, 2003). Teachers have been found to contribute to an array of leadership functions, including sustaining an instructional vision and informally monitoring program implementation (Firestone, 1989).

Building on these earlier findings, we examined the extent to which responsibility for those administration and curriculum and instruction related activities that the school principal participated in were distributed in Cloverville schools. Viewing leadership and management work related to curriculum and instruction type and administration type activities through the window of principals' workdays, we consider how responsibility for such work is distributed among people. We do not attempt to generalize to these school principals' work practices for an entire school year, as we anticipate seasonal variations in their work. We are currently exploring this issue using EOD log data. Still, we argue that the distribution of responsibility

captured by these six work days gives us a glimpse of who is involved in the work of leading and managing schools. Analyzing data from the ESM log completed by Cloverville's principals, we get a sense of how responsibility for leadership and management work is distributed across people in the day-to-day life of the school. Of course, relying only on those activities that the school principal participates in to examine who takes responsibility for leadership and management work obscures our view of such work that is carried out independently of the principal. Other staff members—including assistant principals, reform coaches, and others—lead activities independent of the principal, but we have not directly measured these efforts in our study. However, given the centrality of school principals' efforts, this approach should yield useful insight into the practice of leadership and management in Cloverville schools.

The ESM log asked principals whether or not they were leading the activity in which they were a participant. Perhaps our most direct piece of evidence of distributed leadership and management is the percentage of times principals reported that someone besides themselves was leading the activity. Table 3 shows the percent of times the principal was beeped that s/he reported s/he was leading—including leading alone versus co-leading and not leading. Principals reported that they were not leading on nearly one third (31 percent) of the occasions they were beeped (see Table 3). As we will discuss below, this differed depending on the activity, with school principals more likely to be leading administration-type activities and less likely to be leading instruction and curriculum-related activities (see Table 3). Hence, even when viewed exclusively from the window of principals' daily practice, other individuals emerge as important actors in the work of managing and leading the school. (The mere presence of the principal in an activity, even though the principal reported not leading the activity, may be construed by some as leading the activity in that the mere presence of the principal suggests to participants the importance of the activity).

When these school principals reported someone else was leading an administration or curriculum and instruction activity, the categories of individuals they identified as leaders included classroom teachers (with no formal leadership designation), other professional staff, subject area

TABLE 3	Principal	Time A	According	to ESM.
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Activity	Percent of Times Leading	Percent of Times Leading Alone	Percent of Times Co-Leading	Percent of Times Not Leading
All (N=2066)	68.6	35.6	33.0	31.4
Administration ( $N=1309$ )	77.8	42.9	34.8	22.2
Instruction & curriculum ( $N=458$ )	55.2	25.1	30.1	44.8
Fostering relationships ( $N=179$ )	65.9	25.1	40.8	34.1
Professional growth ( $N=120$ )	23.3	10.8	12.5	76.7

specialists, teacher leaders, and assistant principals, among others (see Table 4). Our analysis of how school principals in Cloverville spend their day suggests that the actual work of leading and managing the school involves multiple others. Even more striking is the finding that individuals with no formal leadership designation tend to lead over one quarter of all the activities that school principals reported participating in but not leading. We found that classroom teachers with no formal leadership designations led over 30% of the activities that Cloverville's principals were involved in over a six-day period. Thus, we argue that in addition to formal leaders, many staff members with no formal leadership/management designation are key players in the daily leadership and management of the school.

As we might expect, there was considerable variation between schools in Cloverville in the proportion of time the principal was leading the activity. Excluding outliers, some principals lead 44% of the activities they participated in while others lead 90% of the activities, with the large majority of principals leading between 60 and 74% of the time. In other words, while some principals reported that someone else was leading over 50% of the activities they participated in over the six-day period, others reported that someone else was leading only 10% of the time. Given that our data is entirely based on school principals' reports of how they spend their time, it is difficult to gauge if this variation reflects differences in the extent to which others are engaged in the actual practice of leading and managing the school or if school principals are selective with respect to those activities they participate in when someone else is leading the activity. It could be, for example, that some school principals are less likely to participate in activities where other formally designated leaders, such as the assistant principal, are

**TABLE 4** Who Lead Activities when Principal was not Leading<sup>1</sup>.

Leader	Percent of Times Leading
Classroom teacher	32.1
Other professional staff	25.4
Subject area specialist	16.7
Teacher leader	16.7
Assistant principal	14.3
Other	13.4
Non-teaching staff	12.1
Not specified	10.9
Student	4.6
District staff	4.4
Parent	3.8
Community member	1.2

<sup>&</sup>lt;sup>1</sup>The percentages listed in Table 4 indicate the percent of times the principal reported each type of person leading when the principal was engaged in administrative or instruction and curriculum related activities and was not leading. Principals could identify more than one type of leader for any one activity. Hence, the numbers in the table add up to more than 100%.

leading or managing, and in some cases this might constitute an effective use of the principal's time. Regardless, these data suggest that even when the practice of leading and managing the schools is analyzed exclusively from the perspective of the school principal's practice, other leaders emerge as important players.

## The Coperformance of Leadership and Management

We contend that understanding how responsibility for the performance of leadership and management is distributed across multiple individuals only provides one representation of the distribution of leadership in schools—the leader plus aspect. Beyond identifying the players across whom leadership and management is distributed, it is also important to understand the social arrangements for the distribution of leadership and management work. Based on their work in the Distributed Leadership Studies, Spillane and colleagues have identified three arrangements by which the work of leadership and management is distributed across people (Spillane, 2006; Spillane, Diamond, & Jita, 2003). Collaborated distribution characterizes practice that is stretched over the work of two or more leaders who work together in place and time to coperform the same leadership routine. Collective distribution characterizes practice that is stretched over the work of two or more leaders who coperform a leadership routine by working separately but interdependently. Coordinated distribution refers to situations where a leadership routine involves activities that have to be performed in a particular sequence. Our ESM log data on Cloverville school principals enables us to estimate the prevalence of the first type of arrangement—collaborated distribution—in the school principal's workday. (We have no data on situations involving collective or coordinated distribution.)

Using the school principals' ESM log data, we analyzed those situations where school principals reported coperforming a leadership or management task with one or more individuals in the same place and at the same time. In this way, the ESM log allows us to capture how frequently school principals engage in situations of collaborated distribution. (We draw a distinction here between individuals who were present and co-leading with the school principal and individuals who were present but not co-leading the activity. School principals reported on both types of individuals.) Again, it is important to remember that our data are based entirely on school principals' self-reports of their practice and only captures situations involving collaborated distribution. The inclusion of log data from other formally designated leaders would undoubtedly complicate the picture.

Even when school principals in Cloverville reported leading the activity in which they were participating, they were not always performing solo. Overall, school principals reported coperforming almost half (47%) of administrationand instruction and curriculum-related activities which they led. Principals

reported co-leading with just one other individual 63% of the time, while they reported co-leading with two or more individuals 37% of the time. When school principals in Cloverville reported they were co-leading an activity, they identified classroom teachers most frequently as their co-leaders (see Table 5). Specifically, school principals identified classroom teachers among their coleaders for over 30% of the activities involving coperformance. Indeed, actors with no formal leadership designations including classroom teachers, students, and parents, figure prominently in coperforming leadership and management activities with the school principal. For 44% of all co-leading situations, school principals identified at least one of the following as their coperformers: students, parents, and/or teachers. Again, this analysis underscores the theory that actors with no formal leadership designations are important in attempting to understand how the work of leadership and management is distributed over people in schools. Others identified by school principals as co-leaders included other professional staff, teacher leaders, and assistant principals (see Table 5).

As one might expect, the prevalence of the coperformance of leadership and management activities differed according to school. To begin with, the solo performance of leadership and management activities by the school principal was more prevalent in some schools than others. Some principals reported coperforming with at least one other actor over 60% of the time, while others reported coperforming fewer than 10% of these activities. Hence, overall figures for the Cloverville school principals obscure considerable variability between schools. There was also considerable variability between Cloverville principals with respect to whom they reported as coperformers. We will examine this in the next section when we consider how the

**TABLE 5** Principal's Co-Leaders<sup>1</sup>.

Co-leader	Percent of times leading
Classroom teacher	30.1
Other professional staff	24.2
Teacher leader	22.9
Assistant principal	20.9
Nonteaching staff	16.0
Student	14.3
Subject area specialist	10.9
Other	4.7
Parent	4.5
District staff	3.5
Community members	1.7

<sup>&</sup>lt;sup>1</sup>The percentages listed in Table 5 indicate the percent of times the principal reported each type of person co-leading with the principal when s/he was engaged in administrative or instruction and curriculum related activities and was co-leading. Principals could identify more than one type of co-leader for any one activity. Hence, the numbers in the table add up to more than 100%.

distribution of responsibility for leadership and management work differs by activity type.

## The Coperformance of Leadership and Management Activities by Activity Type

The evidence presented thus far indicates that leadership and management work in schools is distributed among individuals with formally designated leadership/management positions and individuals without such designations. Evidence from other research indicates that the set of school staff across whom leadership is distributed varies from activity to activity. For example, a number of studies have found that the parties across whom responsibility for leading and managing the school is distributed differs depending on the organizational function or leadership routine (Camburn, Rowan, & Taylor, 2003; Heller & Firestone, 1995; Spillane, 2006), and the subject matter (Spillane, 2006). The performance of some leadership and management routines (e.g., monitoring classroom instruction) tends to be distributed across fewer actors than other routines (e.g., providing professional development on language arts instruction) (Spillane, 2006).

We found that the manner in which the leadership and management work that the school principal participates in is distributed across people differs depending on the particular activity. First, the extent to which school principals coperformed an activity with someone else versus performing the activity on their own varied from one activity to the next. Second, the set of individuals who coperformed an activity with principals varied depending on the type of activity.

For leadership and management activities in which they participated, school principals were more likely to report leading those related to administration than leading those related to instruction and curriculum (see Table 3). Overall Cloverville school principals reported leading over three-quarters (78%) of all administration-related activities in which they participated. In contrast, principals reported leading just over half (55%) of instruction and curriculum-related activities. For those activities in which the principal participated, other leaders were more likely to be leading an instruction and curriculum-related activity than an administration-related activity. Among the instruction and curriculum activities principals did report leading, they generally did not provide student instruction but rather observed classroom instruction and discussed teaching practices and/or curricula. Our data also indicate that the degree to which responsibility for curriculum and instructionrelated activities involves other leaders varies much more from school to school than the degree to which responsibility for administration-related activities involves other leaders (Figure 1).

The distribution of responsibility for instruction and curriculum-related activities also differed depending on the school subject. School principals

were most likely to be leading instruction and curriculum activities that had to do with science (73%) and least likely to be leading those related to mathematics (39%) (see Table 6). Moreover, instruction and curriculum-related activities about writing or social studies were more likely to involve the principal leading alone than activities related to reading or mathematics. This evidence, though limited by the small sample size, suggests that situations that involved the principal coperforming differed depending on the school subject.

Examining situations in which the principal coperformed with different categories of others (e.g., assistant principal, teacher leader) by different types of leadership and management activities sheds light on the practice aspect. Figure 1 plots the percentage of time principals engage in coleadership with teacher leaders, classroom teachers, assistant principals, and other staff members, comparing administration-type activities with curriculum and instruction-type activities. We found that teacher leaders and classroom teachers are more likely than assistant principals and other professional

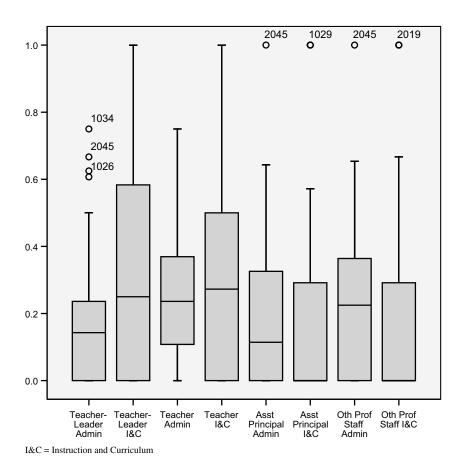


FIGURE 1 Variance in Principal's Co-Leaders by Activity Type.

Subject	Percent of Times Leading	Percent of Times Leading Alone	Leading Alone as Percent of Times Leading
Science $(N=15)$	73.3	33.3	45.5
Multiple subjects ( $N=132$ )	62.9	23.5	37.4
English/language arts $(N=34)$	61.8	38.2	61.9
Not subject specific $(N=58)$	60.3	20.7	34.3
Social studies $(N=24)$	58.3	45.8	78.6
Reading $(N=37)$	54.1	18.9	35.0
Special education $(N=40)$	47.5	27.5	57.9
Other subject $(N=42)$	45.2	26.2	57.9
Writing $(N=5)$	40.0	40.0	100.0
Math (N=66)	39.4	16.7	42.3

 $\textbf{TABLE 6} \ \ \text{Percent of Time Principal Leading and Leading Alone Instruction \& Curriculum Activities by Subject^1. }$ 

staff to coperform with principals on matters of curriculum or instruction. Moreover, teacher leaders and classroom teachers are more likely to engage in coperforming on curriculum and instruction matters than on administrative matters. There is considerably more variation between schools in the frequency with which principals coperform with teachers on curriculum and instruction-related activities than in the frequency with which principals coperform with teachers on administration-related activities.

The pattern of results for assistant principals differs from the pattern of results for teachers. Not surprisingly, our results indicate that principals and assistant principals do not regularly coperform activities on matters of curriculum and instruction. Instead, principals are more likely to engage in coperforming with assistant principals around administration issues.

The evidence from Cloverville suggests that the way in which leadership is distributed across people and the amount of variation between schools depends on the particular type of leadership and management activity in question. The results have intuitive appeal and suggest a sort of task specialization in the performance of leadership and management work. Principals are more likely to report coperforming with teachers in the area of curriculum and instruction than in administration. In contrast, excluding outliers, principals are more likely to report co-leading with assistant principals in the area of administration (18 %) than in the area of curriculum and instruction (12 %). Despite the general patterns we observed, we also saw substantial variation from one school to the next, particularly in the area of curriculum and instruction. This suggests that schools in Cloverville employ a wide range of approaches in involving school staff members, both formally designated leaders and individuals with no formal designations, in the work of leadership and management.

<sup>&</sup>lt;sup>1</sup>Number of observations does not sum to total reported in Table 3 due to missing observations. There were 453 observations where the principal recorded the subject area when engaged in instruction and curriculum activities.

#### DISCUSSION AND CONCLUSION

Taking a distributed perspective, we examined how the work of leading and managing the schoolhouse is distributed across people by focusing exclusively on the work of the school principal. While for some this may be the antithesis of taking a distributed perspective to studying school leadership and management practice, for us it is a natural approach. Extending our earlier theory-building work undertaken as part of the Distributed Leadership Study (Spillane, 2006), we analyzed data from Cloverville, a midsized Southeastern school district in the US, to explore whether and how leadership was distributed across people as explored from the vantage point of the school principal's actual practice. Our analyses centered on the lived organization as measured through the work practices of school principals.

Overall, our analyses support a number of hypotheses generated in prior research. The work of managing and leading the schoolhouse is distributed over multiple actors; some occupying formally designated leadership positions, others without such formal designations. Looking at the lived organization as captured by a log of the school principal's day, we found that the work of leading and managing schools was also distributed over actors with no formal leadership positions. Classroom teachers (with no formal leadership positions) figured prominently in taking responsibility for administration and curriculum and instruction related activities that school principals in Cloverville participated in during the six school days we studied. Other actors with no formal leadership positions, such as students, also figured (though less prominently). Along with the school principal, actors with formal leadership designations as well as actors with no formal leadership designations take responsibility for school leadership and management activities.

Examining school principals' practice more closely and looking at situations where school principals reported coperforming an activity with one or more others—situations involving collaborated distribution—we showed that coperformance was relatively commonplace in Cloverville schools. Overall, school principals coperformed almost half (47%) of the activities they reported having responsibility for, or a third (33%) of all work related activities over a six-day period. Again, both individuals with formal leadership/management designations and individuals without such designations figured prominently as coperformers with Cloverville's principals. Indeed, classroom teachers with no formal leadership/management positions figured more prominently than individuals with such designations.

The extent to which the work of leading and managing the schoolhouse was distributed across two or more actors, however, differed depending on the type of leadership and management activity (e.g., administration-related activities versus instruction and curriculum-related activities). While school principals reported taking responsibility for over three-quarters of

all administration type activities in which they participated, they reported taking responsibility for just over half of the instruction and curriculum activities. For instruction and curriculum-related activities in which the school principal was engaged, other leaders were more likely to have responsibility for the activity compared to administration-type activities. Overall the prominence of coperformance (as distinct from solo performance by the school principal) was roughly the same for administration-type activities as it was for instruction and curriculum-related activities (35% and 30%, respectively).

The extent to which the work of leading and managing the schoolhouse was distributed across people also differed depending on the school. There was considerable between-school variation in both the extent to which others had responsibility for the activities that principals were participating in and the extent to which principals were coperforming activities that they reported taking responsibility for. In summary, the distribution of responsibility for leading and managing differed from one school to the next.

Our analysis adds to a body of empirical research indicating that the work of leading and managing the schoolhouse is indeed distributed (Camburn, Rowan, & Taylor, 2003; Heller & Firestone, 1995; Spillane, 2006). In this study, this is demonstrated not only by the involvement of multiple formally designated leaders and informal leaders (leader plus aspect), but also by the prevalence of the principal coperforming (practice aspect) administration-related and curriculum- and instruction-related activities.

Our effort to take a distributed perspective to the principal's workday using ESM logs has limitations. First, our ESM log sheds no light on whether the activities the school principal engaged in were designed to lead change or maintain the status quo. Second, with respect to the practice aspect our analysis only manages to identify situations involving collaborated distribution, telling us nothing about situations involving collective or coordinated distribution. Third, with respect to collaborated distribution our analysis in this article simply tells us about its prominence in the principal's workday and who the coperformers are, but tells us nothing about the nature of these interactions. For example, we are unable to examine from these data the roles that different coperformers play in situations involving collaborated distribution—how they play off one another in minute-by-minute interactions. Getting at these minute-by-minute interactions requires more intense ethnographic approaches using analytical approaches such as discourse analysis.

While the ESM log data has limitations, it also has strengths. Specifically, it enables us to capture practice when it occurs with others in a particular place and time. We are able to sample practice as it unfolds in the school principal's day. In this way, it more authentically represents the phenomenon as we define it compared to annual or seasonal survey methods that rely heavily on recall. Moreover, we can do this across larger populations of schools and days than is typically possible with more labor-intensive ethnographic

and shadowing techniques. In this way, we can begin to identify patterns in practice that may be associated with macro structures such as school type, student population, and school principal characteristics such as gender and career stage. These sorts of analyses can in turn inform micro-analyses of particular instances of practice. Indeed, we believe that combining different approaches is essential if we are to generate robust empirical knowledge about the practice of leading and managing.

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## **APPENDIX**

**Experience Sampling Form** 

•	1 0		
1. Are	you engaging in a SCHOOL	-RELATED activity?	
	Yes		
	No (terminates questionnaire	)	
	Ising the scale below, indiceel.	ate how TIRED or ENERGE	TIC you
Tired		Energetic	
2 b) U	Ising the scale below, indic you feel.	C	OCUSED
Distrac	eted	Focused	
	sing the scale below, indicateel.	e how IRRITABLE or CHEER	FUL you
Irritabl	e	 Cheerful	
	Using the scale below, indicate you feel.	cate how DETACHED or IN	VOLVED
——— Detach	ned	 Involved	
	Using the scale below, indiceel.	cate how BORED or EXCII	ED you
Bored		Excited	
3. WH	ERE are you?		
	My Office		
	Main Office		
	Classroom		
	Conference Room		
	Hallway		
	Other On Site Location		

	Ш	District Office
		Other Off Site Location
4.	WH	AT are you doing? (select one)
		ADMINISTRATION
		Manage BUDGET, RESOURCES
		Manage PERSONNEL
		Manage SCHEDULES
		Manage CAMPUS
		Manage STUDENTS
		SCHOOL IMPROVEMENT PLAN
		Other
	INS	STRUCTION and CURRICULUM
		Provide STUDENT INSTRUCTION
		Review STUDENT CLASSROOM WORK
		Review LESSON PLANS
		Review INSTRUCTION MATERIALS
		Plan CURRICULA
		Discuss TEACHING/CURRICULA
		Observe CLASSROOM INSTRUCT
		Model a LESSON
		Plan/Implement PROF DEVEL
		Review DATA
		STANDARDIZED TESTING
		Other
If	you	selected INSTRUCTION and CURRICULUM, what is your
PR	IMA	<b>RY intention?</b> (select one)
		Increase KNOWLEDGE of TEACH
		Monitor CURRICULA IMPLEMENT
		MOUNTOI CORRICULA IMPLEMENT
		Monitor INSTRUCTION PRACTICE
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS
	_	Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS Receiving COACHING/TRAINING
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS Receiving COACHING/TRAINING Studying EFFECTIVE PRACTICES
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS Receiving COACHING/TRAINING Studying EFFECTIVE PRACTICES Other
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS Receiving COACHING/TRAINING Studying EFFECTIVE PRACTICES Other STERING RELATIONSHIPS
		Monitor INSTRUCTION PRACTICE Devel/Commun SCHOOL GOALS Motivate TEACHERS/STUDENTS Develop TEACHER'S CAPACITY Develop INSTRUCTIONAL POLICY Redesign TEACHING/LEARNING Other WN PROFESSIONAL GROWTH Formal PROF DEVEL SESSION Work w/ PROF DEVEL MATERIALS Receiving COACHING/TRAINING Studying EFFECTIVE PRACTICES Other

5.	Are	you LEADING this activity?
		Yes
		No
If ·	ves.	indicate who is CO-LEADING this activity with you. (select all
	it ap	
		Working Alone
		Student(s)
		Teacher Leader(s)
		Regular Classroom Teacher(s)
		Principal(s)
		Subject Area Specialist
		Other Professional Staff
		Non-Teaching Staff
		District Staff
		Parent(s)
		Community Members
		Other
Tf ·	no i	indicate who is LEADING this activity. (select all that apply)
11		
		Teacher Leader(s)
		Regular Classroom Teacher(s)
		Principal(s)
		Subject Area Specialist
		Other Professional Staff
		Non-Teaching Staff
		District Staff
		Parent(s)
		Community Members
		Other
6.		o is the INTENDED AUDIENCE for this task? (select all that
	app	
		No One
		Student(s)
		Teacher Leader(s)
		Regular Classroom Teacher(s)
		Principal(s)
		Subject Area Specialist
		Other Professional Staff
		Non-Teaching Staff
		District Staff
		Parent(s)
		Community Members
		Other

7. `	Wha	at SUBJECT is this for? (select one)
		Not Subject Specific
		Multiple Subjects
		Special Education
		Math
		English/Language Arts
		Reading
		Writing
		Science
		Social Studies
		Other Subject
<b>8.</b> ]	OH	W are you doing this? (select one)
		Face-to-Face Interaction
		One on one
		2 to 5 people
		6 to 10 people
		11 to 50 people
		More than 50 people
		Paperwork or Books
		Phone
		Looking or Observing
		Electronic Media
		Other
9.	Wh	at is the DURATION of this activity from start to anticipated
	fin	ish?
		Less than 1 minute
		1 to 15 minutes
		15 to 30 minutes
		30 to 45 minutes
		45 minutes to 1 hour
		More than 1 hour
10.	<b>O</b>	n the scale below, indicate how CONFIDENT you feel in
	pe	erforming this task.
No	t	Very

Questionnaire completed. Thank you.