Instructional leadership is central to school improvement. The tasks of organizing, coordinating, monitoring, and supporting teachers in their efforts to provide high-quality learning opportunities for students are essential to building a strong instructional program that reaches every classroom. Historically, however, instructional leadership has taken a backseat to managerial and political activities. Larry Cuban, in his book The Managerial Imperative and the Practice of Leadership in Schools, argues that education leaders are caught in a crucible of managerial, political, and instructional demands and that instructional attention invariably loses out (Cuban, 1988). In the hectic environments of schools, with the array of demands on leaders, principals and other leaders are generally viewed as unprepared to lead instructional improvement efforts (Levine, 2005).

More recently, the standards and accountability movements have spurred unprecedented attention on instructional improvement in schools as the central means to enhance teaching and improve student learning outcomes (Elmore, 2000). The ensuing demand for more and better instructional leadership has produced a dizzying array of exhortations for principals and other school leaders. Principals are being asked to observe classes, evaluate lessons, do school walk-throughs, check teacher lesson plans, plan and deliver professional development to teachers, scrutinize common curriculum-unit plans, and go over teacher interim assessments (Marshall, 2006). This increased focus on instructional leadership raises two questions. First, just what is “instructional leadership”? Second, what decisions should principals make in their efforts to provide more and better instructional leadership?

In this paper, we use data collected from a midsized urban school district in the Southeastern United States to describe how principals practice instructional leadership and the extent to which their efforts are likely to leverage change in teachers’ classroom practices. Following this introduction, we briefly review the literature on instructional leadership to set the context for our investigation. We then introduce a framework derived from the literature on effectively introducing change. Within this framework, we define high-leverage instructional leadership as acts done by principals to encourage teachers to examine their own instructional practice in order to improve the effectiveness of their practice. Next, we describe the district, the data, and the analytical approach we
used to examine leadership practice in our dataset. We then detail the results of our investigation. In the final section, we discuss our results both in relation to the prior literature and their implications for instructional leadership practice.

**Literature on Instructional Leadership**

The literature on instructional leadership in schools can be divided into three strains: the theory behind instructional leadership activity, research on what instructionally oriented leaders do, and investigations of the effects of leadership efforts on teacher and student outcomes. The first subset of the literature on instructional leadership is conceptual. It consists of a number of strands of thought that lay the groundwork for, and importance of, leadership in support of instruction. This body of work includes attempts to conceptualize the leader’s role in supporting instructional improvement as a primary task of the organization. Much of this literature reflects efforts to distinguish between different leadership philosophies, such as transformational leadership (Burns, 1978; Bass, 1985), charismatic leadership (House & Shamir, 1993), transactional leadership (Bass, 1985), servant leadership (Graham, 1991) and, more recently, distributed leadership (Spillane, 2006; Gronn, 1996). This literature has a number of theoretical forebears that describe how leaders might encourage change in others, including the literature on charisma (Weber, 1978), influence (French & Raven, 1959; Hunt, 1991), and symbolic meaning (Bolman & Deal, 1994; Schein, 1992).

The second component of the literature on instructional leadership articulates what the practice of instructional leadership looks like in schools. Most of this work places different levels of emphasis on one or more of three different aspects of instructional leadership: creating a learning ethos (mission, vision) for the school; managing or developing the instructional program for the school; and providing direct, hands-on support for teachers’ instructional practice. Some work emphasizes the importance of fostering a learning ethos. For example, Goldring and Pasternak (1994) studied principals’ activities and found that the principals’ role in framing school goals, establishing a clear mission, and gaining staff consensus were strong predictors of school outcomes. Similarly, Hallinger, Bickman, and Davis (1996) identified establishing a clear school mission as a key activity of instructional leadership.

Other work places more emphasis on the direct support role of principals. Fink and Resnick (2001) described the program in District 2 in New York that established nested learning communities in which teachers learned from principals, professional developers and one another in their school. Heck, Larson, and Marcoulides (1990) examined principal supervision and support of teachers. They found that higher performing elementary and high school principals spent more time directly supervising and supporting teachers, working collaboratively with teachers to coordinate their schools’ instructional programs and solve instructional problems, and supporting staff development opportunities. Blase and Blase (1989) took a different tack by asking teachers to identify and describe the characteristics of principals who enhanced their classroom instruction. Two major themes of effective principal leadership emerged from
their data: talking with teachers to promote teacher reflection and promoting professional growth. Notably, effective leadership processes occurred in the *interactions* between teachers and leaders around a variety of tasks. That is, what kind of task the principal chose to do proved less important than how the principal interacted with a teacher while doing it.

A final set of work that describes the practice of instructional leadership argues for the importance of both creating a learning ethos and providing more hands-on support for instruction. Hallinger and Murphy (1987) contended that instructional leadership focused on defining the school mission through a clear vision of what the school is trying to accomplish; managing the instructional program by working with the staff in areas specifically related to the evaluation, development, and implementation of curriculum and instruction; and promoting the school learning climate. Leithwood, Jantzi, Silins, and Dart (1993) investigated how principals developed an instructional emphasis in schools. They found that principals who focused on developing a school vision, setting group goals, holding high expectations, and providing individual support for teachers positively influenced school culture and climate. Supovitz and Poglinco (2001) examined the instructional leadership practices of urban school principals implementing a Comprehensive School Reform model. They found that instructional leaders organized their schools around an emphasis on instructional improvement supported by a distinct vision of instructional quality; cultivated a community of instructional practice in their schools by creating a safe and collaborative environment for teachers to engage in and deepen their work; and reorganized their own professional lives, time and priorities to support instructional improvement. In their synthesis of the literature, Leithwood, Seashore Louis, Anderson, and Wahlstrom, (2004) cite specific leadership practices that are common in the literature. These include identifying and articulating a vision, fostering the acceptance of group goals and creating high performance expectations, monitoring organizational performance, promoting effective communication throughout the organization, and the fostering of shared organizational purposes.

In addition to the conceptual and descriptive strains, the third strain of literature on instructional leadership includes attempts to empirically link instructional leadership practice to teacher and/or student outcomes. There have been several fairly comprehensive syntheses of the literature on leadership effects on school and student outcomes. Two meta-analyses in particular have thoroughly summarized the array of studies on the subject. Hallinger and Heck (1997) examined 43 studies conducted between 1980 and 1995 that examined evidence of the relationship between principal leadership and student achievement. They organized studies into three categories: those examining direct effects of leadership practice on student outcomes; mediated effects studies, in which principal leadership was mediated by other people, events, or organizational factors; and reciprocal effect studies, in which the relationships between leadership efforts and school and environmental factors were interactive. The authors saw little evidence of direct effects, with most evidence pointing to indirect effects, and concluded that principals have a measurable but indirect effect on school effectiveness and student achievement. Leithwood, Seashore Louis, Anderson, and Wahlstrom (2004) took a more holistic tack and conducted a wide-ranging analysis of educational leadership
and concluded that leadership “is second only to teaching among school-related factors in its impact on student learning” (p. 5).

**Framework for the Process of Leadership**

While the literature on instructional leadership is helpful to understanding the emphasis of contours for instructional improvement, it leaves unaddressed the question of exactly what is the process by which leaders bring about change in teachers’ instructional practice. To fruitfully examine the process of effective instructional leadership, one needs a theory of how principals might bring about constructive change in teachers’ practices. Changing one’s current practice implies that one comes to understand new ways of doing things that are potentially better than current methods. This requires a process by which new techniques are introduced and teachers are encouraged to be receptive to new ways of doing things. We see instructional leadership as a potential catalyst for this process. This may or may not mean that the instructional leader is the direct provider of new information, as the instructional leader may be providing opportunities for teachers to receive new information. Thus, either directly or indirectly, the instructional leader spurs this process. Therefore, we define one central aspect of instructional leadership as the provision of feedback regarding instructional practice that is likely to lead to teachers’ adjusting their practice in some constructive way. Providing constructive feedback requires principals to develop the means of identifying what aspects of a teacher’s practice needs improvement and providing useful feedback on those aspects in a manner that makes acting on the feedback attractive to the recipient, increasing the likelihood that the teacher will reflect on and make meaningful changes to her practice.

To inform our thinking about the process of instructional change, we reviewed a range of literature on strategic decision-making, effective performance feedback, and psychological support of change. Together, this literature provided the foundation for our own conceptual model of effective leadership for instructional improvement. The first set of literature that informed our model examines the process by which leaders in organizations make decisions. March and Simon (1958) first posited the rational decision-making model, by which actors enter decisions with known objectives, systematically search for the range of options, assess the consequences of these options, and choose the optimal alternative. Daft and Weick (1984) introduced a framework to conceptualize how organizations interpret and act upon external information and enact continuous improvement. Edward Demings developed the plan-do-study-act (PSDA) cycle as a method of continuous organizational improvement (Thompson and Koronacki, 2001). Similarly, in education, Preskill and Torres (1999) developed a model for ongoing inquiry for continuous improvement of teaching and learning.

Subsequent work has identified the shortcomings of the rational inquiry model in practice. Cyert and March (1963) presented theory and case studies that suggested that goals can be inconsistent across people and time. Other authors have pointed out the many challenges in applying this type of continuous improvement model. March and Olson (1975), for example, identified many of the ambiguities to cycles of continuous learning. Allison (1971) showed how standard operating procedures of organizations
dramatically limited the consideration of options and compromised the range of choices. Janis (1982) examined governmental decisions and concluded that “groupthink” often compromised the decision-making process. Argyris and Schon (1978) introduced the notion that leaders’ desire to retain power and authority and avoid failure resulted in lost opportunities for substantive improvement. Taken together, these two sets of work argue that systematic improvement comes through the intentional and iterative process of collecting appropriate information, making meaning of it, and taking constructive action.

The second set of literature that informed our thinking was research on performance feedback. Several comprehensive literature reviews of research of feedback in classrooms have identified some of the factors that determine make feedback effective. These factors include the frequency of feedback, the type of feedback given, the level of detail provided in feedback, and the way that feedback is delivered (Black & Wiliam, 1998; Crooks, 1988; Natriello, 1987). A meta-analysis by Kluger and DeNisi (1996) further stressed that feedback does not indiscriminately improve performance; rather, feedback that is focused on the task and away from the self enhances the likelihood of effective feedback. From this literature, we take the idea that both the content and delivery of feedback are important factors in determining its effectiveness.

The third set of literature that we used to inform our conceptual model focused more on the way that feedback should be provided in order to foster change in others. Evans (1996) viewed the change process as a remolding of our psychological impressions of our place in the world. He viewed instructional change in schools as an implicit critique of teachers’ current teaching strategies, and suggested that the fostering of change involved unfreezing people from their initial state of resistance and building new commitment and competence in the desired practice. Hall and Hord (1987) viewed successful change as a process of understanding and eventual acceptance. They developed a framework that described the process of how people move from unawareness to questioning to engagement to collaboration. Spillane, Reiser, and Reimer (2002) presented the change process as involving the way that individuals interpreted and made sense of change as they filtered new ideas through existing cognitive structures (attitudes, beliefs, and knowledge).

Together, these different strands of research suggest a model for instructional leadership to support change in instructional practice. The framework we developed (shown in Figure 1) consists of three steps: collecting information about current instructional practice; synthesizing that information to decide both how and in what manner to support improvement; and providing high-leverage feedback in support of instructional improvement. By high-leverage feedback we mean carefully chosen feedback that is delivered in a way that makes recipients more likely to be responsive to change. We apply the feedback component of this framework to our analysis of how principals enact high-leverage instructional leadership. We thus define high-leverage instructional leadership to mean evidence-based feedback given by principals that induces teachers to examine their instruction in order to improve the effectiveness of their practice.
Data Sources

The data for this research come from a study of principal leadership in a midsized urban district located in the Southeastern United States. The school district has 51 schools, including 30 elementary schools, 11 middle schools, 8 high schools, and 3 alternative/special education schools. The fact that all the principals in this study come from one district holds the district context and district level policy context constant.

The data were collected as part of a multifaceted evaluation of a principal leadership training program that began in the district in the summer of 2005. All principals in the district were provided with financial incentives to participate in each component of the study.

From that study, two particular data sources were utilized for our research. Both sets of data were collected in January 2006. First, principals were asked to complete a daily web-based log at the end of each day for a period of five days. The Web-based log consisted of a daily calendar that asked principals to describe how they distributed their time across a set of school related activities, including building operations, finance, community or parent relations, school district functions, student affairs, planning/setting goals, instructional leadership, and professional growth. On the Web-based log, instructional leadership was defined as monitoring or observing instruction, school restructuring or reform, supporting teachers’ professional development, analyzing student data or student work, modeling instructional practices, or teaching a class. For instructionally related activities, principals were asked more in-depth questions about the type of instructional leadership to which they were referring.

The second data source consisted of day-long shadowing of a sample of 15 principals completed during the same period that the principals were completing the web log. The sample was chosen using prior web-log data to capture a range of principals with variable attention to instructional leadership, thus increasing the likelihood that the subsample of shadowed principals would be representative of the district as a whole. One purpose of the shadowing activities was to validate the web log (Camburn, Spillane, & Sebastian, 2006). Another purpose was to collect more extensive information about what principals were doing when they logged specific activities. During these full-day shadowing observations, CPRE researchers documented and described the principals’ activities. At the end of the day, the researcher interviewed the principals about their thinking during key activities conducted during the day. In these cognitive interviews, the researcher probed the principals’ thinking about particular events that occurred during the day to gain insight into what the principal was thinking and his/her motives for specific actions.
While some of the questions in the interview allowed principals to choose the activity they discussed in depth, at least one of the activities discussed was an instructionally related interaction.

Sample and Response Rates

Fifty-one schools participated in the study during the January, 2006 data collection. The principals of 43 (84%) of these schools completed all or part of the web-log data collection. Of the 43 participating principals, 39 completed the web log all five days, while one completed the web log on 4 of the 5 days, one completed the log on 3 of the 5 days, and 2 completed the log on only 1 of the 5 days. Of the principals selected for shadowing, all agreed to participate.

Analytical Approach

Our analysis of the data involved analyses of both the web log and shadowing data. With the web logs, we took the principals’ responses on their web logs (which were entered in windows of minutes, i.e., 1-15 minutes, 16-30 minutes, etc.) for each category and converted these to the average number of minutes for each window. Thus, if a principal reported spending 1-15 minutes on a category, we converted that to 7 minutes. If he or she reported spending 16-30 minutes on the category, we converted it to 23 minutes, etc. Then, we took the average number of these minutes that each principal reported spending on each leadership category over the five days of the data collection period. To produce data for the entire sample, we took averages of those averages. We then produced simple descriptive statistics for the one week of principal log data collected in January, 2006.

We also conducted a series of qualitative analyses on the shadowing data. In this sequence, we first confirmed that what principals reported as instructional leadership activities were what we considered to be instructional leadership activities. To do this, we examined the shadowers’ notes corresponding to the times during which the principals claimed they were conducting instructional leadership. Based on the shadowers’ descriptions, we assessed whether we concurred with the principal’s characterization, using the definition of instructional leadership given to the principals. If we disagreed, we did not continue to analyze that event.

Second, we broke the shadowing notes on instructional leadership into instructional leadership segments. Using the shadowers’ descriptions of the principals’ activities, we assessed the number of discrete Instructional Leadership (IL) segments for our analyses. Sometimes, several instructional leadership segments were nested within larger activities. For example, if a principal observed a class, she might take notes on the teacher’s instructional methods, make a suggestion to that teacher, or demonstrate a method by stepping into the role of teacher. In such a situation, each of these three instructional leadership activities would be considered a discrete Instructional Leadership segment and would be examined independently in the next step of our analysis.
Third, we analyzed the type of instructional leadership activity by breaking them down into three categories. To do this we reread the shadower’s description of each of the instructional leadership activities and assessed whether it was an example of collecting data, synthesizing information, or taking an action. Collecting data consisted of such activities as observing a class or reviewing student work. Synthesizing information consisted of identifying needs or planning to meet an instructional need. Examples might include planning a PD session or reviewing data. Taking an action to meet an instructional need consisted of such activities as giving feedback or demonstrating a technique.

Fourth, we focused on those instructional leadership activities that we characterized as actions and assessed the potential that each action had for producing change in instructional practice. Using the following criteria, we assessed each action’s potential leverage for change, labeling each action as low-leverage, moderate-leverage, or high-leverage.

**Low-leverage:** The IL act is not likely to lead to a change in teaching practice for one or more of the following reasons:
- The act is not directed toward teaching staff and/or no teachers are present
- The principal fails to provide any feedback regarding teaching practice
- The principal fails to provide the rationale behind the IL act
This category includes acts that encourage a general focus on instruction and acts that may help students but are not connected to improving teaching.

**Moderate-leverage:** The IL act is likely to lead to a change in teaching practice for one or more of the following reasons:
- The principal provides general feedback (rather than feedback that is specific to an individual) or general suggestions regarding instructional practice
- The principal makes the rationale behind the IL act explicit (explains how the IL act connects to improved instructional practice)
- The IL act is aimed at improving teacher morale regarding instruction
This category includes modeling, designing lesson plans, making general instructional practice suggestions, and showing the importance of instruction by attending and/or introducing professional development sessions, PLC meetings, or other instruction-oriented meetings.

**High-leverage:** The IL act is highly likely to lead to a change in teaching practice for one or more of the following reasons:
- The principal provides specific individual feedback regarding instructional practice
- The principal provides a detailed explanation of how a teacher might improve instructional practice
- The principal provides specific suggestions for improving instructional practice and the rationale behind the suggestions
This category includes acts where the principal encourages others to provide individual feedback, explanations, and/or suggestions.
The flow chart in Figure 2 captures the entire qualitative analysis process. Step 1 depicts our agreement with the principal as to whether what they called instructional leadership could reasonably be called instructional leadership. In almost all cases we concurred. We then asked what kind of instructional leadership each activity was, sorting them into (a) collecting information, (b) synthesizing information, or (c) taking action. Next, if the instructional leadership activity was an action, we assessed the leverage of the activity, using the criteria described above. The actions were thus divided into low, moderate, and high-leverage instructional leadership actions based on their likelihood to bring about change in teacher practice.

**Figure 2. Flow chart of analysis of type and leverage level of instructional leadership practice.**

- **Step 1: Is it Instructional Leadership?**
  - If No: End of analysis

  ![Flow Chart](image)

  - If Yes: (Step 2) What kind of Instructional Leadership is it?
    - Collecting information about instructional practice
    - Synthesizing information
    - Taking action in support of instructional improvement

  ![Flow Chart](image)

  - Step 3: If the IL activity is acting, what level of leverage was it?
    - Low-Leverage: The IL act was not likely to lead to a change in teaching practice
    - Moderate-Leverage: The IL is likely to lead to a change in teaching practice
    - High-Leverage: The IL act is highly likely to lead to a change in teaching practice
In the final step of our final analysis, we analyzed the relationship between the frequency of instructional leadership activity, the frequency of instructional actions, and the frequency of actions with various levels of leverage. Did more frequent instructional leadership activity produce more instructional leadership actions? Did more frequent instructional leadership result in more moderate or high-leverage actions? Or was there no relationship between these variables? To explore these questions, we calculated two correlations. First, we correlated the mean number of minutes that the principals reported spending on instructional leadership in the web log and our assessment of overall number of instructional leadership actions. Second, we correlated the amount of time spent on instructional leadership and the distribution of actions with the three levels of leverage.

Results

The results that follow consist of three findings. First, we report the frequency of instructional leadership during the five day logging period in January 2006. Second, we present what principals said they were doing when they reported practicing instructional leadership. Third, we provide details on our analysis of the type and level of leverage of their instructional leadership.

**How principals reported spending their time.** The log results showed how principals reported spending their time during the winter data collection period. The most frequent activity reported by principals was student affairs, which occupied about 22% of principals’ time. The next most frequent activity principals reported spending their time on was instructional leadership, which they said occupied about 17% of their time. Community and parent relations took up about 11% of principals’ time, while they reported that only 4% of their time was devoted to professional growth.
What principals reported doing when they were practicing instructional leadership.

When principals reported that they were practicing instructional leadership during the logging period, the instrument directed them to identify what type of instructional leadership they were enacting. Respondents were allowed to specify multiple types of instructional leadership if they were doing them simultaneously. These data are reported in Figure 4. Most frequently, 67% of the times they reported practicing instructional leadership, principals reported they were securing resources. Principals also said they were frequently working with teachers (65% of instructional leadership activity) and observing or monitoring teachers (61% of instructional leadership activity). About half of reported instructional leadership activity was working with students. Less frequently, when they reported enacting instructional leadership, principals said they were analyzing data/student work (30% of instructional leadership time), supporting instructional efforts (21% of instructional leadership time), or working on curriculum and instruction policies (20% of instructional leadership time). Principals said they were teaching only 3% of the time they reported practicing instructional leadership.

The Type and Leverage of Instructional Leadership Activity

Focusing now on the shadowing data, our next analyses considered the type and leverage of instructional leadership activity. The shadowing data provided more detailed information about what principals were doing when they reported practicing instructional leadership. This transition to what the shadowers reported as instructional leadership did not produce dissimilar reports of instructional leadership from that of principals. In fact, 97% of the Instructional Leadership activities reported by principals were also identified as instructional leadership activities by the shadower. Thus, there was a high level of consistency between what principals reported as instructional leadership and what was reported by the researchers.
As described in the methods section, instructional leadership activities were divided into three general categories: **Collecting Data**, perhaps for identifying an instructional practice need (for example, observing a class or reviewing student work), **Synthesizing Information** (identifying needs or planning how to meet an instructional practice need by, for example, reviewing data or planning a professional development session), and **Taking Action** to meet an instructional practice need (for example, giving feedback or demonstrating a technique). Prior to reviewing the data gathered by the shadower, we hypothesized that the majority of the instructional leadership activities would fall within the first category: Collecting Data. However, since fifteen principals were observed (giving us a cross-section of fifteen days), we also hypothesized that if principals were doing all three types of activities, our data would show a distribution across the three.

**Collecting Data.** As we had hypothesized, the largest number of instructional leadership activities fell into the Collecting Data category: 60 out of 134 activities or approximately 45%. The percentage by principal ranged from 12.5% to 100%. The majority of the Collecting Data activities consisted of classroom observation (approximately 67%). During these observations, most of the principals took notes and several of them completed a standardized evaluation form while they were observing. Another common activity in this category was reviewing student work, often through “focus walks” or informally walking the halls and looking at student work posted on the walls.

**Synthesizing Information.** This category had the lowest number of activities: 28 out of 134 instructional leadership activities or approximately 21%. Included in this category were activities that involved preparing for another instructional leadership activity (such as a Professional Development session or meeting with teachers) and discussing possible future instructional leadership activities with the school staff. The percentages by principal ranged from 0% to approximately 57%. About half of the Synthesizing Information activities were done by the principals with others (either through informal conversations or planned meetings such as department or grade meetings) and the other half were done by the principal working alone. Only three activities appeared to involve the principal analyzing or reviewing any sort of empirical data: One time the principal discussed with another administrator what they had observed on their focus walk; one time the principal discussed the outcomes of an earlier Professional Learning Community meeting; and once the principal reviewed a breakdown of the results of a standardized test.

**Taking Action:** Forty-six of the one hundred and thirty-four instructional leadership activities (approximately 34%) involved the principal taking action. The percentages by principal ranged from 0% to approximately 89%. The average number of instructional leadership actions taken per principal per day was approximately 3. The number of actions taken by principal per day ranged from 0 to 8. This category included leading meetings where instructional practice was discussed, providing suggestions or feedback regarding instruction, and speaking directly to students regarding instruction issues.

As described in the analytical methods section, each action was categorized as **low-leverage** (not likely to lead to a change in teaching practice), **moderate-leverage** (likely
to lead to a change in teaching practice), or high-leverage (highly likely to lead to a change in teaching practice). Of the 46 actions taken, 23 were categorized as low-leverage (50%), 21 were categorized as moderate-leverage (47%) and 0 were categorized as high-leverage. Overall, 15% of the total number of observed instructional leadership activities were categorized as moderate-leverage actions. Low-leverage actions included acts that were not directed at teachers (for example, talking to students about standardized testing), acts for which no rationale was provided (for example, while observing a teacher, telling that teacher to call on students rather than having them call out their answers), and acts that encouraged a generalized focus on instructional practice (such as emailing instructors to remind them to infuse the arts in the curriculum). Moderate-leverage actions included making general suggestions for improving instructional practice (such as making a suggestion at an instructional meeting, explaining the rationale behind it, and connecting it to teaching practice), providing general encouragement to specific teachers to (such as telling a teacher that if she is persistent, her students will master critical thinking skills), and demonstrating or modeling an instruction technique or activity but failing to provide the rationale behind it. Although no high-leverage activities were observed, one activity may have been high-leverage since it involved a one-on-one meeting with a teacher. However, the shadower was not allowed to observe the meeting.

Focusing on the instructional leadership actions, we categorized 50% as low-leverage activities because they were not likely to lead to improvements in teaching practice. These included such things as encouraging a general focus on good instruction, or telling teachers to call on students rather than having them call out their answers, or talking to students about how to take standardized tests. Another 47% of the instructional leadership actions were judged as moderate-leverage, or somewhat likely to lead to change in teaching practice. These included general suggestions for improving instructional practice, providing general encouragement to specific teachers, and modeling an instructional technique but not explaining the rationale behind it. The discussion section of this paper below focuses on the development of hypotheses to explain both the distribution of instructional leadership activities of principals in the sample and to explain the low incidence of high-leverage instructional leadership activities.

A summary of our categorization of the types and leverage levels of principals’ instructional leadership activities is shown in Figure 5. One hundred thirty four instructional leadership activities were analyzed. Sixty of these (45%) we assessed to be collecting information; 28 (21%) were synthesizing activities; and 46 (34%) were taking action. Of the 46 instructional leadership actions, 23, or 50%, were considered to be low-leverage actions that were not likely to lead to changes in teachers’ instructional practices. An additional 21, or 47%, were moderate-leverage actions that might possibly lead to changes in teachers’ instructional practices. We assessed no principals instructional leadership actions to be high-leverage, or highly likely to lead to changes in teaching practice.

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1 For two actions, there was insufficient data to place the action into one of the categories. Of these two, one action may have been high-leverage since it involved a one-on-one meeting with a teacher. See discussion at the end of this paragraph.
teachers’ instructional practices. In two cases the shadower data was not sufficient to determine the level of leverage of the instructional leadership action.

Figure 5. Summary of categorizations of the types and leverage levels of principals’ instructional leadership activities.

![Diagram showing categorizations and leverage levels of instructional leadership activities]

**The relationship between the frequency and quality of instructional leadership practice**

Our data indicate that there is a moderate relationship between the amount of time a principal spends on instructional leadership and the overall number of instructional leadership “actions” a principal takes. Within our sample of 15 principals, the correlation between the mean number of minutes spent on instructional leadership per day (based on the amount of self-reported instructional leadership during the winter period) and the
overall number of instructional leadership “actions” taken was .5995. In contrast, there was almost no relationship between the amount of time spent on instructional leadership and the number of moderate-leverage instructional leadership actions taken (r = .2352). In other words, the number of high-quality (moderate or high-leverage) instructional leadership actions a principal takes is not predicted by the amount of time she spends on instructional leadership.

These data indicate that encouraging principals to spend more time on instructional leadership may lead principals to take more instructional leadership “actions.” However, increasing the amount of time spent on instructional leadership may not lead to an increase in the number of “actions” that are likely to lead to a change in teachers’ instructional practice. Rather, our data indicate that an increase in the amount of time devoted to instructional leadership will mostly lead to an increase in the number of instructional leadership activities that are not likely to bring about change in teachers’ instructional practice.

Discussion

In the current high stakes accountability environment, instructional leadership is fast becoming a catchword; if principals aren’t practicing instructional leadership, they aren’t doing their job. Not surprisingly, a lot of what principals do is now called instructional leadership, regardless of the likelihood that these activities will produce change in instructional practice. In its current incarnation, instructional leadership is so broadly conceived that it fails to make important distinctions between what principals do and what their actions might produce.

In this paper, we have tried to tighten the ring around what is considered instructional leadership by focusing on actions taken by principals that are likely to lead to changes in teachers’ instructional practices. We have refined the definition of desirable instructional leadership to be the provision of data-informed high-leverage feedback in support of Instructional Improvement. Based on this tighter definition, much of what principals currently call instructional leadership does not pass muster, for much of it is unlikely to produce changes in instruction in their schools. If our data are indicative, less than half of the actions that principals call instructional leadership are even moderately likely to lead to changes in teaching practice. These moderate-level actions represented only about 17% of the total number of activities principals considered to be instructional leadership.

Our analysis began by looking at what principals identified as instructional leadership. On average, approximately 17% of principals’ days were spent on instructional leadership. By instructional leadership, they largely meant securing resources, working with teachers and students, and observing and monitoring teachers. Principals were less likely to analyze data or work on curricular or instructional policies.

Applying our framework that was based on the literature of organizational decision making and effective performance feedback, we analyzed shadowing data across a cyclical process of collecting information, synthesizing that information, and taking
action. The distribution across these three activities was somewhat equal (45% of what principals called instructional leadership we assessed to be collecting information, 21% we determined to be synthesizing information, and 34% of instructional leadership activity was taking action). There are several comments to be made about this distribution. First, the collecting of information and the taking of action are largely behavioral activities, while synthesizing information could be considered more of a cognitive activity. Fortunately for our research, we had both observational and interview data to draw from. But even so, it is possible that our distribution under-identifies cognitive acts. Second, it was interesting that only 3 of the 28 events that we assessed to be synthesizing involved principals actually analyzing or using formal data as a basis for that synthesis. Third, we are limited by the uncertainty of what is an appropriate distribution. We went into the analysis hypothesizing that there would be far more data collection than action. This assumption was perhaps driven by our experience as researchers, in which we tend to collect far more data than we actually analyze and use in our research products. For principals, perhaps the appropriate distribution is different, but we do not have a standard against which to compare our findings. What is an appropriate distribution? Should data collection exceed action? How much of the collected data should be acted upon? These are promising areas for future research.

Focusing on principals’ actions, we examined the likelihood that their actions would produce changes in teachers’ instructional practices. The distribution of the leverage of principals’ actions was decidedly weighted towards the low end. Most actions were not judged to be likely to lead to change in teacher practice. About half of principals’ actions might lead to changes in practice, but we did not witness any action that would be highly likely to lead to change in practice. By contrast, almost half of the leadership actions were unfocused and therefore unlikely to lead to any productive instructional changes.

Extrapolating backwards, of the 134 IL activities that principals reported, only 21 (17%) were examples of even moderate-leverage actions. If we generalized from these data, this might suggest that, in the current urban public school sphere, less than a fifth of what principals deem instructional leadership activity is likely to produce changes in practice. This raises a question about how principals are using their instructional leadership time. Future leadership development program leaders might focus on making instructional leadership activity more productive.

Despite this, it is also important to note that the activities that were of moderate leverage were wide-ranging, including making general suggestions for improving instructional practice, providing general encouragement to specific teachers, and demonstrating or modeling an instruction technique. This suggests the many pathways by which principals can encourage improvements in teachers’ practices.

This study provided an incredibly rich and rare opportunity to more deeply examine instructional leadership activity. One constraint of this study was that it was cross-sectional. That is, we could not follow particular acts of data collection to see what actions they produced. From our data we can only infer that the distribution of data collection, synthesizing, and actions represent the distributions of a longitudinal
perspective. Collecting data longitudinally would allow us to assess what proportion of collected data produces action, and conversely, how much action is not based on any prior data collection. We might even go so far as to hypothesize that actions that are not preceded by intentional data collection and synthesis are more likely to result in low-leverage action.

Much research has shown that school leadership focused on instructional improvement can contribute to improving the educational experiences of students. This paper has focused on how principals can act to more concertedly to encourage teachers to change their practices. Our findings suggest that principals do not leverage most of the opportunities they have to encourage teachers to improve their craft. Even more importantly, what aspect of instruction principals choose to focus on may be less consequential than the process they employ to work with teachers to change their practices.
References


